Otter Tail County
2040 Transportation Plan

Asset Management Peer Exchange

Study Purpose and Goals

1. Leverage existing tools
2. Analyze existing road conditions
3. Comparison of funding versus road conditions
4. Make new tools available
   - Analysis and planning
   - Communications
5. Develop customized solutions for future needs
6. Promote awareness of best practices

Integral to each step is**: Education and Communication:**

- County Boards
- General Public

Gap Analysis: Otter Tail County

Miles of Asphalt Roads = 1,070

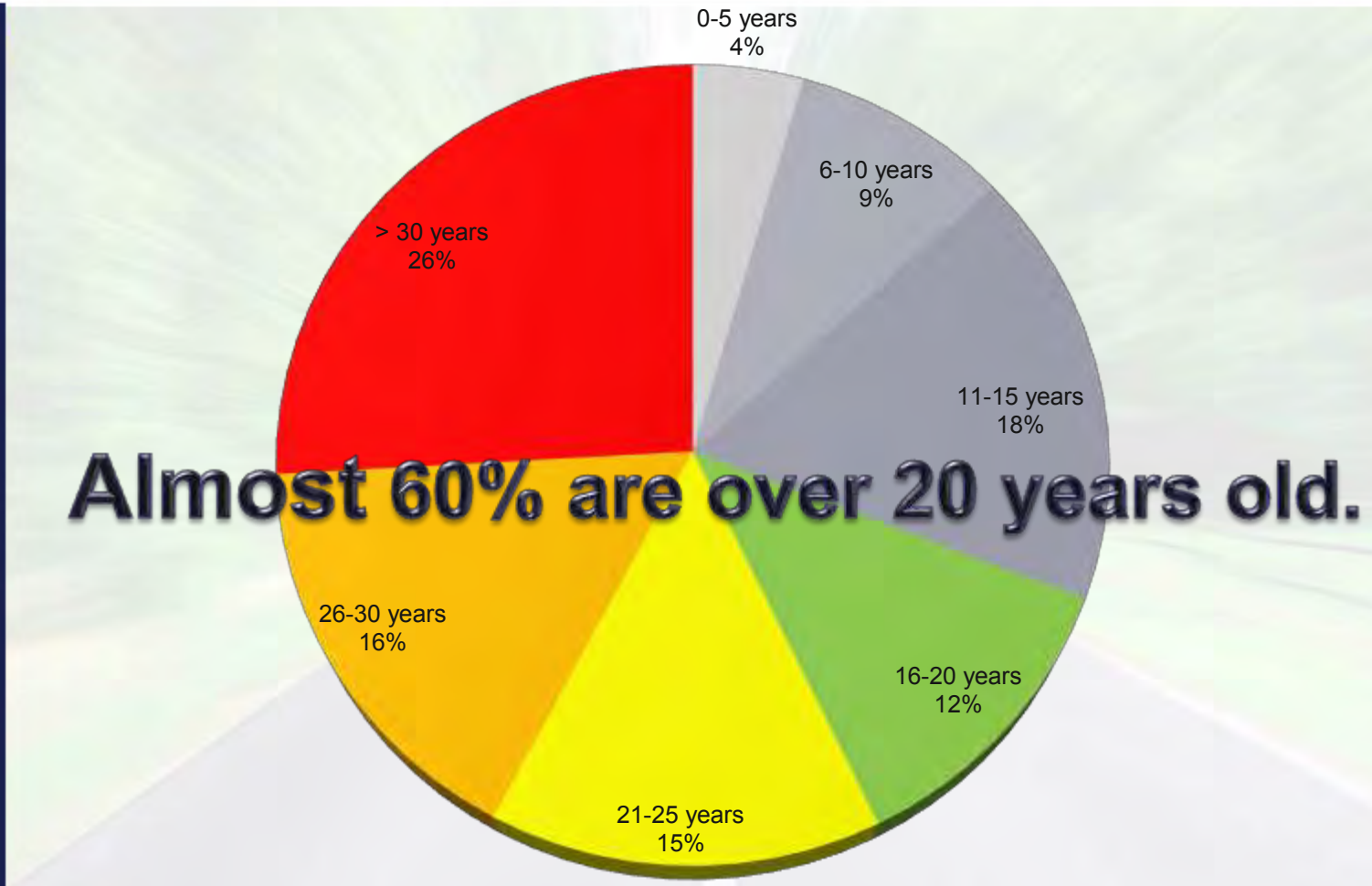
- County State Highways = 935
- County Roads = 135

Number of Vehicle Bridges = 75

- Functionally Obsolete = 0
- Structurally Deficient = 9
- Adequate = 66

Phelps Mill Photo by Elizabeth A. Armour (Wikimedia Commons)

Gap Analysis: Otter Tail County Existing Road Age (Asphalt)



Gap Analysis: Otter Tail County

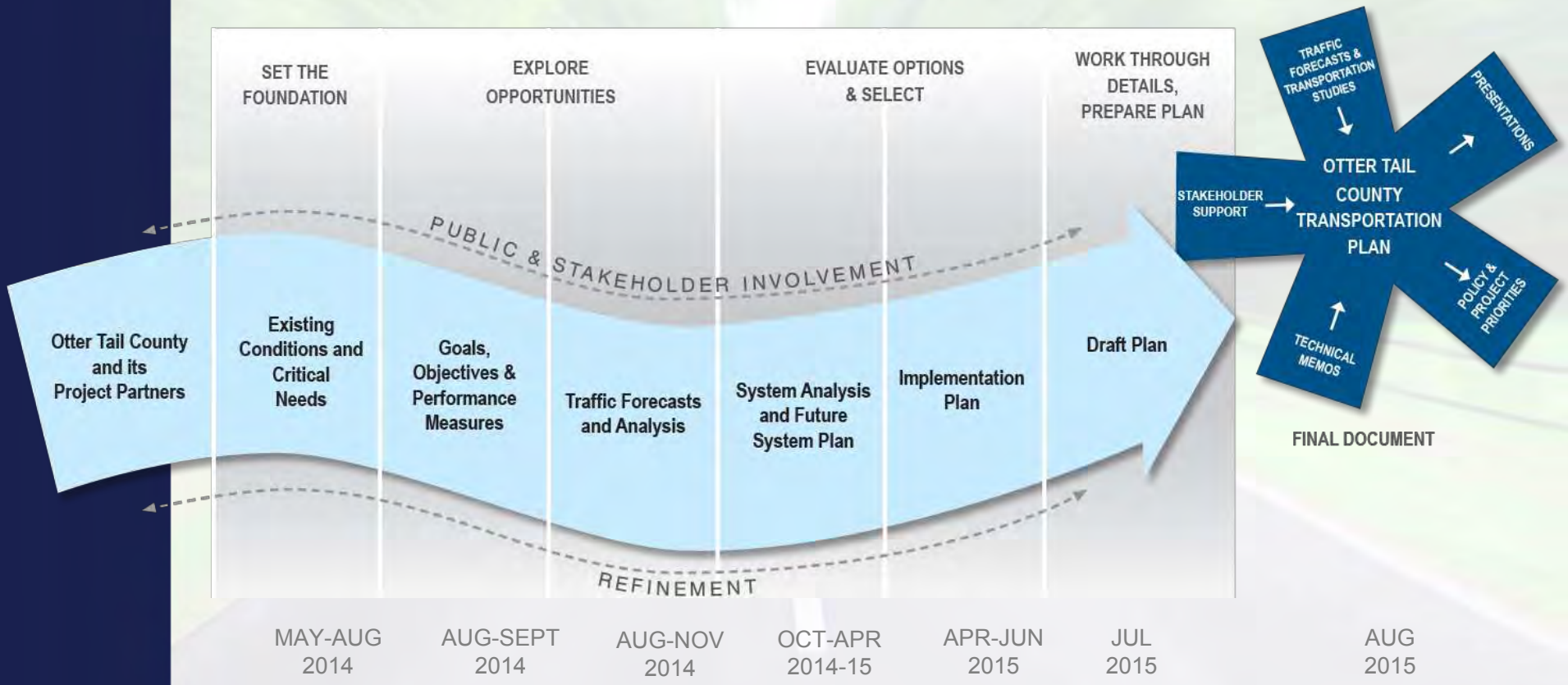
Otter Tail County
Annual Roadway Need - $15.2 million/yr.

