Road Commission of Kalamazoo County 2017 Annual Report 108 Years of Service 1909–2017









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Honorable Board of County Commissioners County of Kalamazoo Administrative Building 201 West Kalamazoo Avenue Kalamazoo, Michigan 49007

Commissioners:

The one hundred eighth annual activities and financial report of the Board of County Road Commissioners of the County of Kalamazoo for the calendar year 2017 is herewith submitted in compliance with the provision of P.A. 283 of 1909, as amended.

Respectfully submitted,

Board of County Road Commissioners of the County of Kalamazoo

Daniel J. Moyle, Chair

Deborah J. Buchholtz, Vice Chair

David Q. Worthams, Member

David C. Pawloski, Member

Larry Stehouwer, Member

108 YEARS OF SERVICE

The Road Commission of Kalamazoo County was formed by a vote of the people in 1909. Five county residents are appointed by the Kalamazoo County Board of Commissioners to serve staggered six-year terms as road commissioners. To better serve our County and local officials, each Road Commissioner has also been assigned as liaison to a township.

MEET THE 2017 ROAD COMMISSIONERS







David C. Pawloski Larry Stehouwer

Deborah J. Buchholtz Daniel J. Moyle David Q. Worthams

Daniel J. Moyle -Chair

Mr. Moyle, Chair, is a Texas Township resident who was originally appointed to the road commission in November 2007. He is the 2017 Chair of the Board and served as Chair of the Board in 2013, 2014, 2015 and 2016 and Vice Chair of the Board in 2012. Mr. Moyle has many years of experience managing a company that maintained and constructed highways, roads and airports. Mr. Moyle is retired from Globe Construction Company. Mr. Moyle also served 12 years on the Mattawan Consolidated Public Schools Board of Education. He has served on the Environmental Health Advisory Council. He was reappointed in January 2013 and his term expires 12/31/2018. Township liaison for Brady, Charleston, and Climax townships.

Deborah J. Buchholtz - Vice Chair

Ms. Buchholtz, Vice Chair, is a Cooper Township resident who was appointed to the road commission in January 2015. She is the 2017 Vice Chair of the Board. She is the founder and owner of Synergy Health Strategies, L.L.C., a company dedicated to improving the wellbeing and vitality of both individuals and organizations. She was elected to the Kalamazoo County Board of Commissioners from 2000 to 2011, serving as chair for 4 years and Vice Chair for 4 years. Her previous work experience included Executive Director of Big Brothers Big Sisters, Vice President of Operations and Finance for her family's carbon commodities and global transportation business, Business Development Analyst at Pfizer, and various consulting projects. Deborah will serve on the Kalamazoo County Board of Public Works representing the road commission. Her term expires 12/31/2020. Township liaison for Cooper, Kalamazoo, and Wakeshma townships.

David Q. Worthams - Member

Mr. Worthams, Member, is a Kalamazoo Township resident who was appointed to the road commission in January 2013. He formerly served as the Transportation Policy Advisor to former Michigan House Speakers Rick Johnson, Craig DeRoche and currently serves as the Policy Director for the Michigan Bankers Association (MBA). He is a Past President of the Kalamazoo Junior Chamber (Jaycees) and the Michigan Jaycees. He also served on the Kalamazoo County Metropolitan Planning Commission, serving as their Chairman for 6 years. A lifelong resident of Kalamazoo County, his term expires 12/31/2018. Township liaison: Alamo, Oshtemo and Richland townships.

David C. Pawloski-Member

Mr. Pawloski, Member is a resident of the City of Kalamazoo who was appointed to the road commission in March 2017. David is the current Community Services Liaison for the United Way of the Battle Creek & Kalamazoo Region. He also currently serves on the Local Officers Compensation Committee for the City of Kalamazoo which sets the salaries of the Mayor, Vice Mayor and Commissioners. Mr. Pawloski also serves on various organization and non-profit boards. He has been a resident of Kalamazoo County since 1994. He serves on the Kalamazoo County Environmental Health Advisory Council. David and his wife Molly are the proud parents of their son, Joseph, who attends Kalamazoo Public Schools. His term expires 12/31/2022. Township liaison for Prairie Ronde, Schoolcraft, and Texas townships.

Larry Stehouwer - Member

Mr. Stehouwer, Member, is a Cooper Township resident who was appointed to the road commission in March 2017. He previously worked as a professional civil engineer on public infrastructure and development projects, primarily for townships in Kalamazoo, Allegan and Ottawa counties. He retired in 2010 from the consulting engineering firm of Prein & Newhof. He volunteers at several nonprofits including the Friends of the Kalamazoo River Valley Trail, Kalamazoo Christian School Foundation, Appalachia Reach Out, Kalamazoo Deacons Conference, Calvary Community Church - Plainwell, Sea to Sea and has served on township appointed boards including Cooper Township's Planning Commission and Board of Review, and the Southwest Michigan Building Authority which services Cooper and Oshtemo townships. He serves on the Kalamazoo County Parks and Recreation Commission. He enjoys helping others, time with family, the outdoors, road trips, and bicycling. His term expires on 12/31/2022. Township liaison for Comstock, Pavilion, and Ross townships.

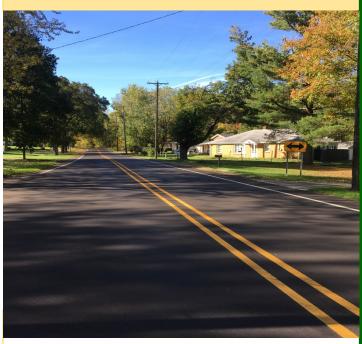
Kenneth R. Oscarson served as Road Commissioner from November 2007 through March 2017

— Contents

Chapter I Pages 1 - 12

Road Commission of Kalamazoo County Overview

Facts and Figures
Organizational Chart
Introduction
Glossary



Chapter 3 Pages 38 - 67

Financial Information

Local Road Participation Funds
Local Road Township Contributions
Local Road Project Summary Expenditures
Routine Maintenance Expenditures
Local Road Routine Maintenance Expenditures and Revenues
Combined Balance Sheet
Statement of Revenues and Expenditures

Chapter 2 Pages 13 - 37 Road Improvements

Alamo Township **Brady Township** Charleston Township City of Portage Climax Township Comstock Township Cooper Township Kalamazoo Township Oshtemo Township Pavilion Township Prairie Ronde Township Richland Township Ross Township Schoolcraft Township Texas Township Wakeshma Township

CHAPTER 1

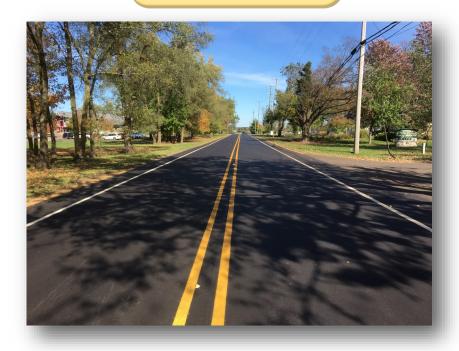
Road Commission of Kalamazoo County Overview

Facts
and Figures
Page 2

Organizational
Chart
Page 3

Introduction Pages 4—10

Glossary
Pages 11—12



West Michigan Avenue - Stadium Drive to Drake Road, Oshtemo Township

Facts and Figures

For Calendar Year Ending December 31, 2017

The Board	
Daniel J. Moyle, Chair	
Deborah J. Buchholtz, Vice Chair	
David Q. Worthams, Member	
David C. Pawloski, Member Larry Stehouwer, Member	
Kenneth R. Oscarson served as Road Com	missioner
from November 2007 through March 201	
The Team	
Joanna I. Johnson, Managing Director	
 41 Employees 	
County Bridge System	
• Bridges	62
Restricted Bridges	8
*Closed Bridges	0
Signs and Signals	
Signs Posted	22,762
Stop Signs	2,469
Signalized Intersections	47
Intersections with Flashing Signal	41
Project Summary 2017	
Miles of Primary Roads Paved	15
Miles of Primary Roads Chip Sealed	131
Miles of Local Roads Paved	13
Miles of Local Roads Chip Sealed	93
Miles of Local Roads Regraveled	1
Reconditioned Bridges	2
Reconstructed Bridges	2

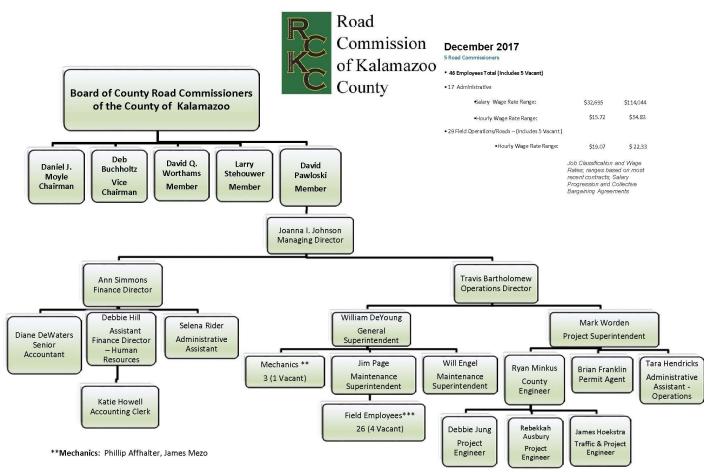
Projects Managed by RCKC

C	ertified Miles	
Township	Primary Miles	Local Miles
Alamo	31	38
Brady	29	47
Charleston	22	23
Climax	25	47
Comstock	44	74
Cooper	31	63
Kalamazoo	26	75
Oshtemo	42	77
Pavilion	27	48
Prairie Ronde	22	52
Richland	27	49
Ross	26	53
Schoolcraft	28	34
Texas	32	92
Wakeshma	25	48
City of Portage	11	0
Total Primary Road	d Miles 448	
Total Local Road M	1iles	820
Total Miles		1,268
Total Gravel Local	Road Miles	105
Total All-season Ro	oad Miles	300



*Bridge totals are based on information from the National Bridge Inventory. Bridges taken out of service that have more than 5 years with no progress toward scheduling replacement are deemed not of significant importance and removed from the bridge inventory.

199



^{***} Field Employees: Todd Hill, James Frederick, Ricky McClish, Peter Snyder, Joseph Peck, James Brown, Melvin Guyton, Jonathan Fitzsimmons, Tarrance DeKilder, Aaron Srackangast, Donald Easley, Jason Mikkelborg, Michael Morrison, Joseph Rix, Brian Chapman, Shelby Harris, Kevin Davis, Steven Kuilema, Robert Robinson, Brent Thomson II, Marvin Dake, Tori Simpson



The goal of the Board of County Road Commissioners of the County of Kalamazoo is using our expertise, energy and funds to provide the safest and most convenient road system possible, and to contribute to economic development and high quality of life throughout the county.

INTRODUCTION

The Road Commission of Kalamazoo County (RCKC) has provided a brief overview of our funding, operations, and assets within this report. Additional financial and audit information, publications and resources can be found on our website at www.kalamazoocountyroads.com.

This report provides a citizens' guide to the efforts by RCKC in public service. These efforts are on-going and continuously developed to meet the needs of our changing reality, while improving our infrastructure. Our work is never complete and we will continue to be focused on continuous improvement, leadership and public service. Our goal is to be the BEST road commission in the State. This is only accomplished by our team of employees vested in the spirit of leadership and service. Thank you for allowing us the opportunity to serve you.

The RCKC is the jurisdictional authority over all public roads lying outside the incorporated cities and villages within Kalamazoo County, exclusive of any state trunkline highway. At the end of 2017, RCKC maintains 1,267.81 miles of roads throughout the 576 square-mile county. The RCKC certified primary road system consists of 447.30 miles; the remaining 820.51 miles comprise the local road system. Along with the road system, RCKC maintains bridges, traffic signs/signals, culverts, storm sewers, and roadsides throughout the county. The State's 83 county road agencies are responsible for approximately 90,000 miles of county roads.

PROJECT SELECTION

The RCKC establishes road improvement priorities for the primary road system. Annually, our staff develops an improvement plan spanning five years that is based on engineering assessments and on-site reviews. This plan is reviewed and projects undertaken based on current and future road needs and anticipated funding.

November 1, 2016 the RCKC adopted a \$55 million, five-year Primary Road Capital Improvement Plan (CIP) for the period 2017 through 2021. The plan includes such preservation-structural improvement projects as resurfacing, reconstructing and widening roads, upgrading certain roads to all-season status, safety projects, bridge replacements, and upgrading traffic signals.

For the local road system, RCKC establishes road improvement priorities which are developed in conjunction with township governments. Each township works with our designated staff to develop a 5-year local road improvement plan supporting asset management for planning purposes and local road preservation. In 2017, staff continued to work with our townships to develop these plans. The RCKC maintains a local road participation fund program that provides funds for each township that must be matched on a dollar-for-dollar basis for local road improvement projects. In 2017, RCKC applied \$1,445,000 toward this local match program. These projects include local road preservation-structural improvement, preventive maintenance and construction projects such as chip seal, hot mix asphalt (HMA) overlays and road reconstruction. There was a significant impact to the investments in the local road system, primarily due to local road projects in Kalamazoo Township.

The financial commitment of township boards and residents through the years has proven invaluable. These partnerships help provide better service to our joint constituencies and a long term collaborative effort. Also available for funding, under the provisions of <u>Act 246, Public Acts of 1931, as amended</u>, is the special assessment district option. The State statute provides an opportunity to fund local road improvement projects through the creation of a special assessment district. This can be initiated either by response to a township board resolution or by a petition of landowners. There were no special assessment districts in 2017.

Texas Township in 2010, Alamo Township in 2014 and Ross Township in 2017 approved a special assessment district under the provisions of Act 188, Public Acts of 1954, as amended, by township board resolution to assist in local road improvements. Comstock Township in 2016, in accordance with Act 51, Public Acts of 1951 (Act 51), Section 20, as amended (MCL 247.670), authorized to appropriate general fund monies and to also levy a property tax not to exceed three mills in any year, and to pay the same into the county road fund of the county for the maintenance and/or improvement of county roads within the Township, pursuant to an agreement between the Township and the RCKC to assist in local road improvements. Climax Township is the only township in Kalamazoo County with a dedicated road millage, while Kalamazoo Township residents approved a \$9.75 million bond proposal in February 2015 to also assist in 3-year local road improvements (2017 was the 3rd year).

ASSET MANAGEMENT

Infrastructure is a valuable asset in every community. It is important to maintain these assets as efficiently and cost effectively as possible. A transportation asset management program allows RCKC to plan and prioritize road improvements. Since 2004, federal aid eligible road asset management data has been collected in Kalamazoo County. In 2009, the RCKC began a process of collecting data on the non-federal aid system and to date all 15 townships have been completed. Updated data will be gathered on a 3-year township rotation for the non-federal aid system. In 2017, updated federal aid ratings were completed and local ratings were completed for Cooper, Kalamazoo, Pavilion, Prairie Ronde and Wakeshma Townships. The data collected used the Pavement Surface Evaluation and Rating (PASER) system, as is used in the federal aid data collection. The method of collection using the Roadsoft Geographic Information Systems (GIS) laptop data collector and trained RCKC staff consisted of a survey of roads and each pavement was assigned a rating based on PASER criteria. PASER rating is based on a number system, 1 through 10 with 1 being the worst and 10 being the best. This data will assist in establishing a strategic plan for project selection and maintaining our infrastructure with the right fix at the right time for our primary and local road system. In the future, the RCKC intends to complete an asset management plan for both roads and bridges building on the asset management principles in place.

