Washtenaw County Road Commission
Roads in Review
Spring/Summer 2016 wcroads.org

Road Funding in 2016 and Beyond

2015 brought new revenue for roads. Here's what to expect:

2015 was an exciting time in the world of road funding for Washtenaw County. For the first time since 1997, Lansing passed a comprehensive road package that will increase state-provided road funding.

While additional road funding is great news for our county's failing road system, the package does not provide new funding as quickly as the Washtenaw County Road Commission had hoped. Additionally, future lawmakers are left to figure out how to re-appropriate General Fund dollars to fund the package, and there is no guarantee those legislators will prioritize roads.

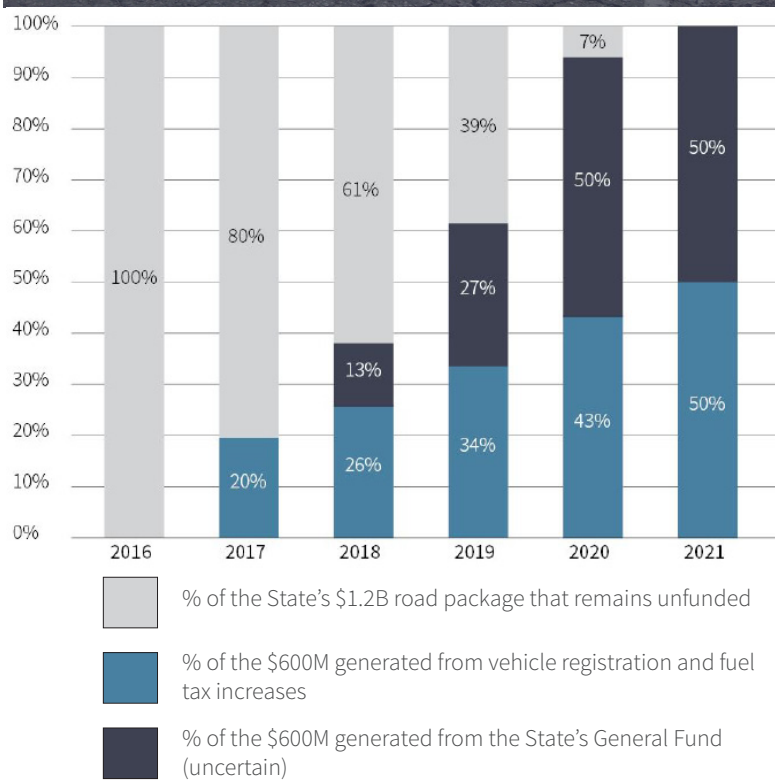
At the local level, the Washtenaw County Board of Commissioners approved a second year of the Public Act 283 (P.A. 283) road millage. The 2016 P.A. 283 0.5-millage will fund an additional 58 miles of road improvements in 2016, which is the gap year before WCRC receives any new funding from the state.

New State Road Funding

Road funding has been on Lansing's to-do list for years. The Michigan Transportation Fund (MTF), which is Washtenaw County Road Commission's main source of funding, has not increased in nearly two decades. The new road plan will add $1.2 billion to the MTF by 2021. WCRC will not collect any new MTF funding until spring of 2017, and will not receive the full amount of the road bill's funding until 2021. The graph on the right depicts how the funding is phased in.

Story continues on page 2

How State Road Funding will phase in



This Issue:

New State Funding (Cont.)

How does the package raise road funding?

The road bill raises $1.2 billion in total. Here's how:

$600 million from shifts in the State's General Fund beginning in 2018.

- **$150M** in 2018-19
- **$325M** in 2019-20
- **$600M** in 2020-21

$200 million from increasing the state's vehicle registration fees.

- **20% increase** in vehicle registration fees beginning in 2017.

$400 million from increases in the state's gasoline and diesel taxes.

- **7.3 cents per gallon** increase in the state's gasoline tax beginning in 2017.
- **11.3 cents per gallon** increase in the state's diesel tax beginning in 2017.

Funding Uncertainty

The State Legislature did not identify where specifically the $600 million from the State's General Fund will come from. Lawmakers are counting on continued economic growth to bring in more tax revenue that could be used for roads. If economic growth does not continue, future lawmakers may set budget priorities that may or may not fully fund the $600 million.

Will it be enough to fix our failing road system?

