Building Bridges in the Community

How Michigan’s county road agencies are impacting their communities.

Photo: Kent County Road Commission

IN THIS ISSUE:
- Member Profile: Sanilac County Road Commission
- CRA board observes future of automated and connected travel
One Team — One Goal.

- 20 FULL SERVICE LOCATIONS
- 24/7 FIELD SERVICE
- 120+ FIELD SERVICE TRUCKS
- 20+ PARTS DROP LOCATIONS
- 24/7 ONLINE PARTS ORDERING
- 150+ DEDICATED SERVICE BAYS
- 350+ SERVICE TECHNICIANS
- 45+ PARTS EXPERTS
- 20,000+ RENTABLE UNITS
- 24/7 RENTAL SUPPORT

Michigan CAT

SITECH

M. Allister CAT Rental Store

NOVI
24800 Novi Road
Novi, MI 48375
(248) 349-4800

MACOMB
12550 23 Mile Road
Shelby Twp, MI 48315
(586) 997-5300

GALESBURG
144 N. 33rd St.
Galesburg, MI 49053
(269) 665-7608

NILES
2147 S 11th St.
Niles, MI 49120
(269) 252-4600

GRAND RAPIDS
7700 Caterpillar Ct.
Grand Rapids, MI 49548
(616) 827-8000

SAGINAW
3141 Wolf Road
Saginaw, MI 48601
(989) 752-7300

LANSING
7625 Northport Dr
Lansing, MI 48917
(517) 394-2233

KALKASKA
3990 U.S. Highway 131
Kalkaska, MI 49646
(231) 258-8265

BROWNSTOWN TWP.
19500 Dix Toledo Hwy.
Brownstown Twp., MI 48183
(734) 779-5800

BROWNSTOWN TWP.
2625 W. Sibley Court
Brownstown Twp., MI 48183
(734) 225-2292

KALAMAZOO
5140 Meredith St.
Portage, MI 49002
(269) 383-7880

WIXOM
52700 Pentiac Trail
Wixom, MI 48393
(248) 714-8300

POWER SYSTEMS
25000 Novi Road
Novi, MI 48375
(248) 349-7050

WATERFORD
2210 Scott Lake Rd.
Waterford, MI 48328
(248) 674-0000

TRaverse City
4195 Meadow Lane Dr
Traverse City, MI 49685
(231) 932-2255

SITECH
24800 Novi Rd.
Novi, MI 48375
(248) 380-1407
Crossroads is the quarterly publication of the County Road Association (CRA) of Michigan. The 83 county members of CRA represent the unified, credible and effective voice for a safe and efficient county road system in Michigan.

The Association, headquartered three blocks north of the State Capitol, is dedicated to helping members promote and maintain a safe, efficient county road system including stewardship of the county road right-of-way in rural and urban Michigan.

No part of this publication may be reproduced without permission of the editor and the County Road Association of Michigan. Opinions expressed by columnists and contributing authors are not necessarily those of the County Road Association of Michigan, its officers, employees or the editor.

Advertisers and sponsors are solely responsible for the accuracy of information in their ads.

© 2018, County Road Association of Michigan

Our Mistake!

In the “Requested vs. Required Signs,” article from the Summer 2018 issue of Crossroads, we erroneously stated that townships must pay for road signs. Road signs are the responsibility of the county road commission or department and therefore are paid for by the road authority.

Next Publication

The theme for the Winter 2018 issue of Crossroads is 21st century winter maintenance practices. We’ll take a look at the innovative tools and techniques county road agencies are using to combat snow and ice.

Crossroads’ editorial team wants to hear from you. Call CRA at 517.482.1189 and share ideas for future issues!

Crossroads individual articles now shareable online!

Crossroads online has a new digital reader featuring an enhanced share function for individual articles. To share your favorite article from this and other issues on Facebook, Twitter or through email, head to micountyroads.org/Crossroads-Magazine.
Once again, I am amazed by the efforts in public service and emergency response throughout the state with the recent flooding events.

Certainly, road agencies are no strangers to emergency response, having to respond to a variety of emergency issues at any time and any day. We are what shines in a time of crisis and where helping hands come together and collaboration is a given. We make sure that our infrastructure is safe for all users.

“In times of emergency response I refer back to Mister Rogers – I may be dating myself as Mister Rogers’ Neighborhood was a favorite of mine as a child. He has a quote that has been repeated many times recently and to which I often refer:

“…Look for the helpers. You will always find people who are helping. To this day, especially in times of disaster; I remember my mother’s words and I am always comforted by realizing there are still so many helpers – so many caring people in this world.” – Fred Rogers

We are thankful for all the comfort you bring to so many people and all you do as a public works first responder.

Joanna I. Johnson
CRA President
Managing Director
Road Commission of Kalamazoo County

A link to more information can be found at: https://www.apwa.net/MYAPWA/MyApwa/Apwa_Public/Resources/First_Responder.aspx
ADS SETS THE STANDARD FOR STORMWATER PIPE

ADS HP Storm and N-12® pipe utilize state-of-the-art lightweight materials. The pipe installs twice as fast, creates a safer work environment and saves money when compared to RCP.

**DELIVERIES**
- HP Storm uses less trucks
- Self unloading - no lifting required

**STAGING**
- HP Storm is able to be stacked high
- Nest smaller diameters
- RCP stacks two high

**STRINGING**
- HP Storm can be moved quicker
- Handle safer
- RCP is moved two at a time
- Requires machinery

*Based on 5,000 feet of 30" diameter pipe.

**INSTALLATION**
A typical project with 5,000 ft specified on the plans will net you:
- 25 days using HP Storm (56 days with RCP)
- 250 joints using HP Storm (625 joints with RCP)

30” HP Storm: Installation Rate of 200 ft per day**

30” RCP: Installation Rate of 88 ft per day**

**Data compiled from RSMeans**
Sanilac County used to be the whole “Thumb” of Michigan back in 1822 when it was split from St. Clair County and administered, for some reason, by Oakland County. Two decades later, Sanilac was divided to create Huron and Tuscola counties – and today all three make up Michigan’s globally-recognized Thumb.

What was important in the Thumb back then, still matters to the Sanilac County Road Commission (SCRC): Agriculture and tourism on the Great Lake Huron.