In 2017, our overall road network condition improved slightly **after approximately \$19.5 million of project investments**. However, on-going investment in our roads is needed to maintain them in good condition.



For additional local asset management information, please visit the RCKC website "Road Data" or the Michigan Transportation Asset Management Council (TAMC) website Dashboards at www.michigan.gov/tamc for additional information on asset management statewide federal aid system. It is important to share the RCKC manages over \$143 million of infrastructure assets.

Please review our asset management graphs, in this report, that reflect data for RCKC's primary and local road system.

FINANCES

The RCKC is a special purpose government engaged in a single government program of road and bridge maintenance, preservation and construction for the county of Kalamazoo, Michigan. Our annual audited financial statements are included in the basic financial statements of Kalamazoo County, Michigan as a discretely presented component unit. Our Board of County Road Commissioners adopts an annual budget in accordance with the <u>Uniform Budgeting Act (P.A. 621 of 1978).</u> An independent audit is performed annually on RCKC financial statements, and we annually submit our Act 51 Financial Report to the Michigan Department of Transportation (MDOT) as required by Act 51. In 2017, we continued to take every possible step to increase our efficiency by controlling expenditures, including overhead and administrative costs. Steps taken include staffing changes, benefit modifications, technology enhancements, equipment investments, on-going collaboration, modifications to our winter maintenance operations, road innovations and modifications to our material usage.

Please review our financial graphs in this report, that reflect data for our revenues, expenditures, pension/other postemployment benefits, historical information, and winter maintenance operations.

Public Act 298 of 2012 allows the MDOT to request the local agency to engage an auditor to conduct a performance audit of whether it has expended funds in compliance by Act 51. If requested, this audit is completed in accordance with the Government Auditing Standards, issued by the Comptroller General of the United States. The RCKC engaged our auditors, even without the request of MDOT, to complete an Act 51 audit in 2017. "For the road commission's year ending December 31, 2017. The RCKC is in compliance with Act 51, as amended. "

REVENUES

MICHIGAN TRANSPORTATION FUND

The Michigan Transportation Fund (MTF), the repository of motor fuel taxes and vehicle registration fees collected by the state, is the principal source of road commission funding. The collected funds are distributed to the MDOT, 533 cities and villages, and 83 county road agencies, using a formula based on variables that include the density of population, road mileage by classification and collected vehicle registration fees. Motor fuel and vehicle registration tax revenue is restricted for transportation purposes by Article IX, Section 9 of the 1963 Michigan Constitution. Motor fuel taxes are excise taxes—a per gallon tax not based on price. The tax on gasoline is cents per gallon whether the pump price is \$2.50 a gallon or \$4.00 per gallon. The cost of materials and services continue to rise and MTF is also used to match any federal aid projects.

Those constitutional provisions are implemented through Michigan Statute – Act 51. Revenue from motor fuel taxes and vehicle registration taxes is first credited to the MTF and then distributed to the following primary recipients in accordance with provisions of Act 51:

- Comprehensive Transportation Fund (CTF) for public transportation programs
- State Trunkline Fund (STF) for construction and preservation of the state trunkline system and administration of the MDOT
- 83 county road agencies for construction and preservation of the county road system and administration
- 533 cities and villages for construction and preservation of the city/village road system and administration

Act 51 also earmarks MTF revenue for certain targeted transportation funds and categorical programs including Transportation Economic Development Fund (TEDF), the rail grade crossing account and the Local Bridge Fund.

On November 10, 2015 Governor Rick Snyder signed a package of legislative transportation funding bills (Michigan Revenue Package) designed to generate \$1.2 billion in new MTF revenues by 2021. This was the first increase in State road funding in approximately 20 years. Approximately half of this total will come from increases in fuel taxes (\$400 million) and vehicle registration fees (\$200 million) starting in 2017. Then, beginning in 2019, increasing amounts of general fund dollars, which are not guaranteed, are anticipated to be transferred to the MTF, reaching \$600 million in 2021. Lastly, the fuel taxes will be indexed to inflation, using the Consumer Price Index (CPI), beginning January 1, 2022.

A summary of the revenue package which began in 2017 is below:

- 7.3 cent increase in State gas tax to 26.3 cents
 - Constitutionally dedicated to MTF
 - * Note: Michigan also levies a sales tax at the pump, which most states do not; these taxes do not go into the MTF
- 20% increase in State registration fees for passenger vehicles and most commercial trucks
- 11.3 cent increase in diesel fuel bringing it equal to State gas tax
- New taxes on alternative fuels and registration surcharges on electric vehicles

STATE AND FEDERAL TRANSPORTATION FUNDS

The RCKC also works diligently to qualify for special sources of revenue for road improvement projects from other state and federal sources.

State sources include TEDF

- TEDF Category A funds are competitively available for road projects related to industry development and redevelopment opportunities
- TEDF Category D funds are available for use to upgrade roads to all-season standards and to develop a network of roads that are not weight restricted during seasonal weight restriction periods
- TEDF Category F funds are competitively available for use to upgrade roads to complete broken links in the all-season-road network in the urban area

FEDERAL SURFACE TRANSPORTATION PROGRAM FUNDS

On December 4, 2015, President Obama signed the Fixing America's Surface Transportation (FAST) Act which provides funding for transportation programs through 2020. This act includes \$70 billion in new funding to be transferred from the federal general fund into the Highway Trust Fund through 2020. Michigan expects to see an increase of approximately five percent in federal transportation dollars over the next 5 years. The FAST Act makes federal funds available to state departments of transportation through three U.S. Department of Transportation (DOT) agencies; the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA) and the Federal Railroad Administration (FRA). Federal funding Surface Transportation Program (STP) is distributed to the RCKC through the Kalamazoo Area Transportation Study (KATS), the Metropolitan Planning Organization (MPO) for the Kalamazoo urbanized area. The Rural Task Force (RTF) Program provides STP-Rural federal dollars to rural areas.

Congestion Mitigation Air Quality (CMAQ) programs reduce vehicle pollutant emissions by improving the flow of traffic, or by providing transportation choices that reduce pollution. CMAQ funds are designated to the Kalamazoo region to support projects that will result in improved air quality.

Under the Federal Aid Highway Program, Michigan is also eligible for Local Safety Program funds which are federal funds to be used for road improvements that provide countermeasures that improve and potentially reduce crashes.

Projects completed during 2017 using CMAQ funds:

• 11th Street at W. Michigan Avenue, Oshtemo Township

Projects completed during 2017 utilizing STP funds:

- Stadium Drive from 9th Street to US-131, Oshtemo Township
- N Avenue from S. Sprinkle Road to 26th Street, Comstock/Pavilion Townships

Projects completed during 2017 utilizing Safety Program funds:

- 11th Street at Stadium Drive, Oshtemo Townhsip
- Sprinkle Road from Zylman Avenue to G Avenue, Comstock/Pavilion Townships and City of Portage

TITLE VI NON-DISCRIMINATION PLAN

On August 26, 2014 the RCKC adopted the <u>Title VI Non-discrimination Plan</u>. Training was held internally on October 27, 2017 and we will continue to serve all people of the county of Kalamazoo, including minority populations, low-income populations, the elderly, persons with disabilities, and those who traverse the State of Michigan. The RCKC recognizes its responsibility to provide fairness and equity in all of its programs, services, and activities, and that it must abide by and enforce federal and state civil rights legislation.

LOCAL BRIDGE PROGRAM FUNDS

Under the Federal Aid Highway Program, Michigan is eligible to use federal funds to improve the condition of highway bridges through replacements, rehabilitation, and preservation activities.

Established by 2004 Public Act 384, an amendment to Act 51, provides financial assistance to local highway authorities for the preservation, improvement, reconstruction of existing bridges, or the construction of bridges to replace existing bridges in whole or part. Revenues are provided from an Act 51 earmark of ½ cent of the gasoline excise tax (approximately \$22 million), and a separate (approximately \$5 million) Act 51 earmark of MTF revenue. Through legislation in 2004, Michigan created a Local Bridge Fund to be administered by the Local Bridge Advisory Board and seven Regional Bridge Councils. Funding from the Local Bridge Fund is allocated to each region based on available funds and weighted ratios provided in the legislation. The recent Michigan Revenue Package which began in 2017, did not allocate additional funding to the local bridge program.

These funds are available on a statewide competitive basis. Bridges eligible for these funds must be structurally deficient, functionally obsolete and in need of repair or do not function in a way that meets traffic needs.

The TAMC annual report on deficient bridges is available on the TAMC website at www.michigan.gov/tamc.

In 2017, 6.5% of RCKC (4 bridges) are rated as structurally deficient: Structurally Deficient (SD) status – A highway bridge is classified as structurally deficient if the deck, superstructure, substructure, or culvert is rated in "poor' condition (0 to 4 on the National Bridge Inventory (NBI) rating scale). A bridge can also be classified as SD if its load carrying capacity is significantly below current design standards or if a waterway below frequently overtops the bridge during floods.

Projects completed during 2017 utilizing Local Bridge Program Funds:

• D Avenue over Gull Lake Outlet, Ross Township

Please review our Bridge Rating Summary graph in this report.

NON-MOTORIZED FACILITIES

The Board of County Road Commissioners are committed to working with local governments to develop safe and efficient non-motorized transportation routes throughout the communities within Kalamazoo County and adopted a Non-motorized Facilities Policy. This policy provides the practical application in working with our partners in the approach to Complete Streets. The RCKC recognizes the value of non-motorized facilities, while simultaneously acknowledging the necessity of working within applicable funding requirements and fiscal limitations and competing needs of other public use considerations including utilities, engineering issues such as proper drainage, safety, right-of-way (ROW) dimensions maintenance issues, as well as the competing interests of users such as pedestrians, joggers, runners, strollers and bicyclists. All of these community and administrative interests should be valued appropriately in facilitating the development of a non-motorized facilities. The RCKC typically serves as the grant applicant for non-motorized facilities when using public funding sources. In Act 51, of the funds allocated from MTF, not less than 1% of those funds shall be expanded for construction or improvement of non-motorized transportation and facilities. These non-motorized facilities included paving of road shoulders, and widening of lanes. Ten years of qualified expenditure for non-motorized improvements for the RCKC total \$5,898,217.95 with \$693,852.88 in 2017. A Non-motorized Facilities 101 educational session was also held in 2017.

Non-motorized Facilities Applications Approved in 2017 include: Kalamazoo Township Oshtemo Township Texas Township

OTHER AREAS OF EXPERTISE

RCKC engineering and maintenance operations are responsible for providing engineering and technical expertise for road commission projects, operations, preventive maintenance and improvement projects on the county road system. These efforts also include our traffic safety operations. RCKC operations are supported by our administrative team, equipment and capital outlay expenditures.

EXPENDITURES

Routine maintenance activities and safety improvements, outside of construction projects, include surface patching, sign maintenance, roadside mowing, tree cutting/removal, culvert repair, guardrail maintenance, and winter maintenance.

During 2017, approximately 28 miles of roads were paved totaling over \$11 million dollars and 2 bridges totaling \$1.8 million dollars. To preserve the capital investment in our roads, 234 miles of roads were chip sealed totaling \$6.2 million dollars. Over \$15 million dollars was spent on our primary road system and over \$10 million on our local road system for both construction and maintenance operations in 2017.

AWARDS, ACHIEVEMENTS, INNOVATIONS AND EDUCATIONAL OPPORTUNITIES

Award Recognition

The RCKC was awarded by the American Public Works Association (APWA) the 2017 Branch Award in Public Works Project of the Governmental Cooperation for the S. Burdick Street from Cork Street to Stockbridge Avenue project.

The RCKC was also awarded the 2017 APWA Branch Award in Public Works Project of the Year Transportation Less than \$5,000,000 for the G Avenue—32nd Street to 37th Street project.

The RCKC was awarded by the Asphalt Pavement Association of Michigan (APAM) and Michigan Department of Transportation (MDOT) the 2017 Award of Merit Projects 10,000—30,000 Tons for providing the people of Michigan the Highest Quality Asphalt Pavement on Stadium Drive from 9th Street to US-131.

The RCKC was awarded by the County Road Association (CRA) at their 2018 banquet the People's Choice Award—2017 Impress Awards in the Collaboration Category—RCKC and the City of Kalamazoo.

The RCKC was also awarded the 2017 Impress Award for Excellence in Collaboration for RCKC and the City of Kalamazoo projects.

RCKC received the 2017 Impress Award for Excellence in Communications for Township Joint Meetings.

RCKC also received the 2017 Impress Award for Excellence in Operations for the Truck Hook Lift Hoist System.

The RCKC received the National Asphalt Pavement Association (NAPA) Award for 2017 Quality in Construction for work on approximately 1.2 miles of Stadium Drive in Kalamazoo, Michigan.

Achievements in 2017

In addition to the investment in our infrastructure through projects and maintenance, the RCKC team continued to focus on delivering the very best in public service in Kalamazoo County by other means listed below.

Communication:

- RCKC continued our Township Joint Meeting presentations with an additional touch of polling for greater participation. It has indeed been well received.
- RCKC team continued to attend various meetings in the County, including Township Supervisors meetings.
- RCKC completed our third and final year in Kalamazoo Township to support projects for the \$9.75 million dollar resident supported bond proposal and provided a construction season update and celebration!
- RCKC participated in public outreach including the Touch a Truck event and continued our Put the Brakes on Fatalities Day poster contest.
- RCKC had a variety of public educational opportunities with special thanks to Public Media Network including Put the Brakes on Fatalities Day coverage and winter maintenance.
- RCKC Connect mass notification outreach continued and refined with shorter direct messaging.
- RCKC completed a Communications Survey.
- RCKC helped organize a variety of educational workshops including Non-motorized Facilities 101.
- RCKC met with the County Board of Commissioners and together we have a consensus of the process to foster those communications and provide optimum results and customer service.

The Team:

- RCKC team leadership sessions continued in 2017.
- RCKC team leaders expectations completed for success and understanding.
- RCKC welcomed 6 new employees/we thanked 3 employees for their combined 68 years of service as they retired. RCKC continued opportunities in a variety of staff training throughout they year—too numerous to mention.
- RCKC team continued in a variety of leadership positions in industry associations.
- RCKC administrative team provided the Board with presentations on their positions and shared the depth of knowledge in the team and the importance of leadership support.
- RCKC participated in the County Road Association Self-Insurance Fund return to work and crisis response plan, which we look forward to next steps in 2018.
- RCKC thanked Commissioner Oscarson for serving as Road Commissioner since January 2007, we welcomed Commissioners
 Pawloski and Stehouwer in March 2017.
- AND we all worked toward completion of our organizational goals.

