

ROADS: Long Term Planning



Road
Commission
of Kalamazoo
County

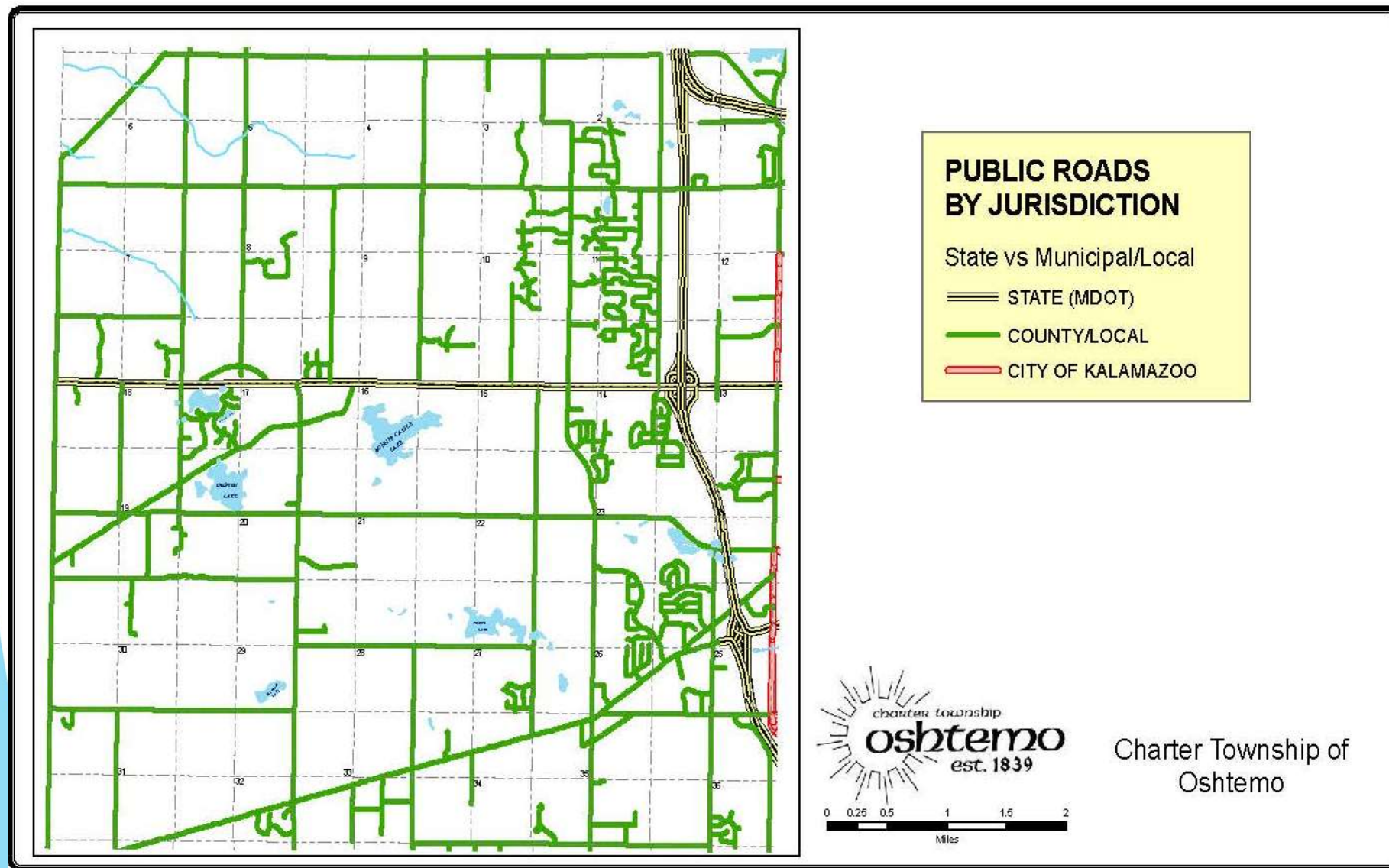
Tuesday, April 13, 2021

OUTLINE

- ▶ Whose roads are which roads?
- ▶ Protecting our investment: Asset Management
- ▶ What is being done? Annual Preventative Maintenance
- ▶ When to perform work? Timing vs Condition
- ▶ Why does it matter? What is the goal?