Over the past decade, the cost to maintain and repair roads has risen steadily, but WCRC's budget has not kept pace with the rate of inflation. Even if WCRC receives the estimated full amount of funding in 2021, there are years of catch-up work needed to fix the county's poor and failing roads.

WCRC estimates that over $50 million is required to get all of the county's roads into good condition. While the new state funding increase will help, it will take five years to fully phase-in, and roads will continue to deteriorate as we await full funding.

In addition to fixing the county's worst roads, WCRC must also balance the need to preserve the investments that have already been made in the county's good roads to increase their lifespan and avoid costly reconstruction projects. WCRC must also factor in the annual cost of winter maintenance, the need for new equipment and other agency operation costs when determining how to allocate the new funding from the state.

County Board approves a 2nd year of P.A. 283 Road Millage

WCRC first recommended that the County Board of Commissioners use Public Act 283 to levy a one-year road millage to fix the county's failing road network in 2014, after years of state inaction on road funding.

P.A. 283 is a one-year millage that funds a specific, pre-approved list of projects throughout the county. The average homeowner in Washtenaw County pays $35 and the funds raised must be used for roads, culverts, and bridges. The millage is an effective tool for fixing some of the county's worst roads as we await the full phase-in of funding from the state's new road funding package.

After a successful first year, the Washtenaw County Board of Commissioners approved a resolution to levy a second year of the one-year millage in September 2015. The 0.5-mill property tax will fund road work in 2016, which is the gap year before WCRC receives any new Michigan Transportation Funding (MTF) funding.

The 2016 P.A. 283 millage funds will allow the WCRC to complete an additional 29 projects and improve nearly 70 miles of roads county-wide.

6 Mile Rd in Salem Twp

Parker Rd in Lima/Scio Twp

Road Commission approves resolution for 4-year road millage

Resolution encourages County Board to place on August 2 ballot

On Tuesday, March 1, the Washtenaw County Road Commission (WCRC) board unanimously approved a resolution in support of a county-wide road funding ballot initiative. The resolution requests that the Washtenaw County Board of Commissioners place a 4-year, 0.5 road millage before the voters during the August 2016 primary.

The 4-year millage would function similarly to the Public Act 283 (P.A. 283) road millage that was approved by the Washtenaw County Board of Commissioners in 2015 and 2016. P.A. 283 funded nearly 70 miles of additional road improvements each year it was approved. The proposed 4-year road millage would levy the same amount (0.5 mills), and WCRC estimates that the funding would improve nearly 200 miles of roads over four years. Similar to P.A. 283, residents would begin to see road improvements the same year that the millage was levied.

While similar to P.A. 283, the 4-year millage would be different in a few ways:

1. The 4-year road millage would go to the public for a vote. P.A. 283 was levied by the Washtenaw County Board of Commissioners and did not require a public vote.
2. 20% of the funds raised by the 4-year millage will go to the County Parks and Recreation Commission to fund improvements on the county-wide non-motorized transportation network including the Border-to-Border trail, the Connecting Communities program, and construction and maintenance of other trails and pathways. On March 8, the Washtenaw County Parks and Recreation approved a resolution in support of the millage.
3. P.A. 283 was a one-year millage and funded a pre-approved list of projects. While the 4-year millage does not require a pre-approved list of projects, the Road Commission has developed a 4-year plan that outlines what projects they expect to complete if voters approve the millage.

As was the case with P.A. 283, the 4-year millage would provide cities and villages with additional funding proportional to the amount raised within their borders (after the 20% for non-motorized paths is distributed to Washtenaw County Parks and Recreation Commission). The Washtenaw County Road Commission would receive the remaining funds for use on county roads that are located outside city and village limits.

What county roads would be fixed with a 4-year road millage?

The Road Commissions plans to use millage funds to maintain the primary road network. WCRC has put together a draft 4-year road improvement plan which you can view on the next page. WCRC has been working with townships to determine which projects are high priorities for their communities so they can adjust their 4-year road improvement plan as appropriate.

How much road funding will the millage generate?

WCRC expects that the millage will raise $7.2 million per year, with approximately $3.3 million going to the county road system to be distributed as equitably as is reasonable across the County's twenty townships. Cities and villages will receive an estimated $2.5 million, with specific allocations based on the amount raised within a city/village's borders.

Why is a 4-year road millage needed?