MISC:

- RCKC continues to be fiscally responsible as seen in our Financial Audit and our first Act 51 audit.
- RCKC learned a lot about Communication Service Providers and the right-of-way and were proactive in a Board Policy.
- RCKC continued to be recognized by various awards with our contractors and partners.
- RCKC continued collaborative efforts including the MDOT, Drain Commissioner, Villages, City of Kalamazoo and Road Commissions in the State.

EDUCATIONAL OPPORTUNITIES

In 2017, the RCKC held educational sessions including;

Traffic Safety Training for Local Officials
May 2017



Non-motorized Facilities (NMF) 101 Educational Session
October 2017



PUBLIC OUTREACH

In 2017, the RCKC participated in the following events:

Touch-A-Truck May 2017



Put the Brakes on Fatalities October 2017



We hope this report provides a better understanding of the RCKC, our commitment to Kalamazoo County, the role we play in improving our infrastructure and how we contribute to economic development and high quality of life throughout the county. We are proud of our accomplishments and our operations. Our TEAM continues to be dedicated to enhancing our road network and putting those limited transportation dollars to efficient use. Our Local Roads Matter!

Your Local Road Professionals since 1909

GLOSSARY



All-season Roads—roads that have a sub-base, base and surface of adequate thickness and composition to withstand year-round use of heavy vehicles without damage.

Asset Management – Asset Management is a systematic approach to selecting the best investment at the right time to maximize the life of the asset being measured.

Cape Seal—a combination surface treatment that preventative maintenance incorporates an application of micro seal over a newly constructed surface treatment of chip seal. Cape seals provide a dense, waterproof surface with improved skid resistance and ride quality.

6-8 Year Service Life

Chip Seal—a surface treatment in which the pavement is sprayed with asphalt emulsion and then immediately covered with aggregate and rolled. Chip seals are used primarily to seal the surface of a pavement.

5-7 Year Service Life

Crack Fill - the placement of bituminous material into nonworking or low movement cracks to reduce infiltration of water and incompressible materials into the crack. Filling typically involves less crack preparation than sealing and performance requirements may be lower for the filler materials. Filling is often considered a short-term treatment to help hold the pavement together between major maintenance operations or until a scheduled rehabilitation activity.

1-3 Year Service Life

Crack Seal—is the placement of a bituminous material into working cracks. Crack sealing requires thorough crack preparation and often requires the use of specialized high quality materials placed either into or above working cracks to prevent the intrusion of water and incompressible materials. Crack sealing is generally considered to be a longer-term treatment than crack filling.

1-2 Year Service Life

Double Seal—two applications of chip seal applied to a prepared gravel base. Another chip seal should be applied within 1-2 years.

8-10 Year Service Life

Epoxy Overlay—an application of polymer epoxy followed immediately with an application of aggregate to a concrete bridge deck. The overlay provides a long lasting seal to protect the deck from the effects of traffic and harsh weather conditions. Epoxy overlays are used to extend the life of a structure by sealing moderate to extensive deck cracking.

10-15 Year Service Life

Fog Seal—a light application of asphalt emulsion diluted with water and without addition of any aggregate applied to the surface of a bituminous pavement or recent chip seal. Fog seals are used to renew aged asphalt surfaces and seal minor cracks. When applied over a recent chip seal, the fog seal reduces dust and lock in aggregate.

1-3 Year Service Life

Hot Mix Asphalt (HMA) Overlay—the application of HMA (hot mix asphalt), a combination of aggregates, mineral fillers, RAP (recycled asphalt pavement), and asphalt binder. HMA is placed on top of gravel or aged HMA surfaces and rolled to compact in place.

15-20 Year Service Life

HMA Ultra-Thin Overlay—a thin overlay of hot-mix asphalt typically a thin lift of ¾ inch.

5-7 Year Service Life

HMA Wedge—a repair patch placed by a paving machine that varies in depth and length.

Infrared— heating and blending new blacktop with infrared heated existing blacktop to create a joint-free integral patch.

Local Roads—county roads not classified as primary roads in the county road system. RCKC has 817.76 miles of these roads, including those in plats.

Micro Seal—a mixture of polymer modified asphalt emulsion, mineral aggregate, mineral filler, water, and other additives, properly proportioned, applied to a paved surface. Also utilized to correct rutting on high volume roads.

6-8 Year Service Life

Onyx –preventative maintenance treatment that seals the pavement surface preventing water infiltration and oxidation from the sun.

Preservation— structural improvement roadwork, including placing a hard surface on a gravel road, reconstructing an existing road or bridge, resurfacing a road with a HMA overlay or installing new culverts or catch basins.



PASER –PASER stands for Pavement Surface Evaluation and Rating. The PASER system is a tool to rate the current surface condition of roads.

Preventive Maintenance—roadwork, including chip sealing, pavement crack seal, and wedging to preserve roads by retarding deterioration.

Primary Roads—major roads within the county road system in Kalamazoo County. Primary roads typically accommodate 85 percent of the county's road system traffic and include 448.35 miles of roadway.

Pulverizing/Pulverization – is a recycling process that grinds existing asphalt in place and blends it with the underlying materials to form a quality aggregate base. Typically a layer of gravel is placed on top of the asphalt surface before grinding.

Reconstruction—removing the existing road surface and replacing it with materials of a thickness that conforms to current standards for pavement design. Vertical and horizontal alignment drainage improvements are also factors of reconstruction.

Service Life Varies

Rehabilitation – placing additional surface material or doing other work to return a road, including its shoulders, to structural or functional adequacy.

Service Life Varies

Resurfacing—placing new bituminous pavement material HMA over existing pavement. Shoulder material is added to match the elevation of the new pavement. Service Life Varies

RoadSoft - road data geographic information systems software used to compile and report on the condition assessments. RoadSoft was developed by Michigan Technological University for all road agencies in Michigan

Routine Maintenance—roadwork, including winter maintenance, pothole filling, roadside mowing, pavement marking, traffic signal maintenance, dust control, gravel road grading, guardrail repair, minor drainage corrections, etc.

Rubblizing— concrete pavement broken into an aggregate base and the rubblized roadbed is left in place and used as part of the new pavement structure.

Texas Underseal— an application of a chip seal, prior to a HMA overlay application. The Underseal treatment provides an impervious membrane to stop the intrusion of moisture.









CHAPTER 2

Road Commission of Kalamazoo County Overview

Road and Bridge Improvements

Primary Road Preservation Structural Improvements
Pages 14—17
Primary Structures Structural Improvements
Page 18
Primary Road Preventive Maintenance
Primary Structure Preventive Maintenance
Page 25
Local Road Preservation Preventive Maintenance and
Structural Improvements



G Avenue – 32nd Street to 37th Street, Ross & Richland Townships

PRIMARY ROAD PRESERVATION STRUCTURAL IMPROVEMENTS Including Administrative and Equipment Allocations PROJECT DESCRIPTION **TOTAL** ALAMO TOWNSHIP Ravine Road – 12th Street to F Avenue, Project No. 210069. 17,538.54 Design engineering for future project. **CLIMAX TOWNSHIP** 2,182.84 **36th Street** – at O Avenue, Project No. 210073. Design work for future intersection improvement project. (Climax / Pavilion Townships). **COMSTOCK TOWNSHIP 34th Street** – N Avenue to MN Avenue, Project No. 210102. 76,604.90 HMA Overlay. N Avenue – South Sprinkle Road to 26th Street, Project No. 210321. 837,658.71 HMA Overlay. 774,801.63 South Sprinkle Road – G Avenue to Market Street, and South Sprinkle Road – Kilgore Road (N Avenue) to Zylman Avenue, Project 210025. Contractor payments by State and construction engineering for traffic signal interconnect project. (Comstock/Pavilion Townships) 36,442.29 **South Sprinkle Road** – East Michigan to East Main Street, Project No. 210317. Construction engineering and contractor payment to State for 2016 project. **COOPER TOWNSHIP D** Avenue – Riverview Drive to North Westnedge Avenue, Project No. 210054. 774.83 Design engineering for future project. **D Avenue** – at Douglas Avenue, Project No. 210074. 9,034.23 Design engineering for future project. **D Avenue** – Grand Elk Railroad west .25 mile, Project No. 210075. 13,432.68 Design engineering for future project. Riverview Drive – G Avenue to Mt. Olivet Road, Project No. 210087. 94.12

1909 108 YEARS OF SERVICE RCKC Annual Report - 14

Design engineering for future project.

PRIMARY ROAD PRESERVATION

• STRUCTURAL IMPROVEMENTS

Including Administrative and Equipment Allocations

PROJECT DESCRIPTION (Cooper Township continued)	TOTAL
G Avenue – at Riverview Drive, Project No. 210088. Design engineering for future signal project.	70.58
KALAMAZOO TOWNSHIP	
Mosel Avenue – Douglas Avenue to North Westnedge Avenue, Project No. 210092. HMA overlay.	118,334.30
Drake Road – at Grand Prairie, Project No. 210076. Design for future project. (<i>Kalamazoo / Oshtemo Townships</i>)	618.82
Kendall Avenue – Kalamazoo city limits to M-43, Project No. 210099. HMA overlay.	69,272.71
East Main Street – East Michigan Avenue to South Sprinkle Road, Project No. 210059. Construction engineering for 2016 project.	1,391.82
Alamo Avenue – Nichols Road to Kalamazoo west city limit, Project No. 210100. HMA overlay.	145,861.87
OSHTEMO TOWNSHIP	
9th Street – at Quail Run and KL Avenue, Project No. 210089. Design work for future signal upgrades.	11,772.36
11th Street – at East Michigan Avenue, Project No. 210143. Construction engineering and contractor payments to State for traffic signal modernization and interconnect.	289,918.49
Almena Drive – at KL Avenue, Project No. 210090. Design for future intersection realignment project.	55,577.40
H Avenue – 10th street to Drake Road, Project No. 210093. HMA overlay.	117,604.62
KL Avenue – .5 mile west of Drake, Project No. 210078. Design for future project.	69,742.13
Stadium Drive – 4th Street to 6th Street, Project No. 210034. Construction engineering and contractor payments by State for intersection improvement and traffic signal upgrade.	875,989.66

STRUCTURAL IMPROVEMENTS	
Including Administrative and Equipment Allocations	
PROJECT DESCRIPTION (Oshtemo Township continued)	TOTAL
Stadium Drive – 9th Street to US-131, Project No. 210068. Construction engineering and contractor payments by State for HMA overlay, including concrete curb and gutter and concrete sidewalk ramp.	1,130,415.82
Stadium Drive – at 11th Street, Project No. 210077. Construction engineering and contractor payments by State for traffic signal upgrade.	552,274.85
West Michigan Avenue – Stadium Drive to Drake Road, Project No. 210094. HMA overlay.	181,507.74
PAVILION TOWNSHIP	
South Sprinkle Road – Centre Avenue to Milham Road, Project No. 210024. Construction engineering and traffic signal upgrades.	190,353.35
RICHLAND TOWNSHIP	
28th Street – M-43 to F Avenue and 28th Street – 300' south of E Avenue to D Avenue, Project No. 210066. Construction engineering for 2016 HMA project.	111.58
G Avenue – North Sprinkle Road to G Avenue, Project No. 210098. HMA overlay.	192,428.44
G Avenue – 32nd Street to 37th Street, Project No. 210085. HMA overlay. (Richland / Ross Townships)	821,702.58
SCHOOLCRAFT TOWNSHIP	
U Avenue – US-131 to Oakland Drive, Project No. 2100096. Underseal and HMA Overlay.	265,314.55
TEXAS TOWNSHIP	
8th Street – U Avenue to S Avenue, Project No. 210101. HMA overlay.	259,856.69

PRIMARY ROAD PRESERVATION

- PRIMARY ROAD PRESERVATION
- STRUCTURAL IMPROVEMENTS
- Including Administrative and Equipment Allocations

PROJECT DESCRIPTION

(Texas Township continued)

9th Street – I-94 to Meridian Avneue, Project No. 210065.	1,212.15
Construction engineering for 2016 project.	
Q Avenue – at 10th Street, Project No. 210082.	10,693.36
Design work for future project.	

WAKESHMA TOWNSHIP

42nd Street – Y Avenue to W Avenue, Project No. 210063.	60,503.13
Construction engineering and contractor payments by State for 2016 project.	
42nd Street – Z Avenue to Y Avenue, Project No. 210064.	24,182.70
Design work for future project.	

TOTAL PRIMARY STRUCTURAL IMPROVEMENTS

7,215,276.47



Mosel Avenue – Douglas Avenue to North Westnedge Avenue, Kalamazoo Township

PRIMARY STRUCTURES

STRUCTURAL IMPROVEMENTS

Including Administrative and Equipment Allocations

PROJECT DESCRIPTION TOTAL

BRADY TOWNSHIP

U Avenue Bridge – west of 31st Street (over Portage River), Project No. 220424.

Construction engineering and contractor payments by State for bridge replacement project.

36,706.18

CLIMAX TOWNSHIP

36th Street Bridge – over Dorrance Creek, Project No. 220310. Design engineering for future bridge replacement project.

13,677.56

PAVILION TOWNSHIP

Q Avenue Bridge – over Portage River, Project No. 220309. Bridge replacement.

867,691.17

S Avenue Bridge – over Portage River, Project No. 220308. Bridge replacement.

