

Road Report

A publication of the Road Commission for Oakland County for public officials serving Oakland County www.rcocweb.org

RCOC activates first-of-its kind public/private partnership for wireless infrastructure

Neo Network Development, on behalf of the Road Commission for Oakland County (RCOC), has activated the first installation of a "small-cell" communications system housed on a Road Commission traffic-signal pole.

The installation, at the intersection of 13 Mile and Lahser roads in Beverly Hills (right outside the RCOC administrative offices), is the result of a first-of-its-kind public/private partnership agreement between RCOC and Neo Network, which is deploying the network on behalf of a major U.S. wireless carrier. The agreement involves the Road Commission leasing space on its traffic-signal poles to the wireless carrier so the company can place its small cell on the poles.

Small cells are low-powered cellular radio-access nodes that have a range of up



The small cell hardware on an RCOC pole.

to a couple miles.

"This is a win/win situation," explained RCOC Managing Director Dennis Kolar. "It ensures the telecommunications industry the ability to install the latest in communica-

tions hardware while providing the Road Commission with a new revenue source. This saves taxpayer dollars."

"The initial deployment includes about 250 locations on our 'vertical infrastructure'," explained RCOC Chairman Eric Wilson. "It will result in an increase in our revenue stream of between \$225,000 and \$250,000 per year," he added.

Wilson noted the revenue will be used to invest in RCOC buildings and grounds, so that tax-payer dollars can be devoted to improving roads.

The agreement was brokered by Neo Network, a private company that develops and markets RCOC's vertical infrastructure.

"This is a creative new approach to managing the issue of hosting telecommunications and wireless facilities in the road

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RCOC: 84 miles of new road surface this year

If it seems like there is a lot of road construction taking place in Oakland County this year, that's because there is.

By the end of this year's construction season (typically in November), the Road Commission for Oakland County (RCOC) will have placed more than 84 miles of new paved surfaces across the county. "That's more new pavement than at any time in recent memory," explained RCOC Managing Director Dennis Kolar.

"We promised to put the new road funding directly into the roads, and that is what we're doing," he added. Kolar said that RCOC placed approximately 45 miles of new road surfaces in 2017, about 14 miles in 2016 and about 20 miles in 2015.

The new funding is the result of the 2015 state road-funding package, which raised the state-collected gas and diesel taxes and vehicle-registration fee as of Jan. 1, 2017. The state Legislature has also provided additional state General Fund



Paving underway at one of the RCOC 2018 preservation overlay projects.

dollars for road improvements.

"We've got a large backlog of roads that need new surfaces as a result of decades of underfunding," Kolar said. "Now that we have new funding coming in, we're starting to take a bite out of that backlog."

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Company chosen to lead pioneering connected-vehicle infrastructure project

The Road Commission for Oakland County (RCOC) and Oakland County general government in June selected P3 Mobility (P3M) of Toronto through an open bid to launch a first-of-its-kind pilot program to test connected-vehicle infrastructure and determine whether an innovative business model to monetize that infrastructure is viable.

The business model will involve a public-private partnership.

"The pilot program has the potential to revolutionize transportation not just in Oakland County but for the world by seeing whether we can monetize connected-mobility infrastructure," Oakland County Executive L. Brooks Patterson said. "On an engineering and business level, this is our moon shot."

In Patterson's 2014 State of the County speech, he announced the formation of the Oakland County Connected-Vehicle Task Force whose job is to tap industry experts to develop a business model for implementing connected-vehicle infrastructure throughout the county. P3M will help the task force take the next step of developing and testing a leading-edge business model.

"This is no small task. After all, Oakland County has 5,600 miles of roads and 1,600 intersections with traffic signals," RCOC Deputy Managing Director/County Highway Engineer Gary Piotrowicz said. "We in Oakland County, however, are visionary. We don't view the



Oakland County Executive L. Brooks Patterson announces the selection P3M to lead the Connected-Vehicle pilot program.

magnitude of the task as an obstacle but a challenge that can be solved by our best and brightest minds."

P3 Mobility will install wireless smart-intersection technology at 10-12 intersections and research the user experience to better understand the optimal pricing of various road services and their projected income potential. The exact location, dates of installation and cost of the project will be determined.

"We are delighted to have been selected for this groundbreaking project in Oakland County," P3M CEO Erin

Milligan said. "During the pilot, we will engage Oakland County residents at every level which will include conducting extensive market research to learn what they think about and want for future connected mobility in their community."

RCOC is no stranger to connected-vehicle technology -- including connected-vehicle infrastructure -- and has a global reputation for its leadership in the field. It was the first local agency in the United States to introduce a connected-vehicle project in 1992 when it launched its FAST-TRAC adaptive traffic-signal system and Ally Scout route-guidance system. Since then, it has been a key player in numerous connected-vehicle technology tests and deployments, partnering with the Federal Highway Administration, Michigan Department of Transportation, all the major auto manufacturers, many tier 1 auto suppliers and many of the leading connected-vehicle companies from around the world.