Current Expenditure (2011)
$3.4 million/yr.

Year 1 Funding Gap
$11.8 million/yr.

Note: This GAP Analysis is for pavement preservation and does not include reconstruction.

Transportation Plan Study Process



Preservation Strategies Evaluated in Plan

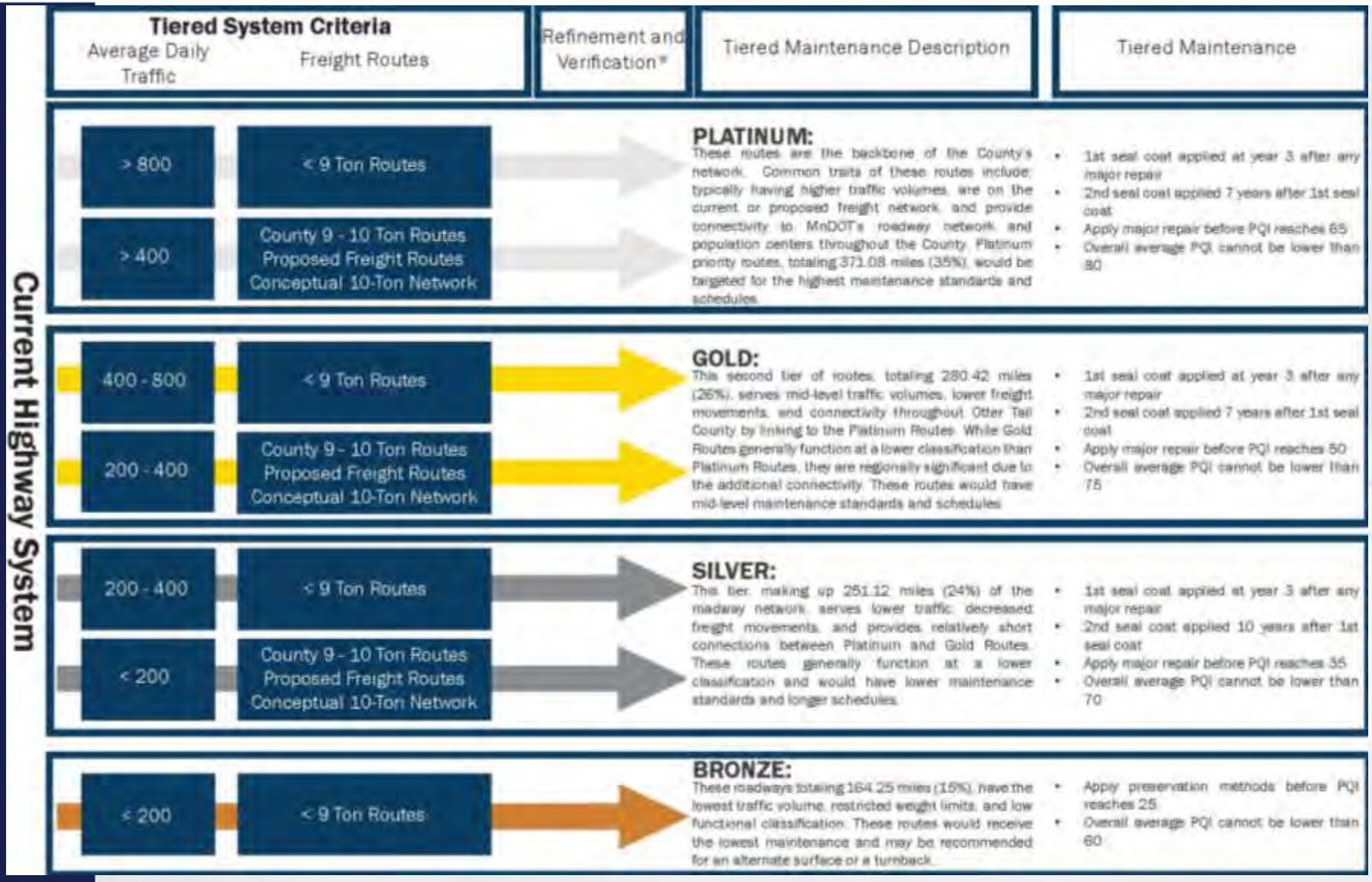
- Reducing System Size
- Developing a Tiered Roadway Maintenance Program
- Developing Performance Measures & Schedules
- Identifying New Funding Sources
- Establishing a Transparent Project Prioritization Process
- Promoting Expanded Public Engagement

2040 Transportation Plan Outreach

Otter Tail County

- **Extensive Public Engagement Process:**
  - Open Houses (6 mtgs)
  - Focus Group Sessions (2 mtgs)
  - Consultations with Other Interests (cities, major businesses, townships, MnDOT D-4, WCI, etc.)
  - Project Management Team (8 mtgs)
  - Project Steering Committee (5 mtgs)
  - County Board Sessions (2 mtgs)
  - Study Website
  - Public Hearing (1 mtg)

Tiered Preservation System



Tiered Preservation System

- Typically higher volumes
- Current and proposed freight network
- Provide connectivity to MnDOT system
- 35% of the system

- Mid-level traffic volumes
- Lower freight volumes
- Connectivity throughout the county connecting to Platinum routes
- 26% of the system