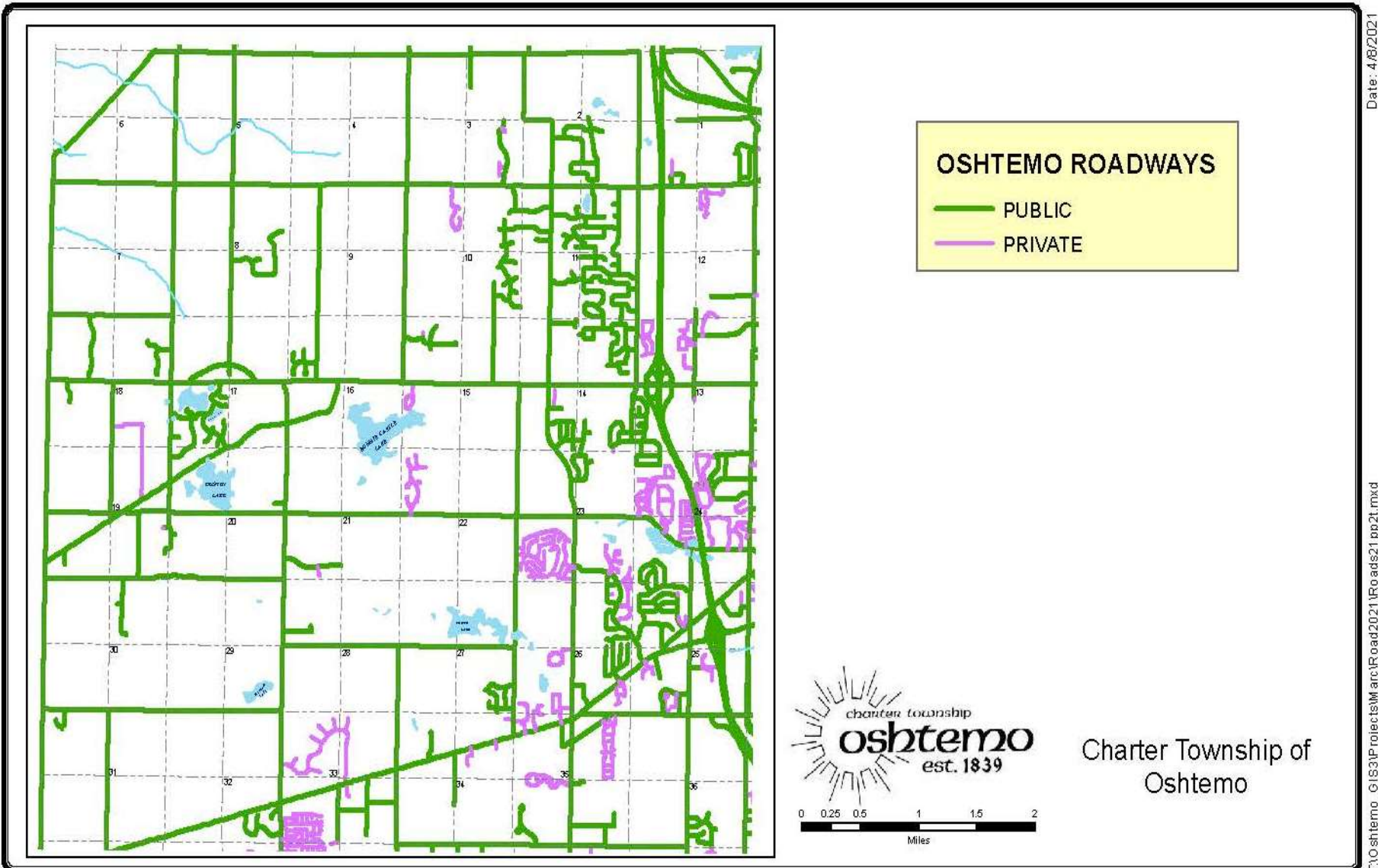


PUBLIC ROADS in Oshtemo



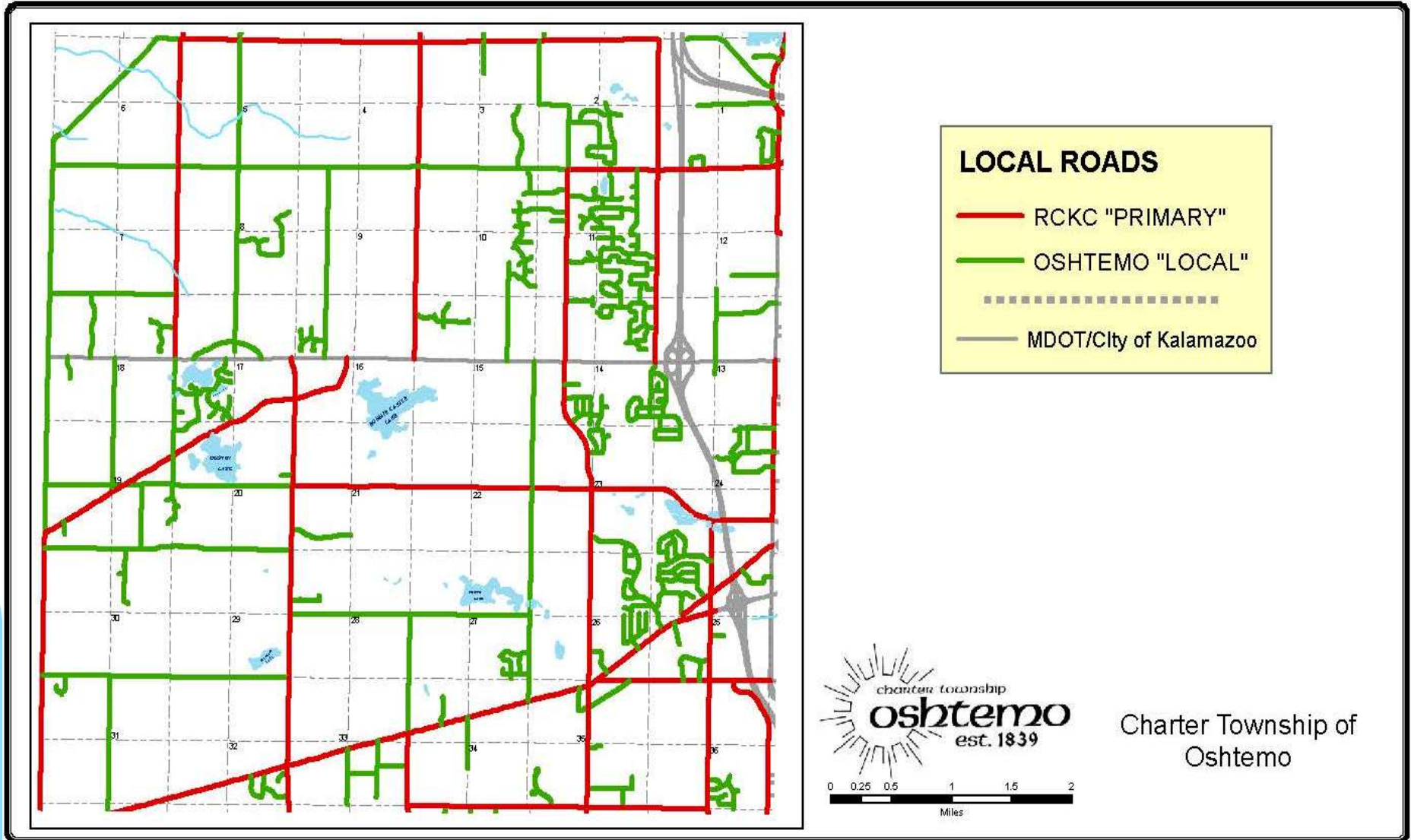
PRIVATE ROADS in Oshtemo

Resident/HOA responsibility



LOCAL ROADS in Oshtemo

Township Responsibility (in partnership with RCKC)



These are the focus of this presentation



WHAT IS ASSET MANAGEMENT?

- ▶ Asset / 'aset/ (noun): a useful or valuable thing, person, or quality

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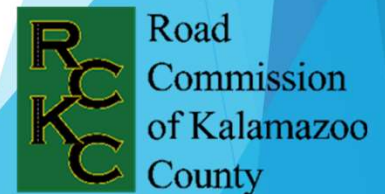
- ▶ Management / 'manijmənt/ (adjective): directing and controlling a system to reach a goal

=

- ▶ *“knowing what you have, knowing its condition and trying to preserve it efficiently and effectively for generations...”*
Source: RCKC

Improved:

- ▶ service to customers
- ▶ cost-effectiveness & use of available resources
- ▶ credibility for decision-making



You use asset management every day! autos, homes, health...

- 1st - Select projects that stop or reduce damage to the asset.
- 2nd - Select projects that have the potential to save money in the future.
- 3rd - Select projects that add functionality or value to the asset.

Get the most out of your budget



Let's apply it to Roads...

What Is TRANSPORTATION Asset Management?

“An ongoing process of maintaining, upgrading, and operating physical assets **cost effectively**, based on a continuous physical inventory and **condition assessment**”

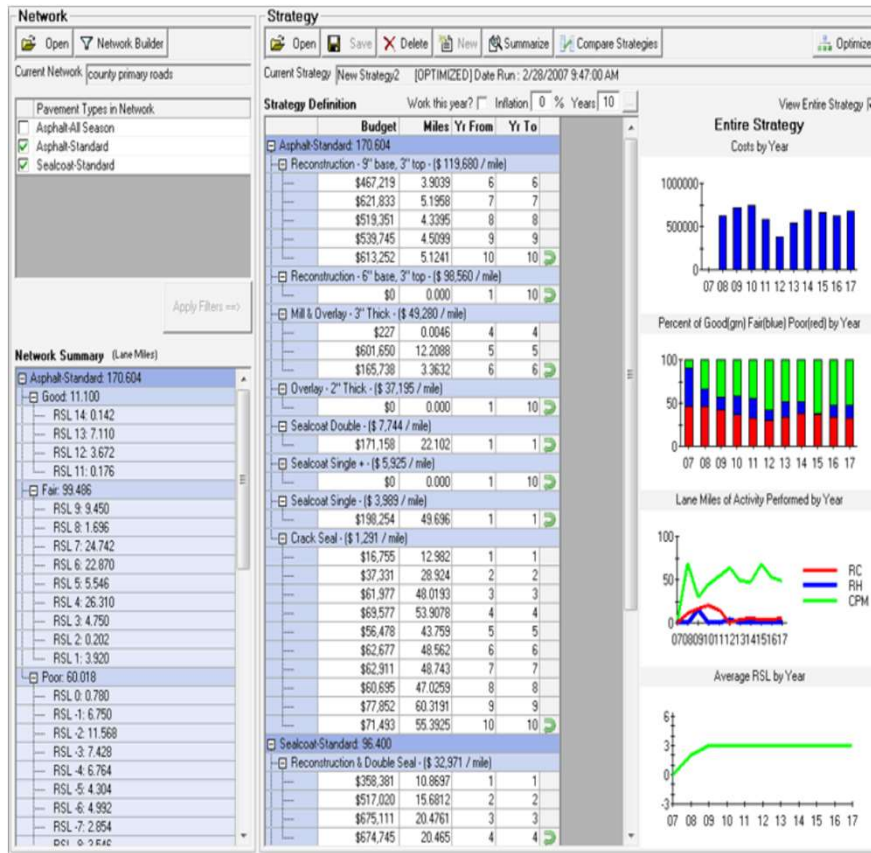
Source: Act 499 of the Public Acts of 2002



