## ALLEGAN COUNTY PRIMARY ROAD MILLAGE

## ALL AREAS



JANUARY 7-9, 2020

## TOPICS

- ALLEGAN COUNTY ROAD COMMISSION INFORMATION
- MILLAGE HISTORY \& GUIDELINES
- 2019 COMPLETED PROJECTS
- 2020 PLANNING \& PROPOSED PROJECTS
- FUTURE PROPOSED PROJECTS
- DISCUSSION


## ALLEGAN COUNTY ROAD COMMISSION INFORMATION

- Responsible for 1,800 miles ( $5^{\text {th }}$ in State) of roadway and 155 bridges ( $9^{\text {th }}$ in State) within 24 townships ( $4^{\text {th }}$ in the State)
- 522 Primary Miles
- 493 miles paved
- 29 miles gravel
- 1278 Local Miles
- 668 miles paved
- 610 miles grave
- 67 miles seasonal, not maintained in winter
- 155 Bridges
- 50 Primary System
- 105 Local System
- Bridge Classification: A structure with a minimum span of 20' (Can be a combination of culverts)


## 2018 ROAD COMMISSION REVENUES

The Road Commission receives revenue through the Michigan Transportation Fund (MTF) from fuel tax and vehicle registrations. This revenue is primarily used to pay operating and maintenance costs of the roads in Allegan County including payroll, equipment, materials, utility cost, etc. The Road Commission's MTF revenue was \$13,162,459 (19 th in State).

Federal and State funding acquired for roads and bridges totaled \$6,793,833.

## Local Revenue:

The Primary Millage raised $\$ 3,474,566$ and township contributions added an additional $\$ 6,697,993$ for preventative maintenance and improvements to the local road system and activities like shoulder paving on the primary road system.

Locally raised revenues in Allegan County are consistently higher than other road commissions in the state.


## Allegan County Road Commission

Number of Employees
■ Full Time Employees
■ Seasonal \& Retirees


## WINTER MAINTENANCE COSTS



## HOT MIX ASPHALT PRICES

| YEAR |
| :---: |
| 2005 |
| 2006 |
| 2007 |
| 2008 |
| 2009 |
| 2010 |
| 2011 |
| 2012 |
| 2013 |
| 2014 |
| 2015 |
| 2016 |
| 2017 |
| 2018 |
| 2019 |
| $* 2020$ |


| Local Roads |  |  |
| ---: | ---: | ---: |
| $(\$ /$ ton $)$ | Yearly Change | \% Change |
| $\$ 27.26$ |  |  |
| $\$ 34.00$ | $\$ 6.74$ | $24.7 \%$ |
| $\$ 39.38$ | $\$ 5.38$ | $15.8 \%$ |
| $\$ 54.72$ | $\$ 15.34$ | $39.0 \%$ |
| $\$ 46.91$ | $-\$ 7.81$ | $-14.3 \%$ |
| $\$ 48.33$ | $\$ 1.42$ | $3.0 \%$ |
| $\$ 44.14$ | $-\$ 4.19$ | $-8.7 \%$ |
| $\$ 49.82$ | $\$ 5.68$ | $12.9 \%$ |
| $\$ 53.22$ | $\$ 3.40$ | $6.8 \%$ |
| $\$ 51.01$ | $-\$ 2.21$ | $-4.2 \%$ |
| $\$ 52.28$ | $\$ 1.27$ | $2.5 \%$ |
| $\$ 49.07$ | $-\$ 3.21$ | $-6.1 \%$ |
| $\$ 48.34$ | $-\$ 0.73$ | $-1.5 \%$ |
| $\$ 49.69$ | $\$ 1.35$ | $2.8 \%$ |
| $\$ 60.87$ | $\$ 11.18$ | $22.5 \%$ |
| $\$ 63.00$ | $\$ 2.13$ | $3.5 \%$ |