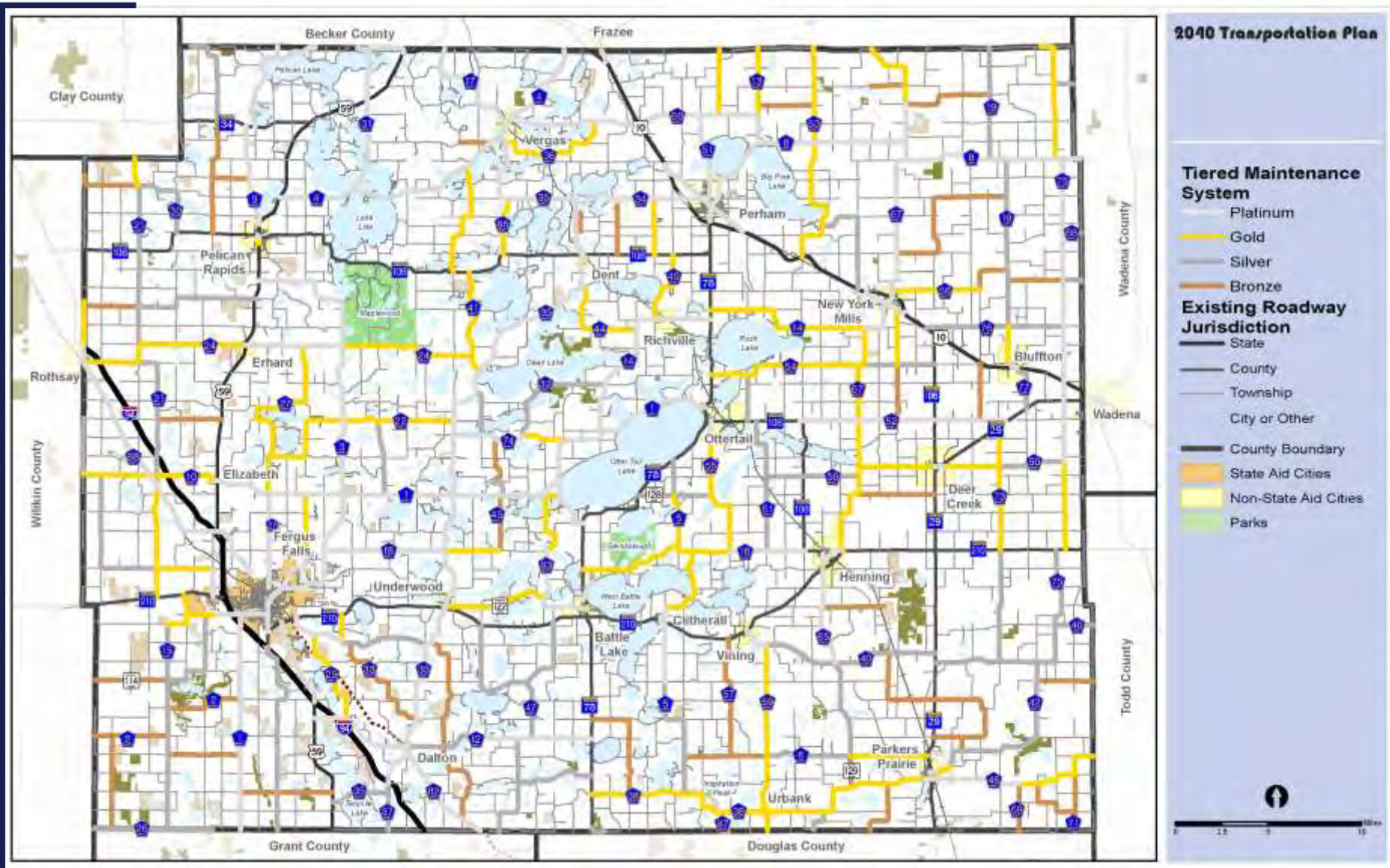
- Serves lower traffic
- Decreased freight movements
- Provides relatively short routes between Platinum and Gold routes
- 24% of the system

- Lowest traffic volumes
- Restricted weight limits
- Low functional classification
- 15% of the system

Revenue Enhancements

- Wheelage Tax ($10/vehicle): $568,650/yr. (2013 est.)
- Local Option ½ cent Sales Tax $4,384,000/yr. (2013 est.)
- Bonding
- Increased local road and bridge levy
- State gas tax and/or registration fees (legislative proposal): $2,280,000/yr. (2015 est.)
- Gravel Tax

Tiered Roadway Maintenance System



Project Prioritization

- Prevent “fair condition” roads from falling into “poor condition;” avoid worst first approach
- Used County Pavement Management System to evaluate priorities, based on good data, new management policies, and performance measures
- Prioritized preservation strategies over more expensive reconstruction fixes.
- Developed scope and cost
- Established program of projects (10 year list)

System Preservation Analysis

System Characteristics

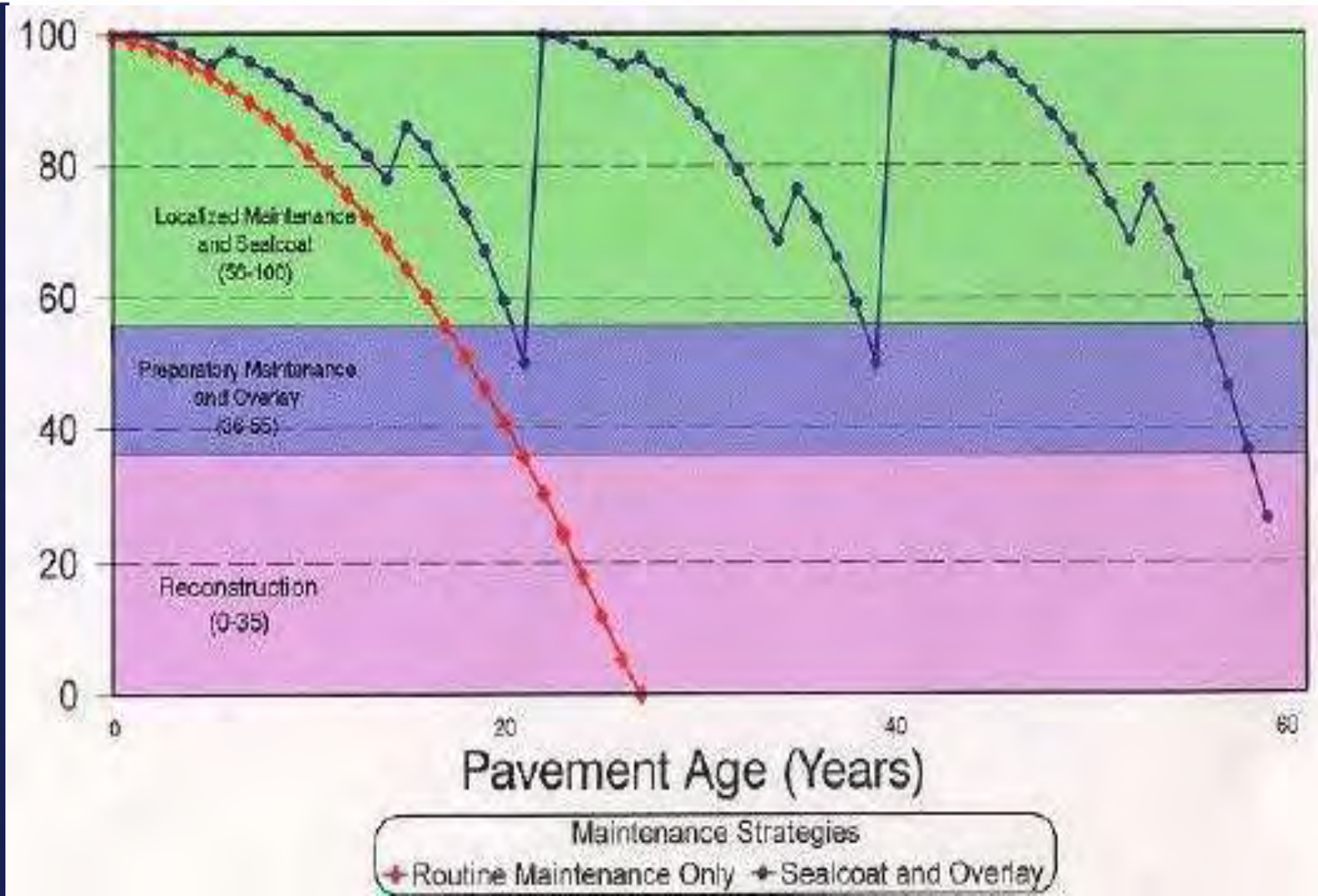
What are the system impacts of the various funding options?