How does it work?



1. Inventory



LOTS and LOTS of DATA

- ▶ Without DATA the Public and Elected Officials cannot make educated decisions
- ▶ Need to rely on the local road professionals
- ▶ Value in knowing what you have!
- ▶ Value in knowing how it may impact other infrastructure!



2. Assessing Condition



3. Predict future



4. Do the work

Choose approach: worst first or mix of fixes

↳ Mix of fixes: Chip seal, fog seal, crack fill, seal coat
maintain surface and prevent structural damage

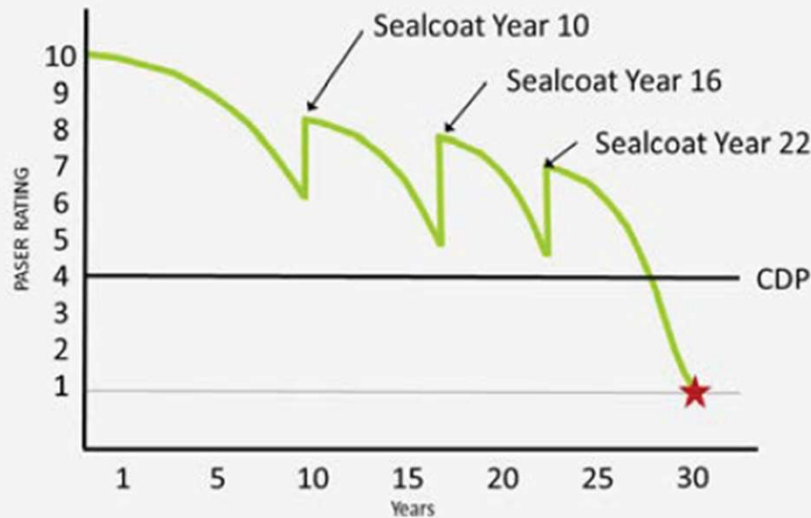
What destroys a pavement?

- ▶ Water - weaken structure
- ▶ Traffic - excess loads and volumes
- ▶ Environment - temperature, natural elements

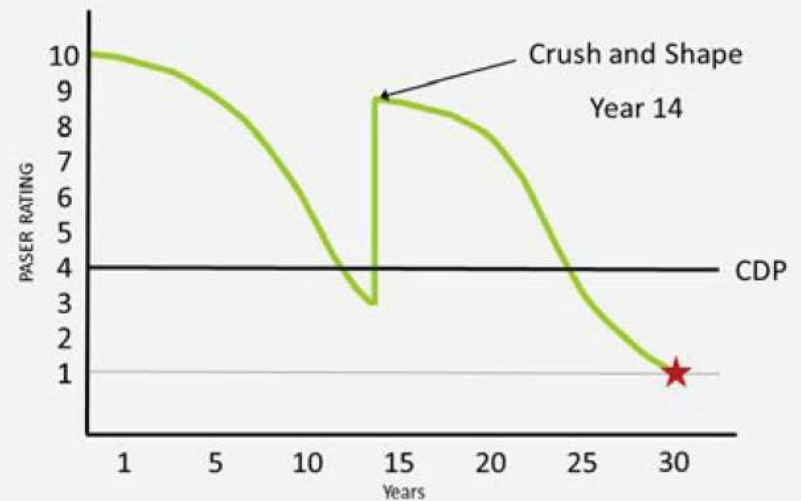


WHAT IS BEING DONE?

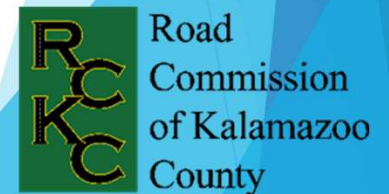
Sealcoat at 10, 16 and 22 (Mix of Fixes)
Cost \$60,000



Rehabilitation at 14 Years (Worst First)
Cost \$150,000



Source: Michigan Tech Transportation Institute.