| Primary Roads |  |  |
| ---: | ---: | ---: |
| $(\$ /$ ton $)$ | Yearly Change | $\%$ Change |
| $\$ 24.79$ |  |  |
| $\$ 33.27$ | $\$ 8.48$ | $34.2 \%$ |
| $\$ 38.83$ | $\$ 5.56$ | $16.7 \%$ |
| $\$ 48.50$ | $\$ 9.67$ | $24.9 \%$ |
| $\$ 47.63$ | $-\$ 0.87$ | $-1.8 \%$ |
| $\$ 49.92$ | $\$ 2.29$ | $4.8 \%$ |
| $\$ 43.59$ | $-\$ 6.33$ | $-12.7 \%$ |
| $\$ 50.49$ | $\$ 6.90$ | $15.8 \%$ |
| $\$ 53.60$ | $\$ 3.11$ | $6.2 \%$ |
| $\$ 52.48$ | $-\$ 1.12$ | $-2.1 \%$ |
| $\$ 58.40$ | $\$ 5.92$ | $11.3 \%$ |
| $\$ 52.36$ | $-\$ 6.04$ | $-10.3 \%$ |
| $\$ 53.32$ | $\$ 0.96$ | $1.8 \%$ |
| $\$ 50.81$ | $-\$ 2.51$ | $-4.7 \%$ |
| $\$ 60.18$ | $\$ 9.37$ | $18.4 \%$ |
| $\$ 62.00$ | $\$ 1.82$ | $3.0 \%$ |

*Projected

## ALL-SEASON ROUTES (CLASS A)



## ALLEGAN COUNTY MILLAGE HISTORY

- 1968 a one mill tax was established for bridge \& culvert replacement on county roads.
- 1968-1982 there were 111 bridges and culverts replaced with the millage.
- 1982 the millage language changed from bridge and culvert replacement to primary road resurfacing.
- 2008 the millage language was revised again to include "preservation and preparation" along with resurfacing.
- 2020 is the $2^{\text {nd }}$ year of the renewed 6 year millage.


## FINANCIAL GUIDELINES

- Millage Revenue:
- $\sim 30 \%$ to Cities \& Villages
- $-70 \%$ to Road Commission
- Road Commission's Revenue:
- Split equally between 6 areas
- Each area contains 4 townships
- Each area carries a balance from year to year
- Township Contributions - Primary Roads:
- Shoulder Paving - (2" of asphalt) x (additional shoulder width) $\times$ (project length) $\times$ (contracted unit price)
- Renovation Projects - $\$ 35,000 / \mathrm{mi}$
- Work outside existing road shoulders (widening, clearing, ditching)
- Reconstruction Projects - \$50,000/mi
- Existing gravel road with full base/sub-base reconstruction
- Crush, Shape, \& Resurface or Mill \& Resurface Projects within existing shoulders won't require contributions
- Road Commission Responsibility:
- Develop plan/proposed projects
- Present to townships
- Oversee projects