As with many county road agencies Sanilac has seen its ups and downs in the 99 years since the commission was established, according to current 16-year county highway engineer-manager Robb Falls, PE.

The early 2000s were a challenging time for SCRC, when cash flow dipped dangerously low just as Falls was taking over. The budget dictated the road commission shed 16 employees and a corresponding amount of heavy equipment, despite serving a whopping 26 townships and having an above-average number of bridges and road miles.

That “right-sizing” set SCRC on course for the healthy financial position it enjoys today, Falls said, and has made the road commission very economy-minded.

The remaining SCRC staff has taken on the extra work required to make the wheels go ‘round, even after right-sizing.

“Our workers are very dedicated – we don’t have late-night shifts,” Falls said. “They all know year-round if there’s a windstorm or a rainstorm they are going to get called in, and they are very reliable.”

Quality staff + good equipment = ready for the roadwork

Having the right tools for the job is key to every profession, as it is to every county road agency. SCRC has put a priority on having proper equipment while also funding road work over the years.

Taking wing

One of Falls’s points of pride is Sanilac’s early adoption of the wing plow extension that expands the plowed area from 10 to 15 feet.

“In about 2008 we became one of the first counties in this area to have a wing.”
Today all but four SCRC plow trucks have wings, and they will all be equipped by 2020.

**Wrenching re-invented**

“Something else I’m very proud of is that in 2005 we switched over to one centralized maintenance garage,” said Falls. “Before that everyone was taking care of his own truck, doing his own oil changes and making individual maintenance decisions.”

“As a leadership team we decided to change to one maintenance garage, which is currently staffed with four certified mechanics. At the time, it wasn’t popular with our drivers” who often bond with “their” trucks and want to care for them.

“We went from a whole day in some cases to do an oil change to three hours,” Falls said. When the certified mechanics got under the hoods, they discovered that some corners had been cut in maintenance with a “quick fix” that wasn’t a lasting fix in the long run.

“I believe our equipment has less down time now, and more time out on the road serving the people of Sanilac County,” Falls said.

When not maintaining the fleet, mechanics also custom-build SCRC’s own trucks with purchased chassis and other parts. “We save money, get better quality and have a truck more suited to our needs,” Falls said.

**Building township relationships**

With 26 townships and a history of conflicts, Falls and his commissioners have worked hard to create new relationships. They hold a large meeting nearly every year with township officials, as well as one-on-one meetings.

“We tell them: ‘You’re the customer, you’re paying a large percentage of the bill, so how can we get this [road project] done to our standards by working together,’ said Falls. “It wasn’t always that way. Fifteen and twenty years ago, townships wanted to use private contractors to do all of their work, including summer maintenance.”

“We have asked the townships to help us out by utilizing us in the summer for dust control, mowing, other maintenance and construction work. This helps the road commission retain the employees who are critical to our winter road operations, and keep them busy all summer,” he said.

“It took years, but we have won over a lot of the townships with our commitment to working together,” Falls said.

**Matching funds**

SCRC has had a policy of requiring 83 percent of funding for a local road project to come from townships with the road commission providing 17 percent of the dollars plus its in-kind workforce. With new road funding arriving, SCRC has just increased its contribution to 25 percent.

On culverts under 30 inches, SCRC pays for the project; larger culverts are the township’s responsibility per board policy.

In Sanilac County, over half the townships have a local road millage and the county has a two-mill county-wide primary road millage that was up for renewal on the August 2018 Primary ballot.

“It is very important that we keep the county millage and the township millages,” Falls said. “We need both of these funding sources in addition to state revenue and federal dollars to restore our roads.”

**Supporting local economic development**

When it comes to supporting the local community, county road professionals get involved in local economic development planning and construction.
One of SCRC’s biggest economic development projects took place several years ago as collaboration between the City of Sandusky, also the county seat, and SCRC to improve the road as part of enlarging the city’s industrial park.

“We got one of the local roads certified as a primary road and then put a major reconstruction and paving project on our five-year state TIP [Transportation Improvement Plan] so that we could get federal funds for it,” Falls said.

“We went to that amount of effort and planning because economic growth in our county would generate more tax for roads and more people working at this location... We have ethanol plants at Caro and Marysville – what if something of that magnitude wanted to come to Sanilac County? We have to be prepared,” he said.

This summer, SCRC is working with a Transportation Economic Development Fund Urban grant from MDOT to improve roads to accommodate the expansion of an automotive supplier near the Village of Lexington. The road commission has also worked with large dairy farms that need roads upgraded to Class A all-season roads so that they can haul full milk loads year-round and remain competitive in the milk business.

“Everyone has trouble with the front-end loader for some reason,” Falls said. “But when you put those younger people on our road grader – the most expensive piece of equipment we have – they can run it like nothing. I think that’s because the operating mechanisms are two joy-sticks like their video game controllers!”

**Hiring times are a changin’**

In a full-employment economy, hiring at the county road agency has become more challenging in all corners of the state.

“My hardest job is trying to draw that personality and true skills out of a person applying for a job with the Sanilac County Road Commission,” Falls said.

The Gen Y’ers particularly distinguish themselves during the hands-on equipment-driving tests Falls administers to potential employees.

Top 3 things Sanilac Road Commissioners are thinking about:

1) Passing the county-wide millage renewal to support primary roads and bridges.
2) Keeping good township relations.
3) Providing a high level of service to customers.
Specializing in Online Auctions of Municipal Assets

- ONLINE AUCTION BIDDING
- FREE LISTINGS FOR MUNICIPALITIES
- ITEMS SELL FROM YOUR LOCATION
- PROFESSIONALLY MARKETED

Cal Yonker
616-890-5514 · CYonker@Rangerbid.com
601 Gordon Industrial Ct., Byron Center, MI

SOLD

SOLD

AWARD WINNING ASPHALT PAVING & SUPPLY SINCE 1959.

Alma Contact: Russ Milan - 989.402.5932
Monroe Contact: Frank Azzopardi - 734.322.1934
Can you grind up an asphalt road, spit it back out and use it again? The answer is yes, of course!

New this summer, the Jackson County Department of Transportation (JCDOT) began a large-scale approach with a decades-old process called cold-in-place recycling to improve the longevity and conditions of its county roads.