917,777.44

ROSS TOWNSHIP

C Avenue Bridge – over Augusta Creek, Project No. 220311. Design engineering for future bridge replacement project. 4,800.47

TOTAL PRIMARY BRIDGE

1,840,652.82



Q Avenue Bridge over Portage River, Pavilion Township

• PREVENTIVE MAINTENANCE

Including Administrative and Equipment Allocations

PROJECT DESCRIPTION	TOTAL
ALAMO TOWNSHIP	
B Avenue – Ravine Road to 12th Street, Project No. 380420. Crack fill, chip seal and fog seal.	103,189.26
6th Street – Ravine Road to D Avenue, Project No. 380436. HMA wedge, chip seal and fog seal.	61,431.07
Ravine Road – D Avenue to C Avenue, Project No. 380435. Chip seal and fog seal.	45,831.83
BRADY TOWNSHIP	
24th Street – Z Avenue to Vicksburg south village limit, Project No. 380430. HMA wedge, chip seal and fog seal.	107,164.12
27th Street – YZ Avenue to Y Avenue, Project No. 380431. Chip seal and fog seal.	13,129.99
28th Street – South county line to YZ Avenue, Project No. 380432. HMA wedge, chip seal and fog seal.	28,762.92
29th Street – W Avenue to U Avenue, Project No. 380433. HMA wedge, chip seal and fog seal.	64,294.53
YZ Avenue – 27th Street to 32nd Street, Project No. 380436. HMA wedge, chip seal and fog seal.	73,916.13
South Sprinkle Road – S Avenue to Vicksburg north village limit, Project No. 380563. Crack fill.	14,455.72
TU Avenue – South Sprinkle Road to 27th Street, Project No. 380565. Crack fill.	368.10
CHARLESTON TOWNSHIP	
27th Street – TU Avenue to T Avenue, Project No. 380566. Crack fill.	460.13
40th Street – MN Avenue to East Michigan Avenue, Project No. 380437. Chip seal and fog seal.	50,679.04

• PREVENTIVE MAINTENANCE

• Including Administrative and Equipment Allocations

PROJECT DESCRIPTION (Charleston Township continued)	TOTAL
44th Street – MN Avenue to Climax north village limit, Project No. 380416. HMA wedge, crack fill, chip seal and fog seal.	29,108.83
Mercury Drive – MN Avenue to I-94, Project No. 380423. Crack fill, chip seal and fog seal.	82,877.77
CLIMAX TOWNSHIP	
ON Avenue – Climax east village limit to 48th Street, Project No. 380438. HMA wedge, chip seal and fog seal.	65,442.89
PQ Avenue – 36th Street to 38th Street, Project No. 380439.	31,492.98
HMA wedge, chip seal and fog seal. 38th Street – PQ Avenue to O Avenue, Project No. 380440. HMA wedge, chip seal and fog seal.	48,092.20
COMSTOCK TOWNSHIP	
26th Street – ML Avenue to N Avenue, Project No. 380567. Crack fill.	6,472.48
26th Street – H Avenue to East Main Street, Project No. 380568. Crack fill.	4,202.51
28th Street/MN Avenue – ML Avenue to 29th Street, Project No. 380413. HMA wedge, crack fill, chip seal and fog seal.	64,766.42
32nd/33rd Street – M-96 to DE Avenue, Project No. 380434. HMA wedge, chip seal and fog seal. (<i>Comstock / Richland Townships</i>)	137,929.48
H Avenue – M-43 to 26th Street, Project No. 380421. HMA wedge, crack fill, chip seal and fog seal.	50,975.21
35th Street – M-96 to MN Avenue, Project No. 380569. Crack fill.	4,555.28
COOPER TOWNSHIP	
G Avenue – Riverview Avenue to North Sprinkle Road, Project No. 380571. Crack fill.	4,570.61
Riverview Drive – North county line to Mount Olivet Road, Project No. 380572. Crack fill.	16,227.22

PREVENTIVE MAINTENANCE

• Including Administrative and Equipment Allocations

PROJECT DESCRIPTION (Comstock Township continued)	TOTAL
KALAMAZOO TOWNSHIP	
Grand Prairie Road – Drake Road to Nichols Road, Project No. 380441. Chip seal and fog seal.	34,021.03
Humphrey Street – Kalamazo north city limits to East Main Street, Project No. 380442. Chip seal and fog seal.	27,804.71
Burdick Street – Kalamazoo city limits to Mosel Avenue, Project No. 380443. Chip seal and fog seal.	20,147.32
North Westnedge Avenue – G Avenue to Business US-131 ramp, Project No. 380573. Crack fill.	4,417.24
Ravine Road – Drake Road to Kalamazoo north city limit, Project No. 380575. Crack fill.	7,178.02
OSHTEMO TOWNSHIP	
H Avenue – 9th Street to 10th Street, Project No. 380422. Crack fill, chip seal and fog seal.	31,279.57
Stadium Drive – Vankal Street to 6th Street, Project No. 380425. Crack fill, chip seal and fog seal.	157,307.17
9th Street – I-94 to Meridian Avenue, Project No. 380560. Chip seal and fog seal.	75,438.09
9th Street – M-43 to H Avenue, Project No. 380577. Crack fill.	4,785.35
10th Street – M-43 to H Avenue, Project No. 380444. Chip seal and fog seal.	63,087.90
12th Street – 4224' south of Parkview Avenue to Parkview Avenue, Project No. 380446. Chip seal and fog seal.	21,394.99
12th Street – 4224' south of Parkview Avenue to Texas Drive, Project No. 380576. Crack fill.	7,362.07
Almena Drive –Vankal Street to M-43, Project No. 380447. Chip seal and fog seal.	71,345.02
Parkview Avenue – Stadium Drive to Kalamazoo city limit, Project No. 380578. Crack fill.	7,638.14

• PREVENTIVE MAINTENANCE

• Including Administrative and Equipment Allocations

PROJECT DESCRIPTION (Kalamazoo Township continued)	TOTAL
PAVILION TOWNSHIP	
34th Street – N Avenue to Q Avenue, Project No. 380448. Chip seal and fog seal.	84,054.67
R Avenue – East Long Lake Drive to 25th Street, Project No. 380449. HMA wedge, chip seal and fog seal.	19,296.16
S Avenue – 29th Street to 36th Street, Project No. 380450. HMA wedge, chip seal and fog seal.	149,694.36
South Sprinkle Road – Centre Avenue to Milham Road, Project No. 380562. Chip seal and fog seal.	133,915.86
South Sprinkle Road – Zylman Avenue to Centre Avenue, Project No. 380564. Crack fill.	7,208.69
PRAIRIE RONDE TOWNSHIP	
8th Street – XY Avenue to W Avenue, Project No. 380418. HMA wedge, crack fill, chip seal and fog seal.	61,478.75
W Avenue – West county line to 2nd Street, Project No. 380579. Crack fill.	3,312.93
RICHLAND TOWNSHIP	
North Sprinkle Road – DE Avenue to G Avenue, Project No. 380424. Crack fill, chip seal and fog seal.	101,488.69
24th Street/AB Avenue – D Avenue to M-89, Project No. 380451. Chip seal and fog seal.	78,091.14
28th Street – M-43 to D Avenue, Project No. 380452. Chip seal and fog seal.	57,591.54
ROSS TOWNSHIP	
40th Street – M-89 to north county line, Project No. 380414. Crack fill, chip seal and fog seal.	142,914.58
42nd Street – Augusta village limit to M-89, Project No. 380415. Crack fill, chip seal and fog seal.	74,317.74
Augusta Drive – Augusta village limit to east county line, Project No. 380419. Crack fill, chip seal and fog seal.	87,518.84

• PREVENTIVE MAINTENANCE

• Including Administrative and Equipment Allocations

PROJECT DESCRIPTION (Ross Township Continued)	TOTAL
C Avenue – 40th Street to east county line, Project No. 380581. Crack fill.	18,290.14
G Avenue – 36th Street to 39th Street, Project No. 380582. Crack fill.	4,110.48
Fort Custer Drive – M-96 to east county line, Project No. 380453. HMA wedge, chip seal and fog seal.	85,662.95
East Gull Lake Drive – North county line to C Avenue, Project No. 380580. Crack fill.	12,883.62
SCHOOLCRAFT TOWNSHIP	
XY Avenue – US-131 to Portage Road, Project No. 380427. HMA wedge, chip seal and fog seal.	132,189.92
VW Avenue – Portage Road to Vicksburg village limit, Project No. 380455. Chip seal and fog seal.	46,279.66
VW Avenue – Schoolcraft village limit to 18th Street, Project No. 380456. Chip seal and fog seal.	68,972.03
U Avenue – Oakland Drive to Portage Road, Project No. 380583. Crack fill.	9,739.40
TEXAS TOWNSHIP	
Q Avenue – West county line to 6th Street, Project No. 380458. Chip seal and fog seal.	80,720.13
Texas Drive – 1000' east of 8th Street to 8th Street, Project No. 380459. Chip seal and fog seal.	8,300.80
3rd Street – P Avenue to Q Avenue, Project No. 380585. Crack fill.	4,371.23
9th Street – I-94 to Meridian Avenue, Project No. 380560. Chip seal and fog seal. (<i>Texas / Oshtemo Townships</i>)	26,530.03
12th Street – U Avenue to Q Avenue, Project No. 380457. HMA wedge, chip seal and fog seal. (<i>Texas / Schoolcraft Townships</i>)	120,874.49

- PRIMARY ROAD
- PREVENTIVE MAINTENANCE
- Including Administrative and Equipment Allocations

PROJECT DESCRIPTION

TOTAL

WAKESHMA TOWNSHIP

42nd Street – Y Avenue to W Avenue, Project No. 380561. 51,716.66
Chip seal and fog seal.

47th Street/XY Avenue/46th Street – W Avenue to Y Avenue, 71,675.48
Project No. 380417.
HMA wedge, crack fill, chip seal and fog seal.

W Avenue – Vicksburg east village limit to east county line, Project No. 380426. 415,362.50 HMA wedge, crack fill, chip seal and fog seal. (Wakeshma / Brady Townships)

Y Avenue – 42nd Street to east county line, Project No. 380428.

HMA wedge, crack fill, chip seal and fog seal.

3,891,232.10



28th Street - HMA Wedging, Chip Seal and Fog Seal, Brady Township

- PRIMARY STRUCTURE
- PREVENTIVE MAINTENANCE
- Including Administrative and Equipment Allocations

PROJECT DESCRIPTION TOTAL

BRADY TOWNSHIP

W Avenue Bridge – west of 29th Street over Portage River, 334.04

Project No. 220061.

Contrator payments by State and construction engineering for epoxy overlay of bridge deck, guardrail and HMA approaches.

CHARLESTON TOWNSHIP

East Michigan Avenue Bridge – over Kalamazoo River, Project No. 220060. 473,585.44

Contrator payments by State and construction engineering for epoxy overlay of bridge deck, guardrail and HMA approaches.

COOPER TOWNSHIP

D Avenue Bridge – over Kalamazoo River, Project No. 220063. 17,658.24

Contrator payments by State and construction engineering for epoxy overlay of bridge deck, guardrail and HMA approaches.

ROSS TOWNSHIP

D Avenue Bridge – over Gull Lake Outlet, Project No. 220079.

Design work for future bridge preventive maintenance project.

WAKESHMA TOWNSHIP

38th Street Bridge – over Little Portage Creek, Project No. 220058.

Final Accounting by State for 2015 project.

42nd Street Bridge – over Little Portage Creek, Project No. 220059.

Sinal Accounting by State for 2015 project.

TOTAL PRIMARY STRUCTURE PREVENTIVE MAINTENANCE

684,369.76



East Michigan Avenue Bridge, Charleston Township

• LOCAL ROAD PRESERVATION

• PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS

Including Administrative and Equipment Allocations

PROJECT DESCRIPTION	PREVENTIVE MAINTENANCE	STRUCTURAL IMPROVEMENT
ALAMO TOWNSHIP ~ 37.84 Local Road Miles		
7th Street – G Avenue to Owen Drive, Project No. 68024. HMA wedge.	27,436.50	
AB Avenue – 1000' west of 1st Street to 1st Street, Project No. 680623. HMA wedge.	20,025.30	
B Avenue – Vankal Street to 2nd Street, Project No. 680622. HMA wedge.	9,142.28	
F Avenue – 8th Street to Hart Drive, Project No. 680620. HMA wedge.	14,187.32	
F Avenue – 6th Street to 7th Street, Project No. 680621. HMA wedge.	8,784.15	
Owen Drive – D Avenue to C Avenue, Project No. 510601. Pulverize, gravel, HMA overlay.		252,197.39
Owen Drive – Hart Drive to Ravine Road, Project No. 680619. Crack fill.	6,520.04	
ALAMO TOWNSHIP TOTALS	86,095.59	252,197.39
DDADY TOWNSHIP ACCOLUMN DATAMIN		
BRADY TOWNSHIP ~ 46.63 Local Road Miles		
29th Street – Y Avenue to XY Avenue, Project No. 680548. HMA wedge and chip seal.	18,232.72	
30th Street – U Avenue to South Indian Lake Drive, East Indian Lake Drive – 30th Street to 2722' north of 30th Street, South Indian Lake Drive – 1811' west of 30th Street to 30th Street.	95,505.54	
Project No. 680547. HMA wedge, crack fill, chip seal and fog seal.		
	21 245 24	
31st Street – YZ Avenue to Y Avenue, Project No. 680612. HMA wedge, crack fill and chip seal.	21,245.24	
BRADY TOWNSHIP TOTALS	134,983.50	0.00

LOCAL ROAD PRESERVATION

PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS

Including Administrative and Equipment Allocations

PROJECT DESCRIPTION	PREVENTIVE MAINTENANCE	STRUCTURAL IMPROVEMENT
CHARLESTON TOWNSHIP ~ 23.15		
L Avenue – 38th Street to 7288' east of 38th Street, Project No. 680568. Crack fill and chip seal.	36,925.92	
ML Avenue – 38th street to 40th Street, Project No. 680569. Chip seal.	20,177.98	
CHARLESTON TOWNSHIP TOTALS	57,103.90	0.00
CLIMAX TOWNSHIP ~ 47.40 Local Road Miles		
38th Street – R Avenue to PQ Avenue, Project No. 680554. HMA wedge, crack fill and chip seal.	42,411.63	
40th Street – Q Avenue to P Avenue, Project No. 680555. HMA wedge and chip seal.	45,540.38	
42nd Street – P Avenue to O Avenue, Project No. 680556. HMA wedge, crack fill and chip seal.	48,864.46	
	136,816.47	0.00

COMSTOCK CHARTER TOWNSHIP ~ 73.82 Local Road Miles

33rd Street – N Avenue to ML Avenue, Project No. 510591.

431,277.79

Pulverize, gravel and HMA overlay.

128,222.92

Comstock Avenue – River Street to Conrad Street, Abbey Street – River Street to Metzger Street, Francis Street – River Street to Henry Street, Wright Street – Moline Street to Gateway Street, Celery Street – River Street to Roe Street, Moline Street – Celery Street to Comstock Avenue, Conrad Street – Celery Street to Comstock Avenue, Wetzger Street – Celery Street to Abbey Street, Henry Street – Celery Street to Francis Street, Gateway Street – Celery Street to Wright Street,

Project No. 680546.

HMA wedge, crack fill, chip seal and fog seal.

- LOCAL ROAD PRESERVATION
- PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS
- Including Administrative and Equipment Allocations

PROJECT DESCRIPTION

(ComstockTownship Continued)

PREVENTIVE STRUCTURAL MAINTENANCE IMPROVEMENT

335,706.96

Docsa Street – Lucerne Avenue to East Main Street, Lucerne Avenue – 425' west of Docsa Street to 26th Street, Lantana Avenue – Carter Street to Verleen Street, Elaine Avenue – Magnolia Street to Verleen Street, Susan Avenue – Patricia Street to Verleen Street, Angelo Avenue – Magnolia Street to Verleen Street, Verleen Street – Angelo Avenue to Lucerne Avenue, Magnolia Street – Angelo Avenue to East Main Street, Patricia Street – Susan Avenue to Lois Avenue, Carter Street – Lois Avenue to East Main Street, Lois Avenue – Carter Street to Patricia Street.

Project No. 510618.

HMA overlay.

HJ Avenue – 33rd Street to 36th Street, Project No. 680391.

28,623.89

89,054.90

Chip seal (2nd application).

