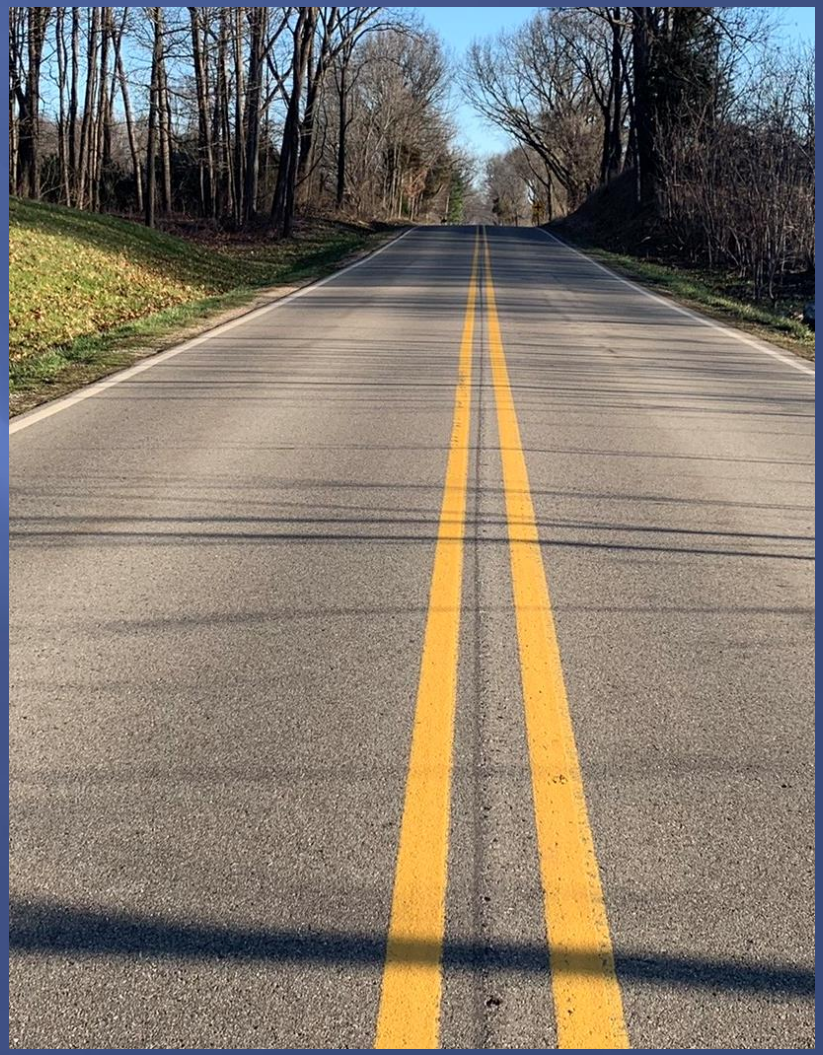
Roads and Infrastructure in Columbia Township

JACKSON COUNTY
DEPARTMENT OF TRANSPORTATION

Vision for the Future…



Roads and Streets are an Important Community Space…

An Overview

1. **Historical Perspectives on County Road Agency Funding in Michigan**
2. Current Situation
3. The Plan for Moving Forward

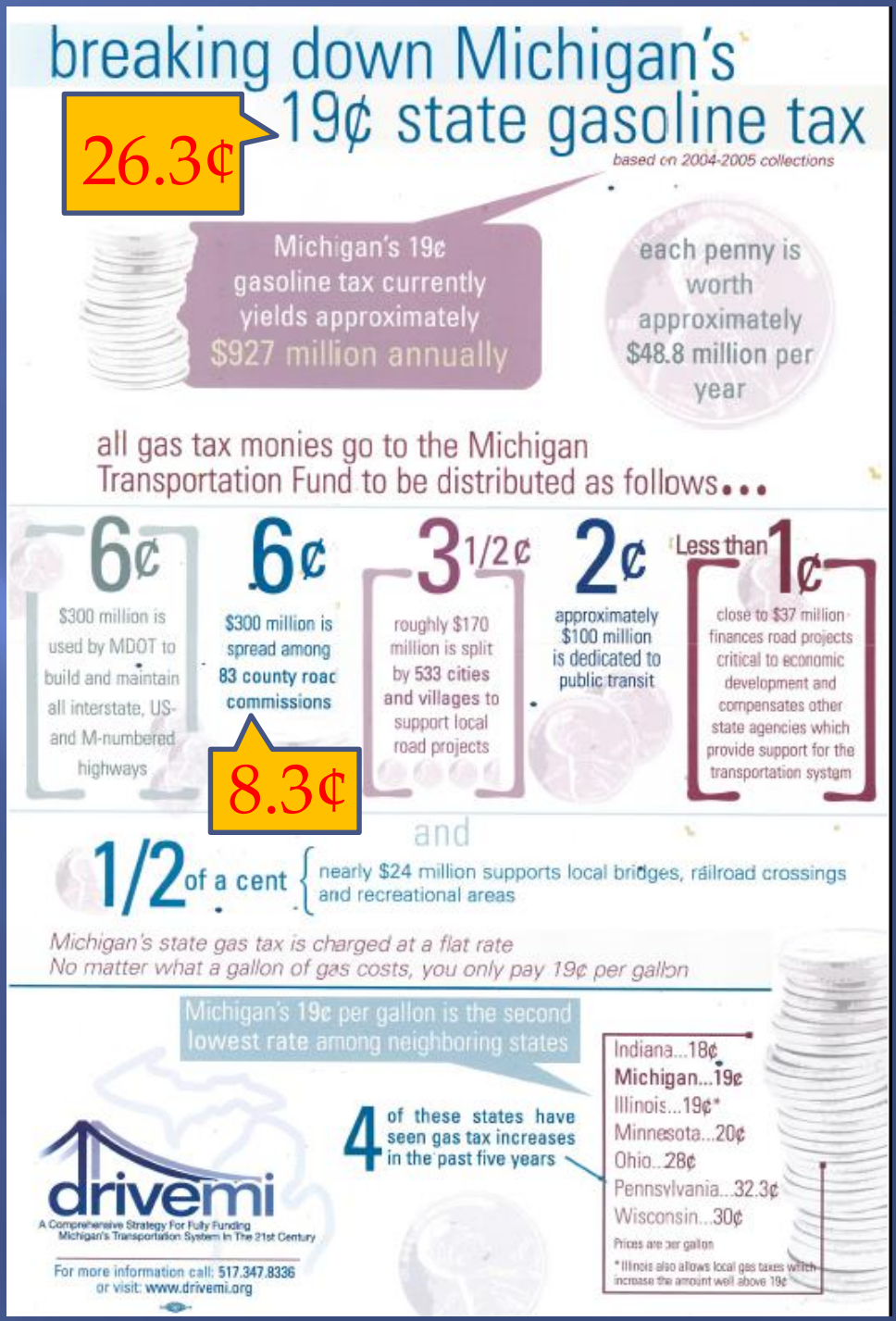
JACKSON COUNTY DEPARTMENT OF TRANSPORTATION

The Problem…Funding!