Do the funding options meet the standards set for each Tier?

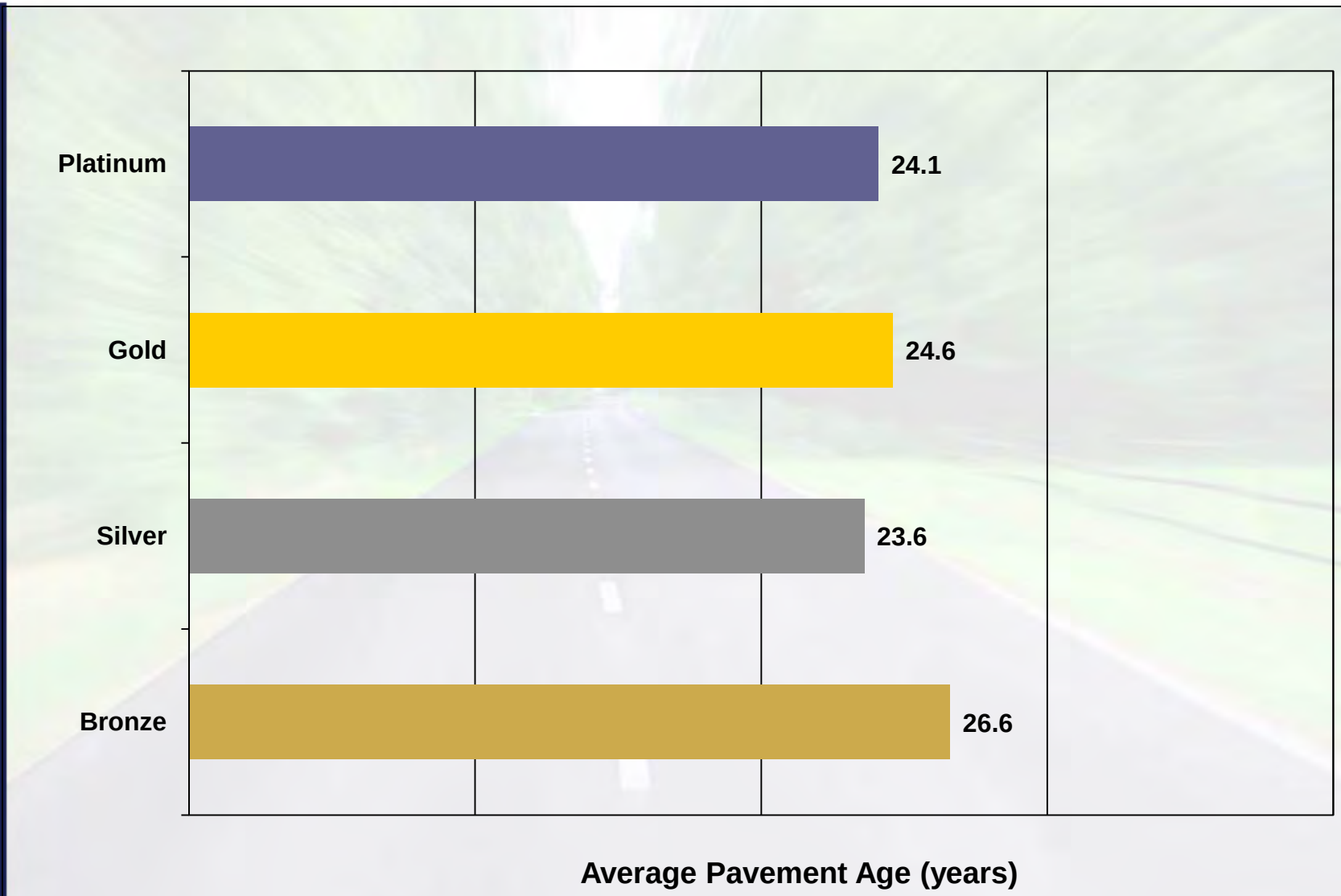
System Characteristics

- Tiered Preservation System – Platinum, Gold, Silver and Bronze
- Pavement Age
- PQI – Pavement Quality Index
  - Ratings performed by MnDOT
  - Even mix of ride and surface condition
  - 100 good, 0 failed