Kristin Avenue – Wild Meadow Street to Cindy Street, Little Red Avenue – 172' west of Wild Meadow Street to Wild Meadow Street, Cade Avenue – Cindy Street to 28th Street, Natalie Street – Wild Meadow Street to Cindy Street, Duncan Avenue – Country Meadows Drive to 28th Street, Flower Field Avenue – Country Meadows Drive to Prairie Hill Street, Ringling Avenue – Country Meadows Drive to 28th Street, County Meadows Drive – Duncan Avenue to 28th Street, Durango Street – 357' south of Silverton Avenue to Silverton Avenue, Silverton Avenue – 165' west of Durango Street to Country Meadows Drive, Wild Meadows Street – Ringling Avenue to Kristin Avenue, Prairie Hill Street – Ringling Avenue to Duncan Avenue, Cindy Street – Natalie Street to Kristin Avenue,

Project No. 680545.

HMA wedge, crack fill, chip seal and fog seal.

Sunnycrest Drive – Percy Avenue to H Avenue, Berry Street – Percy Avenue to H Avenue, Clarice Street – Percy Avenue to Jill Avenue, Percy Avenue – Sunnycrest Drive to Clarice Street, Jill Avenue – Berry Street to Clarice Street, Leigh Avenue – Willette Avenue to H Avenue, Margaret Avenue – Willette Avenue to H Avenue, Willette Avenue – Margaret Avenue to Leigh Avenue, Casper Street – Pristine Avenue to H Avenue,

Project No. 680544.

HMA wedge, crack fill, chip seal and fog seal.

52,881.68

COMSTOCK CHARTER TOWNSHIP TOTALS

298,783.39

766,984.75

LOCAL ROAD PRESERVATION

• PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS

Including Administrative and Equipment Allocations

PROJECT DESCRIPTION	PREVENTIVE MAINTENANCE	STRUCTURAL IMPROVEMENT
COOPER CHARTER TOWNSHIP ~ 62.83 Local Road Miles		
20th Street – G Avenue to McKinley Avenue, Project No. 680290. Chip seal. (2nd application).	27,089.94	
Baseline Road – Riverview Drive to 22nd Street, Project No. 680288. Chip seal. (2nd application).	25,988.18	
Baseline Road – Douglas Avenue to 16th Street, Project No. 680289. Chip seal. (2nd application).	12,189.28	
E Avenue – 12th Street to 14th Street, Project No. 680558. Crack fill and chip seal.	27,123.40	
E Avenue / 23rd Street / DE Avenue – Riverview Avenue to North Sprinkle Road, Project No. 680286. Chip seal. (2nd application)	44,142.84	
Fineview Avenue – Douglas Avenue to North Westnedge Avenue, Project No. 680285. Chip seal. (2nd application)	22,383.98	
Stoney Hill Drive – Rolling Meadows Drive to 625' East of Rolling Meadows Drive, Rock Crest Avenue – Rolling Meadows Drive to Hillview Street, Hillview Street – Glacier Valley Avenue to Rock Crest Avenue, Glacier Valley Avenue – Rolling Meadows Drive to Hillview Street. Project No. 680557. Crack fill, chip seal and fog seal.	19,784.13	
Solvel Street – G Avenue to Thayer Avenue, Project No. 680613. Crack fill, chip seal and fog seal.	10,188.29	
Tibit Drive – 1382' west of Canton Drive to Canton Drive, Project No. 680614. HMA wedge, crack fill, chip seal and fog seal.	11,421.18	
Walkers Ridge Road – 12th Street to 650' east of Red Rock Trail, Red Rock Trail – Walkers Ridge Road to Rolling Meadows Drive. Project No. 510592. HMA overlay.		171,895.91
COOPER CHARTER TOWNSHIP TOTALS	200,311.22	171,895.91

- LOCAL ROAD PRESERVATION
- PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS
- Including Administrative and Equipment Allocations

PROJECT DESCRIPTION

PREVENTIVE **STRUCTURAL** MAINTENANCE IMPROVEMENT

KALAMAZOO CHARTER TOWNSHIP ~ 74.89 Local Road Miles

Carsten Avenue – Nichols Road to Piedmont Drive, Edling Drive – Carsten Avenue to Peidmont Drive, Ashby Lane – Edling Drive to Carsten Avenue, Piedmont Drive – Edling Drive to 181' north of Carsten Avenue, Project No. 680570.

27.134.99

Crack fill, chip seal and fog seal.

Lamont Avenue – Lake Street to Willow Boulevard, Willis Avenue – Lake Street to Willow Boulevard, Carleton Avenue - Field Avenue to 157' east of Bronson Avenue. Project No. 680572.

20,486.98

Crack fill, chip seal and fog seal.

Lauderdale Drive – 1902' south of M-43 to M-43. Westwood Drive – M-43 to M-43, Dartmouth Street – 179' south of Academy Street to M-43, Clarendon Street – Academy Street to M-43, Berkley Street – Academy Street to M-43, Academy Street – 165' west of Dartmouth Street to 199' east of Arlington Street, Dartmouth Street – 179' couth of Academy Street to M-43, Grove Street – 165' west of Dartmouth Street to 190' east of Arlington Street, Sabin Street – 693' south of M-43 to M-43, Melcrest Street – Alamo Avenue to Rusridge Avenue, Rusridge Avenue – Melcrest Street to Marywood Street, Marywood Street - Alamo Avenue to Rusridge Avenue, Santos Avenue - Solon Street to Kendall Avenue, Rock Valley Drive – 1210' south of Grand Prairie Road to Grand Prairie Road. Project No. 510605.

468,650.55

483,627.22

Mulberry Lane to Buttonwood Lane.

Project No. 680576.

HMA overlay.

Crack fill, chip seal and fog seal.

Meadowcroft Lane - Nichols Road to Buttonwood Lane, Mulberry Lane -13,977.09 Meadowcroft Lane to Mandarin Grove Lane, Mandarin Grove Lane –

Mosel Avenue – Riverview Drive to Kalamazoo city limit, Darwood Avenue – 493' west of Delray Street to Delray Street, **Delray Street** – Fargo Avenue to Mosel Avenue, Fargo Avenue – 493' west of Delray Street to Sonora Street, Laredo Street – Fargo Avenue to Mosel Avenue, Sonora Street – Barclay Drive to Mosel Avenue, Cimarron Drive – Barclay Drive to Mosel Avenue, Maple Street - M-43 to 2440' north of M-43, Vliet Lane - Nichols Road to Valley Glen Circle, Valley Glen Circle – Vliet Lane to Vliet Lane, Shaffer Street – M-43 to 1544' north of M-43. Old Riverview Drive – Riverview Drive to 245' north of Mosel Avenue, Woodward Avenue – 784' south of H Avenue to Project No. 510604.

HMA overlay.

- LOCAL ROAD PRESERVATION
- PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS
- Including Administrative and Equipment Allocations

PROJECT DESCRIPTION

(Kalamazoo Charter Township Continued)

PREVENTIVE STRUCTURAL MAINTENANCE IMPROVEMENT

61,630,78

Pristine Avenue – Nazareth Road to township line, Sonia Lane – Pristine Avenue to Sunsprite Drive, Sunsprite Drive – Pristine Avenue to township line, **Grandessa Drive** – Sunsprite Drive to township line.

Project No. 680575.

Crack fill, chip seal and fog seal.

Stewart Drive – culvert east of Olmstead Road, Project No. 680615. Culvert replacement.

199.387.76

1.158,024.48

Sunnyside Drive – East Main Street to M-43, Foster Avenue – Market Street to Lake Street, Crossfield Avenue – Market Street to Lake Street, Springfield Avenue – Olmstead Road to Crossfield Avenue, Brookfield Avenue – Olmstead Road to Crossfield Avenue, Greenfield Avenue - Olmstead Road to Crossfield Avenue, Lincoln Street - East Michigan Avenue to East Michigan Avenue, Healy Street – 315' south of Lake Street to Lake Street, Brook Drive – 640' south of M-43 to M-43, **Asbury Avenue** – M-43 to Sunnyside Drive,

Gertrude Street - Stamford Avenue to Sunnyside Drive, Ann Street -Stamford Avenue to Baker Drive, Fenimore Avenue – East Main Street to Humphrey Street, Franklin Street – Olmstead Road to Sprinkle Road, Charles Avenue - Kalamazoo township line to Arthur Avenue, Washington Boulevard

- Boardman Street to Healy Street, **Boardman Street** - Washington Boulevard to Traction Court, **Dupont Avenue** – Lake Street to Willow Boulevard, Stockbridge Avenue – 140' west of Shakespeare Avenue to Schuster Avenue,

Clinton Avenue – Shakespeare Avenue to 140' east of Schuster Avenue, Shakespeare Avenue – Clinton Avenue to Stockbridge avenue, Schuster Avenue – Clinton Avenue to Stockbridge Avenue, Eagleston Avenue – 140' west of Shakespeare Avenue to 140' east of Schuster Avenue, Shakespeare

Avenue – Stockbridge Avenue to Lake Street, Schuster Avenue – Stockbridge Avenue to Lake Street.

Project No. 510603.

HMA overlay.

Turwill Lane – 1002' south of M-43 to M-43, Olney Road – Gorham Lane to Nichols Road, Cherry Hill Street – 775' south of Santos Avenue to Santos Avenue, Project No. 680574.

33.315.92

65,444.94

Crack fill, chip seal and fog seal.

Yucca Ave – Cumberland Street to Chaparral Street, Fir Avenue – Cumberland Street to 50' east of Chaparral Street, Chaparral Street - Grand Prairie Road to Aspen Drive, Sequoia Court - Chaparral Street to 420' east of Chaparral Street, Sagebrush Street – Grand Prairie Road to Long Leaf Street, Long Leaf Street - Sagebrush Street to Fawn Avenue, Fawn Aveune - Sagebrush Street to Long Leaf Street, Sagebrush Street – Fawn Avenue to 240' north of Andora Avenue, Andora Avenue – Sagebrush Street to Tamrack Street, Yew Street – Skyline

Street to Tamrack Street, Fir Street – Skyline Street to Tamrack Street,

Tamrack Street – Yew Street to 130' north of Andora Avenue,

Project No. 680571.

Crack fill, chip seal and fog seal.

KALAMAZOO CHARTER TOWNSHIP TOTALS

221,990.70

2,309,690.01

LOCAL ROAD PRESERVATION

• PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS

Including Administrative and Equipment Allocations

PROJECT DESCRIPTION	PREVENTIVE MAINTENANCE	STRUCTURAL IMPROVEMENT
OSHTEMO CHARTER TOWNSHIP ~ 76.71 Local Road Miles		
1st Street – 401' north of Stadium Drive to M Avenue, Project No. 680415. Chip seal (2nd application)	23,488.70	
G Avenue – 3244' west of Ravine Road to Ravine Road, Project No. 510606. Pulverize, gravel and HMA overlay.		194,145.36
KL Avenue – 2nd Street to 4th Street, Project No. 680578. HMA wedge and chip seal.	58,603.03	
KL Avenue – Vankal Street to 1st Street, Project No. 680579. HMA wedge and chip seal.	21,617.81	
Sundowner Lane – 11th Street to Sweet Briar Drive, Sweet Briar Drive – 11th Street to 326' north of Fountain Square Drive, Project No. 680580. Crack fill, Chip seal and fog seal.	22,000.04	
Stoneview Avenue – 130' west of Northfield Trail to Northfield Trail, Project No. 680581. Crack fill, chip seal and fog seal.	23,475.46	
Wickford Drive – M-43 to J Avenue, Project No. 680582. Crack fill, chip seal and fog seal.	16,916.38	
OSHTEMO CHARTER TOWNSHIP TOTALS	166,101.42	194,145.36

PAVILION TOWNSHIP ~ 48.35 Local Road Miles

35th Street – R Avenue to Q Avenue, **QR Avenue** – 35th Street to 1202' east of 35th Street,

46,162.83

Project No. 680564.

HMA wedge, crack fill and chip seal.

LOCAL ROAD PRESERVATION

• PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS

• Including Administrative and Equipment Allocations

PROJECT DESCRIPTION (Pavilion Township Continued)	PREVENTIVE MAINTENANCE	STRUCTURAL IMPROVEMENT
O Avenue – 29th Street to 6677' east of 29th Street, Project No. 680563. HMA wedge, crack fill and chip seal.	44,104.67	
R Avenue – 32nd Street to 33rd Street, Project No. 680562. HMA wedge, crack fill and chip seal.	31,427.80	
R Avenue – 33rd Street to 34th Street, Project No. 510594. Pulverize, gravel, HMA overlay.		124,702.34
TS Avenue – 33rd Street to 34th Street, Project No. 680559. HMA wedge and chip seal.	38,373.31	
PAVILION TOWNSHIP TOTALS	160,068.61	124,702.34
PRAIRIE RONDE TOWNSHIP ~ 52.11 Local Road Miles		
4th Street – XY Avenue to W Avenue, Project No. 680586. Chip seal.	29,154.84	
10th Street – U Avenue to 5280' north of U Avenue, Project No. 680608. Crack fill.	10,398.92	
TU Avenue – Vankal Street to 2nd Street, Project No. 510607. Regravel.		26,760.55
V Avenue – 2640' east of 5th Street to 8th Street, and V Avenue - 4th Street to 2640' east of 5th Street, Project No. 680585. HMA wedge, crack fill and chip seal.	73,158.41	
PRAIRIE RONDE TOWNSHIP TOTALS	112,712.17	26,760.55

RICHLAND TOWNSHIP ~ 49.24 Local Road Miles

27th Street – M-43 to F Avenue, Project No. 680551. 31,474.56

HMA wedge and chip seal.

• LOCAL ROAD PRESERVATION

HMA wedge and chip seal.

• PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS

Including Administrative and Equipment Allocations

PROJECT DESCRIPTION (Richland Township Continued)	PREVENTIVE MAINTENANCE	STRUCTURAL IMPROVEMENT
30th Street – DE Avenue to Engelwood Avenue, Project No. 680552. HMA wedge and chip seal.	20,655.10	
35th Street – D Avenue to West Gull Lake Drive, Project No. 680553. HMA wedge, crack fill and chip seal.	52,922.82	
B Avenue – 24th Street to M-89, Project No. 680549. HMA wedge and chip seal.	52,115.65	
C Avenue – 24th Street to 27th Street, Project No. 680550. HMA wedge, crack fill and chip seal.	70,309.11	
DE Avenue – 28th Street to 3000' east of 28th Street, Project No. 680291.	14,029.58	
Chip seal (second application). F Avenue – 27th street to 28th Street, Project No. 680540. Chip seal (second application).	17,233.56	
RICHLAND TOWNSHIP TOTALS	258,740.38	0.00
ROSS TOWNSHIP ~ 53.44 Local Road Miles		
42nd Street – B Avenue to Baseline Road, Project No. 510616. HMA wedge and chip seal.	33,682.19	
42nd Street – C Avenue to B Avenue, Project No. 680617. Crack fill and chip seal.	23,344.16	
D Avenue – West township line to 37th Street, Project No. 680618. HMA wedge and chip seal.	22,490.03	
ROSS TOWNSHIP TOTALS	79,516.38	0.00
SCHOOLCRAFT TOWNSHIP ~ 34.23 Local Road Miles		
16th Street – Z Avenue to XY Avenue, Project No. 680590.	64,957.26	

- LOCAL ROAD PRESERVATION
- PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS
- Including Administrative and Equipment Allocations

PROJECT DESCRIPTION (Schoolcraft Township Continued)

PREVENTIVE STRUCTURAL MAINTENANCE IMPROVEMENT

18th Street – VW Avenue to U Avenue, Project No. 680593.