The undertaking was not without controversy between the county and the private road-building industry, yet the Jackson County Board of Commissioners forged ahead.

50-year roads?

Shortly after the Transportation Package passed the Michigan Legislature in 2015, there was much discussion about 50-year roads. Could roads be made to last that long on a routine basis?

While 50 years is a stretch, it’s no secret that re-constructed roads taken down to the aggregate (gravel) layer and rebuilt last longer than a band-aid approach.

Cold-in-place recycling is one path to reconstruction. JCDOT and the Jackson County Board of Commissioners have made a $6 million investment in equipment needed for a comprehensive road recycling program.

“Cold-in-place recycling takes the road’s aggregate base and existing asphalt, grinds it all up, adds asphalt binder and a small amount of Portland cement, paves and rolls and compacts it to make bound aggregate base material to put back as a ‘new’ very durable roadbed,” said Christopher Bolt, MPA, PE, the JCDOT managing director.

“The recycled material is typically between 6 and 8 inches, but can vary in thickness depending on the traffic volume of the road,” Bolt said. “After laying the material, a top coat of hot-mix asphalt material is added in partnership with a private-sector asphalt paving contractor.”

JCDOT is the first road agency in Michigan to utilize cold-in-place recycling technology as part of a comprehensive road improvement program, purchasing nearly $6 million of equipment earlier this year.

“This isn’t a process you can use if you just want to grab the keys and go – a lot of preparation and planning goes into every project. We’re working with on-site materials, and every road has different base and asphalt characteristics, so a ‘recipe’ must be developed for every project in the lab to maximize the strength of the new road base,” Bolt said.

Jackson will recycle roadways one of two ways: the train method or the stationary method.
“In the train method (shown above) all the equipment is out on the roadway and moving very slowly, grinding up the old road, adding binding agents, and laying it back down with compaction as a new bound aggregate base,” Bolt said. “You cover about 20 feet per minute.”

The road can be opened to traffic immediately and a finishing course of asphalt is applied by a private contractor a few days later, Bolt said.

In the stationary plant method, some of the process happens away from the work site. This works very well in subdivisions, roads with hills and curves, and when additional base stabilization work is needed ahead of time.

“You’re still using all the equipment, but a stationary mixing plant is set up in a staging area nearby rather than on the roadway,” Bolt said.

Making the decision to purchase

Jackson thought long and hard, talking with experts, other agencies and contractors currently utilizing cold-in-place recycling technology and visiting roads built with the process before making the decision to purchase the equipment.

“We’re putting science back into our road building, and we are looking at things differently,” Bolt said. Staff talked to or visited agencies and contractors doing cold-in-place recycling in Ontario, Canada, as well as Florida, Texas, Minnesota, California, Alaska and Pennsylvania. While Bolt has long tracked the development of this technology, he worked with staff to comb through 30 years of research to understand project successes and failures and new developments.

“What we saw in Ontario was nothing short of amazing and validated what we had been reading and hearing: They have the same winter freeze-thaw cycles and face the same challenges that we do, and their recycled roads are holding up very well with no cracks or defects after several years of service – not one, but mile after mile of driving,” Bolt said. “The base is solid. They have been doing this for about 30 years, and they expect to be able to just mill and overlay the top layer of asphalt for decades to come.”

Costing it out

During its year of researching the technique, JCDOT came to believe the cost savings to the county and the anticipated improvements to road longevity were compelling. Moreover, JCDOT anticipates environmental benefits, such as reduction in greenhouse gas emissions and reuse of existing aggregate and road materials.

“Jackson maintains about 1,600 miles of roads, with nearly 1,000 miles currently requiring reconstruction. On average it costs about $300,000 to $400,000 per mile for traditional reconstruction,” Bolt said.

“Unfortunately, we won’t ever be able to catch our tail and resolve our nearly half-billion-dollar problem because as we’re fixing some roads now, many other roads are falling apart. They are costing us a lot money to patch because they’re already in such poor condition. We simply do not have adequate funding to stop the decline.”

“Our financial projections show that with cold-in-place recycling we can save an average of about $100,000 a mile, and we are building a stronger, more durable road – from the bottom up. And we expect additional savings on maintenance over the 30 to 50-year life of the road,” Bolt said.

In late June, JCDOT completed its first mile of recycling on Rosehill, a primary road. “This road now has the best foundation we have ever seen.” Twenty miles are planned for 2018 increasing to 50 to 80 miles annually over the next 20 years.

“I credit our county board and our county administrator, Mike Overton, for their collective leadership and support in approving the nation’s first municipally-owned comprehensive recycling program,” Bolt said. “The technology and equipment has evolved and improved a great deal in recent years, and we sincerely hope to see other road agencies consider using cold-in-place recycling to create a strong market demand for contractors here in Michigan.”
UNSURPASSED RELIABILITY

We’ve got you covered!
SALES PARTS SERVICE RENTAL

Jeff Ely
SouthWest MI
517-204-2127
ejly@aisequip.com

Chris Robinson
SouthEast MI
248-866-3168
crobinson@aisequip.com

Dan Novak
Northern MI
231-631-6168
dnovak@aisequip.com

Yes We Can! www.aisequip.com
Using Inter-Nation-al Funds on the LOCAL ROADS

Restoring the local road system with international dollars is easier than it sounds when county road agencies are working with Michigan’s 12 sovereign Indian nations.

Road agencies with a local tribal presence say working with the tribe and the Bureau of Indian Affairs (BIA) on road and bridge projects is a very positive experience that benefits the entire community.

Crossroads is reporting on this international relationship within Michigan.

Inter-nation-al support for roads

One of the point people working with BIA road funds is Don Seal, community engineer for the 3,300-member Saginaw Chippewa Indian Tribe. The Saginaw Chippewa work with road and bridge projects important to the tribe in Isabella and Arenac counties.

“We try really hard to collaborate,” Seal said of his role. “Especially in today’s climate, we try to get everyone together and just talk. We have great local relationships and have worked together many times” including working with the Isabella County Road Commission.

Michigan Indian tribes support roads that serve the Native community in several ways.

All tribes maintain a Transportation Infrastructure Inventory of roads and bridges – located directly on the reservation land or otherwise serving the tribal members. Inventory status is required for BIA funds for routine repairs, safety improvements and emergencies.