Pavement Age
Typical Pavement Life Cycle

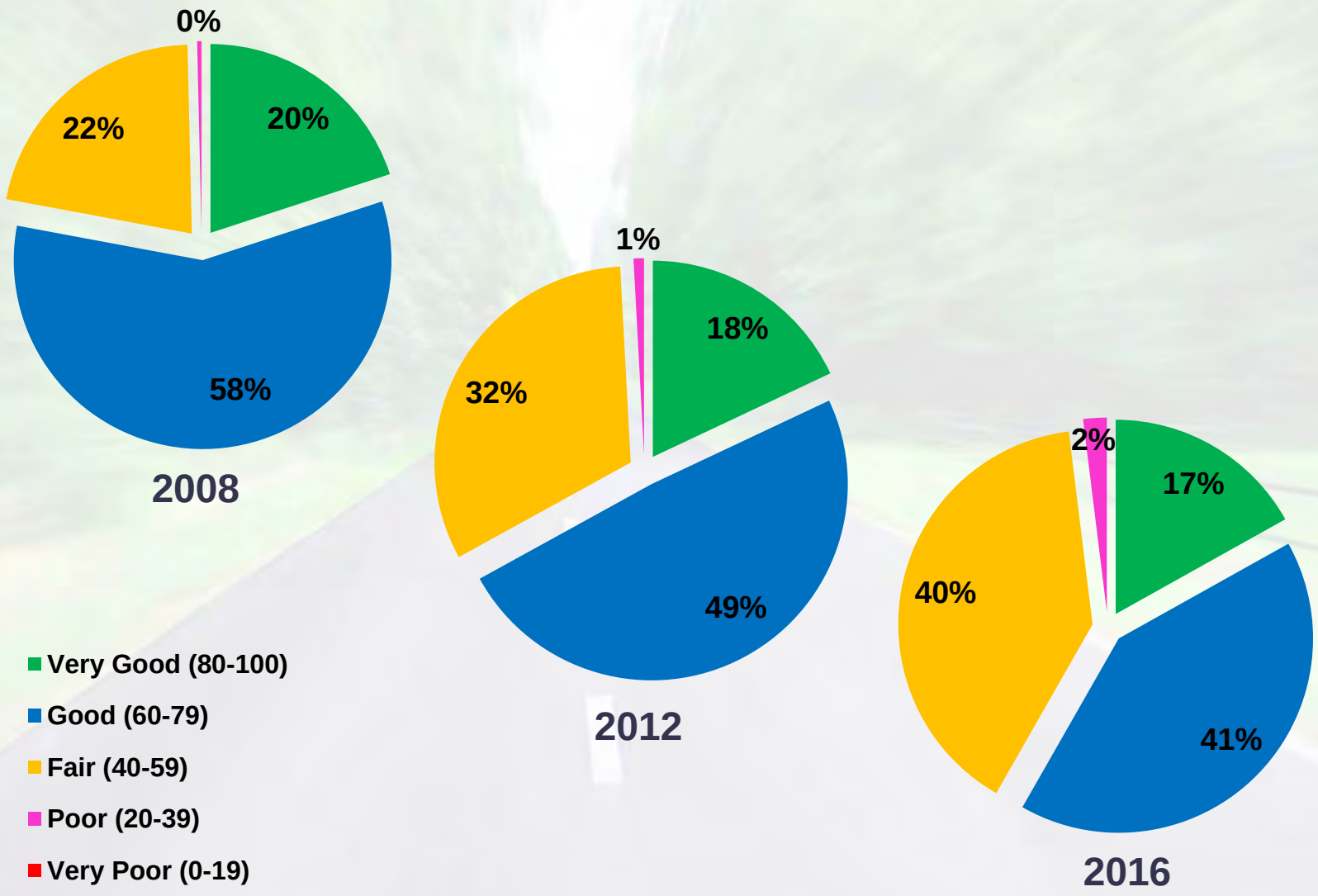


Pavement Age
According to Tier Assignments

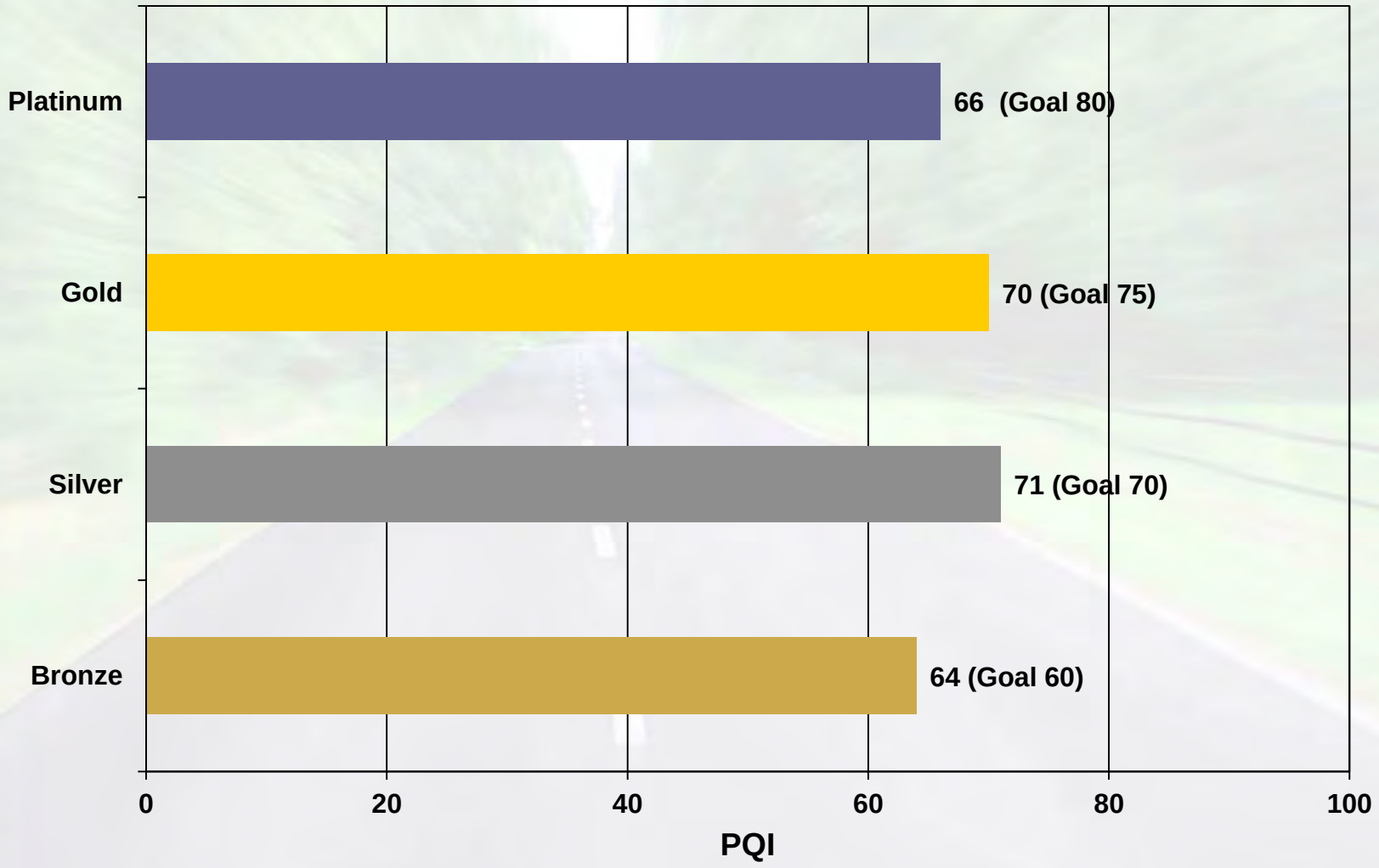


What does the PQI Look Like?