61,516.16

11,043.11

HMA wedge, crack fill and chip seal.

Barnswallow Avenue – 270' west of Prairie Edge Street to Prairie Edge Street, Prairie Edge Street – U Avenue to 50' north of Starling Avenue, Starling Avenue – Prairie Edge Steet to Heron Street, Nighthawk Avenue – Prairie Edge Street to Heron Street, Blackstone Avenue – Heron Street to Blue Ridge Drive, Heron Street – U Avenue to 50' north of Starling Avenue, Blue Ridge Drive – South Hill Avenue to 250' north of South Hill Avenue, South Hill Avenue to South Hill Avenue of South Hill Avenue to South Hill Avenue, Starlet Street – South Hill Avenue to 1003' north of South Hill Avenue.

Project No. 680609.

Crack fill.

SCHOOLCRAFT TOWNSHIP TOTALS

137,516.53

0.00

TEXAS CHARTER TOWNSHIP ~ 92.35 Local Road Miles

2nd Street – S Avenue to RS Avenue, Project No. 680385.

16,461.03

Chip seal (2nd application).

43,560.17

Eagle Heights Drive, Eagle Terrace, Crestway Drive, Fieldwood Point, Fieldwood Circle, Glade Trail, Windsong Way, Gladeview Drive, Hobblebush Lane, Lakeridge Place, Farmington Avenue, Foxcroft Drive, Hunters Ridge Drive, Hitching Post Road, Orchard Hill Avenue, Glen Harbor Drive, Birchwood Drive, Blue Jay Drive, Bob White Avenue, Swallow Avenue, Blue Spruce Lane, Canary Lane, Morning Dove Lane, Old Stone Circle, Old Oak Circle, Finch Drive, Warbler Drive, Eagle Lake Drive, Standiford Street, Stapleton Drive, Dorval Road, Leland Court, Texas Heights Avenue, Briarcliff Lane, Green Pine Lane, Colony Lane, Plover Drive, Swan Drive, Mystic Trail, Continental Trail, Sierra Madre Trail, Saguaro Trail, Appalachian Trail, Alidor Street, Phiant Avenue, Autumn Glen Street, Autumn Court, Oakwood Avenue, Timberview Avenue, Maple Hollow Avenue, Glenwynd Drive, Hidden Cove Place, Rolling Pines Court, Farmington Avenue, Heathrow Avenue, Orly Court, Gatwick Court, Hunters Ridge Drive, Burning Tree Road, Chadeau Avenue, Norcross Street, Keith Court, Omega Street, Bramblewood Drive, Misty Creek Drive, Willowbend Trail, Cranberry Court, Willowbend Way, Saddle Club Drive, Deer Path Road, Summherhill Drive, Double Tree Court, Bent Tree Road, Shepherds Glen Road, Shepherds Glen Court, Huntwick Road, Four Seasons Drive.

Project No. 680567.

Crack fill.

- LOCAL ROAD PRESERVATION
- PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS
- Including Administrative and Equipment Allocations

PROJECT DESCRIPTION (Texas Township Continued)

PREVENTIVE STRUCTURAL MAINTENANCE IMPROVEMENT

Finnagen Street – Q avenue to PQ Avenue, Project No. 510600.

66,671.08

HMA overlay.

Kendall Arbor Avenue – Copper Harbor Street to Kaleb Kove Street, Copper Harbor Street – Kendall Arbor Avenue to Texas Heights Avenue, Leelanau Street – Kendall Arbor Avenue to Texas Heights Avenue, Keenan Street – Kendall Arbor Avenue to Texas Heights Avenue, Logan Bay Street – Kendall Arbor Avenue to Texas Heights Avenue, Kaleb Kove Street – 180' south of Kendall Arbor Avenue to Texas Heights Avenue,

166,292.71

Project No. 510595.

HMA overlay.

68,729.60

Maricopa Trail – 4th Street to Sierra Madre Trail, Gila Bend Trail – Maricopa Trail to 725' north of Maricopa Trail, Spruce Pine Street – Weeping Pine Lane to 347' north of Weeping Pine Lane, Weeping Pine Lane – 4th Street to Stone Pine Street, Stone Pine Street – 292' south of Weeping Pine Lane to Weeping Pine Lane, Mountain Pine Lane – 4th Street to Knotty Pine Lane, Knotty Pine Lane – Mountain Pine Lane to 329' west of Mountain Pine Lane, Sierra Madre Trail – Weeping Pine Lane to Mystic Trail,

Project No. 680566.

Crack fill, chip seal and fog seal.

PQ Avenue – 4th Street to 5th Street, Project No. 680381.

11,893.29

Chip seal. (2nd application).

Sierra Madre Trail – Appalachian Trail to 6th Street, Teton Trail – Mystic

62,683.89

Trail to Sierra Madre Trail,

Project No. 510616.

HMA overlay.

Texas Heights Avenue – Interlochen Street to Copper Harbor Street, **Interlochen Street** – Texas Heights Avenue to Q Avenue, **Mackinaw Cove** – 104,445.94

Interlochen Street to 300' east of Interlochen Street, Tawas Avenue –

 $Interlochen \ Street \ to \ Keweenaw \ Street, \ Keweenaw \ Street - Texas \ Heights$

Avenue to Tawas Avenue,

Project No. 510616.

HMA overlay.

Vankal Street –Texas south township line to Q Avenue,

91,055.38

Project No. 680365.

HMA wedge, crack fill and chip seal.

TEXAS CHARTER TOWNSHIP TOTALS

231,699.47

400,093.62

- LOCAL ROAD PRESERVATION
- PREVENTIVE MAINTENANCE AND STRUCTURAL IMPROVEMENTS
- Including Administrative and Equipment Allocations

PROJECT DESCRIPTION

PREVENTIVE STRUCTURAL MAINTENANCE IMPROVEMENT

WAKESHMA TOWNSHIP ~ 47.52 Local Road Miles

X Avenue – 47th Street to east county line, Project No. 680597. 16,065.62

HMA wedge and chip seal.

UV Avenue – 47th Street to 48th Street, Project No. 680598.

HMA wedge and chip seal.

WAKESHMA TOWNSHIP TOTALS

35,322.59

0.00

Total Local Road Preventive Maintenance Total Local Road Preservation Structural Improvements

2,317,762.32

4,246,469.93



38th Street - R Avenue to PQ Avenue, Climax Township

CHAPTER 3

Road Commission of Kalamazoo County Overview

Financials

Local Road Participation Funds	Page 39
Local Road Township Contributions	Page 40
Local Road Project Summary Expenditures	Page 41
Routine Maintenance Expenditures	Page 42
Local Road Routine Maintenance Expenditures and Revenues	Page 43
Combined Balance Sheet	Page 44
Statement of Revenues and Expenditures	Page 45
Supplemental Information—Graphs	Pages 46—67



Alamo Avenue – Kalamazoo City Limits to Nichols Road, Kalamazoo Township

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The Board of County Road Commissioners of the County of Kalamazoo determines, annually, the amount of primary road funds allocated to the local road participation (PAR) fund program that will be made available to each township. The distribution of the funds is based on township mileage and population and is determined on the same basis that local road fund money is distributed to the RCKC from the MTF.

PAR funds are made available to the townships for use on local road preservation-structural improvements, preventive maintenance, construction and special assessment projects. Townships, in order to receive local road participation funds, must match funds on a dollar-for-dollar basis.

Carryover Funds: Remaining obligated, yet unspent funds for local road projects which may be carry over to the following year, per RCKC policy.

Reallocation: Re-distribution of initial allocation based on township's January 20th response for use of allocated PAR funds by township, per RCKC policy.

Township	Initial Allocation	2017 Carryover Funds	Reallocation of PAR Funds	Revised Allocation
Alamo	\$49,807		\$716	\$50,523.00
Brady	\$59,580		\$856	\$60,436.00
Charleston	\$29,728		\$427	\$30,155.00
Climax	\$50,399		\$725	\$51,124.00
Comstock	\$168,373	\$28,224.27	\$2,421	\$199,018.27
Cooper	\$117,200	\$20,472.31	\$1,685	\$139,357.31
Kalamazoo	\$198,309		\$2,851	\$201,160.00
Oshtemo	\$179,116	\$22,736.76	\$2,575	\$204,427.76
Pavilion	\$81,361		\$1,170	\$82,531.00
Prairie Ronde	\$57,863	\$9,169.72	\$832	\$67,864.72
Richland	\$85,838		\$1,234	\$87,072.00
Ross	\$66,010		\$949	\$66,959.00
Schoolcraft	\$65,767		\$945	\$66,712.00
Texas	\$185,546		\$2,668	\$188,214.00
Wakeshma	\$50,103	\$2,151.54	-\$20,054	\$32,200.54
Total	\$1,445,000	\$82,754.60		\$1,527,754.60

LOCAL ROAD TOWNSHIP CONTRIBUTIONS

Township	Preservation - Structural Imp. Contributions	Preventive Maintenance Contributions	Routine Maintenance Contributions	Special Assessment Contributions	Total Township Contributions
Alamo	179,566.37	75,480.83	1,008.99		256,056.19
Brady		64,531.39	6,116.60		70,647.99
Charleston		26,253.21	2,177.55		28,430.76
Climax		75,542.28	13,034.23		88,576.51
Comstock	510,340.43	173,571.64			683,912.07
Cooper	79,565.93	31,652.90			111,218.83
Kalamazoo	1,836,865.41	171,560.01			2,008,425.42
Oshtemo	93,180.98	65,811.68	975.45		159,968.11
Pavilion	75,691.64	88,307.54			163,999.18
Prairie Ronde	12,386.72	52,059.02	20,675.31		85,121.05
Richland		117,851.55	1,366.17		119,217.72
Ross		36,690.25	2,868.22		39,558.47
Schoolcraft		63,618.99			63,618.99
Texas	179,037.07	191,398.14			370,435.21
Wakeshma		15,496.06	8,538.51		24,034.57
Total	2,966,634.55	1,249,825.49	56,761.03	0.00	4,273,221.07

Preservation-Structural Improvement Contributions: Payments made by township for preservation-structural improvement projects.

Preventive Maintenance Contributions: Payments made by township for preventive maintenance projects.

Routine Maintenance Contributions: Payments made by township for dust control, and miscellaneous.

Special Assessment Contributions: Payments made by township for special assessment projects.

LOCAL ROAD PROJECT SUMMARY EXPENDITURES

Preservation - Structural Improvements and Preventive Maintenance Expenditures

Including Administrative and Equipment Allocations

	Local Preventive	Local Preservation	Total Township
Township	Maintenance	Structural Improvements	Projects
Alamo	80,493.26	252,197.39	332,690.65
Brady	126,199.98		126,199.98
Charleston	53,388.09		53,388.09
Climax	127,913.68		127,913.68
Comstock	279,341.23	766,984.75	1,046,325.98
Cooper	187,276.76	171,895.91	359,172.67
Kalamazoo	207,545.54	2,309,690.01	2,517,235.55
Oshtemo	155,293.03	194,145.36	349,438.39
Pavilion	149,652.78	124,702.34	274,355.12
Prairie Ronde	105,377.88	26,760.55	132,138.43
Richland	241,903.87		241,903.87
Ross	74,342.16		74,342.16
Schoolcraft	128,568.18		128,568.18
Texas	216,622.53	400,093.62	616,716.15
Wakeshma	33,024.11		33,024.11
Total	2,166,943.08	4,246,469.93	6,413,413.01

Preservation-Structural Improvements: Roadwork, including placing a hard surface on the gravel road, reconstructing an existing road or bridge, resurfacing a road with HMA overlay or installing new culverts or catch basins.

Preventive Maintenance: Roadwork, including chip sealing, pavement crack seal, and HMA wedging to preserve roads by retarding surface deterioration.



Mercury Drive, MN Avenue to I-94, Charleston Township

• ROUTINE MAINTENANCE EXPENDITURES

- For Calendar Year Ending December 31, 2017
- Including Administrative and Equipment Allocations

		Average		Average	Increase
	2017	Cost	2016	Cost	(Decrease)
	Cost	Per Mile	Cost	Per Mile	Per Mile
PRIMARY ROAD SYSTEM	447.3		448.35 Miles		
Surface Maintenance	5,104,035.65	11,410.76	2,754,215.42	4,690.41	6,720.35
Roadside Maintenance	793,204.92	1,773.32	564,514.68	870.41	902.91
Traffic Control	698,567.31	1,561.74	631,622.18	1,100.71	461.03
Winter Maintenance	853,801.07	1,908.79	1,195,758.70	1,904.44	4.35
Total	7,449,608.95	16,654.61	5,146,110.98	8,565.97	8,088.64
LOCAL ROAD SYSTEM	820.51 Miles		817.76 Miles		
Surface Maintenance	3,691,293.63	4,498.78	3,858,245.32	4,470.75	28.03
Roadside Maintenance	1,285,533.14	1,566.75	770,832.96	747.28	819.47
Traffic Control	268,479.46	327.21	276,030.40	349.61	(22.40)
Winter Maintenance	622,073.09	758.15	778,525.64	780.10	(21.95)
Total	5,867,379.32	7,150.89	5,683,634.32	6,347.74	803.15



Winter Maintenance Operations

- **●** LOCAL ROAD ROUTINE MAINTENANCE EXPENDITURES
- AND REVENUES
- Including Administrative and Equipment Allocations

	Michigan	Township	Total	Less	Difference
	Transportation	Revenue for	Revenue for	Maintenance	By
Township	Fund Revenues	Maintenance	Maintenance	Expenditures	Township
Alamo	208,818.83	1,008.99	209,827.82	180,355.91	(29,471.91)
Brady	257,326.17	6,116.60	263,442.77	180,720.62	(82,722.15)
Charleston	127,752.54	2,177.55	129,930.09	86,577.48	(43,352.61)
Climax	261,575.39	13,034.23	274,609.62	224,868.12	(49,741.50)
Comstock	407,373.31	0.00	407,373.31	297,871.33	(109,501.98)
Cooper	346,725.35	0.00	346,725.35	210,063.79	(136,661.56)
Kalamazoo	413,278.07	0.00	413,278.07	341,277.34	(72,000.73)
Oshtemo	423,321.69	975.45	424,297.14	391,392.41	(32,904.73)
Pavilion	266,817.93	0.00	266,817.93	148,713.19	(118,104.74)
Prairie Ronde	287,567.37	20,675.31	308,242.68	265,143.94	(43,098.74)
Richland	271,729.37	1,366.17	273,095.54	260,294.97	(12,800.57)
Ross	294,906.93	2,868.22	297,775.15	242,667.80	(55,107.35)
Schoolcraft	188,897.16	0.00	188,897.16	89,243.45	(99,653.71)
Texas	509,630.53	0.00	509,630.53	361,044.47	(148,586.06)
Wakeshma	262,237.60	8,538.51	270,776.11	269,382.18	(1,393.93)
Total	4,527,958.24	56,761.03	4,584,719.27	3,549,617.00	(1,035,102.27)

Local road routine maintenance includes winter snow removal, roadside mowing, pavement marking, traffic signal maintenance, dust control, gravel road grading, pothole repair, etc.