Routine repairs to roads and bridges come from the tribe’s annual federal FAST Act allocation, following a long-standing equation. As with non-tribal projects, the US government requires tribes to put together a five-year Transportation Improvement Plan (TIP) of intended projects, which involves cooperation with the county road agency.

Emergency use. The Federal Lands Highway’s Emergency Relief for Federally Owned (ERFO) roads program administered by the BIA comes into play more frequently than many realize.

The July 2017 rainstorm in Isabella County and the 2013 Sugar Island road wash-out both relied on BIA ERFO dollars for immediate relief.

If there’s a silver lining to getting a BIA ERFO grant, it’s that ERFO funds pay for engineering and many expenses as soon as the disaster occurs and allow up-sizing culverts while an inventoried road is being repaired.

That’s not the case with traditional federal road disaster funds. While a disaster-scale road wash-out may seem like the best time to replace a culvert with a regulation-required larger one, doing so forfeits federal funds for making an “improvement.”

“There are many different ways to get from the start to the finish [on a road project]. With BIA funds my perception is there is less red tape,” said Bryan Hewitt, PE, BIA highway engineer for the Midwest region and contact point for all Michigan tribes. “It works this way in most cases because the counties and the tribes have a good relationship.”

Economic development boosters

Michigan’s Native American nations contribute to local economic development in many ways. Of course, the casinos attract tourists who spend money at other businesses in the area.

The Saginaw Chippewa Indian Tribe is building a 148-room hotel that will have 500 jobs and has worked with the Arenac County Road Commission to develop the local roads.

“We want to spur economic development there and we will be the largest employer,” Seal said. “But we try to get the infrastructure in place first. Without the infrastructure – the roads and railroad crossings – the development can’t take place.”

In addition to building attractions and roads to them, Michigan tribes also support the community by contributing two percent of casino revenue to the area. Some tribes opt to benefit the region by providing funds directly to townships, which in turn may use them on local road projects.

“For the most part these tribes are pretty great to work with, especially on the transportation side,” said Hewitt of the BIA. “We are all looking for good roads and good infrastructure – I think there’s been a pretty good collaboration between the tribes and all these local road agencies for the last 15 years that I’ve been here.”

Cooperation on tribal-inventoried roads is a hallmark of the relationship between Tony Casali, manager of Isabella County Road Commission (at right), and Don Seal, community engineer for the 3,300-member Saginaw Chippewa Indian Tribe in Mt. Pleasant.
How do you resurface an aging road, protect the environment, plus save time and money?

Call Gallagher.

We'll show you how to dramatically reduce your pavement resurfacing program’s budget, and do your part to help protect the environment.

Hot-in-Place Recycling is not only a very green process that reduces the carbon footprint by 28% versus mill and overlay, it also reduces congestion and user-delays with far less trucking required.
“Whether I’m training a Special Forces driver in tactical roadway maneuvers, or my son how to drive, I need to know my students can hear me. I choose to train on asphalt roads because they produce less pavement-tire noise, guaranteeing I’m heard, even when my son pretends he isn’t listening. That matters.”

—Guy Frank | Tactical Driving Instructor | Dad

A QUIET RIDE
It’s just one of the ways asphalt delivers drivability.
CRA: We hear you have quite the history with your county transportation agency and road commissioners.

SEN. O’BRIEN: Funny story, when I was a young girl I lived on a dead-end road that was serviced by the road commission. Our road was never plowed until our neighbor got elected road commissioner. We weren’t the first to get plowed, we were just thrilled we got plowed at all. That was the first time I learned what a road commissioner was.

CRA: Can you tell us a little more about your relationship with the manager and road commissioners in Kalamazoo?

SEN. O’BRIEN: Joanna Johnson, our road commission director, is incredible. She keeps me in the loop. When the recent supplemental for roads was announced, we were told we needed shovel-ready projects ready to go. I was impressed when Joanna had a list of projects ready covering the entire county of Kalamazoo.

It’s important to have this in-depth knowledge, but trust is even more important. My relationship with my road commission is truly an exemplary partnership.

CRA: Were you surprised when the $400 million surplus in the 2018-2019 budget was first discussed for infrastructure, with $300 million going to roads?

SEN. O’BRIEN: The only surprise I had was how much the surplus was. My community has been adamant that we must invest in roads. When they said it would go to roads, it made sense.

CRA: Because of recent infrastructure emergencies across the state, have you given any thought to creating an emergency infrastructure bank or emergency local government bank?

SEN. O’BRIEN: We should have an emergency infrastructure account, but we must deploy it so that it really applies to emergencies that couldn’t be planned or prepared for, and we must make it fair and accessible to all.

CRA: Can you touch on your views on funding distribution regarding local agencies?

SEN. O’BRIEN: It’s important that we maintain local distribution. I know there is a desire from some to change the funding formula, but we need to look at why. There are many needs to be balanced, and compromise is key. That’s how we got PA 51; it’s based on compromise and treating everyone fairly.

CRA: The Legislature has placed an emphasis on road funding that has seemed to ramp up over the last two years. With so many term-limited seats up for election, do you anticipate any change in attitude toward road funding come 2020 and beyond?

SEN. O’BRIEN: Any time we have a major turnover, my biggest worry is the loss of knowledge and history of the past. I am asking all my partners and locals: What are you doing to educate the next crop of legislators?

I’m worried not all legislators will have a support system like I do. Be the resource, build the team.
SNOW & ICE CONTROL
ANTI-ICING
PRE-WETTING
CHLORIDE SAND
Trademark of Occidental Chemical Corporation
Bay Dust Control Division of Liquid Calcium Chloride Sales

LIQUIDOW™ DOWFLAKE™ PELADOW™
2715 S. Huron Rd., Kawkawlin, MI 48631
Ph: 989-684-5860   Fax: 989-684-9953
www.LiquidCalciumChloride.com

ST REGIS
CULVERT INC.
202 Morrell St. • Charlotte, MI 48813
(517) 543-3430 • (800) 527-4604

PRODUCTS WITH PRIDE
• Corrugated Steel Pipe
• Storm-water Detention Structures
• Culvert Liners
• CSP Fabrications
• Custom Window Wells
• Campfire Rings
• Aluminum & Steel Structural Plate
• Aluminum & Steel Box Culverts
• Erosion Control Fabric
• Guard Rail
• Snow Plow & Grader Blades
Ironically, to find the future of connected and automated (formerly autonomous) vehicles in Michigan, one has to look back to the WWII Arsenal of Democracy that was Detroit in the 1940s, as coined by President Franklin D. Roosevelt.

