

# TIME TO REPLENISH

— Getting Creative With Limited Funding —



REPORT OF THE 2023 STRATEGIC PLANNING PROCESS



## We've come a long way since 2015

That was the year, now nine years ago, when the Michigan Legislature last increased road funding.

At the time, as the result of decades of inadequate road funding, about two-thirds of Road Commission for Oakland County (RCOC) paved roads were rated in poor condition. Today, thanks to the injection of new funding resulting from the 2015 legislation, about 78 percent of RCOC paved roads are in good or fair condition, and only 22 percent are in poor condition.

In part, that is also due to RCOC's creative approach to road funding – the agency has worked diligently to stretch every available dollar as far as possible. That has resulted in more than 600 miles of paved roads receiving a new surface since the new state dollars started to flow in 2017. RCOC will continue to improve the roads with those new dollars until the “buying power” of those dollars is absorbed by inflation, which is projected to occur in 2025. To keep the road-repair momentum going after 2025 additional state road funding will be needed.

### RCOC Cost Comparison: 2016 vs. 2023

ITEM	2016	2023	% INCREASE
Asphalt	\$77.88/ton	\$105.53/ton	35%
Road Striping	10.8 cents/linear foot	14 cents/linear foot	30%
Snow Plow For Trucks	\$9,074	\$19,926	119%
3/4 Ton Pickup Truck	\$23,000	\$34,000	40%

That was one of the messages delivered by RCOC Managing Director Dennis Kolar and Deputy Managing Director/County Highway Engineer Gary Piotrowicz during the 2023 Road Commission Strategic Planning meetings. The Strategic Planning meetings involve RCOC leaders meeting individually with the leaders of nearly all townships, cities and villages in the county every other year to receive feedback from the communities about the services RCOC provides, any ongoing issues, learn about anticipated new development and road needs in the communities and to share information about roads, road funding and the agency.

This report provides an overview of the key messages RCOC leadership shared with the communities during these meetings. Specific details of each meeting, including feedback provided by the community leaders, are included in a second report available on RCOC's website (rcocweb.org), then click on the “About Us” tab at the top of the homepage and select “Publications” from the pull-down menu, then select “RCOC Strategic Planning Reports” and choose the 2023 report).

## Federal Infrastructure Investment and Jobs Act (IIJA)

While state dollars are the largest source of road funding for RCOC, the next largest source is federal road funding – and this funding pot saw an increase recently as well.

In a relatively rare bipartisan act, Congress approved, and the President signed, a new federal infrastructure funding bill, known as the Infrastructure Investment and Jobs Act (IIJA), in 2021. The bill was touted as a shot in the arm for infrastructure funding. In reality, though, it was largely a continuation of existing federal funding with some additional dollars added.

Additionally, more than 60 percent of the new funding in the bill was dedicated to electric vehicles and chargers and other discretionary categories. In all, it included \$110 billion in new road funding. While this might seem like a lot of money, when it is filtered across the entire nation, it results in only modest increases for most individual agencies, such as RCOC.

The bottom line is that the bill is resulting in about a 10 percent increase in federal funding for RCOC – not the 15 to 28 percent reported by some national media. At the same time, inflation related to infrastructure has been running at least 6 percent per year, further eroding the benefit of the additional funding.

## The EV Challenge

Against this road-funding backdrop, there is another funding-related discussion ongoing around the state: That is the impact that an ever-growing fleet of electric vehicles (EVs) will have on road funding.

Fuel taxes remain one of the largest sources of road funding in both Michigan and across the country. But there is a very real threat to this funding source – electric vehicles.

Driven in part by public policy at both the state and federal levels, EVs are growing rapidly as a portion of the public vehicle fleet. Already, as a result of the current EVs on the roads, Michigan has lost more than \$50 million in road funding over the last several years. That number is expected to grow quickly, as the number of EVs on the roads ramps up.

The EV challenge does not just affect road funding, though. Michigan charges sales tax on gas and diesel. While the sales tax revenue does not go to roads, it does go to schools and cities, villages and townships across the state.



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So, as the amount of fuel sold declines as the EV fleet grows, the sales tax revenue will shrink as well as fuel-tax revenue, meaning schools and municipalities will also both take a hit.