- Revenue sources were down since 2003
  - Gas taxes did not increase from 1997 to 2015.
  - Grants are increasingly competitive
- Construction inflation & higher material fuel prices & the "Triple Whammy" **Effect:**
  1. Operating costs UP
  2. Construction material costs UP
  3. Revenues DOWN
- Net effects:
  - Defer improvements & maintenance
  - Make cuts in projects
  - Increased pressure on local governments for revenues
  - People are unhappy!

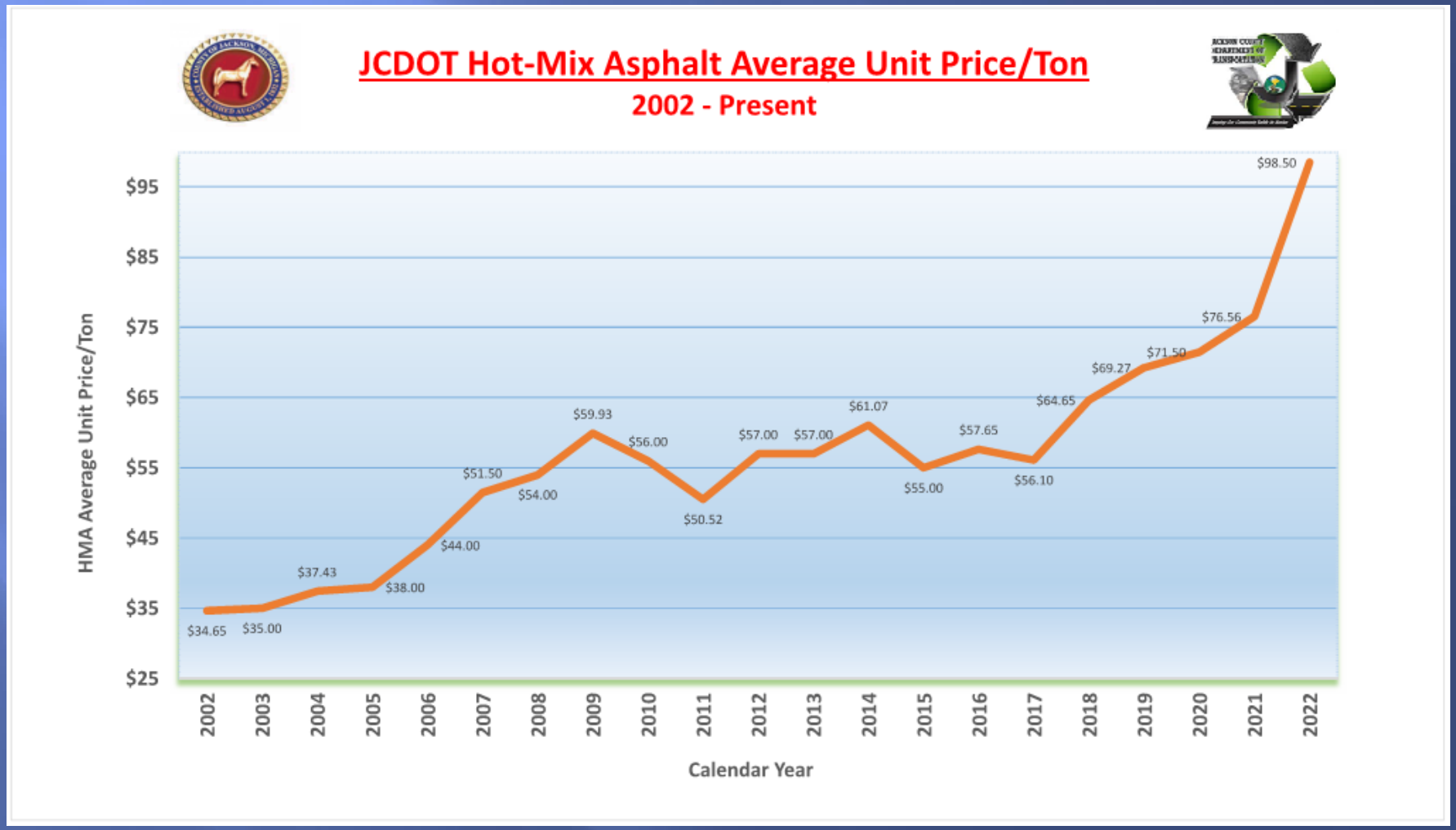
Where does the money you pay at the pump go?

- 2015 Road Funding Legislation
  - Gas tax increased to 26.3¢
    - Gas & diesel parity
    - Was 19¢ for 20 years!
  - Registration fees up 20%
- Fuel Efficiency?
- Electric Vehicles?