## 6 PRIMARY MILLAGE AREAS



## 6 PRIMARY MILLAGE AREAS

| Area | Township | Primary (Miles) | Total (Miles) | \% of Area | \% of Total | Ranking (Miles) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Laketown | 17.7 | 78.5 | 22.5\% | 15.1\% | 4th |
|  | Fillmore | 27.4 |  | 34.9\% |  |  |
|  | Saugatuck | 21.1 |  | 26.9\% |  |  |
|  | Manlius | 12.4 |  | 15.7\% |  |  |
| 2 | Overisel | 18.2 | 71.0 | 25.6\% | 13.7\% | 6th |
|  | Salem | 19.6 |  | 27.6\% |  |  |
|  | Heath | 14.3 |  | 20.1\% |  |  |
|  | Monterey | 18.9 |  | 26.6\% |  |  |
| 3 | Dorr | 22.0 | 97.1 | 22.7\% | 18.7\% | 2nd |
|  | Leighton | 24.7 |  | 25.5\% |  |  |
|  | Hopkins | 23.0 |  | 23.6\% |  |  |
|  | Wayland | 27.4 |  | 28.2\% |  |  |
| 4 | Ganges | 33.3 | 104.1 | 32.0\% | 20.0\% | 1st |
|  | Clyde | 18.7 |  | 18.0\% |  |  |
|  | Casco | 29.9 |  | 28.7\% |  |  |
|  | Lee | 22.3 |  | 21.4\% |  |  |
| 5 | Valley | 17.0 | 91.4 | 18.6\% | 17.6\% | 3rd |
|  | Allegan | 30.4 |  | 33.2\% |  |  |
|  | Cheshire | 26.5 |  | 29.0\% |  |  |
|  | Trowbridge | 17.6 |  | 19.3\% |  |  |
| 6 | Watson | 14.1 | 77.9 | 18.0\% | 15.0\% | 5th |
|  | Martin | 21.9 |  | 28.1\% |  |  |
|  | Otsego | 18.5 |  | 23.7\% |  |  |
|  | Gun Plain | 23.5 |  | 30.2\% |  |  |

## PRIMARY ROAD MILLAGE PROJECT TOTALS

- From 1983-2019 the millage has raised $\$ 74,002,405$ which has funded:
- 655.05 miles of paving (14.05 in 2019)
*Some roads have been resurfaced multiple times
- 172.02 miles of chip seal \& fog coat (13.13 in 2019)
- 208.69 miles of crack sealing (32.90 in 2019)
- 14 large culvert replacements
- Millage funds were used to locally match 1 State/Federal funded project in 2019
-     * Michigan Transportation Funds (MTF) - 2019
- 2 primary resurfacing projects (4.38 Miles) $=\sim \$ 710,000$
- 8 large culvert replacements $=\mathbf{\sim 2 5 0 , 0 0 0}$






## 2020 Planning and Proposed Projects

- Current Pavement Conditions:
- Pavement Surface Evaluation \& Ratings (PASER)
- Road History:
- When \& how was the road constructed \& paved
- Last resurfacing or preventative maintenance
- Other Considerations:
- Cause of Pavement Distresses (traffic loads, poor soils, poor drainage, age, etc.)
- All-Season Routes
- Maintenance Costs
- Project Costs
- Safety


## PASER RATING GUIDLINES

- Good Ratings: 8, 9, \& 10
- No maintenance required
- Fair Ratings: 5, 6, \& 7
- 7 - Crack Seal
- 5 or 6 - Chipseal and Fog Coat
- Poor Ratings: 1, 2, 3, \& 4
- Time to Resurface
- Milling, Crush \& Shape, or Reconstruction extends pavement life
- Rating resets when treatment is completed
- Reconstruction: 10
- Resurface: 9
- Chip Seal: 8
- Crack Seal: Does not reset rating but extends pavement life


## Asphalt PASER

|  | Asphalt 10 | Asphalt 9 | Asphalt 8 |
| :---: | :---: | :---: | :---: |
| $\begin{aligned} & \mathbf{O} \\ & 0 \\ & 0 \\ & \hline 0 \end{aligned}$ | New construction <br> No defects <br> Less than 1 year old <br> Only a " 10 " for 1 year <br> Recent base improvement <br> No action required | Like new condition <br> No defects <br> More than 1 year old <br> Recent overlay with or without <br> a crush and shape <br> No action required | - Occasional transverse crack >40' apart <br> - Crack width tight (hairline) or sealed Few if any longitudinal cracks on joints <br> Recent seal coat or slurry seal (*see below) <br> Little or no maintenance required |
| Asphalt 7 |  | Asphalt 6 | Asphalt 5 |
| -는 | - Trans. cracks $10^{\prime}-40^{\prime}$ apart <br> - Cracks open < $1 / /^{\prime \prime}$ <br> Little or no crack erosion <br> Little or no raveling <br> Few if any patches in good condition <br> First signs of wear <br> Suggested Action <br> Maintain with crack seal | - Trans. cracks less than $10^{\prime}$ apart <br> - Initial block cracking ( $6^{\prime}-10^{\prime}$ Blocks) <br> - Cracks open $1 / /^{\prime \prime}-1 / 2^{\prime \prime}$ <br> Blocks are large and stable <br> Slight to moderate polishing or flushing <br> No patches or few in good condition <br> Slight raveling <br> Sound structural condition <br> Suggested Action <br> Maintain with sealcoat | - Secondary cracks (crack raveling) <br> - Moderate block cracking ( $1^{\prime}-5^{\prime}$ blocks) <br> - First sign of longitudinal cracks at edge <br> - Cracks open >1/2" <br> Patching/wedging in good condition <br> Moderate raveling <br> Extensive to severe flushing \& polishing <br> Sound structural condition <br> Suggested Action <br> Maintain with sealcoat or thin overlay |