What is the solution? At some point, Michigan – and every other state – is going to have to find a way to charge motorists to use the roads in a way that is not based on fuel consumption. The most likely alternative is a mileage-based user fee (MBUF), also known as a road-user fee, which involves motorists paying a fee per mile driven.

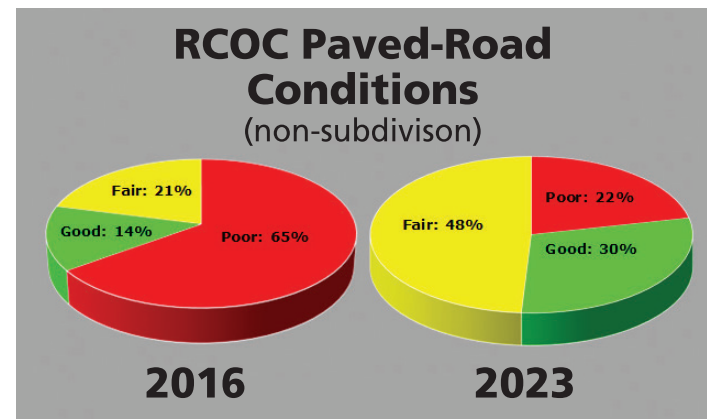
This concept is already being tested in other states and seems to be a viable option. The technology exists to make this possible, though there are some policy challenges that must be overcome (such as some people having privacy concerns, though it could be done without sharing any personal data).

The Michigan Legislature has committed some funding to studying this issue, but it appears the solution is still a ways off.

## Road Conditions

Since the first new state road-funding dollars arrived in 2017, RCOC has committed to repairing and improving as many roads as possible. Between 2017 and 2023, this has included:

- Preservation overlays (simple resurfacing): 435 miles
- Concrete slab replacements: 68 miles
- Crack sealing: 391 miles
- Major resurfacing: 60 miles
- Reconstruction/widening: 12 miles
- Gravel road paving: 6 miles
- Spot resurfacing (resurfacing short sections of road): 619 Locations
- Bridge replacements: 44
- Bridge preventative maintenance locations: 11
- Culvert replacements: 8
- New gravel placed on gravel roads: 363 miles



As the charts above show, this level of investment has resulted in a significant improvement in the condition of RCOC roads. They have gone from being 65 percent in poor condition, 21 percent in fair condition and 14 percent in good condition in 2016 to 22 percent in poor condition, 48 percent in fair condition and 30 percent in good

condition in 2023, which represents a smaller percentage in poor condition than the statewide average.

The challenge now will be to ensure the system continues to improve and we don't lose the ground we have gained. As noted previously, at current funding levels, the condition of the roads will again begin to deteriorate in 2025.

## Rating Road Conditions

RCOC will have rated the condition of all its paved roads by the end of 2024. All counties are required to rate their federal-aid-eligible roads (heavier-traveled roads that are given this federal designation). Some have begun rating non-federal-aid-eligible roads as well, including RCOC.

Rating all roads in the system is important to ensure we know the true condition of each paved road, for benchmarking and project-selection purposes and to determine the level of funding needed to improve the system.

## Local Federal Fund Exchange

One way that RCOC has been creative in stretching its funds is through the Local Federal Fund Exchange (LFFE), a program RCOC and the County Road Association of Michigan (CRA) convinced the Michigan Department of Transportation (MDOT) to enact and that allows county road agencies to "sell" their federal road funding to other agencies. This benefits smaller agencies that do not have the staff to easily comply with the numerous requirements associated with federal road funds.

It also allows larger agencies, such as RCOC, to "purchase" federal road funds at a discount, typically for about 80 cents on the dollar. To date, RCOC has been the most aggressive purchaser in this program. Since RCOC staff are well versed and experienced in utilizing federal road funds, the program offers a way to leverage state road funding to attain a larger amount of federal funds.

While there are limitations on the amount of federal funding available through the program as well as on the types of projects it can be used for, it has, nonetheless, proven a highly successful initiative for RCOC. So far, RCOC has purchased nearly \$26 million in federal funds at a cost of approximately \$20.2 million, resulting in nearly \$6 million in additional road funding – and RCOC will continue to aggressively pursue this option.