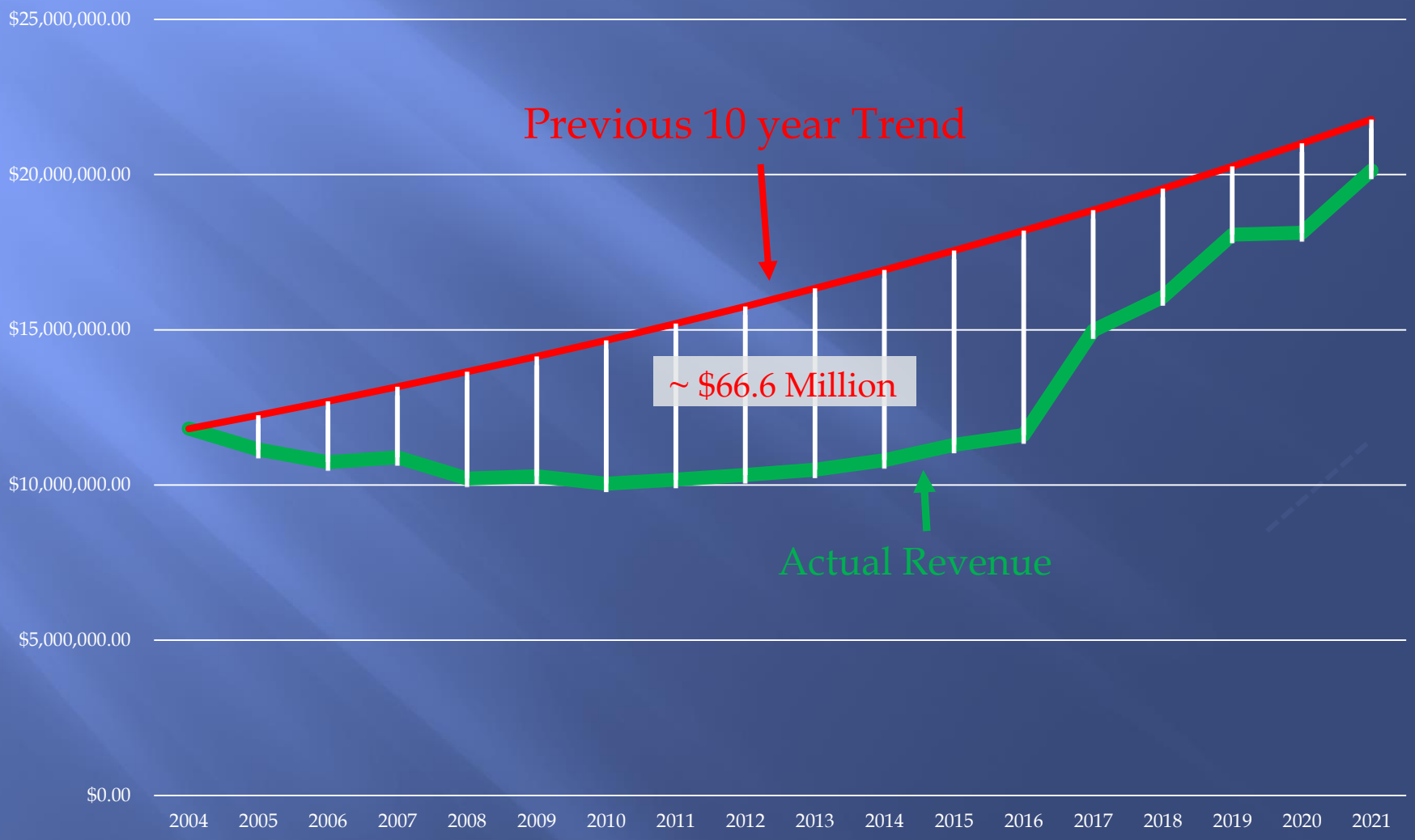


Construction Inflation Rates:

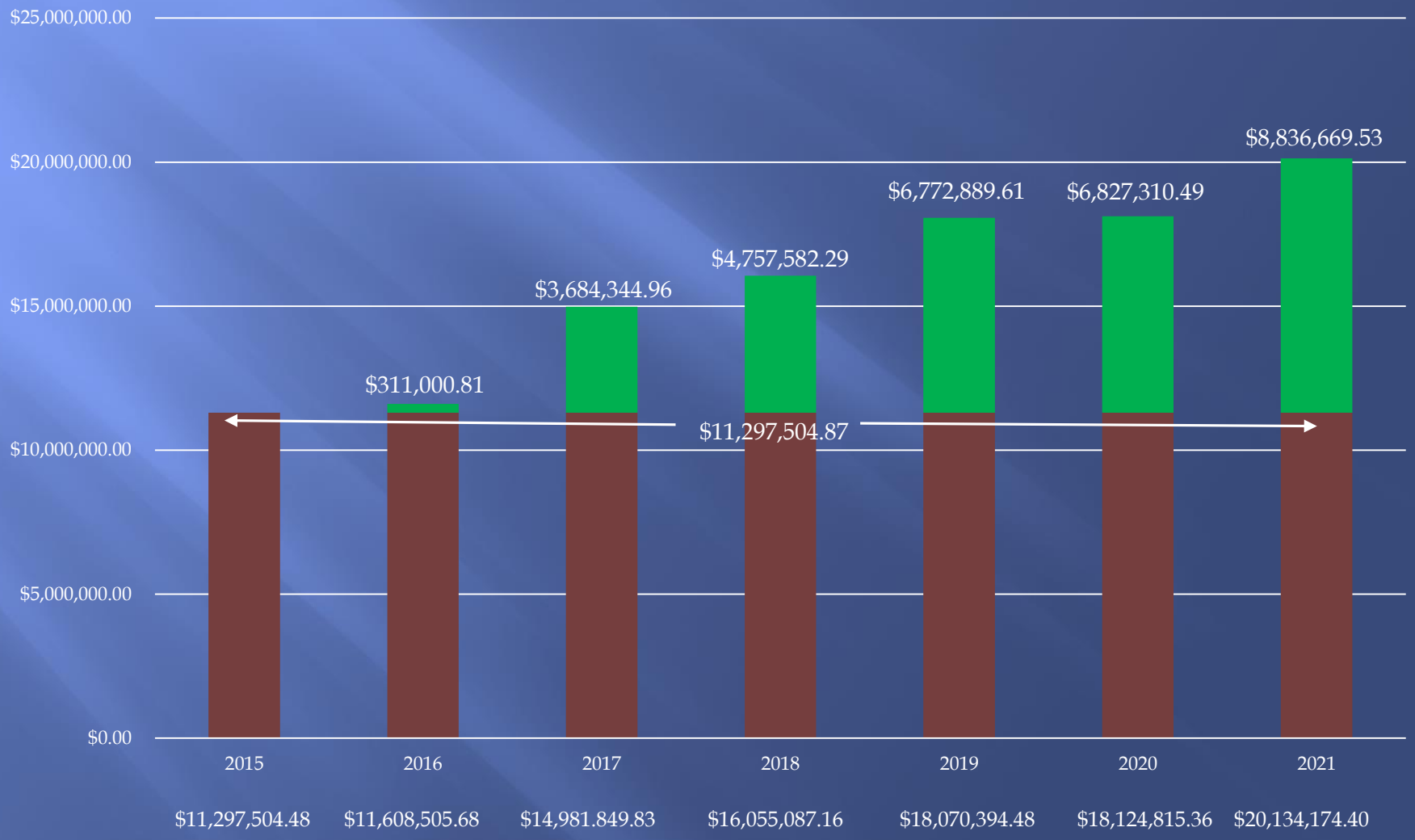
The Cost of Building Roads has more than DOUBLED in just 20 years!