At that time “Rosie the Riveter” and the Willow Run Aircraft Factory in Ypsilanti built a B-24 bomber every 52 minutes for the US Army Air Forces, with Henry Ford applying automotive assembly-line technology to aircraft under the watchful eye of Charles Lindbergh.

Today the defunct 5 million-square-foot B-24 factory is literally the foundation for the nation’s most comprehensive connected and automated vehicle systems (CAVS) test site in the US.

CRA Board of Directors visits the future

To close out the CRA’s strategic planning session in July, many members of the CRA board and staff, as well as some staff, board members and administrators of CRASIF and MCRC SIP toured the new American Center for Mobility (ACM) facility in Ypsilanti Township.

MDOT staffer Mark Chaput, PE, (pictured, far left) and now ACM Vice President of Construction & Infrastructure Development gave a special tour of the site and an informative talk about the future of CAVS as it relates to the state and local road system.

With state loans totaling $50 million and a nearly equal amount of investment from industry supporters, the ACM began construction of a diverse CAVS test facility in June 2017, largely under Chaput’s oversight.

The main objective of the CAVS revolution is to improve driver safety, and the road and bridge network are as important as the vehicle in achieving this goal. The main objective of ACM at Willow Run is to provide real-world transportation infrastructure necessary to test and validate CAVS and related software, and to develop CAVS standards.
Back in the early 1940s, Willow Run site was built to accommodate 45,000 vehicles per day coming and going to work in the aircraft factory. The traffic demand is long gone, but the segment of freeway, a cloverleaf interchange and tri-level overpass remained available on the 500-acre site.

The original 5 million-square-foot concrete slab on which the factory was built, remains intact on-site for environmental reasons. New roads are being built atop it and structures anchored into it.

The ACM is constructing new roads and intersections to address NHTSA data on the nation’s top intersection crashes and other scenarios that will challenge CAVS with real-road situations. Yes, including potholes.

There are nine other Automated Vehicle Proving Grounds across the US that have been designated by the Federal Government, with ACM at Willow Run being the most comprehensive of them all, Chaput said.

**Unique features of the site**

With the older freeway components and new infrastructure features, the ACM site can test CAVS in these situations: 65-70 mph capability, multiple lane merging scenarios; bridges; capacity for semi-trucks, buses and passenger cars; a 700-foot curved steel tunnel; variation in pavement surface color; street lighting variability; 300- and 500-meter radius bends; pull-off areas with fiber-link to download the vehicle’s data for immediate high-speed transmission; 2, 3 and 4-lane capacity; signage; intersection visibility obstructions; and lane marking variability among other items, all utilizing AASHTO standards.

A rural-style road network with chip-seal and sealcoat surfaces, as well as gravel roads are planned within the next two years, to expand the range of road conditions available to the vehicle and tech developers.

As CRA and its members begin looking into the CAVS technology county road agencies will need to incorporate in the 75 percent of road miles they own, ACM will become an important source of information.
ONTARIO TRAP ROCK (OTR) IS A SUPPLIER OF HIGH QUALITY MDOT APPROVED AGGREGATES FOR YOUR CHIP SEAL NEEDS

MDOT SOURCE #95-10
MDOT AGGREGATE WEAR INDEX (AWI): 306
PRODUCTS: CS-2 & CS-T
OTR'S PRODUCTS REDUCE EMULSION APPLICATION RATES AND LOWER OVERALL MAINTENANCE COSTS.

CURRENT MICHIGAN DOCKS SUPPLIED:
Benton Harbor // Cheboygan // Detroit
Ferrysburg // Ludington // Marysville
Muskegon // Saginaw

FRANK HURKMANS  BILL SANDERS
REGIONAL SALES MANAGER – CANADA  REGIONAL SALES MANAGER – US
(519) 709-4377 // fhurkmans@tomlinsongroup.com  (219) 775-5783 // bsanders@tomlinsongroup.com
www.tomlinsongroup.com
Many people may remember 1983 as the year “M*A*S*H” ended its iconic run, “Every Breath You Take” ruled the airwaves and Jennifer Beals danced onto the silver screen in “Flashdance.” Wesley Federspiel, however, remembers it as the year he became a road commissioner.

Federspiel, now chair of Gratiot County Road Commission (GCRC), has been with the road commission for 35 years. A lifelong farmer, local road commission leaders convinced him to be a road commissioner to get better geographic representation across the county.

“I have always had an interest in the road system,” said Federspiel. “Supervisors at the Gratiot County Road Commission knew this and wanted someone from my area to help represent our unique needs. The rest is history.”

According to Federspiel, across more than three decades the most important aspect of the position—building community relations—has not changed.

“How we plan and the technologies we are deploying on roads has changed over the years,” Federspiel said. “But I’ve always seen the most important role of the road commissioner as partnering with townships, politicians and local business to bring the community together.”

As GCRC has seen increased road funding, Federspiel believes the need for community partnerships has also grown.

He has helped lead the charge by meeting regularly with township officials to better coordinate construction and development, something he says has greatly improved public perception and hope for the future.

“Many things have a cycle, from simple things like our equipment needs to complex issues like road funding,” said Federspiel. “Things look very positive right now. As we get more money and focus on our community, I can see things really improving.”

Federspiel, a humble man who goes by Wes, was shocked to learn he was the longest serving commissioner.

“I had no idea,” Federspiel said. “I’m just thankful to enjoy it and keep doing the job.”