WHEN TO PREFORM THE WORK?

GOOD



PASER 10, 9, 8

Routine:

Crack Fill

Minor Patching

FAIR



PASER 7, 6, 5

Preventive:

Chip Seal

Hot Mix Asphalt

(HMA) Wedging

Concrete Joint Repair

POOR



PASER 4, 3, 2, 1

Rehabilitation/

Reconstruction:

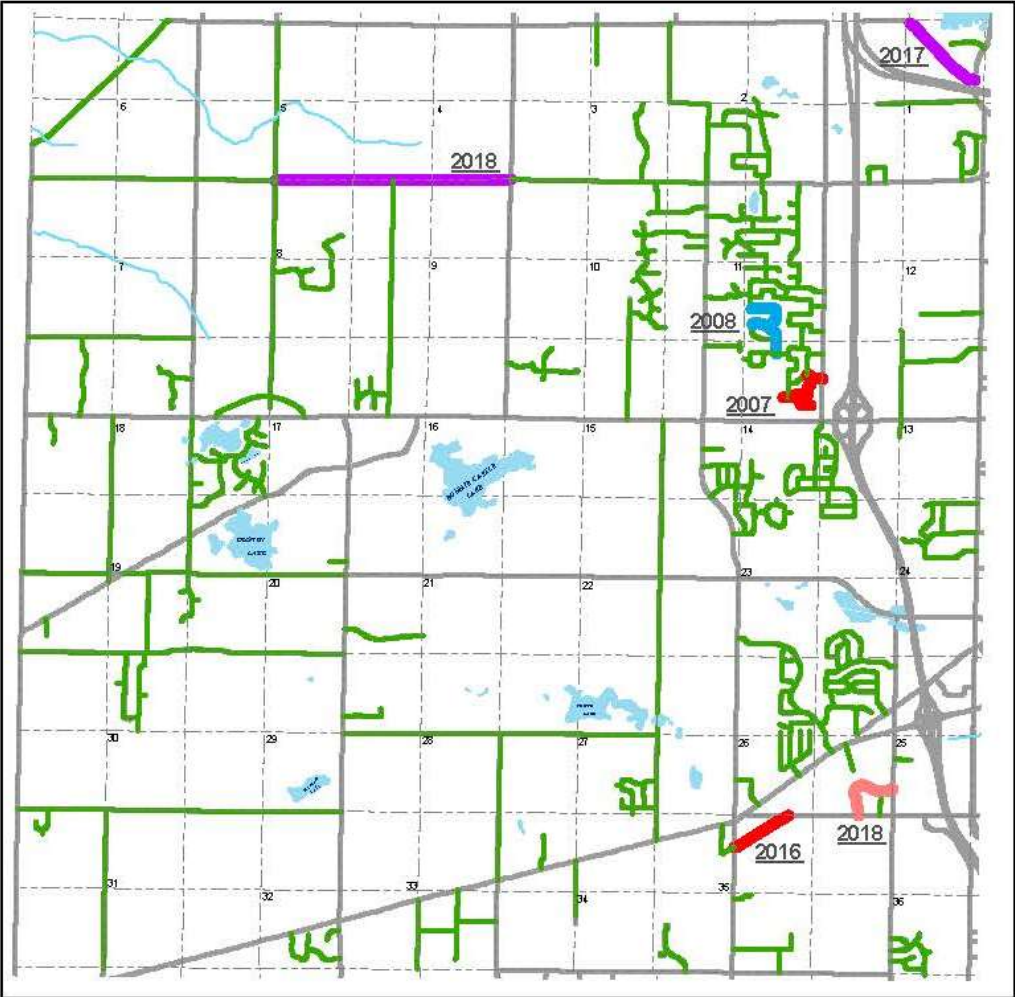
Resurface

Pulverize/HMA Paving