MTF Revenue Shortfall

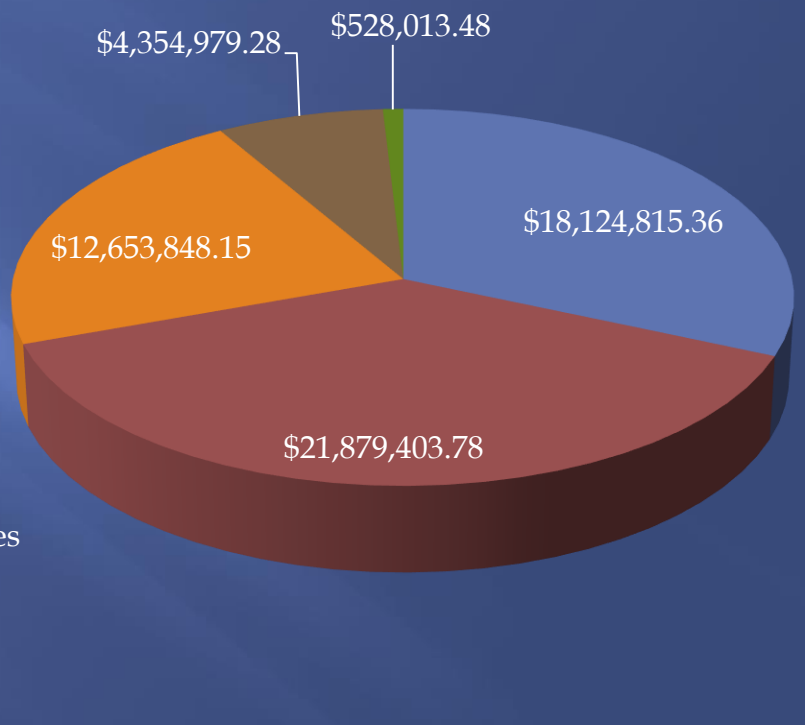


Road Funding: 7-Year Michigan Transportation Fund Revenue (MTF) for Jackson County

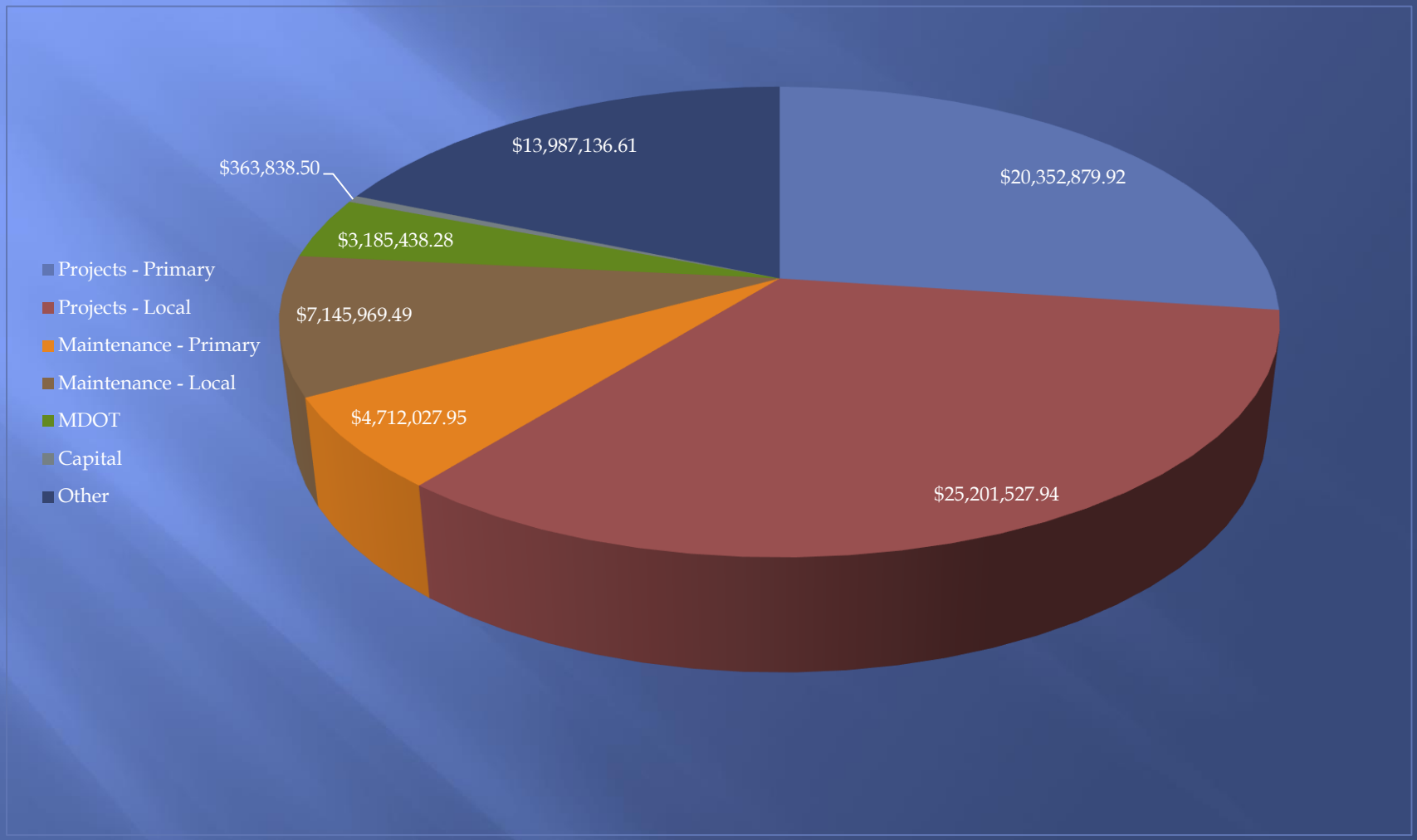


2020 Revenue Sources

- Michigan Transportation Fund (MTF)
- Grants
  - Federal & State Sources
  - Local Sources
- Intergovernmental Agreements
  - Townships
  - MDOT
- Other
  - Permit fees
  - Farmland leases
- Key:
  - **Road agencies have no authority to raise significant revenues**



2020 JCDOT Expenditures



Act 51 of 1951: Important things to know…

- Any MTF dollars used for local road improvements **must** be matched dollar for dollar from "other sources"

its own name and the agreement may provide for joint participation in the costs.

(15) Money distributed from the Michigan transportation fund may be expended for construction purposes on county local roads only to the extent matched by money from other sources. However, Michigan transportation funds may be expended for the construction of bridges on the county local roads in an amount not to exceed 75% of the cost of the construction of local road bridges.