"The University of Michigan Transportation Research Institute published an article a few weeks ago that says implementing connected-vehicle technology and infrastructure could prevent up to 8.1 million car crashes and 44,000 deaths every year," Patterson said. "Taking another step closer to countywide connected-vehicle infrastructure is another step closer to preventing automobile deaths and injuries."

Road Commission bridges remain in relatively good shape

Unlike many of the roads under Road Commission for Oakland County (RCOC) jurisdiction, many of the agency's bridges are in relatively good condition.

While about 60 percent of RCOC's paved primary roads are currently in poor condition (due to decades of underfunding), approximately the same percentage of RCOC bridges are in good condition.

And that percentage has remained fairly consistent over the years. "We have been very aggressive about going after bridge funding," explained RCOC Managing Director Dennis Kolar.

Kolar noted that, unlike road maintenance money, bridge money, particularly that from the state's Local Bridge Fund, is awarded on a competitive basis. "Road maintenance dollars are handed out based on a formula. We simply get what we get. Local Bridge dollars are competitive --



when we can compete against other counties in the region, we do well," Kolar said.

He added RCOC has been able to successfully apply for other funding sources for major bridges in recent years as well, such as the Michigan Transportation

Economic Development Fund (TEDF). TEDF provides funding for road projects intended to attract or respond to economic development.

"For example, we were awarded TEDF dollars to the rebuild the Silver Bell Road bridge near the GM plant in Orion Township in 2011, Kolar said. "That was a \$2.6 million grant that helped pay for a \$4 million bridge," he noted.

Kolar added that RCOC's active bridge preventive-maintenance program should also help to ensure RCOC's bridge stock remains in fairly good shape. "We are not only replacing bridges that are deteriorating, but we are investing in preventive maintenance to help extend the life of the bridges long before they get to the point of needing to be replaced," he said. "This is a great investment in our bridge infrastructure."

NEO NET -- CONT'D FROM FRONT rights of way," Wilson noted. "This is truly cutting edge and solves a number of problems that both road agencies and telecoms have been struggling with."

He added that the state Legislature is currently considering legislation that would impact telecoms in the road rights of way. "We figured out how to do this in a way in which everyone benefits -- both the public road agency and the telecommunications and wireless carriers," Wilson said. "This is a very timely development in light of the Legislature's current activities and demonstrates that the legislation is not necessary."

"This agreement provides a great model for how the public and private sectors can work together on the issue of placing telecommunications equipment in road rights of way in a way that meets the needs of both," Wilson said. "It's fair to both the road agency and the telecoms. This is a scalable and repeatable model that could easily be adopted by trans-

portation agencies and municipalities across Michigan and the nation."

RCOC's program allows the Road Commission to enter agreements to lease vertical infrastructure space to other telecom companies as well. "Right now, Neo Network is talking to other companies that could result in additional leases," Wilson said.

The master lease agreement provides for five- and ten-year lease terms with automatic five-year renewals and requires the lessees to follow RCOC's safety, planning and permit requirements.

"We retain control of our infrastructure and rights of way," Wilson said of the agreement. "Additionally, if there is a road project or other reason that we need to move the infrastructure, the carrier is responsible for the cost of moving its equipment. And, they pay all normal permit fees just like any other company that places equipment or provides service from within our right of way."

RCOC thanks motorists for patience during construction

There have been a lot of roads under construction this summer, and that makes for difficult travel.

The Road Commission for Oakland County (RCOC), makes every effort to minimize the impact of road construction on traffic. However, the nature of the work often requires disruptions or interruptions of traffic.

"That can be challenging for motorists," observed RCOC Managing Director Dennis Kolar. "But, it is also means we are improving the roads."

"We understand the frustration," Kolar added. "But, there is light at the end of the tunnel. The projects will finish, and the roads will be improved. In the meantime, we thank the motorists for their patience as we get the work done."



Napier paving completed

The Road Commission has completed the paving of Napier Road between 9 Mile and 10 Mile on the Novi/Lyon Twp. border.

84 MILES -- CONT'D FROM FRONT

However, Kolar observed it will still be years before RCOC is able to catch up with the backlog, even at the current rate of paving. "We have about 600 miles of primary roads in poor condition, so, while this year's program is a great step in the right direction, we still have a long ways to go."

The new surfaces this year include a variety of projects from simple resurfacing jobs to complete reconstructions, gravel road paving and road widenings. In all the total price tag for all RCOC projects that are underway this year is more than \$93 million.