Replace Concrete Slab

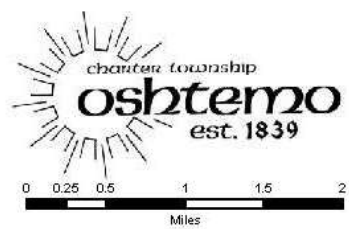
Reconstruction





**RCKC ROADSOFT
MAINTENANCE TRACKING**
(2001-2020)

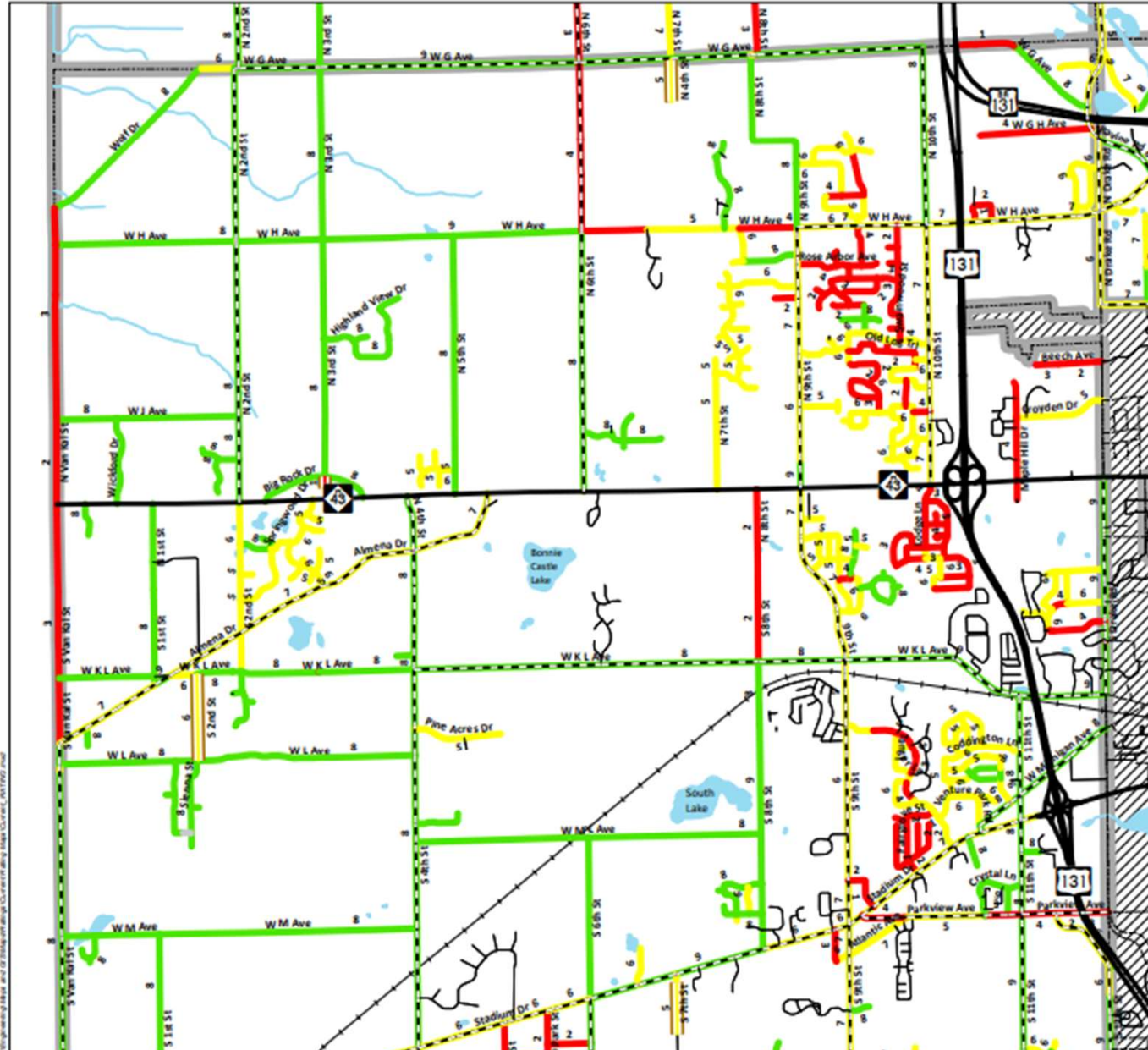
- 1.5" HMA OVERLAY
- THICK HMA OVERLAY (3-inch)
- CRUSH & SHAPE; HMA OVERLAY
- FULL RECONSTRUCTION
-
- Other Local (Oshtemo)
- Non-Local (MDOT/RCKC)