Here are some other current commissioners with a long career in county roads:

- **Randy Schafer**, Ingham (1985)
- **Frank Leiva**, Iosco (1986)
- **Doyle Donn**, Gladwin (1989)
- **Larry Norman**, Missaukee (1989)

When asked what advice he would have for future commissioners, Federspiel said:

“It takes a couple years to learn what’s really going on, so don’t rush it. Attending CRA events for new commissioners is a great idea, too.”
Many companies say they can reclaim, but can they do it at ½ the cost?
Spaulding Mfg., Inc. has a hot patcher with the technology to save time, cost and material. With an oil jacket hot patcher you can reclaim millings and used material using only one burner. For more information and a demo contact a Spaulding Mfg., Inc. representative today. Don’t wait to start saving time, man hours, material and money. MiDeal Contract #0718770091

810-987-8748  www.PrecisionCS.net
With road conditions being such a hot topic in Michigan, now is a good time to briefly review financing options available to county road commissions. The traditional methods county road commissions use to finance road improvements are:

**Road Commission Notes**

A county road commission can borrow in anticipation of receiving future revenues derived from the Michigan Transportation Fund. Future MTF revenues can be pledged for the payment of notes issued for purchasing road machinery or equipment, for improving county highways, or for other general county road purposes. Notes can be repaid in up to 10 annual installments. The amount borrowed cannot exceed the amount approved by the county board of commissioners or certain statutory limitations.

**County-issued MTF Bonds**

A county can issue bonds secured by MTF Revenues to pay all or any portion of the cost of construction, reconstruction, enlargement, or relocation of existing highways, the acquisition of necessary rights-of-way, and all incidental work. The written recommendation or approval of the county road commission is required to issue these bonds. The amount that may be issued is subject to certain statutory limitations.

**Installment Purchases**

A county road commission can purchase real or personal property for public purposes by installment purchase contract. The purchase is paid in installments over a period of the lesser of 15 years or the useful life of the property acquired. Note also that counties can purchase lands, property, or equipment by installment purchase contract.

Other financing options for consideration under the right circumstances may include: voted township bonds issued to finance public local road improvements under a contract with a county road commission; county-issued capital improvement bonds; voted county bonds issued for construction and maintenance of county roads; borrowing for construction of bridges across navigable streams; bonds issued to pay an allocable share of the cost of construction or reconstruction of highways pursuant to a contract with the state, a city, or a village; and loans taken from proceeds of state transportation commission bonds for paying capital costs for certain transportation purposes.

By Eric A. McGlothlin, Dickinson Wright, PLLC, Troy
Key transitions at...

...Road Commissions and Departments

Lisa Hammerberg has joined the Menominee County Road Commission as office/accounting assistant.

Stuart “Mike” McTiver, PE, has joined the Luce County Road Commission as engineer-manager.

Eric Nelson, PE, is now county highway engineer at the Mason County Road Commission.

Wayne Schoonover, PE, has joined the Grand Traverse County Road Commission as county highway engineer/engineering manager.

Sheryl Siddall, PE, has been selected as managing director of the Washtenaw County Road Commission.

Matthew Snell, PE, has joined the Monroe County Road Commission as county highway engineer.

Christina Strong, communications manager, has left CRA after two years. She has taken a new position in southeast Michigan.

Roy Townsend, PE, managing director, Washtenaw County Road Commission, retired after 31 years of service.

In Memoriam

On July 8 Robert Kaarlie, chair of the Allegan County Road Commission, passed away unexpectedly. He was on the Allegan board for 11 years.

Mile Markers

Marlena McNeil, administrative assistant, Alcona County Road Commission, retired after 29 years of service.

Stan Ronquist, PE, engineer-manager, Luce County Road Commission, retired after 18 years of service.

Christina Strong, communications manager, has left CRA after two years. She has taken a new position in southeast Michigan.

Roy Townsend, PE, managing director, Washtenaw County Road Commission, retired after 31 years of service.

In Memoriam

On July 8 Robert Kaarlie, chair of the Allegan County Road Commission, passed away unexpectedly. He was on the Allegan board for 11 years.

Do you have a staff member you want recognized in Crossroads? Call Alexandra Contreras at 517.482.1189, or email acontreras@micountyroads.org.

We need you! To join Roads+!

Roads+™ is a political action committee for people like you—who understand how important it is to have good roads and bridges, and protect the right-of-way. We need you to financially support this work.

Roads+™ promotes better road policies and legislation in Michigan by contributing to the campaigns of candidates for state office and incumbents who understand road and bridge issues and will advocate for them.

Contribute today!

Member Dues

$50

* Contributions are accepted in all amounts.

Contribute at tinyurl.com/Roads-Contributions.

Election season 2018

Help Roads+™ elect candidates who support good road, bridge and right-of-way policy.

Paid for by Roads+™ the political action committee of the County Road Association of Michigan
“R.O.A.D.S. stands for Remain calm, Observe and listen, Acknowledge, Direct and Smile. This initiative was created for everybody at the Road Commission for Oakland County,” said Catina Richter, RCOC’s human resources training specialist. “We print the acronym on the back of badges for all new hires and include it as part of the orientation process. Temporary employees get a badge with R.O.A.D.S., printed on it as well.”

“To educate current employees on the new communication initiative, we did several presentations to on-site staff at our main office and at each of our garages,” Richter said.

RCOC’s R.O.A.D.S. initiative was also the recipient of one of the County Road Association of Michigan’s 2017 IMPRESS Awards.

R.O.A.D.S. was not developed as a reaction to service issues but rather as a proactive approach for ensuring RCOC maintains a high-quality level of customer service.

Building a pool of road workers

The Road Commission of Kalamazoo County (RCKC) is using partnerships to recruit and maintain a robust group of highly-skilled workers.

The Municipal Maintenance Technician Apprenticeship Program is a collaboration between Teamsters Local 214; Michigan Human Resources Development, Inc.; Michigan Works Southwest; and the US Department of Labor.

The program is registered with the US Department of Labor. And it’s the first of its kind in the state for road commissions.

The idea for the program was generated during a conversation between RCKC and Teamsters Local 214.

“The program was developed to support the recruitment and retention in our unique industry (the road commission),” said Deb Hill, RCKC’s Assistant Finance and Human Resources Director. “It is a paid two-year apprenticeship program. By the end of the program an individual will have a CDL Group A license.”

Program participants must be at least 20 years of age and possess a high school diploma or GED. There isn’t currently a specific number of slots available in the program.

Currently RCKC will sponsor one position. This number may be adjusted as the program develops and staffing needs change.

“The Road Commission of Kalamazoo County sponsors the apprenticeship program. We will continue to look for grant opportunities and assistance as skilled trade initiatives become available,” Hill said.

