

# **MARSHALL TOWNSHIP**

**LOCAL ROADS INVESTMENT PLAN**

# THE PROBLEM...

- Infrastructure is deteriorating
- Maintenance & repair costs are increasing
- Replacement costs are rising
- Needs are growing



# THE PROBLEM...

## ➤ Revenue sources have declined

- Increased fuel efficiency = decreased gas tax revenues
- Grants are more competitive

## ➤ High fuel prices create “Triple Whammy”

- Operating costs go UP
- Construction material costs go UP
- Gas tax revenues go DOWN

## ➤ Net effects:

- Defer improvements & maintenance
- Make cuts in number of projects & scope
- Increased pressure on local governments for revenues
- People are unhappy



# TYPICAL COUNTY ROAD AGENCY REVENUE SOURCES

## ➤ Michigan Transportation Fund (MTF)

- Funding split between MDOT, counties, & other municipalities

## ➤ Grants

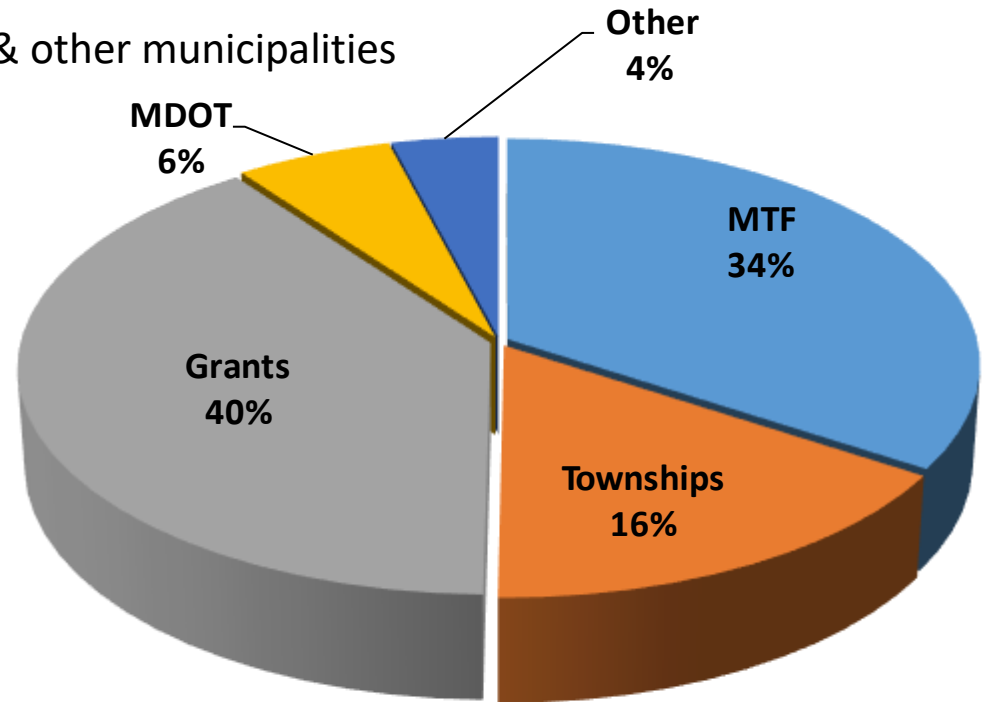
- Federal & State Sources
- Local Sources