Road funding in Michigan is based on vehicle registration, gas and diesel taxes; some of which have not increased in nearly 20 years. A road millage will help fill the funding gap while Washtenaw County awaits the five-year phase-in of new road funding that was recently approved by the state. In the event that the state does not fully fund the new road package, the millage will provide our county with a funding mechanism to continue improving county roads.

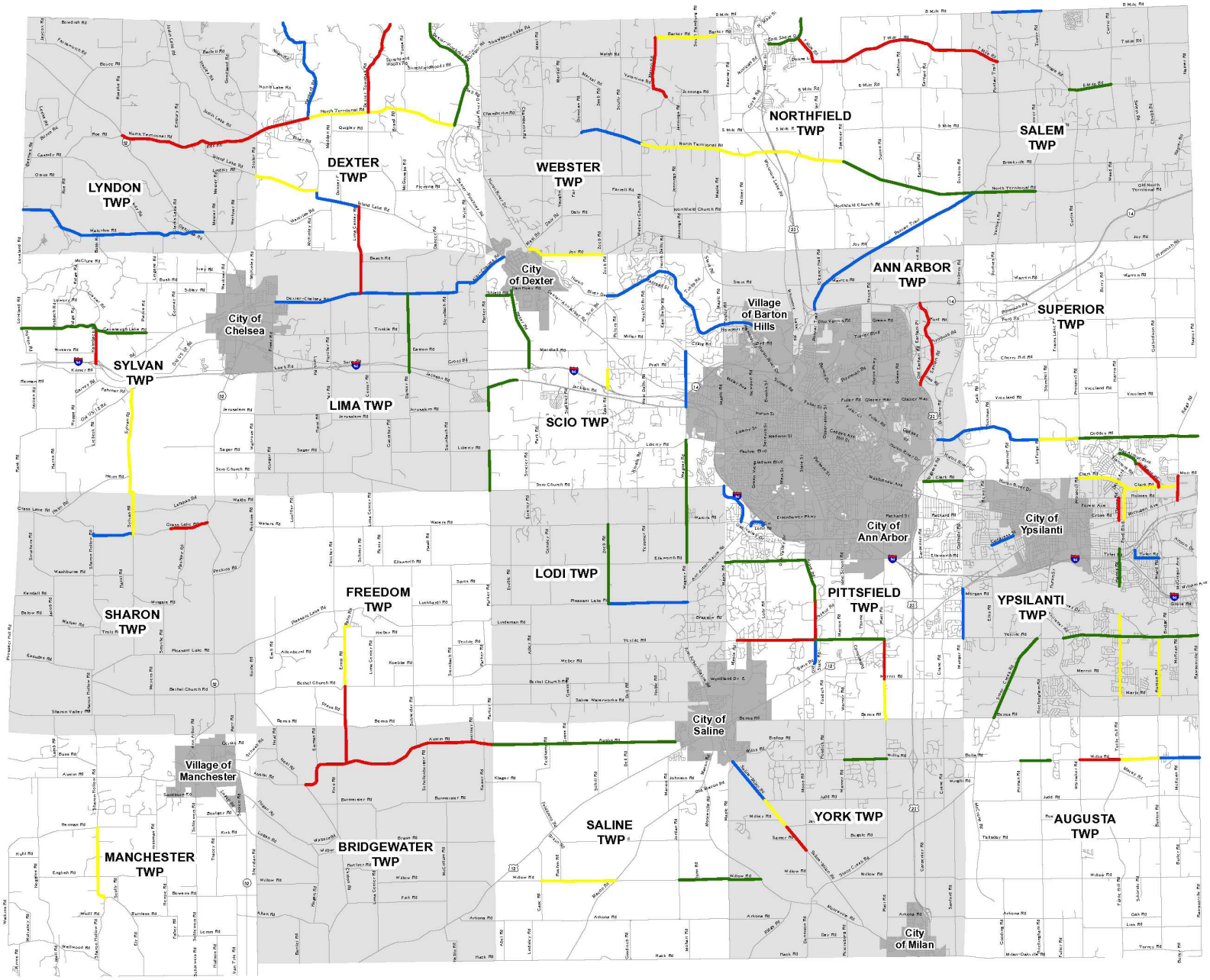
How much will a 4-year road millage cost taxpayers?