Additionally, a new law created a voluntary buyout program in which MDOT is purchasing federal aid from eligible local agencies across the state at a rate of 90 cents per dollar of federal funding. As with the LFFE, the benefit for local agencies is that the rules governing the non-federal funds received are more flexible than those for the federal funds.

RCOC took advantage of this program in 2023 and used the funds toward its Orchard Lake Road resurfacing and reconfiguration project from Commerce Road to Middlebelt Road in West Bloomfield Township, Orchard Lake Village, Keego Harbor and Sylvan Lake.

## Modernizing Operations

Another way that RCOC is being creative in stretching its available funding is by finding ways to use the dollars it receives as efficiently as possible. That includes modernizing facilities where possible.

One recent example is RCOC's construction of a new building for its electrical shop, providing the first update for this important operation in about 50 years.

The electrical shop builds all the traffic-signal cabinets, which are located at every signal and include state-of-the-art computers and technology. The shop staff also build the traffic signals themselves. Having adequate space and the ability to comfortably use the latest technologies has greatly improved the efficiency of this operation.

The new building is allowing RCOC staff to more efficiently perform the critical "behind-the-scenes" tasks that are necessary to efficiently operate the road system.



## Traffic-Signal Technology Upgrades

In the past year, RCOC has continued to roll out a new software system to manage some of its "smart" traffic signals.

As the operator of one of the largest adaptive traffic-signal systems in the country (the signal timing is automatically adjusted to most-efficiently move the traffic present at each moment), RCOC has long been on the cutting edge of traffic-signal technology.

For 30-plus years, RCOC has used an Australian-based company to provide the software to manage the smart signals. Now, it is beginning to migrate to a more advanced system from a US-based company that will allow RCOC to increase the integration of the signals with the next wave of transportation technology: connected- and autonomous-vehicle systems.

The new Centrac system will allow much greater connectivity and data harvesting for the RCOC smart-signal system. Over the next two years (2024-26), RCOC will integrate more than 400 traffic signals via the Centrac system, expanding RCOC's system of "smart" signals to some 1,250 intersections (which remains one of the largest deployments in the country).

Additionally, RCOC is installing closed-circuit television (CCTV) cameras at signalized intersections to allow signal-systems engineers to remotely monitor the signals'



operation in real time. This allows the engineers to remotely diagnose and repair signal problems without having to travel to often distant intersections. This saves significant time and money and ensures traffic signals function properly more of the time.

So far, CCTV cameras have been installed at more than 200 intersections. RCOC has secured funding to expand camera installation to more than 500 locations over the next three years.

These cameras are for live signal monitoring only and do not record any video footage. Additionally, RCOC is gradually making the camera feeds available to interested local communities for a fee.

Finally, RCOC was recently awarded a federal Strengthening Mobility And Revolutionizing Transportation (SMART) grant to develop an economically sustainable deployment model for cellular-to-vehicle-to-everything (C-V2X) technology in Oakland County. Such a model would likely be the first in the nation and may help usher in the era of the "connected vehicle" (in which vehicles and infrastructure communicate).

## Supporting Wetlands

With RCOC's support and assistance, the Michigan Wetland Board funded and led the creation of a new 13-acre wetland bank in Brandon Township. This site can now be used to mitigate wetlands that must be removed as part of road projects.

The mitigation credits for this site are available to road agencies and municipalities in Oakland County and some neighboring counties. This ensures that when road projects impact wetlands, there is no net loss of this environmentally important ecosystem.





### Gravel-Road Paving

In 2022, the Road Commission updated its gravel-road paving plan. This is a document that identifies which of RCOC's 750 miles of gravel roads have been prioritized for paving by communities in the county. The communities typically partner with RCOC on the paving costs.

The average cost to pave a mile of gravel road is \$4.7 million. RCOC sets aside \$2 million of federal road funding each year to put toward gravel paving.

Typically, gravel-road paving projects, on roads that are federal-aid-eligible, are paid for with 80 percent federal funding and 20 percent local match, with RCOC paying 10 percent and the local community paying the remaining 10 percent. For non-federal-aid-eligible roads, the cost is split 50/50 with the local community.