Enrollment for the apprenticeship program is open. Instructions on how to apply are on the RCKC website and Michigan Works! job board. Initial screenings of applicants take place through Michigan Works!

Interested candidates are directed to Michigan Works! Southwest for enrollment processes.

“It’s been a rewarding process and a good learning experience. We’re looking forward to seeing how this rolls out,” Hill added.
Put them together and leave nothing behind with Bayer

For ultimate bareground control, you need the power of two superhero-strong products. While Esplanade brings long-lasting, superior combat strength, Method provides an unrivaled broadleaf weed herbicide foundation. So go ahead, combine them, and use your power for good.

Method

Broadleaf weed control solution that is both powerful and flexible

Superior broad spectrum control of 75+ weed species for up to 8 months

THE ROAD STARTS HERE

Preservation
Construction
Specialty Applications

THE ONE STOP SHOP FOR ALL YOUR ASPHALT NEEDS
VISIT OUR WEB SITE AT:
WWW.ASPHALT-MATERIALS.COM

940 North Wynn Road
Oregon, Ohio 43616
(419) 693-0626
www.asphalt-materials.com
CRA has launched its highly anticipated next-generation database system: the Michigan Road Agency Database, or MiRAD (the database formerly known as MISCRAM).

For over a year, a MiRAD team from CRA’s Finance & Human Resources Committee worked to fine tune what MiRAD would contain, how it would look and functional properties to make MiRAD a more useful tool.

MiRAD pulls the most recent Act 51 revenue and expenditure data from MDOT, combines it with current compensation data, council information, road miles and the number of bridges, and allows a county to review and manipulate it for benchmarking and agency to agency comparison.

“Before leaving the Mason County Road Commission, with minimal training I was able to get into MiRAD and build some sophisticated reports comparing manager salaries in our council,” said Wayne Schoonover, PE, now county highway engineer/engineering manager, Grand Traverse County Road Commission. “Using quick filters and the reports saved in MiRAD, I was very happy with what I was able to build and provide my former board.”

Perhaps the most requested feature is the ability to verify previous information already in MiRAD instead of reentering it every year.

“Finance directors did not like that we had to re-enter all of the information from scratch each year. Nothing was carried forward from the prior year to the current year,” said Steve Watson, CPA, finance director, Huron County Road Commission. “If the new MiRAD system eliminates these problems it will be more user friendly and a big time savings for us as finance directors.”

With a focus on sustainability and the flexibility to change and grow with the needs of county road agencies, this is only the beginning for MiRAD.

“MiRAD is a great tool I have been able to put to use my first time using it,” Schoonover said. “I’m excited to see how it continues to develop as time goes on.”

CRA would like to thank the members of the MiRAD workgroup for their efforts in launching MiRAD: Beth Hunt, Lenawee County Road Commission; Kimberly Kimmel, Clare County Road Commission; Jennifer Rosser, Shiawassee County Road Commission; Steve Watson, CPA, Huron County Road Commission; and Melissa Williams, Road Commission for Oakland County.

Signup for access to MiRAD

→ Have you signed up for MiRAD? Access is just a click away.
→ Fill out the form at micountyroads.org/MiRADsignup to enable your account today.
→ For more information on MiRAD, call CRA at 517.482.1189.
Strategic moves: Modernizing Your OPEB

MERS has teamed up with Mercer to provide a comprehensive strategy to help you eliminate or reduce OPEB liability – without compromising your commitment to providing retiree health care.

Together, we offer:

- Health Care Consulting
- Retiree Health Funding Vehicle (Section 115 Trust)
- Individual Savings Accounts for Retiree Health Care
- Private Health Care Exchange – Mercer Marketplace 365

MERS
Municipal Employees’ Retirement System
www.mersofmich.com

FAHRNER
asphalt sealers
Enforcement Maintenance Infrastructure
Environmental Stewardship

YOUR ASPHALT IS A BIG INVESTMENT
It’s time to trust the experts

→ Crack Sealing
→ Chip Sealing
→ Fog Sealing

www.FahrnerAsphalt.com
989-752-9200

MACKINAW ADMINISTRATORS, LLC

The Recognized Leader in the Insurance and Alternative Risk Field

- Multi-Line Claims Administration
- Risk Management Services
- Self-Insured Claims Administration
- Excess Workers’ Comp Placement
- Flexible Claim Reporting Options
- Local Claim Service
- Loss Prevention & Safety Consulting

Donna K. Cianciolo
810-844-3945 | dcianciolo@mackadmin.com
WWW.MACKADMIN.COM
On June 23, 2017, a 48-hour downpour hit Central Michigan. Before it was over, nine inches of water would wreak havoc across 578 square miles, including the university, casino resort and rural roads.

Tony Casali, managing director for the Isabella County Road Commission (ICRC), began hearing about bridges and roads being washed out during the torrential downpour in the wee hours of the morning.

“We knew immediately that morning about the damage. We were getting calls from dispatch at four or five in the morning that the levels were already exceeding the normal conditions and water was over the roads,” Casali said.

Upon arriving at the road commission building, Casali realized that Mother Nature was challenging ICRC in more ways than one.

“The Isabella County Road Commission Garage was flooded! Our office had three to four inches of water in it,” Casali said. “Our road commissioners came to our office to help us. They ripped out carpet while our staff worked to set up an emergency command center and get out on the roads.”

“We did lose some computers, but the road equipment was okay,” Casali added.

**Using 21st century technology**

While ICRC was working double-duty cleaning out its office and dispatching staff, bridges and roads were disappearing rapidly beneath the extensive downpour.

This included areas under construction such as the Lincoln Road Bridge between Broomfield Road and M-20 in the county.

Rain completely washed out the south leg of the Lincoln Road Bridge.

ICRC utilized drone footage to capture in-depth footage of storm damage, including the bridge. Using traditional storm damage assessment techniques, identifying the damaged leg of the bridge would not have been possible, Casali said. With the use of 21st century drone technology, ICRC was able to quickly identify and assess damage to the bridge.

Drones were also used to assess damage on numerous other roads that couldn’t be traveled by ICRC staff.

“We were able to get some footage from hand-held drones,” Casali said. “The construction company we were working with had one. Also, a resident brought in video shot with his own drone.”