|  | Asphalt 4 | Asphalt 3 | Asphalt 2 |
| :---: | :---: | :---: | :---: |
| ㄴ | - Longitudinal cracking in the wheel paths <br> - Rutting $1 / 2^{\prime \prime}-1^{\prime \prime}$ deep <br> - Severe block cracking: <1' blocks <br> Severe surface raveling <br> Multiple longitudinal \& transverse cracks with slight crack erosion <br> Patching in fair condition <br> First signs of structural weakening <br> Suggested Action <br> Structural overlay $>2^{\prime \prime}$ | - < 25\% alligator cracking (first signs) <br> - Moderate rutting $1^{\prime \prime}-2^{\prime \prime}$ deep <br> - Severe block cracking (Alligator) <br> Longitudinal \& transverse cracks showing extensive crack erosion Occasional potholes <br> Patches in fair/poor condition <br> Suggested Action | - >25\% alligator cracking <br> - Severe rutting or distortion $>2^{\prime \prime}$ Closely spaced cracks with erosion Frequent potholes <br> Extensive patches in poor condition <br> Suggested Action <br> Reconstruction with base repair Crush and shape possible |
|  |  |  | Asphalt 1 |
|  |  | Milling would extend overlay life | Loss of surface integrity <br> Extensive surface distress <br> Suggested Action <br> Reconstruction with base repair |



## 6 PRIMARY MILLAGE AREAS

| Area | Township | Primary <br> (Miles) | Total (Miles) | \% of Area | \% of Total | Ranking (Miles) | Average <br> PASER | Average <br> Area PASER | Ranking <br> (PASER) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Laketown | 17.7 | 78.5 | 22.5\% | 15.1\% | 4th | 6.1 | 5.86 | 5th |
|  | Fillmore | 27.4 |  | 34.9\% |  |  | 6.2 |  |  |
|  | Saugatuck | 21.1 |  | 26.9\% |  |  | 4.9 |  |  |
|  | Manlius | 12.4 |  | 15.7\% |  |  | 6.4 |  |  |
| 2 | Overisel | 18.2 | 71.0 | 25.6\% | 13.7\% | 6th | 6.1 | 6.48 | 1st (tie) |
|  | Salem | 19.6 |  | 27.6\% |  |  | 6 |  |  |
|  | Heath | 14.3 |  | 20.1\% |  |  | 7.6 |  |  |
|  | Monterey | 18.9 |  | 26.6\% |  |  | 6.5 |  |  |
| 3 | Dorr | 22.0 | 97.1 | 22.7\% | 18.7\% | 2nd | 6.4 | 5.95 | 4th |
|  | Leighton | 24.7 |  | 25.5\% |  |  | 5.3 |  |  |
|  | Hopkins | 23.0 |  | 23.6\% |  |  | 5.9 |  |  |
|  | Wayland | 27.4 |  | 28.2\% |  |  | 6.2 |  |  |
| 4 | Ganges | 33.3 | 104.1 | 32.0\% | 20.0\% | 1st | 5.3 | 5.53 | 6th |
|  | Clyde | 18.7 |  | 18.0\% |  |  | 5.9 |  |  |
|  | Casco | 29.9 |  | 28.7\% |  |  | 5.4 |  |  |
|  | Lee | 22.3 |  | 21.4\% |  |  | 5.5 |  |  |
| 5 | Valley | 17.0 | 91.4 | 18.6\% | 17.6\% | 3rd | 6.6 | 6.48 | 1st (tie) |
|  | Allegan | 30.4 |  | 33.2\% |  |  | 6.3 |  |  |
|  | Cheshire | 26.5 |  | 29.0\% |  |  | 6.2 |  |  |
|  | Trowbridge | 17.6 |  | 19.3\% |  |  | 6.8 |  |  |
| 6 | Watson | 14.1 | 77.9 | 18.0\% | 15.0\% | 5th | 7.3 | 6.00 | 3rd |
|  | Martin | 21.9 |  | 28.1\% |  |  | 5.2 |  |  |
|  | Otsego | 18.5 |  | 23.7\% |  |  | 5.6 |  |  |
|  | Gun Plain | 23.5 |  | 30.2\% |  |  | 5.9 |  |  |