Comparative Roadway Conditions



2014 Condition Based on Tier Assignments



How Do We Meet the Goals?

FUNDING SCENARIOS

1 - Current Funding (CH and CSAH)

2 - Wheelage Tax Option (CH and CSAH)

3 - Sales Tax Option (CH and CSAH)

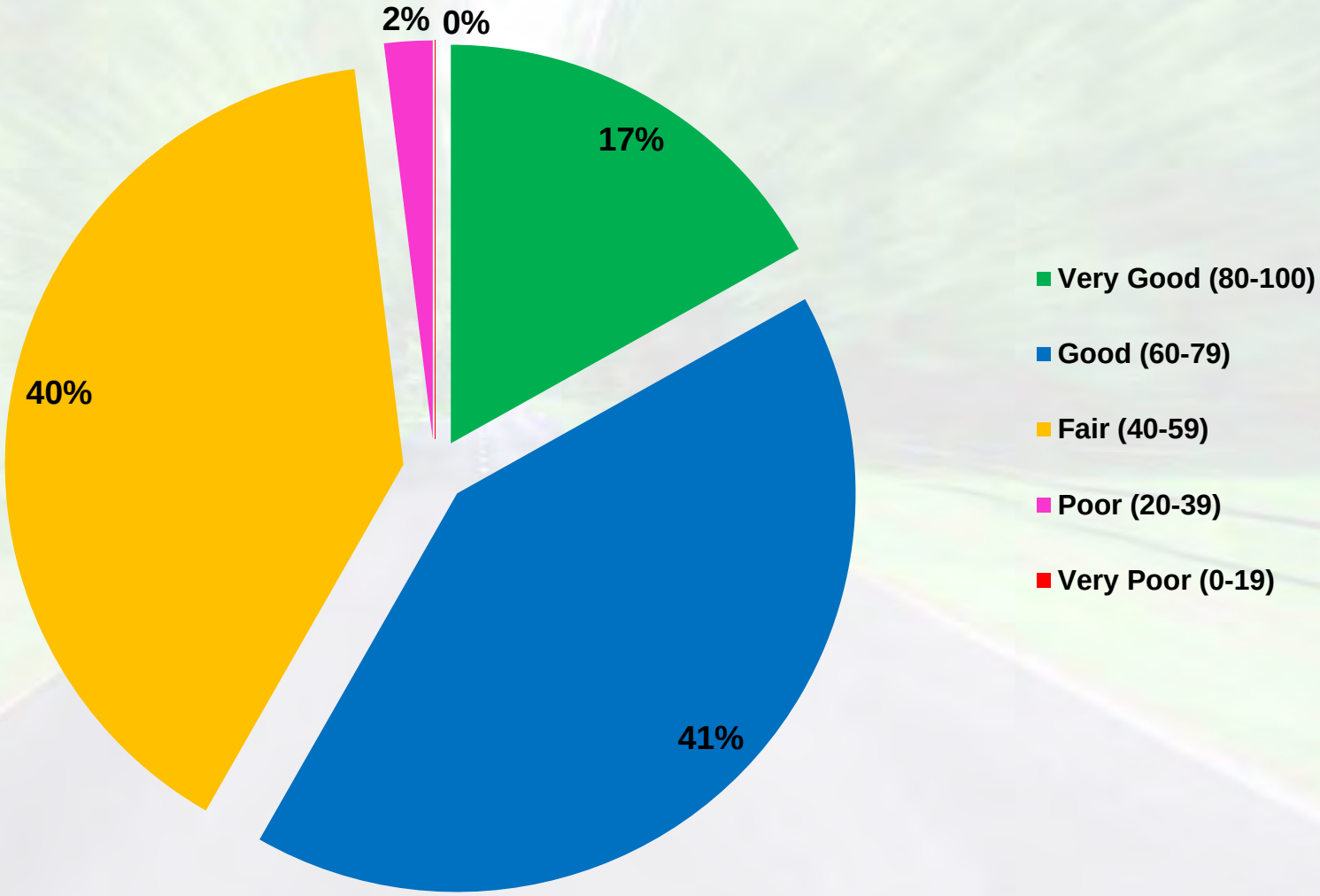
4 - Gas Tax Option (CSAH only)