The chart above represents, for 2017, the total revenue collected less the total expenditures to arrive at either a deficit or surplus, by township, for the local road routine maintenance activities. The MTF revenue received includes local mileage, local urban mileage, and a factor for population. RCKC receives MTF as a collective amount based on the county as a whole. This data is presented <u>for illustrative purposes only</u>, and reflects the expenditures in each township outside of annual projects. As you can see, RCKC must annually apply primary road dollars to cover the deficit for local road routine maintenance expenditures. Please note, weather and other issues may result in activity expenditures varying across the county.



1st Street - W Avenue to XY Avenue, Prairie Ronde Township

COMBINED BALANCE SHEET

For Calendar Year 2017

4

ASSETS

		129,378,495.77
		10,310,239.02
2,554,234.01	9,050,042.02	
0.00		
6,495,808.01		
	139,456.75	
	27,651.38	
	101,103.03	
	639,079.41	
		137,000,734.77
		139,688,734.7
		129,378,495.7
		10,310,239.02
101,072.72		
	809 624 39	
101 031 47		
85,308.46	3,055,347.00	
2,898,940.59		
	1,623,388.25	
	4,498,378.43	
	43,446.57 27,651.38 85,308.46 101,931.47 707,692.92 6,495,808.01 0.00 2,554,234.01	1,623,388.25 2,898,940.59 43,446.57 27,651.38 85,308.46 3,055,347.00 101,931.47 707,692.92 809,624.39 139,456.75 160,612.44 23,431.76 639,079.41 101,103.03 27,651.38 352,906.43 139,456.75 6,495,808.01 0.00 2,554,234.01 9,050,042.02

TOTAL LIABILITIES AND FUND EQUITIES

139,688,734.79

• STATEMENT OF REVENUES AND EXPENDITURES

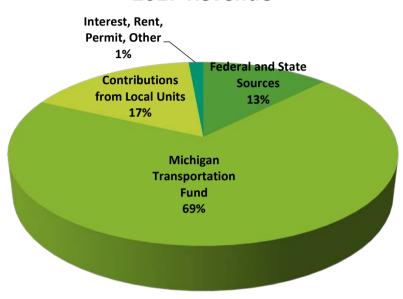
• For Calendar Year Ending December 31, 2017

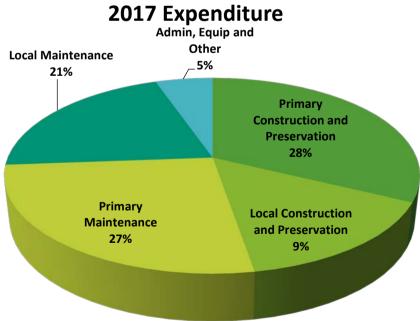
	Primary Road Fund	Local Road Fund	Road Commission Fund	Total
REVENUE				
Michigan Transportation Fund	14,074,778.54	4,525,792.99	0.00	18,600,571.53
Optional Transfer	(1,138,763.66)	1,138,763.66	0.00	0.00
Critical Bridge Fund	510,000.15	0.00	0.00	510,000.15
Snow Removal Fund	1,180.32	2,165.25	0.00	3,345.57
Other State Revenue	58,168.00	0.00	0.00	58,168.00
Economic Development Fund	0.00	0.00	0.00	0.00
Federal Revenue	2,795,791.52	0.00	0.00	2,795,791.52
County Raised Revenue	40,857.62	4,321,961.49	320,773.54	4,683,592.65
Gain on Disposal of Equipment	0.00	0.00	89,069.47	89,069.47
Contributions from Private Sources	0.00	0.00	0.00	0.00
Special Assessment Districts	0.00	23,180.36	0.00	23,180.36
Miscellaneous Revenue	43,730.89	242.30	4,436.94	48,410.13
Total Revenue	16,385,743.38	10,012,106.05	414,279.95	26,812,129.38
EXPENDITURES				
Construction/Capacity Improvement	0.00	0.00	0.00	0.00
Preservation - Structural Imp.	8,466,650.41	3,970,147.65	0.00	12,436,798.06
Routine and Preventive Maintenance	6,964,855.04	5,485,582.76	0.00	12,450,437.80
Other: Work for Others	0.00	0.00	187,682.32	187,682.32
Administration	703,184.14	430,879.52	0.00	1,134,063.66
Interest Expense	0.00	0.00	0.00	0.00
Equipment Account	107,332.61	125,496.12	16,548.10	249,376.83
	16,242,022.20	10,012,106.05	204,230.42	26,458,358.67
Non-Operating Expenditures				
* Net Capital Outlay	(334,326.04)	0.00	159,245.40	(175,080.64)
Total Expenditures	15,907,696.16	10,012,106.05	363,475.82	26,283,278.03
Increase (Decrease) in				
Available Operating Fund	478,047.22	0.00	50,804.13	528,851.35
Total Allocated Expenditures	16,385,743.38	10,012,106.05	414,279.95	26,812,129.38

^{*}Net Capital Outlay - Expenditures less depreciation and depletion.

- **Revenues and Expenditures**
- 2017

2017 Revenue

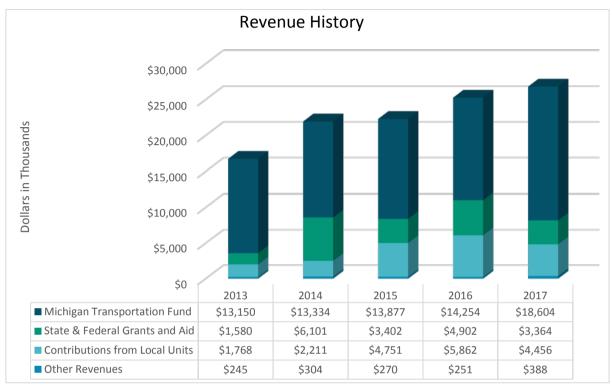


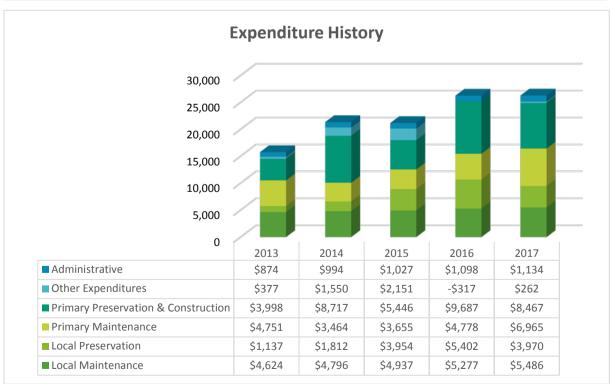


• Revenues and Expenditures History

• 2013 through 2017



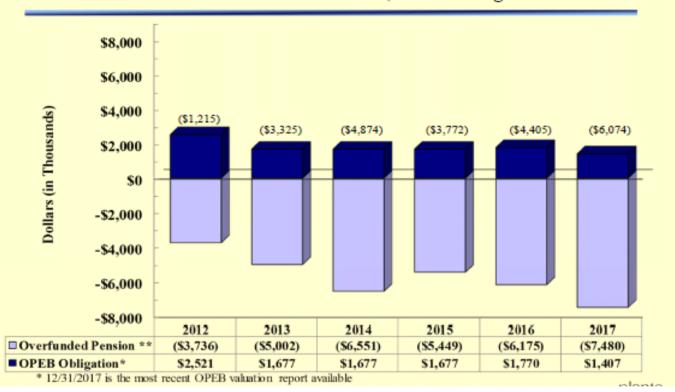




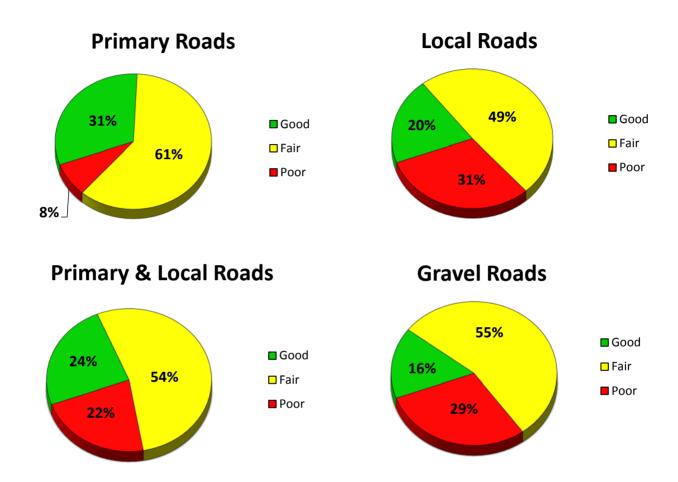
- Overfunded Pension and Unfunded OPEB Obligations
- 2012 through 2017

Road Commission of Kalamazoo County

Overfunded Pension and Unfunded OPEB Actuarial Liability For the Years Ended December 31, 2012 through 2017



- Countywide Asset Management PASER Rating Summary2017



^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4) Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

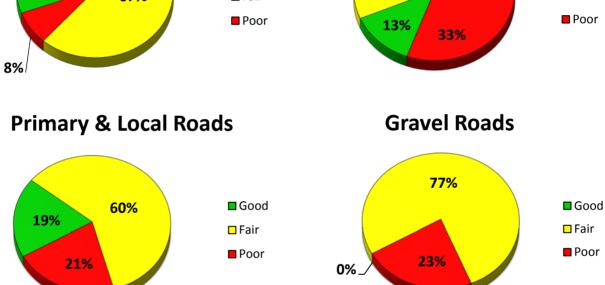
- Alamo Township Asset Management PASER Rating Summary
 2017
- _____

Primary Roads

Local Roads

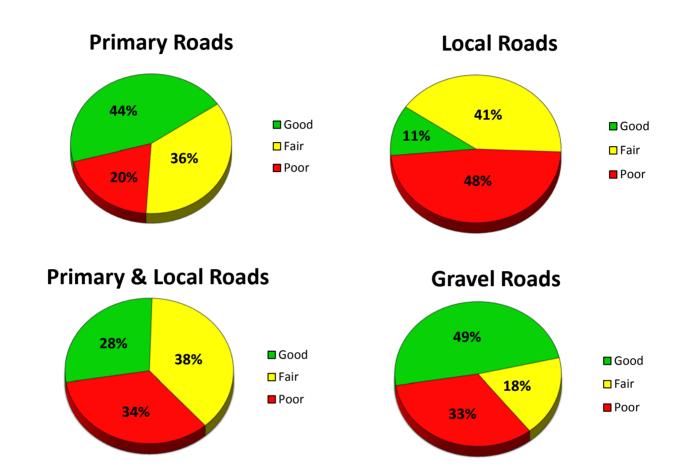
Good
Fair

Fair



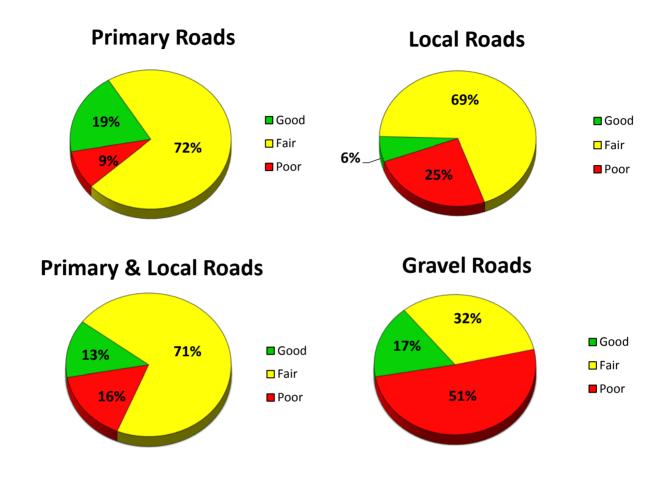
^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4) Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

- Brady Township Asset Management PASER Rating Summary
 2017



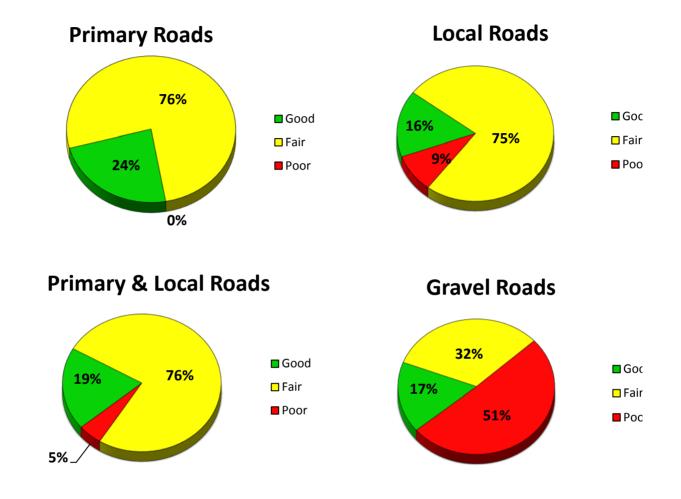
^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4)
Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

- Charleston Township Asset Management PASER Rating Summary
- **2017**



^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4)
Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

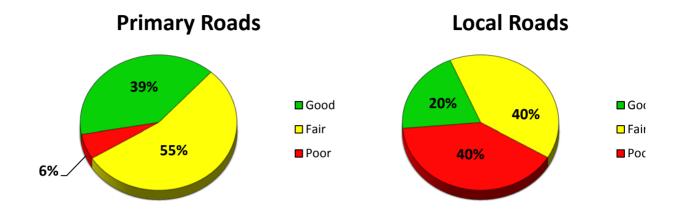
- Climax Township Asset Management PASER Rating Summary
- **2017**



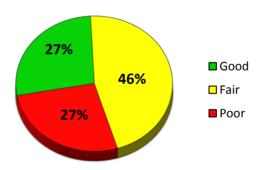
^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4) Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