## 2020 PROPOSED PROJECTS - AREA 1

2019 PASER Map - Area 1





## 2020 PROPOSED PROJECTS - AREA 3

2019 PASER Map - Area 3





## 2020 PROPOSED PROJECTS - AREA 5

## 2019 PASER Map - Area $5 \quad-\quad-1.5 \mathrm{mi}$





## 2020 PROPOSED PROJECTS - AREA 6

2019 PASER Map - Area 6



| PRIMARY ROAD RESURFACING MILLAGE FUND 2020 PROPOSED PROJECTS |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AREA | TOWNSHIP | PROJECT LOCATION | TYPE OF WORK | MILES | MILLAGE FUND COSTS | TOWNSHIP \& OTHER CONTRIBUTIONS | TOTAL COSTS |
| 1 | Saugatuck | Lakeshore Drive, M-89 to 126th Avenue | Resurface, HMA 4E1-220 \#/syd | 1.03 | \$175,000.00 |  | \$175,000.00 |
|  | Laketown \& Fillmore | Blue Star Highway, 3,900' west of 60th St to 58th Street | Crush, Shape, and Resurface, HMA 4E1-220 \#/syd leveling \& HMA 4E1-220 \#/syd top | 2.00 | \$400,000.00 | ACRC (MTF) \$400,000.00 | \$800,000.00 |
|  | Saugatuck | 62nd Street, 124th Avenue to 128th Avenue | Chip Seal \& Fog Coat | 1.97 | \$55,000.00 |  | \$55,000.00 |
|  |  |  | SUB-TOTAL AREA 1 | 5.00 | \$630,000.00 | \$400,000.00 | \$1,030,000.00 |
| 2 | Monterey | 30th Street, 128th Avenue to 134th Avenue | Mill and Resurface, HMA 4E1-220 \#/syd | 3.01 | \$525,000.00 |  | \$525,000.00 |
|  | Salem | 142nd Avenue, 34th Street to 30th Street | Mill and Resurface, HMA 4E1-220 \#/syd | 1.99 | \$350,000.00 |  | \$350,000.00 |
|  | Overisel | 38th Street, 142nd Avenue to 146th Avenue | Crack Seal | 2.01 | \$16,000.00 |  | \$16,000.00 |
|  |  |  | SUB-TOTAL AREA 2 | 7.01 | \$891,000.00 | \$0.00 | \$891,000.00 |
| 3 | Hopkins | 128th Avenue, 18th Street to 14 th Street Carried from 2019 | Mill and Resurface, HMA 4E1-275 \#/syd | 2.13 | \$95,000.00 | Federal - Safety \$600,000.00 | \$695,000.00 |
|  | Leighton | Division Street, 138th Avenue to 142nd Avenue | Crush, Shape, and Resurface, HMA 4E1-220 \#/syd leveling \& HMA 4E1-220 \#/syd top | 2.00 | \$400,000.00 | ACRC (MTF) \$400,000.00 | \$800,000.00 |
|  | Hopkins \& Wayland | 12th Street, 124th Avenue to 128th Avenue | Mill and Resurface, HMA 4E1-220 \#/syd | 1.76 | \$290,000.00 | Hopkins (PS) $\$ 30,000.00$ <br> Wayland (PS) $\$ 30,000.00$ | \$350,000.00 |
|  |  |  | SUB-TOTAL AREA 3 | 5.89 | \$785,000.00 | \$1,060,000.00 | \$1,845,000.00 |