- Many counties do not provide *any* match for local road improvements:

- Most other counties cap their annual contribution

Policy No. 8590 Local Road Improvement Funding Program

- To provide a uniform method to allocate matching funds used to construct, reconstruct or improve roadways located on the local road system within Jackson County.
- The Department of Transportation will provide matching funds for local road construction, reconstruction, or improvement activities. Those activities shall include, but are not limited to the following:
- **Road Construction (paving gravel roads)** – Projects may include clearing, drainage corrections, grading, placement of sub-base, bituminous mix surface, gravel shoulders, and construction engineering (includes administration, inspection and testing on all road projects.)
  - Participation in this program requires that a Township share 70% of the project costs.
- **Resurfacing (re-paving bituminous roads)** – Project may include clearing, drainage improvements, culvert replacements, bituminous wedging, placement of bituminous mix surface and gravel shoulders.
  - Participation in this program requires that a Township share 70% of the project costs.
- **Heavy Maintenance (wedging and chipping bituminous roads)** – Project may include bituminous wedging, chip seal over the wedging and gravel shoulders
  - Participation in this program requires that a Township share 70% of project costs.
- **Re-gravelling** - includes adding gravel to a full length section of existing gravel road.
  - Participation in this program requires that a Township share 50% of project cost.
- **Seal Coating** – Project may include all costs associated with chip sealing of an existing road.
  - Participation in this program requires that a Township, share 70% of the project costs.
- **Bridge Replacement** – Projects including repair or replacement of any structurally deficient bridge.
  - Bridge replacements are funded partially through the federal/state bridge program with the remainder being paid for by the Department of Transportation. Local bridges may require the Township to participate at a cost share of 50% if other revenue sources are not available.
- **Culvert Replacement** – Culvert projects under the road equal to forty-eight inches (48″) or more in diameter.
  - Participation in this program requires that the Township share 50% of the project costs.
  - Culverts with a diameter of less than forty-eight inches (48″) are replaceable under normal routine maintenance procedures.
  - Driveway culverts are not the responsibility of the Jackson County Department of Transportation.

Road Miles

Washtenaw

1653 miles of roads

- Primary Roads
  - 594 Miles
    - 515 miles hard surfaced
    - 79 miles gravel
- Local Roads
  - 1059 Miles
    - 370 miles hard surfaced
    - 589 miles gravel

Jackson

1608 miles of road

- Primary Roads
  - 547 Miles
    - 547 miles hard surfaced
- Local Roads
  - 1061 Miles
    - 822 miles hard surfaced
    - 239 miles gravel

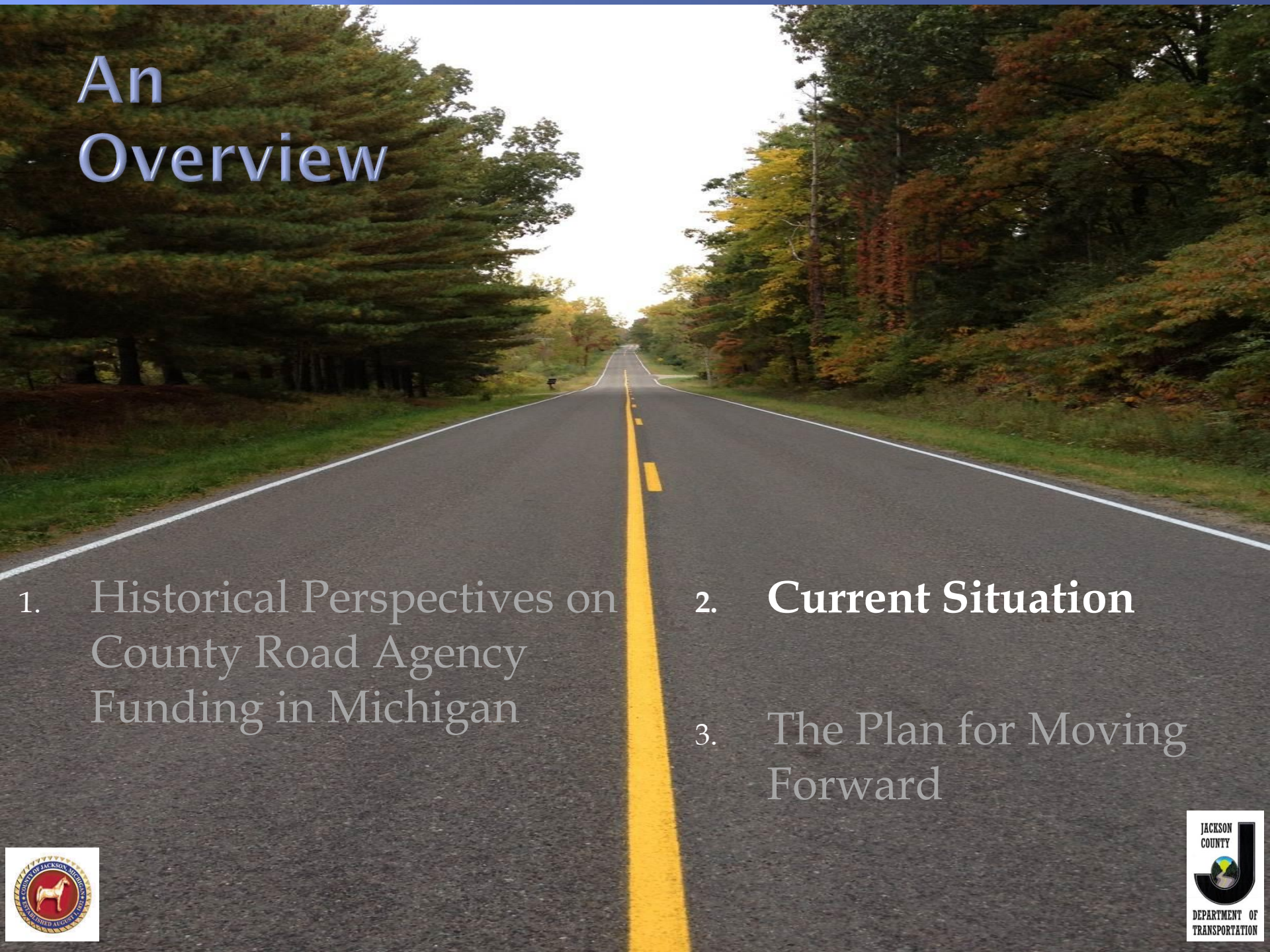
Funding Source 2022 estimate

Washtenaw

- Michigan Transportation Funds
  - ~$34,005,147.77
- County
  - ~$4,000,000
- Townships
  - ~$7,000,000

Jackson

- Michigan Transportation Funds
  - ~$20,551,960.46
- County
  - ~$208,000
- Townships
  - ~$2,400,000



An Overview

1. Historical Perspectives on County Road Agency Funding in Michigan
2. **Current Situation**
3. The Plan for Moving Forward

JACKSON COUNTY DEPARTMENT OF TRANSPORTATION

What is JCDOT doing now?

- JCDOT is doing its best to continue maintenance with the funds available
- JCDOT applies for all grants available
- Roads continue to deteriorate
- The cost of repairing the roads is increasing year after year, at a rate higher than general inflation

Grants….