---

**DISASTER in Isabella County**

**Mother Nature’s fury unleashed**

Woodruff Road North of Pickard Road in Isabella County.
ICRC did not own a drone at the time of the storm but is considering adding one to its equipment supply.

“We are considering buying one because of this past storm. Drones were also useful in identifying areas of infrastructure that could be improved,” Casali stated. “Hopefully by making improvements, we can avoid or reduce damages if a storm like this should occur again.”

In addition to drones, the Michigan State Police assisted ICRC by using one of its helicopters to record video that was livestreamed into ICRC’s office.

The flooding damaged 130 roads and 10 bridges just in Isabella County. ICRC made daily calls to 911 dispatch regarding which roads were passable and kept the public up-to-date with Facebook.

“Our staff was putting out Facebook updates on which roads were closed and which bridges were damaged,” Casali said.

The after-effects of the storm

ICRC’s staff and subcontractors were working 24 hours a day for two weeks after the storm. At the end of the storm, damages totaled $15 million.

Rebuilding Isabella County’s transportation infrastructure would take numerous funding sources and help from townships and other government organizations.

“We received a loan from the Governor’s office that has to be paid back. We were also fortunate to go through the Bureau of Indian Affairs in Washington,” Casali said. “We were able to get reimbursed for 20 sites thanks to the Saginaw Chippewa. So overall, it was about $12.3 million in federal funding to restore the roads.”

“We also received Section 19 funding through the State of Michigan. We had to work with Isabella’s 16 townships and they applied on our behalf for a portion of the damage that was done in their townships,” Casali said. “Total funds through townships was $300,000.”

Thirty of Isabella’s roads remained closed going into 2018, and a few were still closed at press time. ICRC plans to reopen all roads this year.

“It’s astonishing that 12 months have already gone by and we’re still dealing with the aftermath from the flood,” Casali said. “We are grateful the storm wasn’t worse, and that we were able to work with our partners to find funding to open roads again for the public.”

Getting by with help from friends

Isabella County’s recovery has been a year-long journey with much help from the community.

“The public and their patience was kind of surprising. During the storm recovery, townships were coming with pop, food and water for our staff. Other road commissions not affected helped with staff and equipment if they had it,” Casali said.

“MDOT called and asked if they could help. We had lots of help from our State Representative Roger Hauck. It was nice to know we had people there for us,” Casali said.
Krenn Timber Bridge, Inc.
COMPLETE BRIDGE PACKAGES, DECKS AND CULVERTS

- Pre-engineered
- Long Life
- Designed for any loading or ADT
- No rust, cracking, or spalling
- Aesthetically pleasing
- Serving Michigan for over 60 years

(269) 207.7483  |  6835 South 6th St.  |  Kalamazoo, MI 49009 | krenntimber@gmail.com

October 3-5
Superintendents Seminar
2018 marks the 43rd annual Superintendents Seminar by the Superintendents Association of Michigan. It features educational sessions, a banquet and heavy equipment trade show at the Bavarian Inn in Frankenmuth.

REGISTRATION LIVE!

October 26
CRA Public Relations Workshop: Building Bridges in the Community
Learn effective approaches to develop partnerships, strengthen relationships and build bridges with stakeholders. Held at the Comfort Inn & Suites, Mt. Pleasant.

REGISTRATION LIVE!

December 4
4th annual Legal Issues Symposium and Mastery Series
New subjects including crisis/emergency management will be the focus of this year’s Legal Issues Symposium in the morning and the afternoon education program.

December 18
SuperPave® Asphalt Mix Design, Production and Construction
CRA’s SuperPave® asphalt workshop is back with instructor Tim Murphy, PE, president of Murphy Pavement Technology, Inc., of Illinois. Participants will earn 16 CEU credits!

REGISTRATION LIVE!

To register and for details on all CRA events, visit www.micountyroads.org/events.
Michigan roads and bridges will continue to see even more improvements next year thanks to $300 million in surplus funding from the state; and the first phase of the new income tax funding in fiscal 2018-2019.

When I first started with the County Road Association, I was unaware of the work that went on behind-the-scenes and the large amount of funding needed to simply maintain, let alone improve Michigan’s transportation infrastructure.

I didn’t know that roads were maintained by separate road agencies, such as MDOT, cities and county road agencies. I was unaware that Michigan roads hadn’t seen an increase in capital in 20 years! I was also unaware of the huge costs associated with road maintenance and repairs.

During the two years I have been with CRA, I have watched county road agencies do more with less and constantly innovate to serve the residents of their counties.

It is because of the work you do that Michigan’s economy can thrive, “first responders” can save someone’s life, parents can get their kids to school and tourism in the state can flourish.

July 5th marked my last day with CRA, and this is my last Editor’s Note. It has been a pleasure serving with the hardworking men and women who maintain 75 percent of Michigan’s roads, 5,700 bridges and more than 31 billion square feet of right-of-way!

As I travel down county roads from time-to-time, I will always remember who to thank for passageways throughout the “Mitten.”

Christina Strong
Editor and Communication Manager
QBS

Qualifications-Based Selection is a simple and competitive process to match the right design professional to your project.

Projects that use QBS

"It’s a very good system. We use it now for all engineering because it just saves a bunch of potential problems.

Steve Sobers, Former Big Rapids City Manager"

Website: QBS-ML.org • Email: info@QBS-ML.org • Phone: (517) 332-2066

ACTION
TRAFFIC
MAINTENANCE

Family Owned & Operated Since 1982

810.695.7516
www.ActionTraffic.net

SALES, INSTALLATION, REPAIR & SERVICE

ROAD SIGNS & FENCE

GUARDRAIL & ATTENUATORS

5182 S. Saginaw Rd - Flint, MI 48507
Micro Surfacing
FiberMat
SAMI Interlayer
Overband Crack Seal
Chip Seal

Slurry Seal
Emulsified Asphalts
FDR
Soil Stabilized Base
Axys/Onyx Mastic
Surface Treatment

For further information please contact:
Malcolm Smith, Pierre Peltier, or Andrew Friend
www.strawserconstruction.com

Strawser Construction, Inc.
1392 Dublin Road
Columbus, OH 43215

Phone: 614.276.5501
Fax: 614.276.0570