A 0.5 millage costs homeowners $50 per $100,000 in taxable value. The average Washtenaw County homeowner will pay $35 per year. The millage would not cause an increase in Washtenaw County homeowners' tax bills as compared to the past two years. The millage is for the same amount that has been levied county-wide via P.A. 283 in 2015 & 2016.

Why not levy a third year of the one-year PA 283 road millage?

Although the P.A. 283 road millage has been successful, a 4-year millage allows for better long-term planning and coordination. Additionally, it allows citizens of Washtenaw County to decide if road funding is a priority for our community through a vote of the people.

WCRC's 4-year Road Millage Improvement Plan



Washtenaw County Road Millage Projects 2017-2020

DRAFT

Road Millage Projects

- 2017 (Proposed)
- 2018 (Proposed)
- 2019 (Proposed)
- 2020 (Proposed)

0 1 2 4 Miles

Updated: March 10, 2016

N

Failing Bridges a Symptom of Decades of Underfunding

In 2015 our agency closed eight bridges and culverts to traffic after the structures failed routine inspections. These structures will remain closed until our agency secures the funding necessary to repair or replace them. These figures do not include the 52 bridges and culverts that were replaced or repaired in 2015.

Our routine inspections also determined that 13 bridges and culverts were in such poor shape that we had to reduce their weight restrictions, limiting the weight of vehicles that can safely travel across. At times, this means snow plows, school buses, and fire trucks must now take detours around failing infrastructure.

The Washtenaw County Road Commission has a responsibility to ensure the safety of the motoring public, and when a bridge or culvert is no longer safe to cross we must close it. We wish we had better news for residents, but our county is facing the consequences of decades of underfunding Michigan's road system. The cost to maintain our nation's infrastructure is a large expense. However, the alternative of allowing our bridges to fail has caused an even a greater impact locally.

Many of the county's failing bridges and culverts were built in the early 1900s and have far surpassed their life spans. Every year we take steps to preserve the county's bridges with our available resources, but routine maintenance only gets us so far. Freeze-thaw cycles, erosion, and the wear-and-tear of daily drivers takes its toll. Washtenaw County's bridges and culverts require comprehensive repairs, and some require costly replacements.

Roads are classified in two ways: primary and local roads. A road's classification determines how its repairs can be funded. Federal, state and local funds can be used to repair or replace structures on primary roads. However, bridges or culverts located on local roads require local matching funds. Many of the bridges that closed in 2015 are on local roads.

Michigan statute requires local participation to improve local roads. A local source must match WCRC's financial contribution to a project. A road or culvert improvement requires 50% funding from a local source. A bridge (equal to or greater than 20 foot span) requires that 75% of the funds to come from a local source.

If there is no local source, the road will remain closed until other funds are identified. Moreover, the State of Michigan provides WCRC $1,500-$3,000/year per mile of local roads in the county to conduct local road maintenance. Some years this money is only enough to cover winter maintenance costs.

Governor Snyder recently approved a comprehensive road funding package, but WCRC will not receive the full extent of funding until 2021. Washtenaw County has a substantial amount of catch-up work to do to rehabilitate our road system, and other bridges in poor condition could close while we wait for funding. In the meantime, our staff will continue working with townships to identify funding sources to repair and replace our county's failing bridges and culverts.

Bemis Rd over Tributary to Saline River

Cracking on Bemis Rd Bridge

Henzie Rd over Iron Creek

Rust & Cracks under Henzie Rd Bridge

Above Photos from Great Lakes Engineering Group, LLC.

Collapsed Arkona Road Bridge

Construction Season Preview

2016 will be another busy construction season for the Washtenaw County Road Commission. Below is a snapshot of the major projects scheduled for this year. In addition to this list, WCRC has many preservation projects (chip sealing) funded by the P.A. 283 road millage. More information about road work and/or closure dates and durations can be found on our website during construction season.

We encourage residents to sign up for our Weekly Road Work Schedule, which is sent out weekly during construction season and lists all of WCRC's road projects throughout the county: wcroads.org/weekly-road-work-update

Textile Rd Rehabilitation

LODI TOWNSHIP

A bumpy stretch of Textile Road, from Maple Rd to Ann Arbor-Saline Rd, will be resurfaced this year. WCRC will pulverize the existing pavement on Textile Road and reuse it to make a stronger, smoother road base. After pulverization, we will apply a two-course overlay of new asphalt. This project is expected to extend the life of the road by 10-15 years.