- Safety Grants
- Local Bridge Grants
- TAP Grants
- Economic Development Grants
- Federal BUILD/RAISE Grants
- Special Appropriations Funds

HOWEVER, local roads are generally not eligible for grants, except for bridges and limited safety funds

Current Conditions…

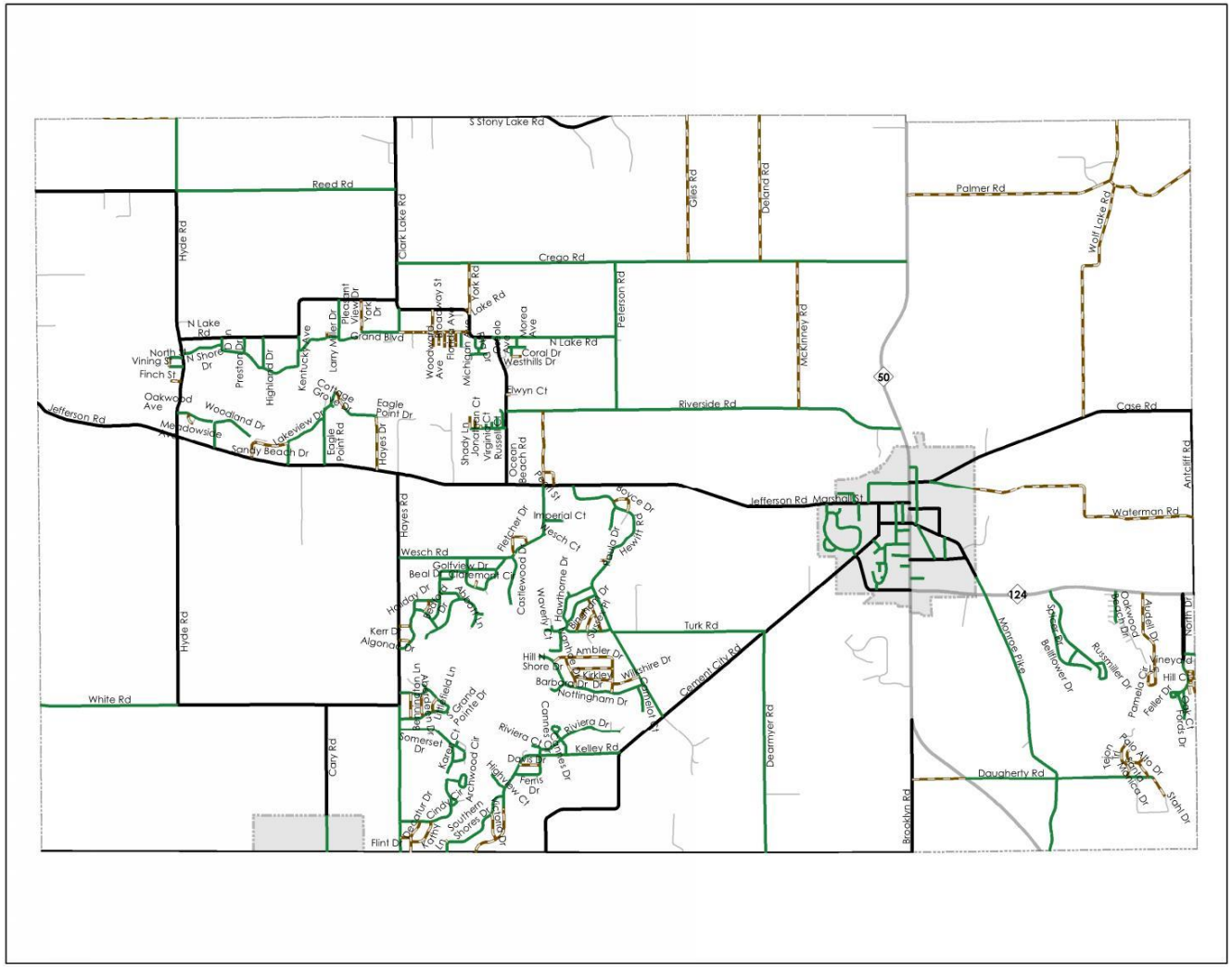
Case Rd

Cement City Rd

Hilltop Ct

Nottingham Dr

Columbia Township Road Network



Columbia Township

Primary Roads

~33 miles

Local Roads

44.6 miles

19.7 miles

Road Type

- Freeway
- Route
- Primary
- Local Paved
- Local Gravel
- Private Drive

0 1 Miles

N W E S

DISCLAIMER: *Maps are drawn as accurately as possible. They are intended to be a visual aid for road construction and related projects. They are subject to change based on new information and do not take the place of a formal contract.*

Source: Jackson County Department of Transportation

Road Construction 101: Overview - PASER System

GOOD

PASER 10, 9, 8, 7

Routine:

Crack Fill

Minor Patching

FAIR

PASER 6, 5

Preventive:

Chip Seal

HMA Wedging

Concrete Joint Repair

POOR

PASER 4, 3, 2, 1

Rehab/Reconstruct:

Resurface

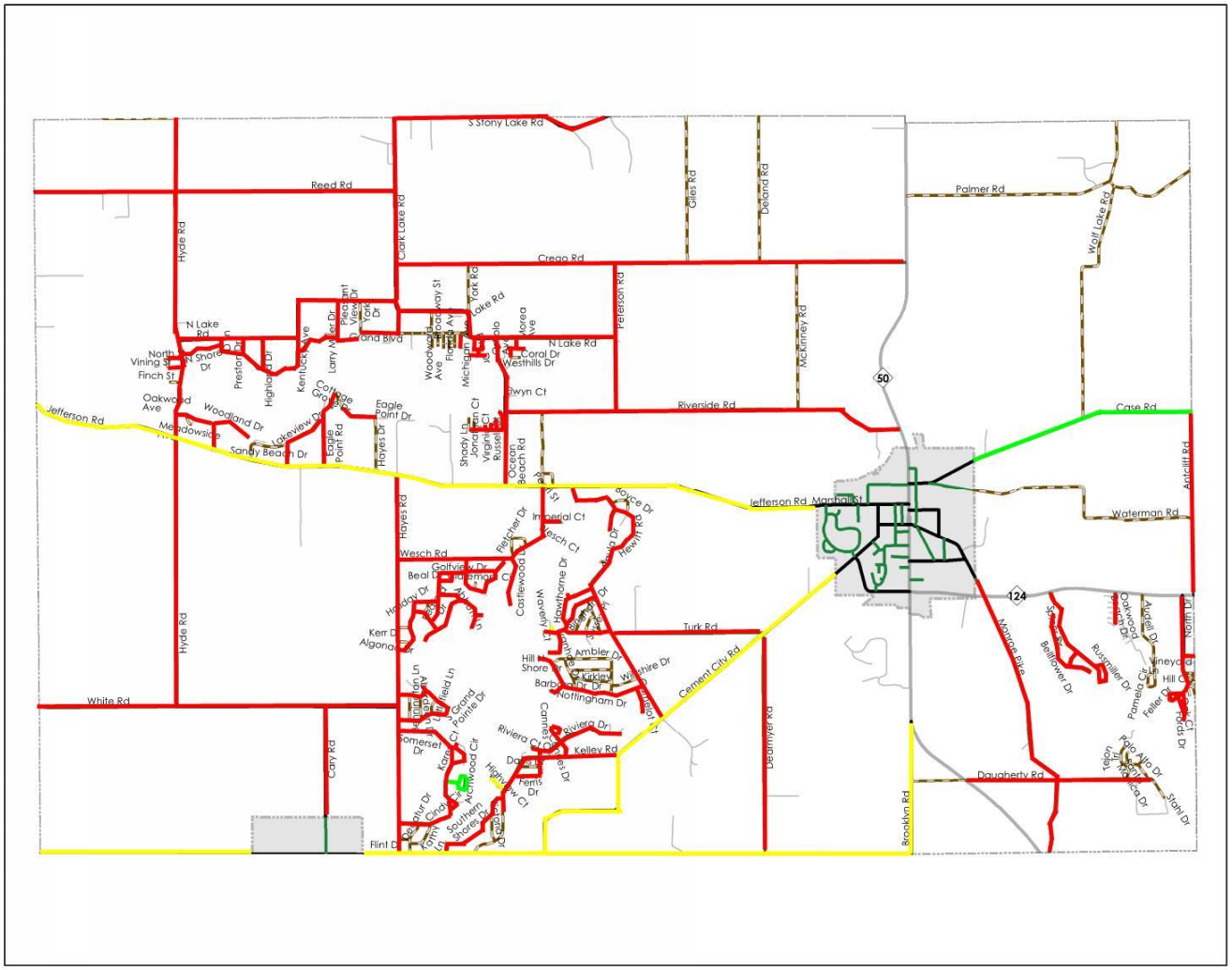
Pulverize/HMA Paving

Replace Concrete Slab

Reconstruct

PASER – Pavement Surface Evaluation & Rating System

Columbia Township PASER



Columbia Township

Primary Roads

- 1.5 Miles
- 16.1 Miles
- 15.4 Miles

Local Roads Paved

- .3 Miles
- .2 Mile
- 44.1 Miles

Local Roads Gravel

- 19.7 Miles

Road Type

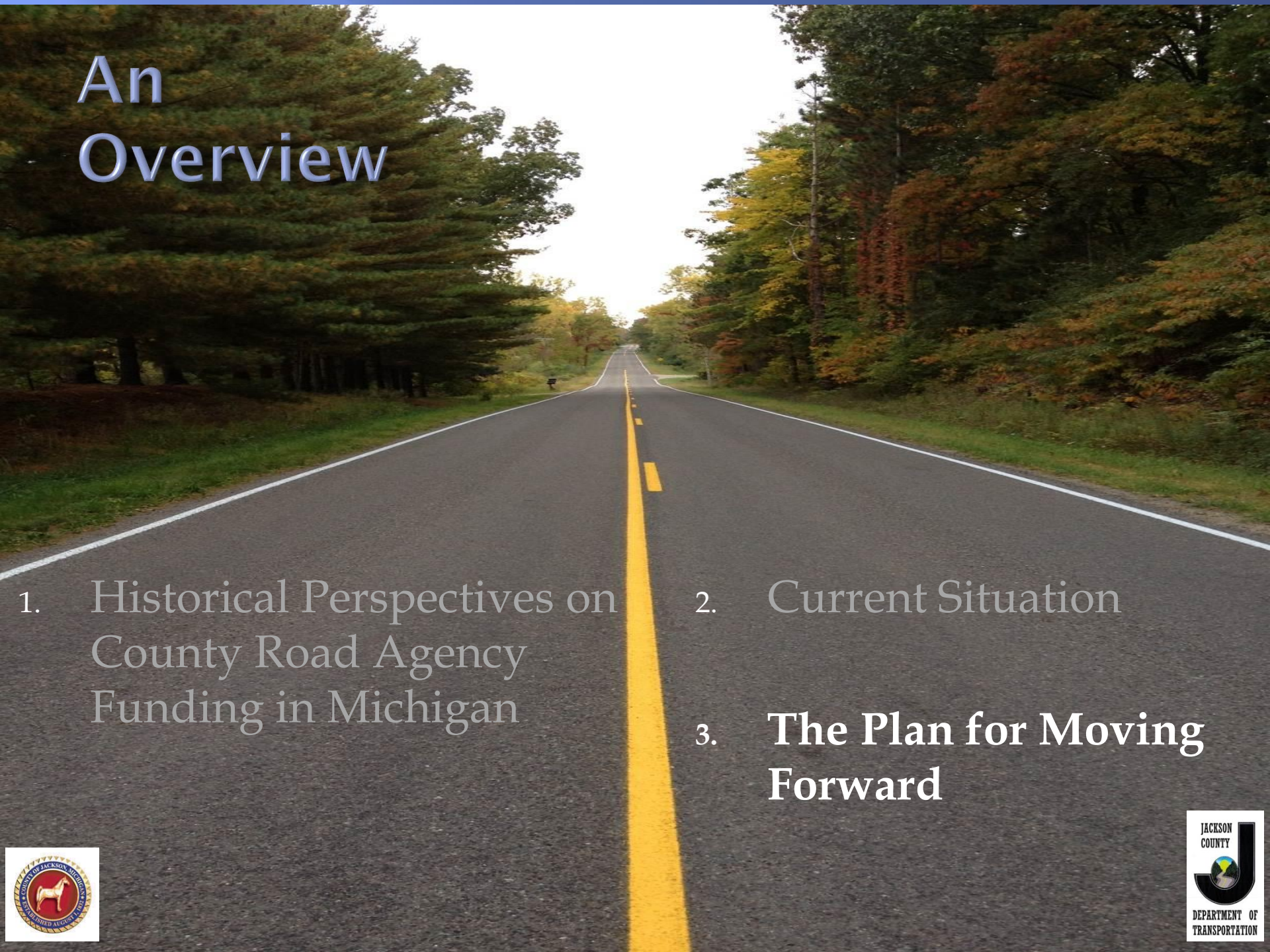
- Freeway
- Route
- Primary
- Local Paved
- Local Gravel
- Private Drive

0 1 Miles

N W E S

DISCLAIMER: *Maps are drawn as accurately as possible. They are intended to be a visual aid for road construction and related projects. They are subject to change based on new information and do not take the place of a formal contract.*

Source: Jackson County Department of Transportation



An Overview

1. Historical Perspectives on County Road Agency Funding in Michigan
2. Current Situation
3. **The Plan for Moving Forward**