Workzone cameras provide online views of Wixom and Opdyke bridge replacement projects

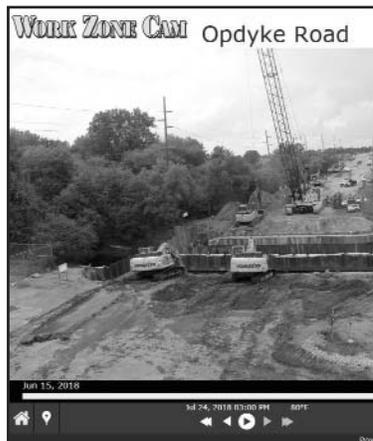
Anyone interested in tracking the progress of either the Wixom Road bridge replacement project or the Opdyke Road bridge replacement project can view the projects through workzone cameras on the RCOC website (www.rcocweb.org) -- in the "Helpful Links" section at the bottom of the home page).

The cameras operate daily, shooting a photo every 15 minutes between 7 a.m. and 7 p.m. Visitors

can view photos of the projects or a time-lapse series that combines all photos taken in succession. RCOC will produce a compilation of all photos for each project following the completion of the projects.

The Wixom Road bridge project involves replacing the structure that spans the Huron River in the Proud Lake Recreation Area on the Milford Township/Commerce Township border. Wixom Road is closed at the bridge during the project.

The \$2.2 million project began in late July and is expected to be completed in November. The cost is 95 percent paid for



The Opdyke Road project workzone camera.

through the Local Bridge Program, which is a combination of state and federal dollars. The remaining 5 percent is being covered by RCOC.

The Opdyke bridge replacement is part of the larger Opdyke Road resurfacing project from Auburn Road to Perry Street in Auburn Hills and Pontiac that began on June 18. The bridge, which spans the Clinton River, is located between Auburn Road

and M-59.

The Opdyke project is expected to be completed by mid-October. The road is closed at the bridge for the duration of the project.

The project is expected to cost approximately \$10.9 million, with \$3.1 million covered by federal funding. The City of Auburn Hills is paying for new water-mains along the road. Approximately \$2.8 million will be paid for through the Local Bridge Program, and the remainder will be shared by RCOC, the two cities and Oakland County general government (through the Tri-Party Program).

Proposed 2019 Road Commission budget presented at Aug. 23 public hearing

The Road Commission for Oakland County (RCOC) Board of Road Commissioners presented the RCOC proposed fiscal year 2019 budget at its annual budget public hearing Aug. 23 at the Oakland County Board of Commissioners auditorium.

At \$155 million, the proposed budget is about 6 percent larger than the 2018 budget as adopted in September of 2017. The proposed budget is expected to be adopted by the Board at its regular meeting on Sept. 20.

While the proposed budget includes an increase in state revenues (generated by the state-collected gas and diesel taxes and vehicle-registration fees), it also reflects a decrease in federal funding and Transportation Economic Development Fund (TEDF) dollars (a combination of state and federal dollars targeted at road projects that promote or support economic growth).

"Federal road funding is awarded on a project-by-project basis," explained RCOC Managing Director Dennis Kolar. "As a result, it tends to fluctuate up and down from one year to the next. So, the fact that we anticipate less federal dollars in 2019 than we received in 2018 is not unusual or a surprise. The same is true of TEDF dollars."

The anticipated increase in state funding is the result of the 2015 state road-funding package, which called for increased road funding to be phased-in over multiple years through 2021. The 2019 fiscal year is the first year that the state is required to set aside General Fund dollars for roads, with the amount increasing from \$150 million statewide in 2019 to \$325 million in 2020 and \$600 million in 2021 and every year after.

As in all recent years, the RCOC Board has committed the additional funding to improving the RCOC road system. That means that the proposed budget calls for an increase over last year's budgeted amounts in the three programs intended to quickly improve paved road surfaced: the preservation overlay program, the spot resurfacing program and concrete repair program.

The preservation overlay program involves simple asphalt pavement on top of a road that is in moderate condition and extends the life of the road five to 10 years. The spot resurfacing program involves milling small sections of bad pavement and replacing it with new pavement. The concrete repair program involves removing individual slabs of concrete that have failed and replacing just those slabs.

A copy of the proposed budget is available on the RCOC Website (click on the "Financials" icon on the home page and then select "proposed 2018-19 budget" from the "Budget Summary" category).

Contacting RCOC

If your constituents need information about a road project or want to report a pothole, traffic signal problem or other road issue, they should call RCOC's **Department of Customer Services** toll free at:

(877) 858-4804

OR

Fill out a report via the RCOC Web site:

www.rcocweb.org

ROAD REPORT

Road Report is published quarterly by the Road Commission for Oakland County. Have a question or comment about **Road Report**? Call Senior Communications Manager Craig Bryson at (248) 645-2000, ext. 2302.

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