Huron St & Whittaker Rd Resurfacing

YPSILANTI TOWNSHIP

Due to normal wear-and-tear from traffic and weather elements, these roads' surfaces have begun cracking, which has led to potholes. WCRC has committed federal aid resources into milling and resurfacing the pavement to extend the life of the road by approximately ten years.

Austin Rd Resurfacing

MANCHESTER TOWNSHIP

Public Act 283, the one-year, 0.5 road millage approved by the County Board of Commissioners (*see page 2*) will fund the milling and resurfacing of Austin Road, between M-52 and Clinton Road. Milling is when we remove one layer of the existing road surface and replace it with a new layer of asphalt. This improvement extends the service life of road by 9-10 years.

Willis Rd Rehabilitation

AUGUSTA & YORK TOWNSHIPS

Public Act 283 will fund improvements on two rough segments of Willis Road: (1) Stony Creek Road to Pitman Road, and (2) Moon Road to Warner Road. These two projects involve pulverizing the existing pavement, reusing it, and applying two new overlays of fresh asphalt. The final product will be a strong, smooth road that is expected to last 10-15 years.

McGregor Rd Bridge

DEXTER TOWNSHIP

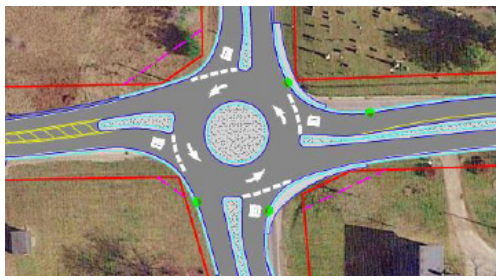
McGregor Road Bridge in Dexter Township will be replaced this spring & summer. The bridge had its weight restriction reduced in 2012, and again in 2015. The bridge has deteriorated to the point that our snow plows are no can no longer travel across it.

The bridge closed on March 7 will remain completely closed to traffic during the 4-6 month long project. The new bridge will be wider, providing room for pedestrians to travel across and will provide increased clearance for boats.

Moon Rd Rehabilitation

PITTSFIELD TOWNSHIP

Moon Road between US-12 and Bemis Road will be pulverized and resurfaced. Pulverizing will break up the existing pavement which will be reused to make a new road base. We will then apply two new layers of fresh asphalt. This project is funded by the Public Act 283 road millage.



Ann Arbor-Saline at Textile Roundabout

LODI TOWNSHIP

WCRC will build a compact urban roundabout at this intersection to reduce peak-period congestion that occurs on Ann Arbor-Saline Road. A roundabout was chosen over a traffic signal for four reasons:

1. Compact urban roundabouts have a smaller footprint. This is important because it requires less space in the road right-of-way, meaning fewer impacts to property owners and a lower project cost.
2. Roundabouts are statistically safer than traffic signals.
3. With a traffic signal, delay is present 24 hours a day when a driver encounters a red light. At a roundabout, less delay occurs, especially at off-peak hours, because drivers are only required to yield at entry.
4. A compact urban roundabout will be less intrusive to Lodi Cemetery and adjacent corner properties.

Whittaker at Merritt Roundabout

YPSILANTI TOWNSHIP

This intersection has a reputation for being one of the area's most dangerous, with 24 crashes and four fatalities over a four-year period. Merritt Road crosses Whittaker at a sharp, blind curve. Due to the skew of the intersection, placing a traffic signal would not have had a significant impact in improving safety, especially if a driver attempted to beat a yellow or red light. WCRC selected a roundabout due to its safety benefits.

Read more about why we build roundabouts on page 8.