There are currently five gravel paving projects planned through 2030. The updated Gravel Road Paving Plan is available on the RCOC website (rcocweb.org – click on the "Publications" link under the "About Us" tab at the top of the homepage).

### The EGLE Brine Situation

Brine is naturally occurring salt water that RCOC pumps out of the ground at three well sites around the county. The material is a cost-effective and highly efficient way to control ice and snow on winter roads and dust on gravel roads during the spring, summer and fall.



In early 2023, with no advanced warning, the Michigan Department of the Environment, Great Lakes and Energy (EGLE) announced plans to severely limit the use of brine on Michigan roads, alleging, without any supporting data, that the brine was causing increased salination of Michigan's waterways.

Road agencies across the state, including RCOC, immediately protested this development, arguing that brine is beneficial for the environment because it reduces the amount of rock salt needed in winter. Additionally, brine greatly improves air quality along gravel roads by reducing the amount of dust emanating from the roads

(which negatively impacts those with asthma and heart conditions and reduces the quality of life for those living near the gravel roads).

Brine is used as an "anti-icing" agent, meaning it is sprayed on roads prior to snow events, in some situations, to delay the formation of ice. It is mixed with rock salt as the salt is spread from the back of salt trucks, both reducing the amount of salt needed and reducing the amount of time it takes the salt to begin to melt snow and ice. All of these mean that brine is helping to make the roads safer during winter weather conditions, thus reducing the likelihood of crashes that could result in injuries or even deaths.

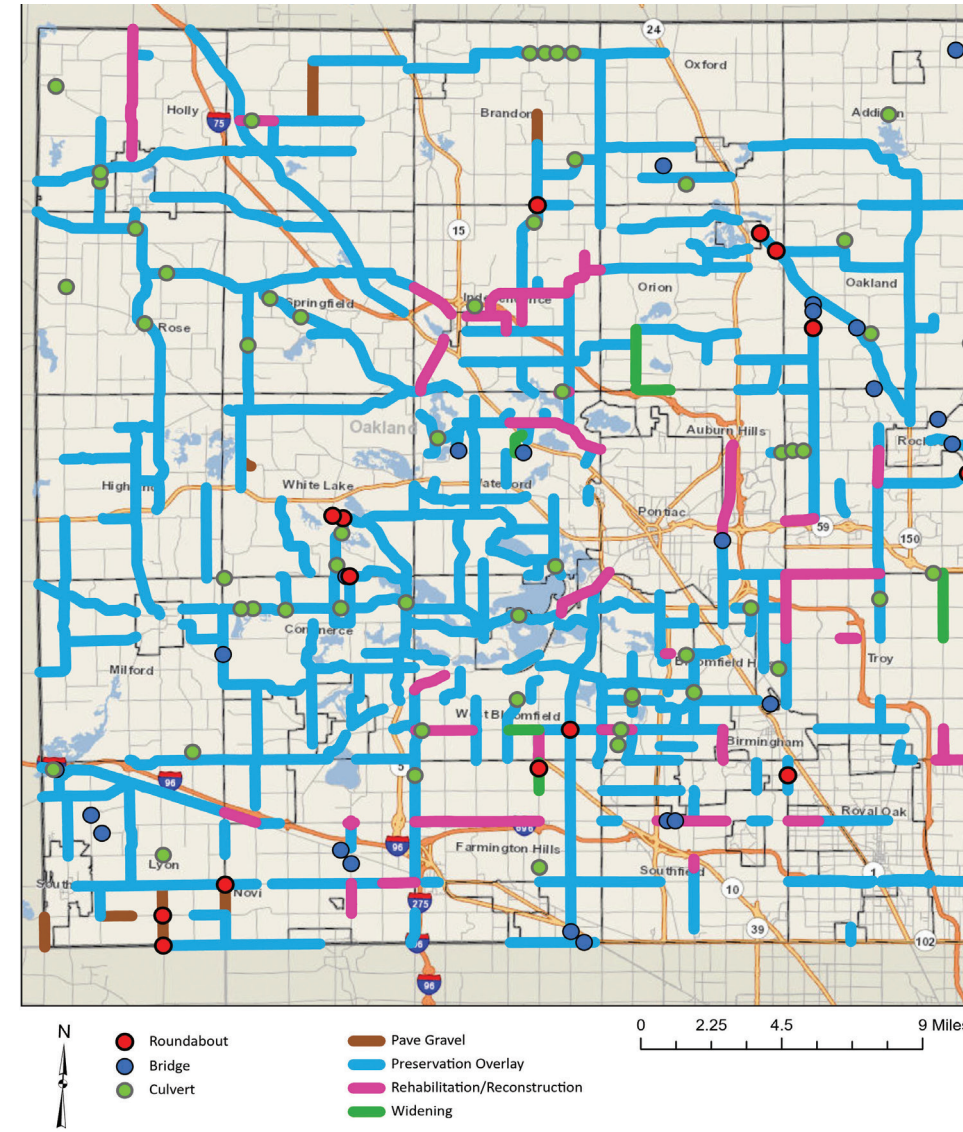
As a result of the loud and unanimous objections to its new rules, EGLE has backed away from its original plan and is now re-evaluating its position based on input from road agencies. It is not yet clear, though, what the outcome of this re-evaluation will be.