| PRIMARY ROAD RESURFACING MILLAGE FUND 2020 PROPOSED PROJECTS |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AREA | TOWNSHIP | PROJECT LOCATION | TYPE OF WORK | MILES | MILLAGE FUND COSTS | TOWNSH CONTR | \& OTHER TIONS | TOTAL COSTS |
| 4 | Ganges | Lakeshore Drive, 118th Avenue to 121st Avenue <br> - Carried from 2019 | Resurface, HMA 4E1-275 \#/syd | 1.31 | \$220,000.00 | Ganges | \$30,000.00 | \$250,000.00 |
|  | Casco | Blue Star Highway, 300' south of A Street to 500 ' north of 111th Avenue - Carried from 2019 | Crush, Shape, and Refurface, HMA 4E1 leveling course - 220 \#/syd, HMA 4E1 top course - 220 \#/syd | 3.22 | \$0.00 | Federal State D | $\begin{array}{r} \hline \$ 1,164,008.00 \\ \$ 291,000.00 \end{array}$ | \$1,455,008.00 |
|  | Lee | 103rd Avenue/52nd Street/104th Avenue, 54th Street to 1,000 west of 50 th Street | Renovate, Crush, Shape, and Resurface, HMA 4E1 220 \#/syd leveling \& HMA 4E1-220 \#/syd top | 2.00 | \$830,000.00 | $\begin{aligned} & \text { Lee (REN) } \\ & \text { ACRC (MTF) } \end{aligned}$ | $\begin{array}{r} \$ 70,000.00 \\ \$ 450,000.00 \\ \hline \end{array}$ | \$1,350,000.00 |
|  | Ganges | 62nd Street, 120th Avenue to 124th Avenue | Chip Seal \& Fog Coat | 2.07 | \$55,000.00 |  |  | \$55,000.00 |
|  | Lee | 102nd Avenue, 60th Street to 54th Street | Crack Seal | 3.00 | \$18,000.00 |  |  | \$18,000.00 |
|  |  |  | SUB-TOTAL AREA 4 | 11.60 | \$1,123,000.00 |  | \$2,005,008.00 | \$3,128,008.00 |
| 5 | Cheshire \& Valley | 112th Avenue, 44th Street to 37th Street | Resurface, HMA 4E1-275 \#/syd, geogrid in peat areas | 3.50 | \$680,000.00 | $\begin{array}{\|l} \hline \begin{array}{l} \text { Cheshire (PS) } \\ \text { Valley (PS) } \end{array} \\ \hline \end{array}$ | $\begin{aligned} & \$ 60,000.00 \\ & \$ 60,000.00 \end{aligned}$ | \$800,000.00 |
|  | Cheshire | 46th Street - 102nd Avenue to 104th Avenue (west) | Crack Seal | 1.00 | \$6,000.00 |  |  | \$6,000.00 |
|  |  |  | SUB-TOTAL AREA 5 | 4.50 | \$686,000.00 |  | \$120,000.00 | \$806,000.00 |
| 6 | Gun Plain | Douglas Avenue (10th Street), Baseline Road to Starr Road - Carried from 2019 | Crush, Shape, and Refurface, HMA 4E1 leveling course - 220 \#/syd, HMA 4E1 top course - 220 \#/syd | 1.24 | \$450,000.00 |  |  | \$450,000.00 |
|  | Gun Plain \& Martin | 2nd Street, Marsh Road to 118th Avenue | Mill and Resurface, HMA 4E1-220 \#/syd | 4.11 | \$700,000.00 | $\begin{array}{\|l} \hline \text { Gun Plain (PS) } \\ \text { Martin (PS) } \\ \hline \end{array}$ | $\begin{aligned} & \$ 25,000.00 \\ & \$ 50,000.00 \\ & \hline \end{aligned}$ | \$775,000.00 |
|  | Otsego | 102nd Avenue, 24th Street to 21st Street | Crack Seal | 1.50 | \$9,000.00 |  |  | \$9,000.00 |
|  |  |  | SUB-TOTAL AREA6 | 6.85 | \$1,159,000.00 |  | \$75,000.00 | \$1,234,000.00 |
|  |  |  |  |  |  |  |  | \$8,934,008.00 |