Charter Township of
Oshtemo

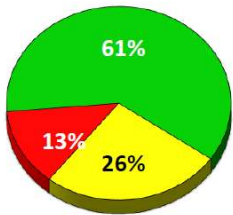


2021 Current Asset Management Ratings Map Oshtemo Twp

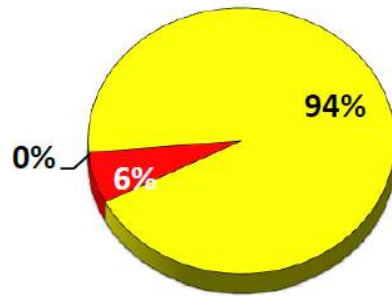


CURRENT PASER RATINGS

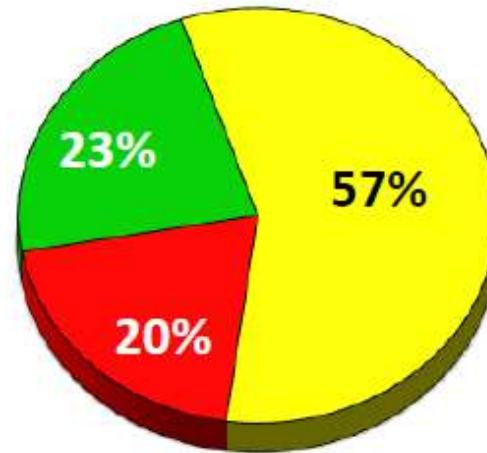
Primary Roads



Gravel Roads



Local Roads



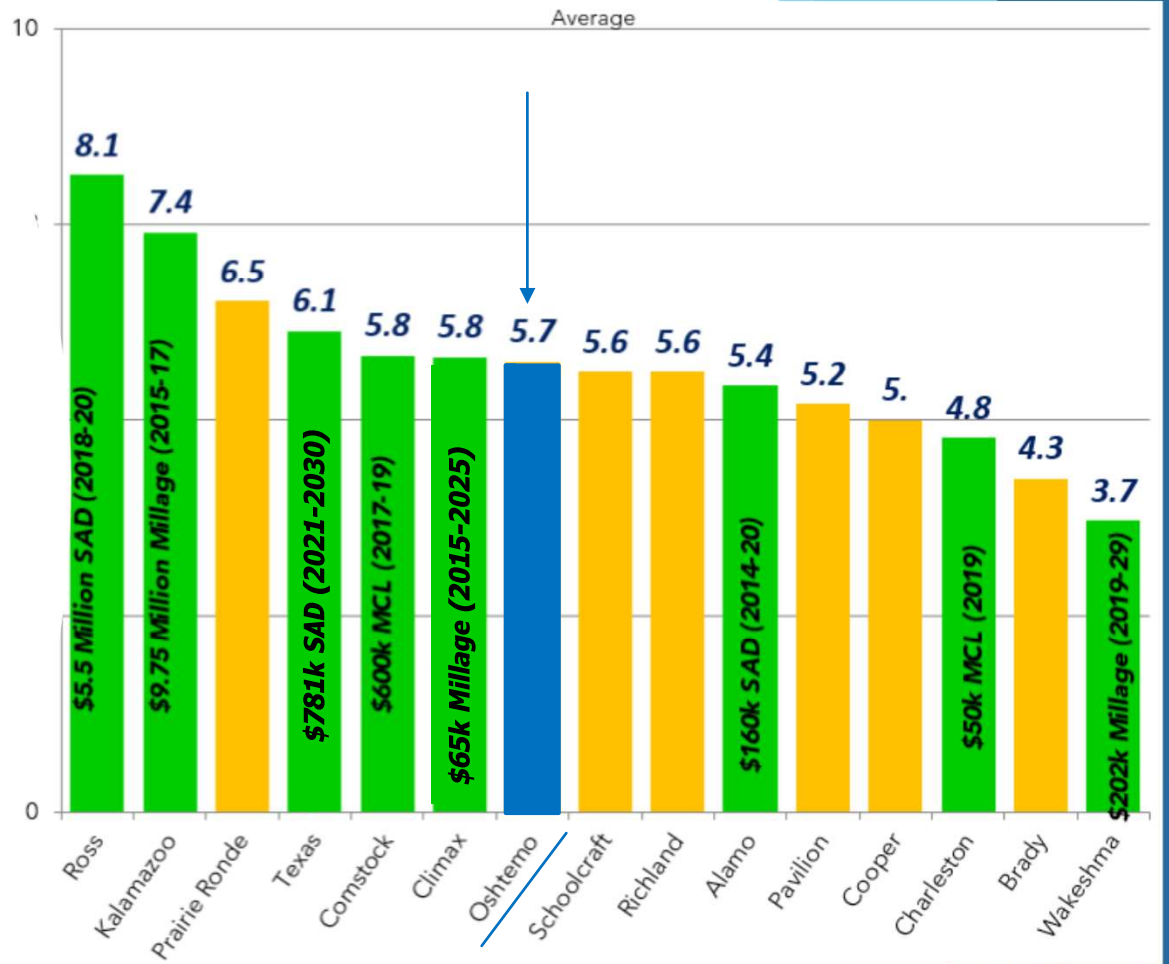
GOOD: 10, 9, 8

FAIR: 7, 6, 5

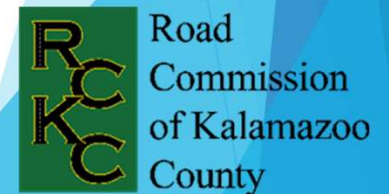
POOR: 4, 3, 2, 1



2020 Local Roads Average PASER Rating by Township



In the prior decade, Oshtemo had highest average.



WHY DOES IT MATTER?