Comstock Township Asset Management PASER Rating Summary2017

•

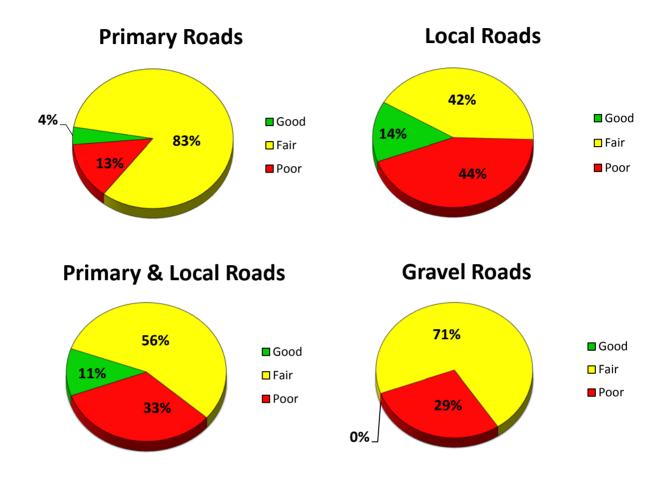


Primary & Local Roads



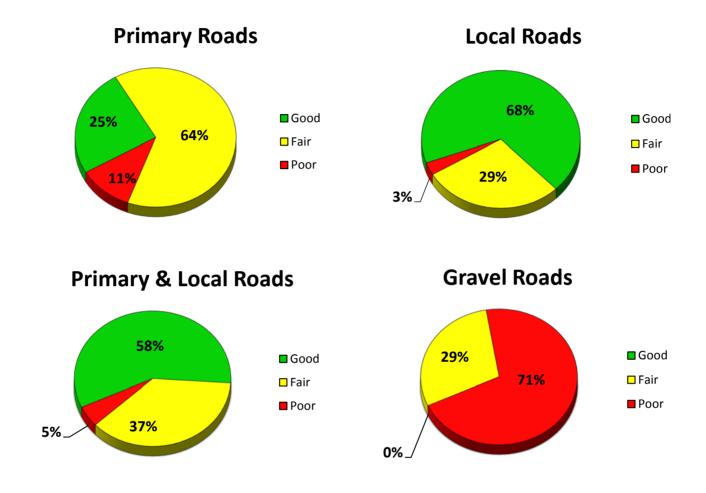
^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4)
Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

- Cooper Township Asset Management PASER Rating Summary
 2017



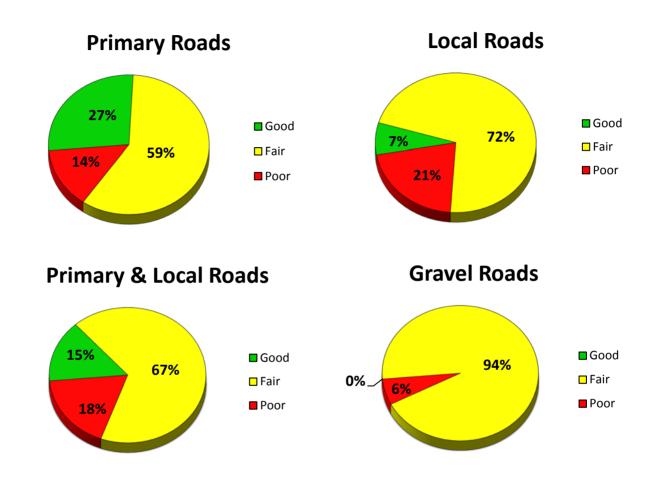
^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4)
Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

- Kalamazoo Township Asset Management PASER Rating Summary
- **2017**



^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4)
Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

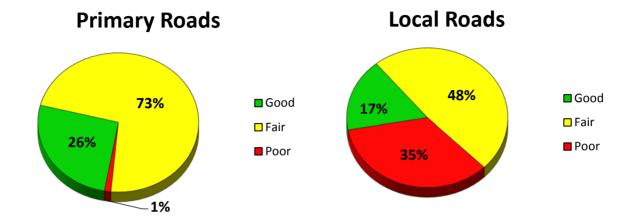
- Oshtemo Township Asset Management PASER Rating Summary2017



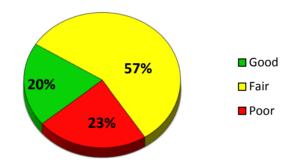
^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4)
Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

Pavilion Township Asset Management PASER Rating Summary

2017



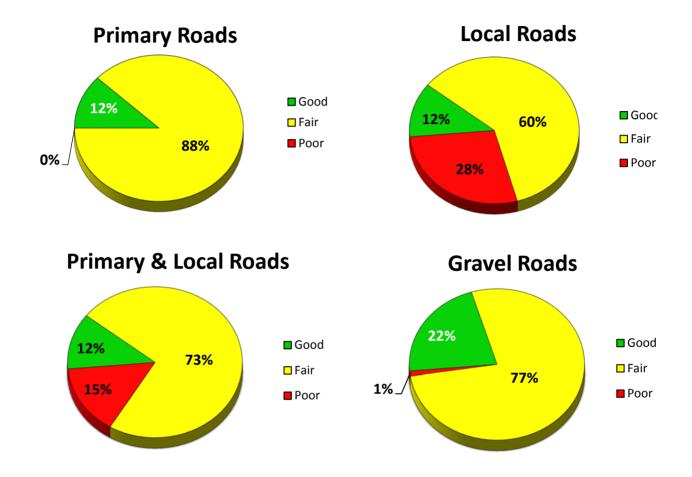
Primary & Local Roads



^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4)
Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

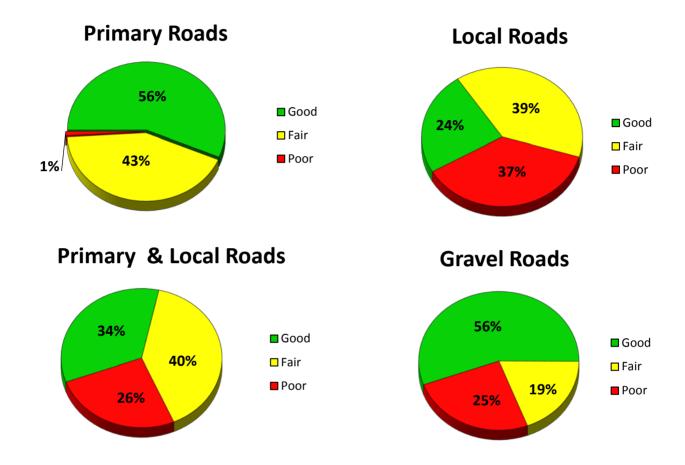
• Prairie Ronde Township Asset Management PASER Rating Summary

2017



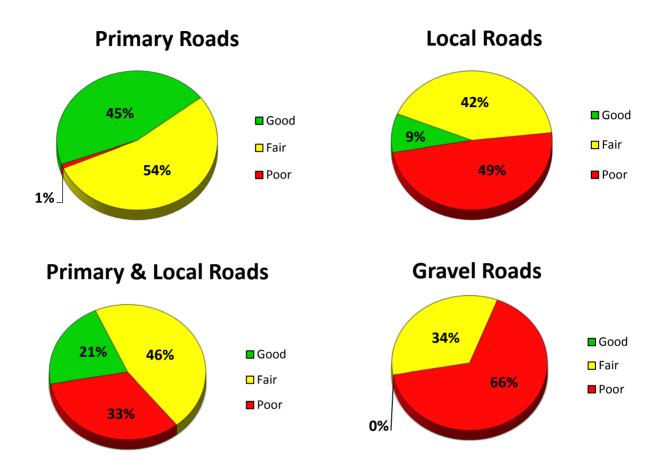
^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4) Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

- Richland Township Asset Management PASER Rating Summary
- **2017**



^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4)
Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

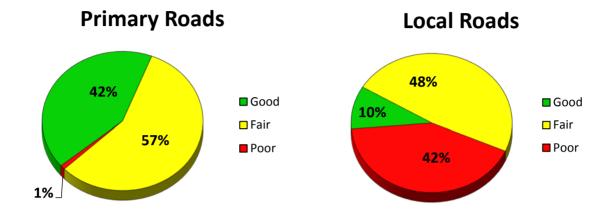
- Ross Township Asset Management PASER Rating Summary
- 2017



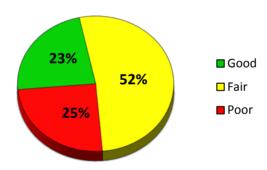
^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4) Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

Schoolcraft Township Asset Management PASER Rating Summary

2017



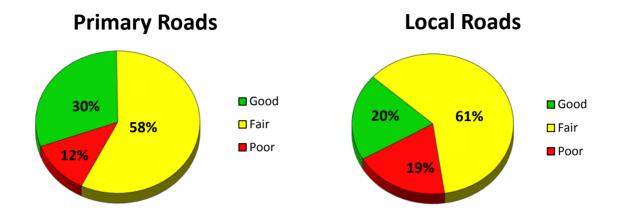
Primary & Local Roads



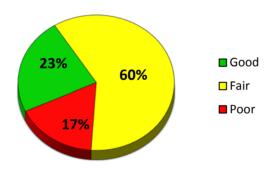
^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4)
Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

• Texas Township Asset Management PASER Rating Summary

2017

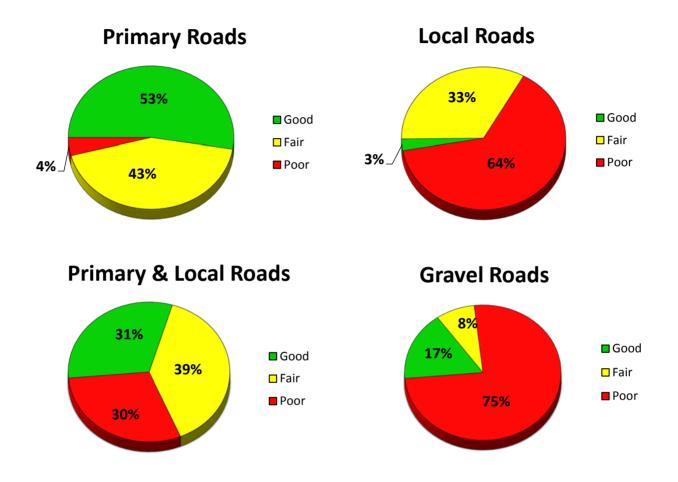


Primary & Local Roads



^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4) Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

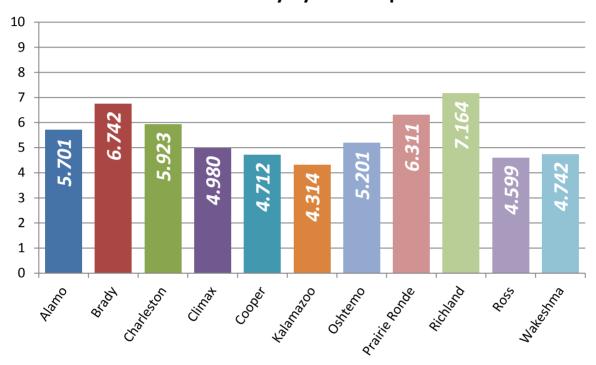
- Wakeshma Township Asset Management PASER Rating Summary
- 2017



^{*}Good (PASER rating ≥8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating ≤4) Based on year end 2016 PASER data. Gravel roads rated using Inventory Based Rating (IBR).

- Gravel Road Ratings
- 2017 Inventory Based Rating System (IBR)

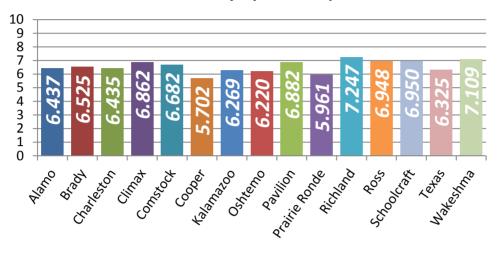
2017
Local Gravel Road IBR by Township
Summary by Township



^{*}Good (rating ≥8), Fair (rating = 7, 6, 5) & Poor (rating ≤4)
Paved Roads rated using the Pavement Surface Evaluation and Rating (PASER).
Gravel Roads rated using Inventory Based Rating (IBR).

- Primary Road Average PASER Rating Summary
- 2017

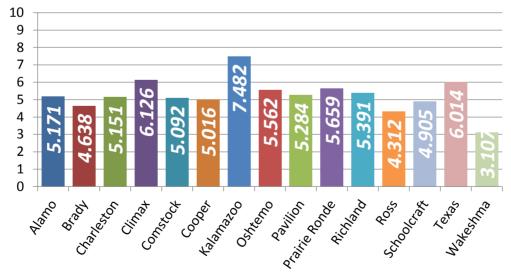
2017
Township Primary Road PASER Rating
Summary by Township



*Good (PASER rating \geq 8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating \leq 4) PASER Data does not include gravel roads.

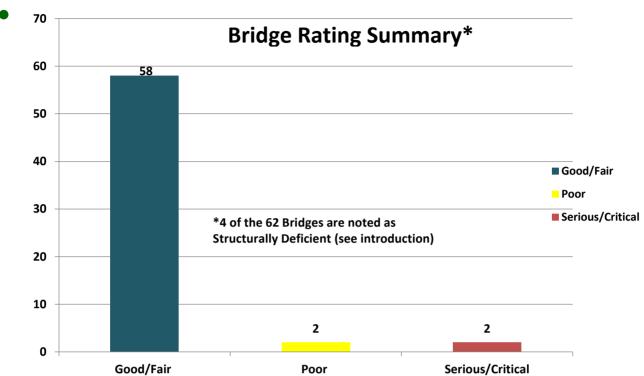
- Local Road Average PASER Rating Summary
- 2017

2017
Township Local Road PASER Rating
Summary by Township

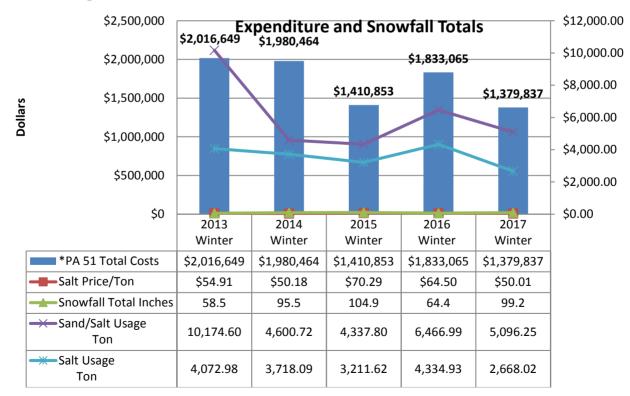


*Good (PASER rating \geq 8), Fair (PASER rating = 7, 6, 5) & Poor (PASER rating \leq 4) PASER Data does not include gravel roads.

- Bridge Rating Summary
- **2017**



- Winter Maintenance Expenditure and Snowfall Totals
- 2013 through 2017



^{*} Total Cost Does Not Include Administrative and Equipment - See Routine Maintenance Expenditures.

COMMUNICATION TOOLS





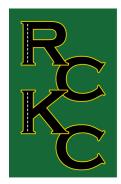












Road Commission of Kalamazoo County

3801 E. Kilgore Road Kalamazoo, MI 49001 (269) 381-3171 Fax (269) 381-1760 www.kalamazoocountyroads.com