JACKSON COUNTY DEPARTMENT OF TRANSPORTATION

Options available to you for a Comprehensive Local Road Improvement Program

1. Special Assessment District (SAD) – Specific locations

2. Township-wide millage or SAD and "pay as you go"

3. Township-wide millage and bond proposal
   - Blackman Charter Township
   - Spring Arbor Township
   - Summit Township

4. Township-wide SAD and Bond Proposal

Option #1:
Special Assessment District (SAD) – Specific locations

Pros:

- Residents can work with the township to request specific roads
- This allows the residents a financial means to begin rehabilitation of local road network
  - They can pay back over a certain timeframe
  - Works great in neighborhoods

Cons:

- Does not address local arterial roads

Option #2:
Township-Wide Millage or SAD
"Pay as you go"

Pros:

- You do not have to borrow money to fix roads
- This allows the Township a financial means to begin rehabilitation of local road network

Cons:

- 1 mil generates approximately $441,000 per year
  - This is approximately 1 - 4 miles of roadway to be rehabilitated per year
- This takes time

Option #3:
Township Wide Millage With Bond Proposal

Pros:

- All roads in Columbia Twp are rehabilitated within 6 years of bond sale.
- Takes advantage of the Low Bond Rates
- Takes advantage of lower construction cost

Cons:

This is a 15-20 year millage

Option #4:
Township Wide SAD With Bond Proposal

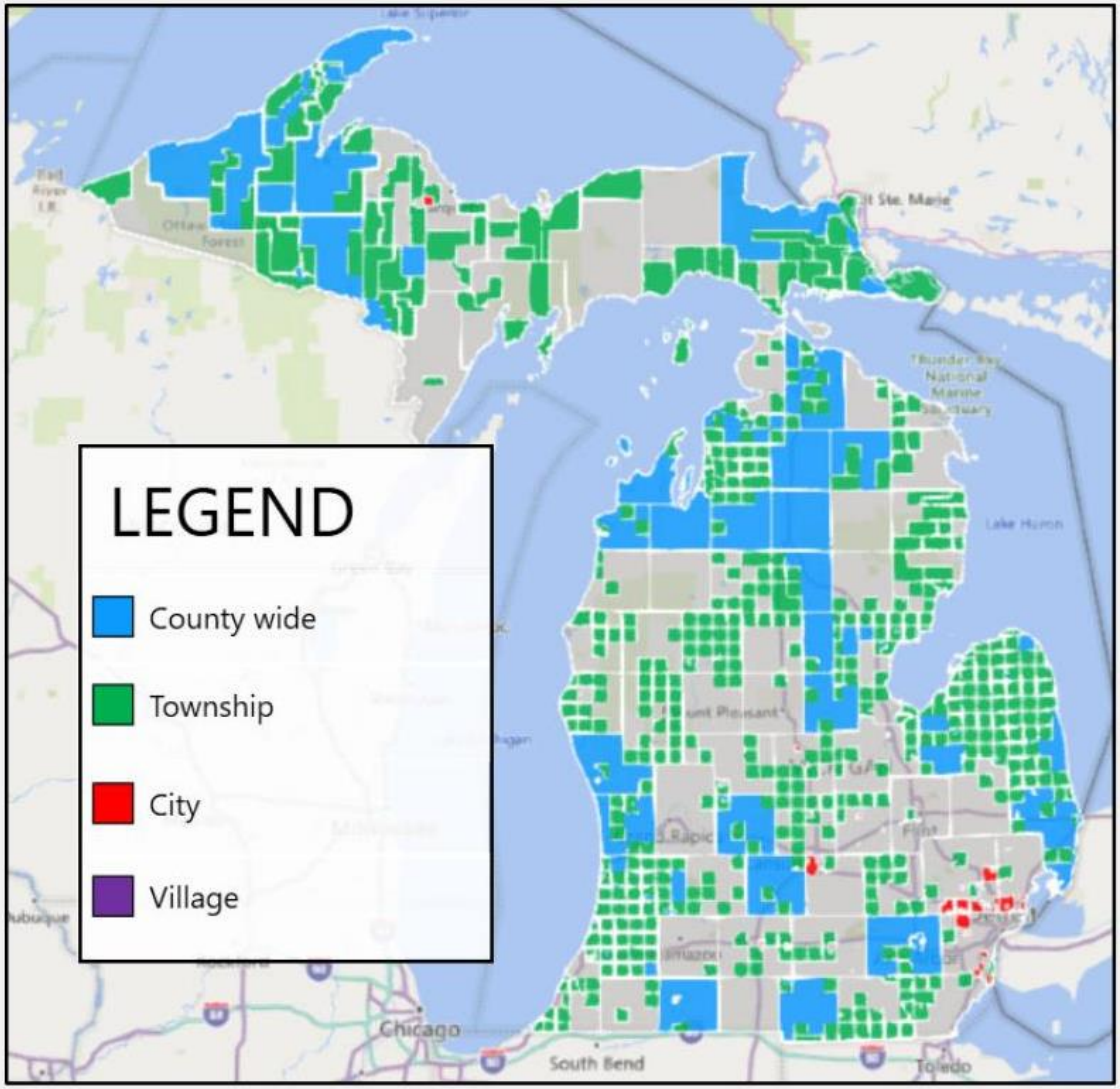
Pros:

- All roads in Columbia Twp are rehabilitated within 6 years of Bond sale.
- Takes advantage of the Low Bond Rates
- Takes advantage of lower construction cost

Cons:

- This is a 15-20 year millage

Local Tax Millages



- County
  - 30 of 83 (36%)
- Township
  - 580 of 1240 (46%)
- City/Villages
  - 150 of 533 (28%)

*Information from County Road Association

Interesting Facts

- Road network breakdown
  - MDOT 8%
  - Counties 74%
  - City/Villages 18%
- MDOT receives 75% of federal Funding
  - The balance is divided between 83 Counties and 533 City/Villages
- Cannabis Tax
  - Sales = ~$1.7 Billion
    - $49 Million deposited in MTF
      - Jackson received ~$329,390
- Miles of Road
  - Primary – 547 (21.6 – 3.9%)
  - Local – 830 paved & 231 gravel (30.6 – 3.7% 25.9 – 11.2)
  - Bridges 64
  - MDOT contract – 561

Treatment Cost Per Mile - 2021

Chip Seal	$26,000 - $35,000
Wedge & Chip Seal	$110,000 - $125,000
1.5 Inch overlay	$125,000 - $150,000
2 Inch Overlay	$160,000 - $200,000
3 Inch Overlay	$230,000 - $280,000
Recycle	$380,000 - $460,000

Thank you!
2019 National Award-Winner:
Rosehill Road