5 - Wheelage plus Sales

6 - Maintain Current Condition of 68

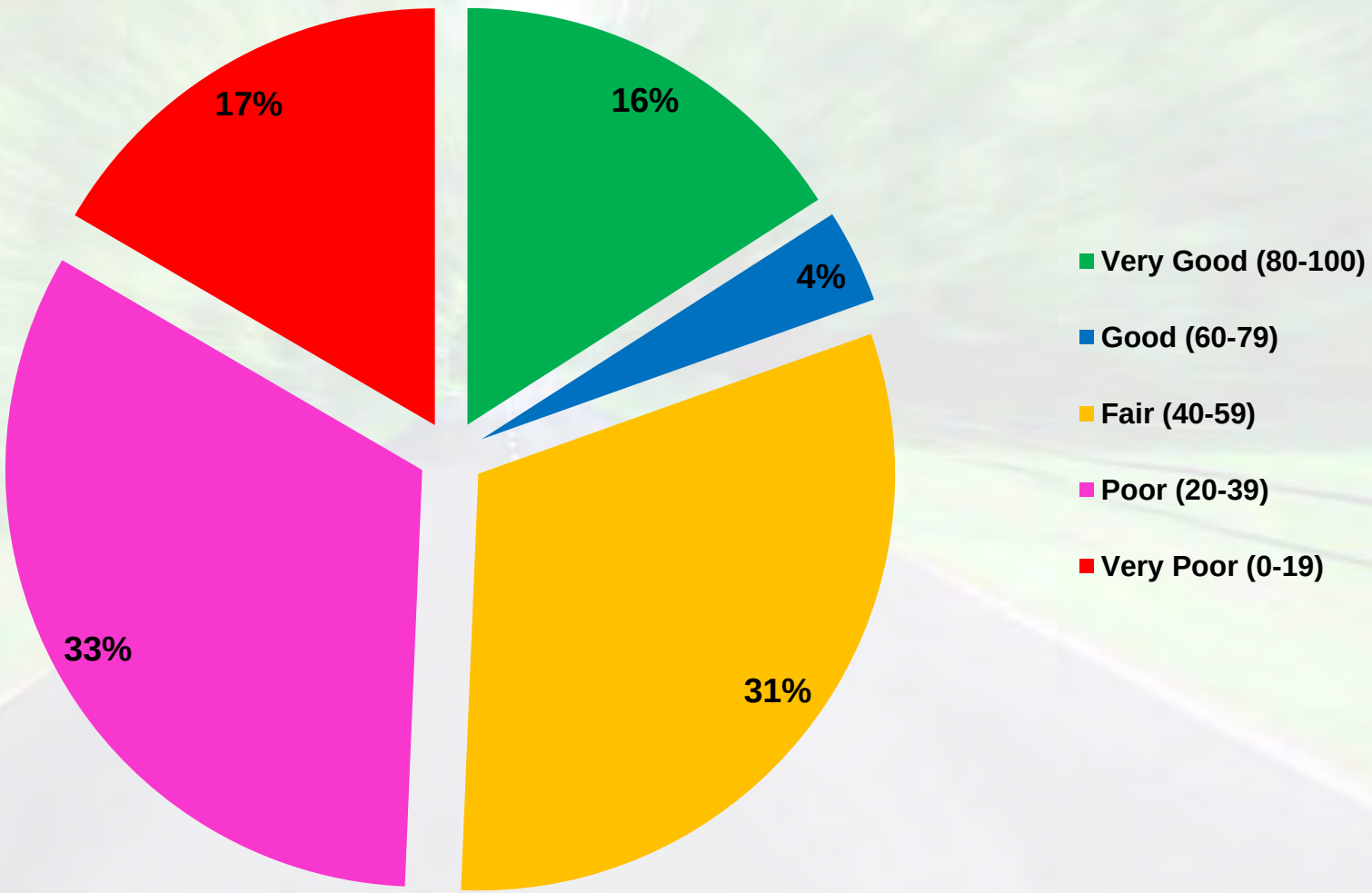
2016 ROADWAY CONDITIONS

(Projected, based on current funding)



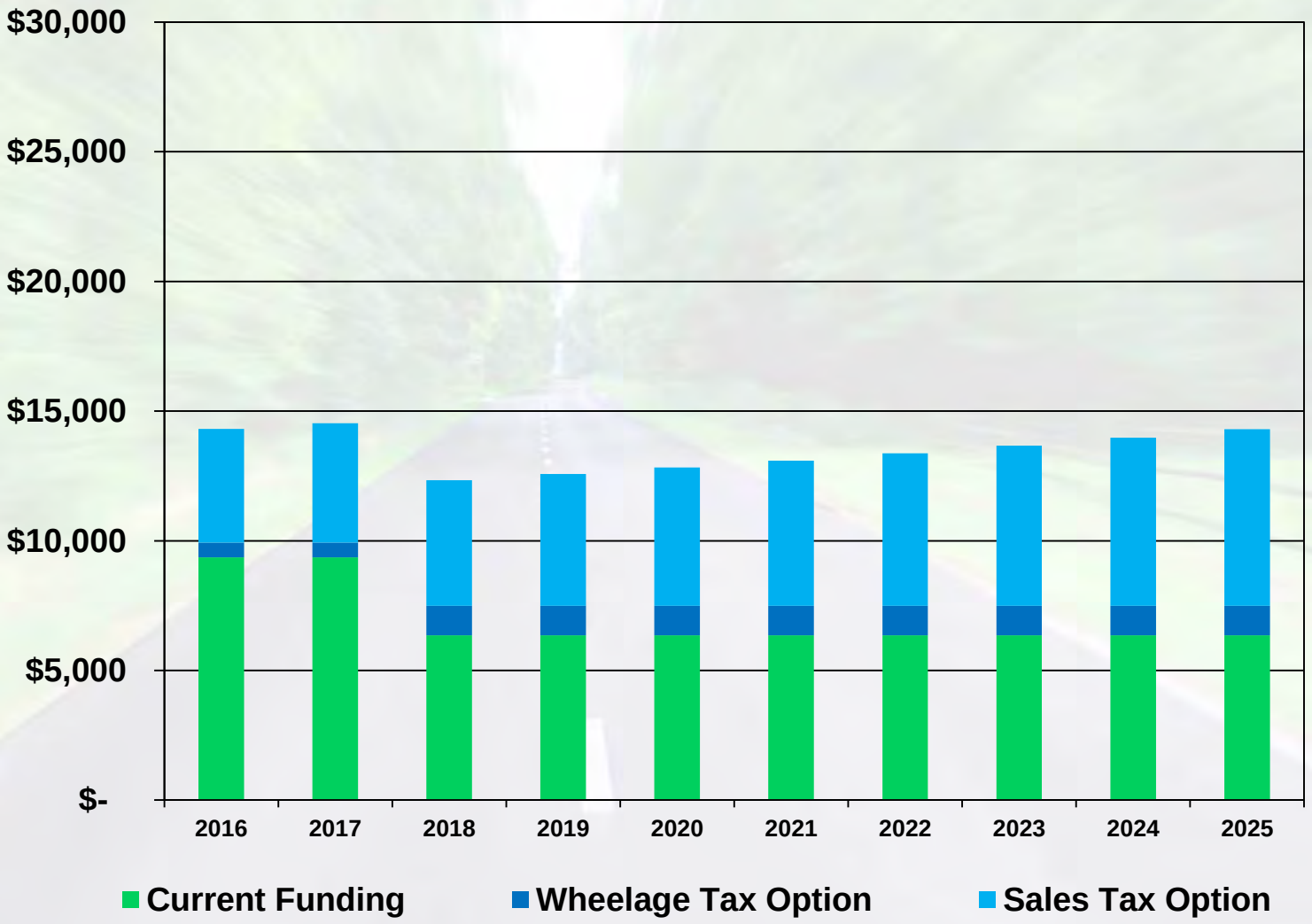
2025 ROADWAY CONDITIONS

(Projected, based on 2015 funding)