Stay informed this construction season

Follow WCRC on Facebook and Twitter to stay updated on road construction and closures. For a complete list of 2016 projects, please visit: wcroads.org/Roads/Projects-Current

facebook.com/washtenawroads

twitter.com/washtenawroads

Additional 2016 Projects

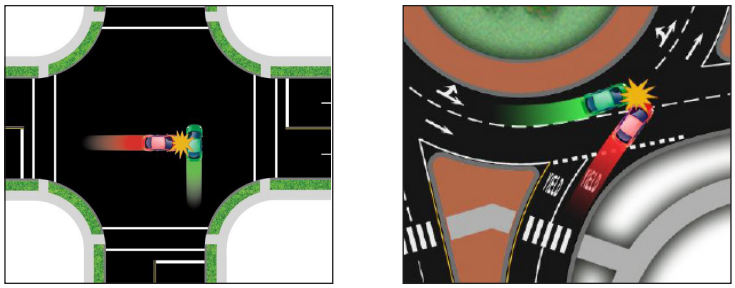
- Parker Rd from Jerusalem Rd to Liberty Rd
  Pulverize & Resurface
- Six Mile Rd from Currie Rd to Chubb Rd
  Pulverize & Resurface
- Zeeb Rd from Huron River Dr to Joy Rd
  Mill & Resurface
- Prospect Road from Geddes to Clark
  Mill & Resurface
- Saline-Milan Rd from Stony Creek Rd to Moon Rd
  Mill & Resurface
- Waters Rd from Oak Valley Dr to Ann Arbor-Saline Rd
  Mill & Resurface
- Lohr Rd from Ellsworth Rd to Ann Arbor-Saline Rd
  Mill & Resurface
- Textile Rd from Stony Creek Rd to Munger Rd
  Mill & Resurface
- Grove Rd from Bridge Rd to Rawsonville Rd
  Mill & Resurface
- Plymouth Rd
  Traffic Signal Interconnect
- Jerusalem Rd Bridge
  Bridge Repair
- Maple Rd Bridge
  Bridge Repair
- Mooreville Rd Bridge
  Bridge Repair
- Strawberry Lake Rd Bridge
  Bridge Replacement
- Wiard Rd Bridge
  Bridge Removal
- Approximately 50 miles of chip seal

About Roundabouts:
Why WCRC has built them & driving tips

Washtenaw County's first roundabouts were built in 2003 at the intersections of Campus Parkway and Community Drive and Suncrest Drive as part of Saline Area Schools campus development for its new high school and elementary school. There are now 15 roundabouts located throughout the county and three more scheduled for construction in 2016.

Fewer Severe Crashes

Studies show that roundabouts are one of the safest intersection options available. According to the Insurance Institute for Highway Safety, a modern roundabout provides a 39% reduction in total crashes and a 90% reduction in serious injury/fatality crashes.



Crashes at a traditional intersection versus a roundabout. Diagram from GHD.

Two features of modern roundabouts make it a safer choice than traditional intersections:

1. The central islands in modern roundabouts eliminate the serious, high-speed t-bone collisions that occur at traditional intersections. With modern roundabouts, direct left turns are eliminated. Drivers must circulate around the central island to the desired destination. With traffic signals, left turns must cross against opposing traffic at or near 90° angles.
2. The splitter islands, located at the entry of a roundabout, slow vehicular speeds. Slower speeds increase safety by making high-speed impacts less likely. In a modern roundabout, drivers no longer speed up to beat the light, and the severity of crashes is significantly reduced.

Before: Textile/Hitchingham

After: Textile/Hitchingham

Congestion Reduction

Roundabouts can move traffic through an intersection more efficiently and with less congestion than traditional intersections. Unlike traffic signals, drivers do not have to wait for a green light to proceed. Drivers are only required to stop at entry yield signs when circulating traffic is present to their left.

- Without the start and stop of traditional intersections, drivers use 30% less gas when using a roundabout compared with a traffic signal.
- When stopped at a red light or stop sign for excessive periods of time, a vehicle's exhaust emits unnecessary pollutants into the atmosphere. Studies have shown that roundabouts reduce carbon dioxide emissions by 32%.

Roundabout Driving Tips

1. **Yield, Don't Merge:** Vehicles traveling in the roundabout have the right-of-way. Do not merge into a roundabout like you merge onto a highway. Slow down and yield, or sometimes stop, for traffic that is circulating the roundabout. Enter the roundabout when a safe gap is present.
2. **Slow Down:** Roundabouts are designed to reduce your speed upon entry. While it may seem counterintuitive, slowing down in a roundabout alleviates congestion. Slower speeds also make roundabouts safer than traditional intersections.
3. **Do Not Switch Lanes in Roundabouts:** It is important to choose your lane prior to entering the roundabout. All multi-lane roundabouts have signs that indicate which lane you should be in to reach your destination. Look for signage as you approach and avoid changing lanes while circulating in the roundabout.