## ➤ Intergovernmental Agreements

- Townships
- MDOT

## ➤ Other

- Permit fees
- Farmland leases

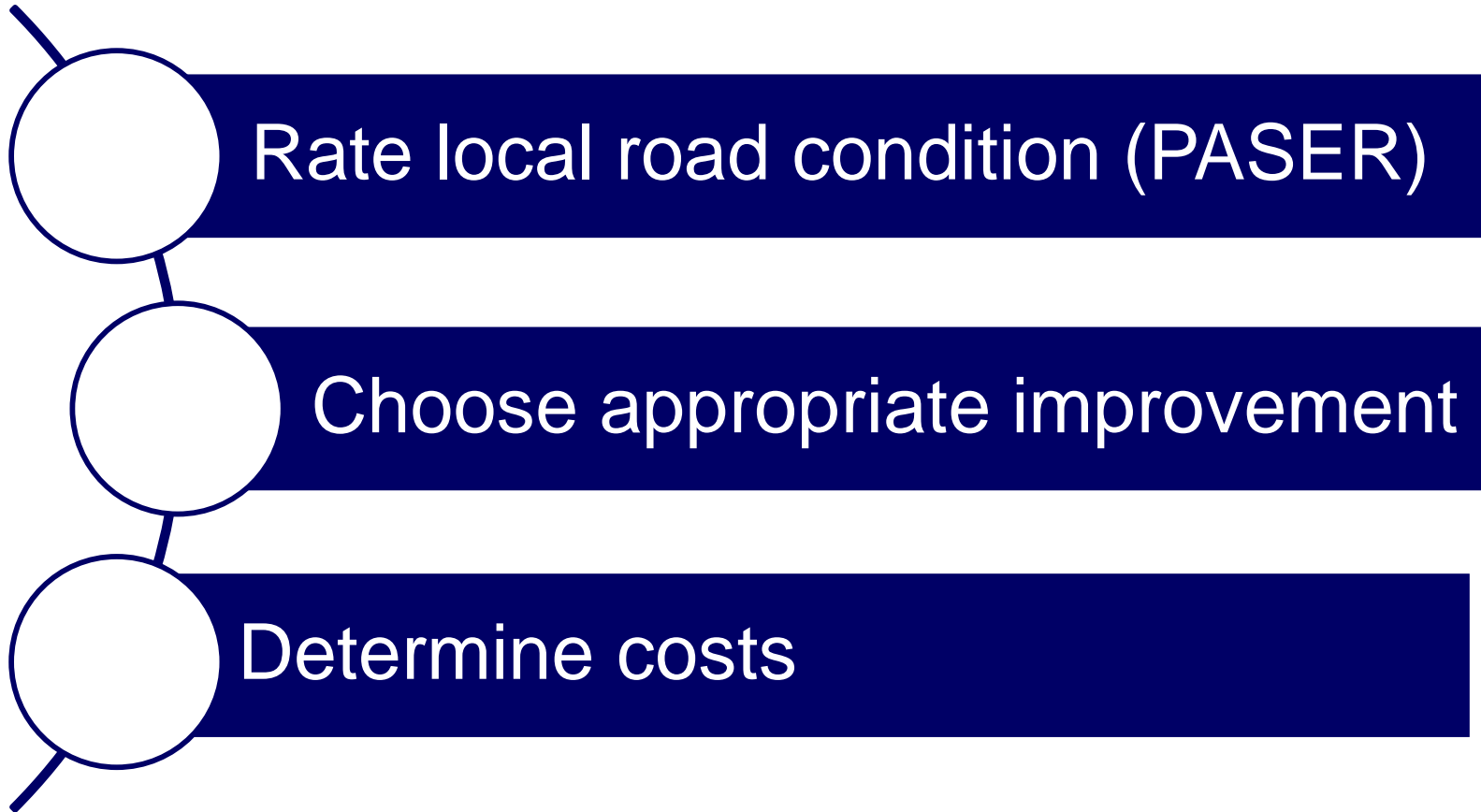


➤ Road agencies have no real authority to raise significant revenues

# **ROAD FUNDING REVIEW: HIGHLIGHTS OF THE NEW ROAD FUNDING BILL**

- **\$1.2 Billion per year phased in over 5 years**
- **\$600M in new revenue – gas taxes & vehicle registration fees**
  - New taxes/fees begin January 1, 2017
  - Phased in over five years
- **\$600M in new revenue – State’s General Fund**
  - Phased in later: 2019 through 2021
  - Depends on state appropriation and fiscal/economic conditions
- **Local road needs are not sufficiently addressed in the bill**
  - New funding will not be enough to fix state highways and primary roads, let alone local roads
  - At least 50% of project costs are still required from “other sources” (townships, etc.)

# PLANNING PROCESS



# PASER RATING SYSTEM

- PASER = Pavement Surface Evaluation & Rating System

**GOOD**



PASER 10, 9, 8

Routine:

Crack Fill

Minor Patching

**FAIR**



PASER 7, 6, 5

Preventive:

Chip Seal

HMA Skip Paving/Wedging

**POOR**



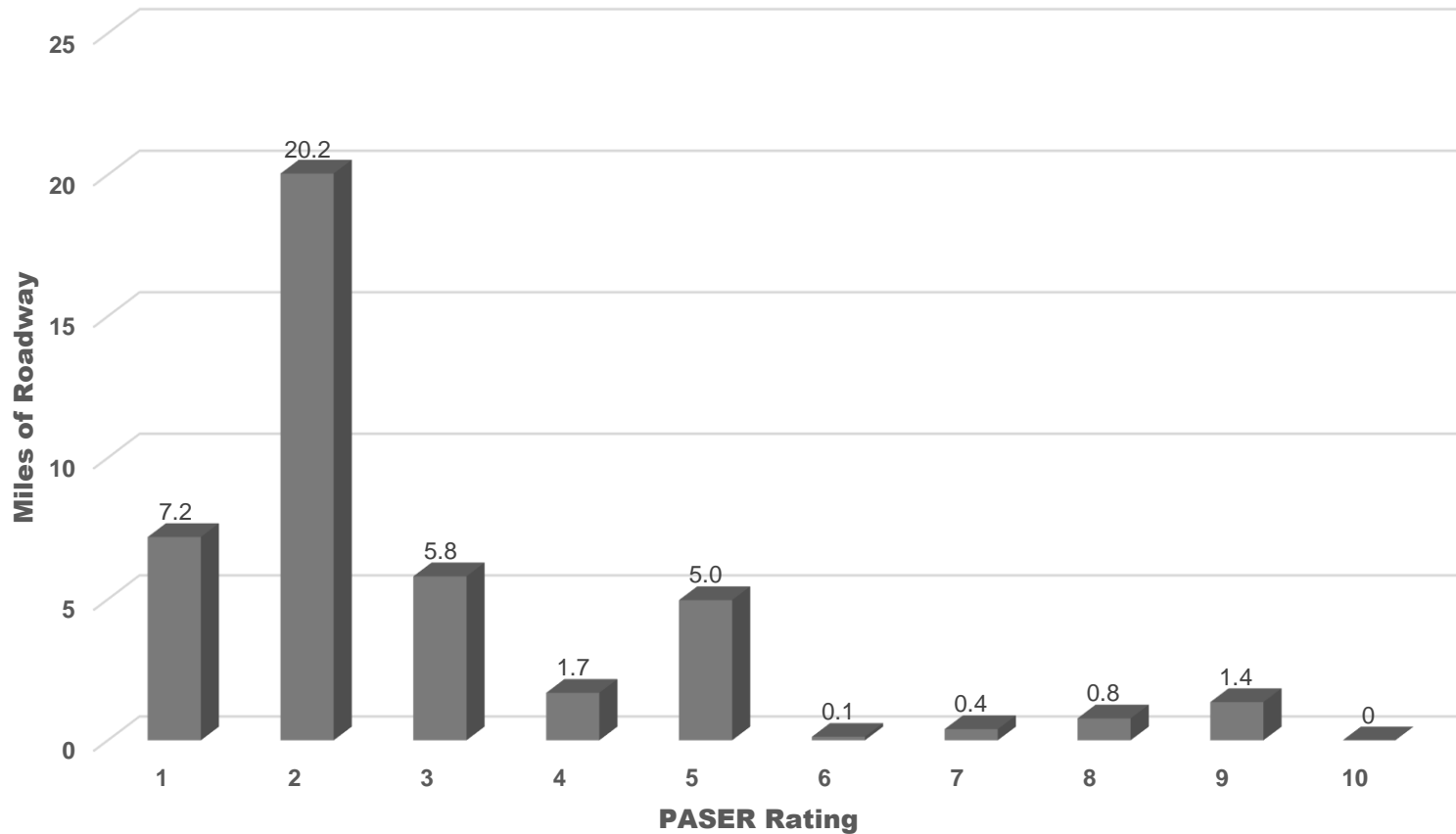
PASER 4, 3, 2, 1

Rehab/Reconstruct:

Resurface (HMA Overlay)

Crush & Shape/HMA Paving

# LOCAL ROAD PASER RATINGS





# LOCAL ROAD FACTS



Local Roadway Mileage: 42.58 miles

Average PASER Rating: 2.8

Funds invested since 2015: \$268,972.72

# THE PROPOSED IMPROVEMENTS...

Definitions of Improvements	
Improvement	Definition
HMA1.5	1.5" hot mix asphalt (HMA) overlay with preparatory patching
HMA2.0	2" hot mix asphalt (HMA) overlay with preparatory patching
HMA2.5	2.5" hot mix asphalt (HMA) overlay (2 lifts) with preparatory patching
HMA3.0	3" hot mix asphalt (HMA) overlay (2 lifts) with preparatory patching
CSC3.5	Crush existing roadway, shape & compact, then resurface with 3.5" HMA
CMHO1.5	Mill roadway to along edge of curb and resurface with 1.5" of HMA
CMHO2.0	Mill roadway to along edge of curb and resurface with 2.0" of HMA
Regravel (5")	Add 5" of road gravel; shape and compact gravel surface

# ROAD CONSTRUCTION 101: TYPICAL LIFE CYCLE & GOALS

Improvement Activity (Fix Type)	Estimated Cost per Mile	Added Years of Life
Crack Fill	\$10,000	1
Chip Seal	\$50,000	2-6
Asphalt Overlay (1.5" to 3")	\$150,000 - \$325,000	4-12
Crush & Shape	\$400,000	14
Reconstruction	>\$500,000	15

# LOCAL ROAD IMPROVEMENT PLAN



## Marshall Township Local Road Improvement Program Phasing Plan

**DRAFT**

### Proposed Treatment

- Crush to Gravel
- Crush & Shape 3.5 inch HMA
- 1.5 inch HMA Overlay
- 2.0 inch HMA Overlay
- 2.5 inch HMA Overlay
- 3.0 inch HMA Overlay

### Project Year

- Year 1
- Year 2



Map Created by: Calhoun County GIS  
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Map Date: 6/14/2018