## AREA FUND BALANCES

2019 Preliminary Balances

| Area | Final 2018 Balances | Preliminary Revenues | Preliminary Expenses | Preliminary 2019 Balance |
| :---: | ---: | ---: | ---: | ---: |
| 1 | $\$ 303,573.63$ | $\$ 595,507.29$ | $\$ 786,713.68$ | $\$ 112,367.24$ |
| 2 | $\$ 151,621.28$ | $\$ 595,507.29$ | $\$ 521,128.56$ | $\$ 226,000.01$ |
| 3 | $\$ 79,909.74$ | $\$ 595,507.29$ | $\$ 486,156.36$ | $\$ 189,260.67$ |
| 4 | $\$ 336,699.66$ | $\$ 595,507.29$ | $\$ 292,740.29$ | $\$ 639,466.66$ |
| 5 | $\$ 246,236.70$ | $\$ 595,507.29$ | $\$ 746,987.59$ | $\$ 94,756.40$ |
| 6 | $\$ 260,518.96$ | $\$ 595,507.29$ | $\$ 250,798.87$ | $\$ 605,227.38$ |
| Totals | $\$ 1,378,559.96$ | $\$ 3,573,043.73$ | $\$ 3,084,525.35$ | $\$ 1,867,078.34$ |

2020 Estimated Balances

| Area | Preliminary 2019 Balances | Estimated Revenues | Estimated Expenses | Estimated 2020 Balance |
| :---: | ---: | ---: | ---: | ---: |
| 1 | $\$ 112,367.24$ | $\$ 580,000.00$ | $\$ 630,000.00$ | $\$ 62,367.24$ |
| 2 | $\$ 226,000.01$ | $\$ 580,000.00$ | $\$ 891,000.00$ | $-\$ 84,999.99$ |
| 3 | $\$ 189,260.67$ | $\$ 580,000.00$ | $\$ 785,000.00$ | $-\$ 15,739.33$ |
| 4 | $\$ 639,466.66$ | $\$ 580,000.00$ | $\$ 1,123,000.00$ | $\$ 96,466.66$ |
| 5 | $\$ 94,756.40$ | $\$ 580,000.00$ | $\$ 686,000.00$ | $-\$ 11,243.60$ |
| 6 | $\$ 605,227.38$ | $\$ 580,000.00$ | $\$ 1,159,000.00$ | $\$ 26,227.38$ |
| Totals | $\$ 1,867,078.34$ | $\$ 3,480,000.00$ | $\$ 5,274,000.00$ | $\$ 73,078.34$ |