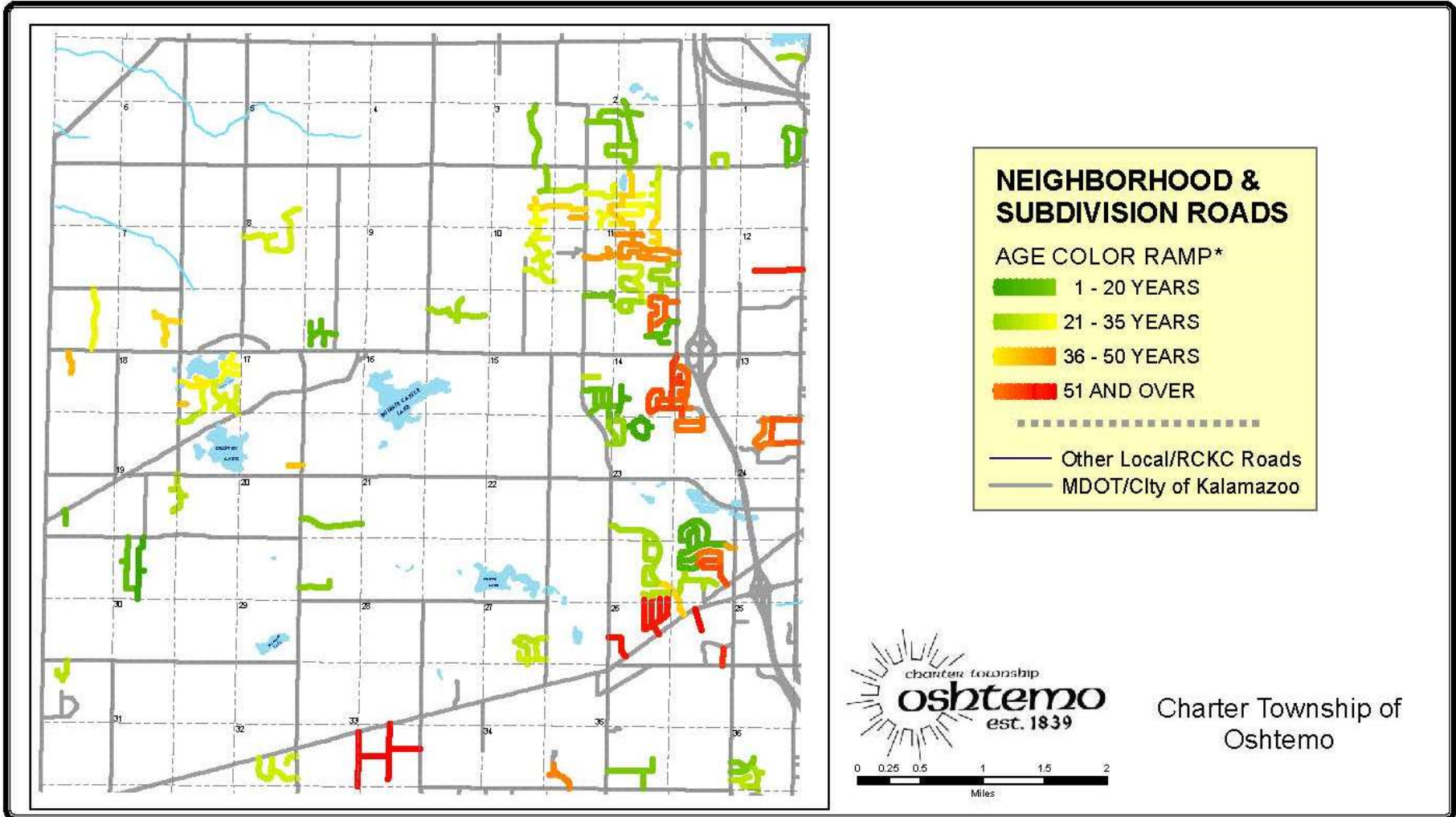
Roads eventually hit service life when preventive maintenance can no longer be useful, rehabilitation is more appropriate

Anticipating the investment...



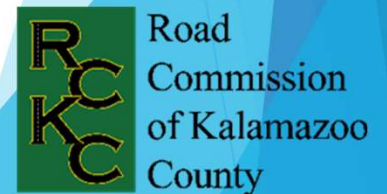
Source: Michigan Tech Transportation Institute.





WHAT IS THE GOAL?

- ▶ **Protecting Assets**
- ▶ **Proactive Planning**
- ▶ **Financial Stability**
- ▶ **Leveraging Resources**
- ▶ **Level of Service**
- ▶ **Active Participation**



Next steps...

Takeaways...

- ▶ Mix of fixes is best result for asset management
- ▶ How do we complete all the preventative maintenance to keep roads in good (PASER 10-7) condition (\$\$\$\$...)
- ▶ At some point, soon, roads will reach end of useful life, need rehab/recon
- ▶ Think about:
 - ▶ Why is keeping up with roads important to Oshtemo?
 - ▶ What do residents expect in road system?
 - ▶ What impact do good or bad roads have on residents? How do good roads provide benefits to all residents? How can we influence entire transpo system (non-motorized/complete streets)?



**CONNECT TO ROAD COMMISSION
OF KALAMAZOO COUNTY ALERTS**



RCKC CONNECT
RCKC ALERTS SIGN UP NOW

HAVE YOU SIGNED UP?

Receive Message Alerts for:

- ◆ Road Construction
- ◆ Road Closures/Detours
- ◆ General Public News



To Sign Up Visit: www.kalamazoocountyroads.com

**Thank you
- Questions**