### RCOC Recognized

In the last year, RCOC has been repeatedly recognized for its projects & processes. This recognition has included:

- 2023:**
  - American Public Works Association: Avon Road at Dequindre Road, bridge and roundabout. Project of the Year Award (projects costing \$5 million to \$25 million)
  - Michigan Transportation Asset Management Council (TAMC): Organizational Achievement Award for the RCOC Asset Management Report (award recognizes agencies that incorporate the principles of asset management and adopt an asset management plan to help guide investment decisions)
- 2022:**
  - American Public Works Association: Baldwin Road, Morgan Road to Waldon Road, reconstruction, widening and construction of five roundabouts. Project of The Year Award (projects costing between \$25 million to \$75 million)
  - American Public Work Association: North Holly Road, Grange Hall Road to Oakland County border, major resurfacing. Project of The Year Award (projects costing between \$1 million and \$5 million)

### 2017-2023 Past RCOC Construction Projects

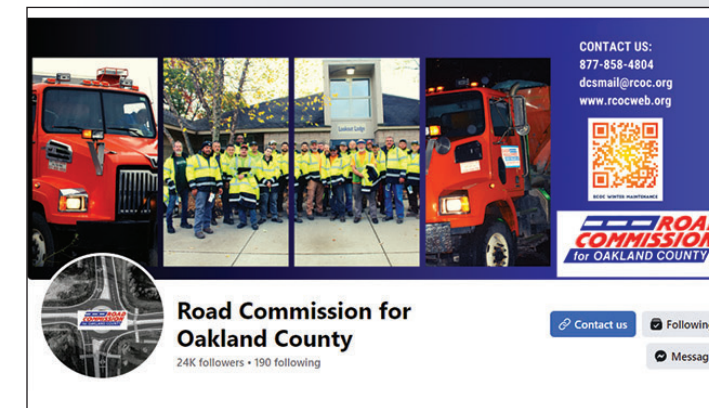


### Projects

The map at left shows the many projects RCOC has completed since it began to receive increased state road funding in 2017.



### Follow Us on Social Media



### 2023 Strategic Report Available Online

This report summarizes the key messages shared by RCOC leaders with the leadership of Oakland County communities during the 2023 RCOC Strategic Planning process.

The second part of the Strategic Planning process involves receiving input and feedback from the county's communities. That data is used by RCOC to plan and focus its road maintenance and construction operations and to help determine the best allocation of resources.

The input provided by each community as part of this process makes up the second volume of the 2023 RCOC Strategic Planning Report, which is available on the RCOC website (www.rcocweb.org). The document can be found in the "Publications" section of the website, in the "RCOC Strategic Planning Reports" subsection. The direct link to the document is: [rcocweb.org/DocumentCenter/View/12201/2023-Strategic-Planning-Report-Volume-II-Community-Details](http://rcocweb.org/DocumentCenter/View/12201/2023-Strategic-Planning-Report-Volume-II-Community-Details)

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