PRIMARY ROAD RESURFACING MILLAGE FUND FUTURE PROPOSED PROJECTS

| AREA | TOWNSHIP | PROJECT LOCATION | TYPE OF WORK | MILES | MILLAGE FUND COSTS | TOWNSH CONTR | \& OTHER UTIONS | TOTAL COSTS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Saugatuck | 66th Street, M-89 to Village of Douglas Limits | Resurface, HMA 4E1-275 \#/syd | 2.84 | \$400,000.00 | Saugatuck (PS) | \$100,000.00 | \$500,000.00 |
|  | Laketown | 64th Street, 142nd Avenue to 32nd Street | Mill and Resurface, HMA 4E1-220 \#/syd | 2.97 | \$550,000.00 |  |  | \$550,000.00 |
|  | All | 63rd Street \& 136th Avenue, Blue Star Highway to 58th Street (2022) | Resurface, HMA 4E1-220 \#/syd | 2.79 | \$100,000.00 | MACC-Urban | \$300,000.00 | \$400,000.00 |
|  | Fillmore \& Manlius | 136th Avenue, 58th Street to 50th Street (2023) | Resurface, HMA 4E1-220 \#/syd | 4.00 | \$300,000.00 | MACC-Urban | \$400,000.00 | \$700,000.00 |
|  |  |  | SUB-TOTAL AREA 1 | 12.60 | \$1,350,000.00 |  | \$800,000.00 | \$2,150,000.00 |
| 2 |  <br> Monterey | 30th Street, 134th Avenue to Ottogan Street (2021) | Mill and Resurface, HMA 4E1-275 \#/syd | 6.91 | \$350,000.00 | Federal | \$1,100,000.00 | \$1,450,000.00 |
|  | Overisel | 142nd Avenue, 48th Street to 46th Street | Mill and Resurface, HMA 4E1-220 \#/syd | 0.92 | \$200,000.00 |  |  | \$200,000.00 |
|  |  |  | SUB-TOTAL AREA 2 | 7.83 | \$550,000.00 |  | \$1,100,000.00 | \$1,650,000.00 |
| 3 | Hopkins | 128th Avenue, Hopkins Village Limits to 18th Street | Mill and Resurface, HMA 4E1-275 \#/syd | 1.74 | \$375,000.00 |  |  | \$375,000.00 |
|  | Leighton | Division Street, 142nd Avenue to 1,000' south of 146th Avenue | Crush, Shape, and Resurface HMA 4E1-440 \#/syd (2 courses) | 2.02 | \$800,000.00 |  |  | \$800,000.00 |
|  | Wayland | 4th Street, 133rd Avenue to 135th Avenue | Renovate, Crush, Shape, and Resurface HMA 4E1 440 \#/syd (2 courses) | 1.02 | \$390,000.00 | Wayland (REN) Wayland (PS) | $\begin{aligned} & \hline \$ 35,000.00 \\ & \$ 25,000.00 \end{aligned}$ | \$450,000.00 |
|  |  |  | SUB-TOTAL AREA 3 | 4.78 | \$1,565,000.00 |  | \$60,000.00 | \$1,625,000.00 |
| 4 | Ganges | Lakeshore Drive, 121st Avenue to M-89 | Renovate, Crush, Shape, and Resurface HMA 4E1 440 \#/syd (2 courses) | 1.85 | \$645,000.00 | Ganges (REN) Ganges (PS) | $\begin{aligned} & \hline \$ 65,000.00 \\ & \$ 50,000.00 \\ & \hline \end{aligned}$ | \$760,000.00 |
|  | Ganges | 62nd Street, 116th Avenue to 120th Avenue | Resurface, HMA 4E1-275 \#/syd | 1.99 | \$350,000.00 | Ganges (PS) | \$50,000.00 | \$400,000.00 |
|  |  |  | SUB-TOTAL AREA 4 | 3.84 | \$995,000.00 |  | \$165,000.00 | \$1,160,000.00 |

PRIMARY ROAD RESURFACING MILLAGE FUND
FUTURE PROPOSED PROJECTS