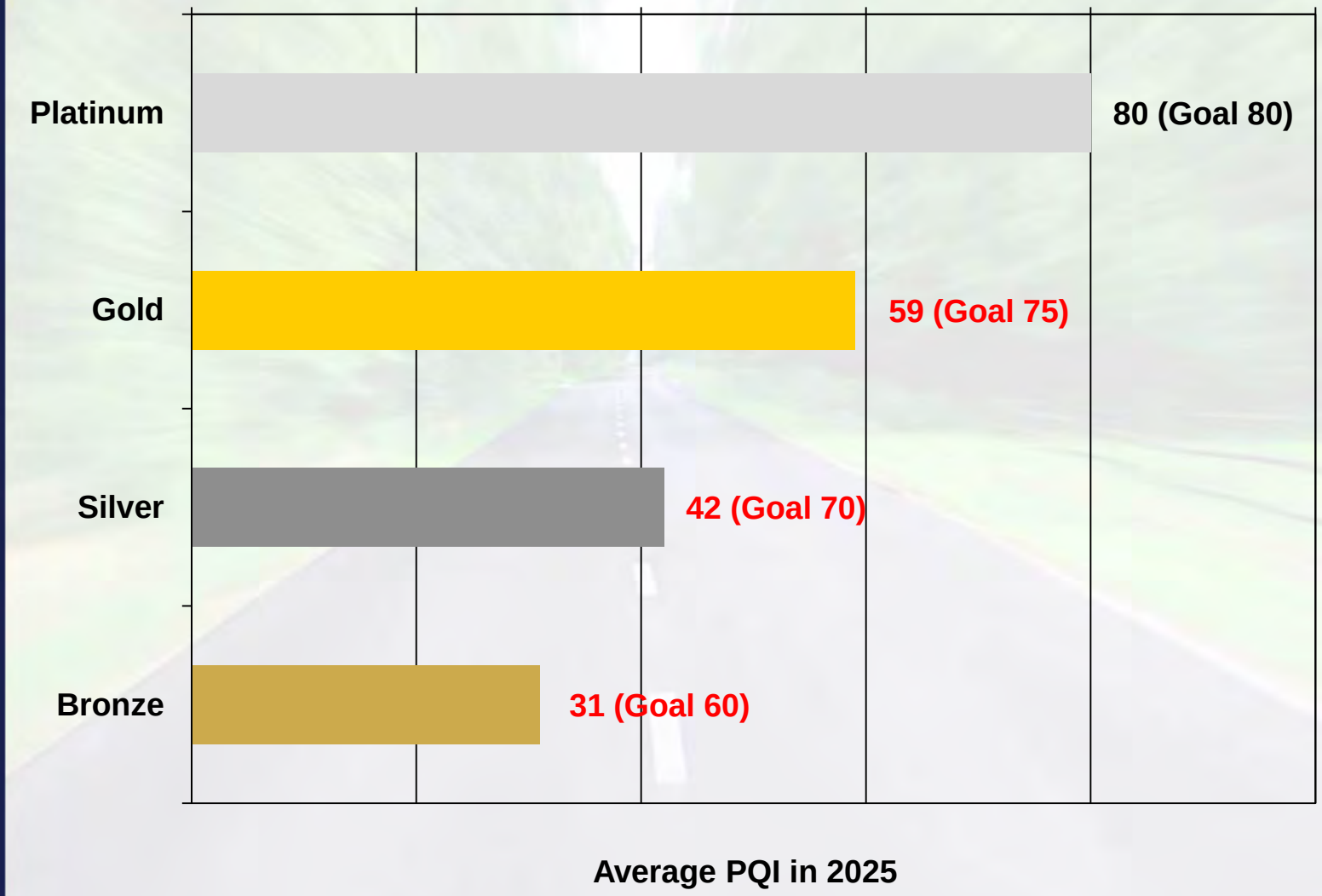
5 - Current + Wheelage + Sales

Annual Funding

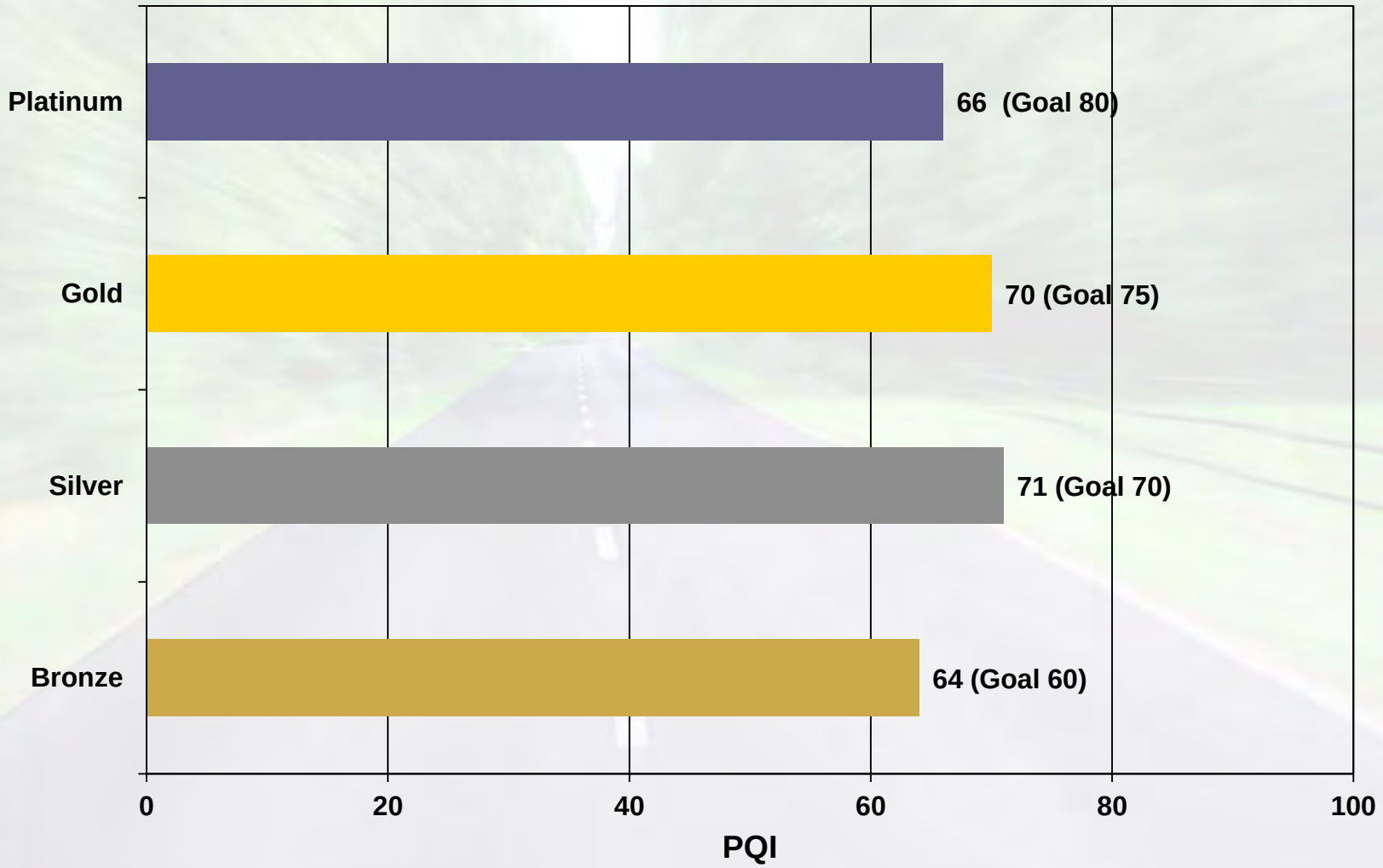


5 - Current + Wheelage + Sales Results

2025 Condition



6 – Maintain Current Condition



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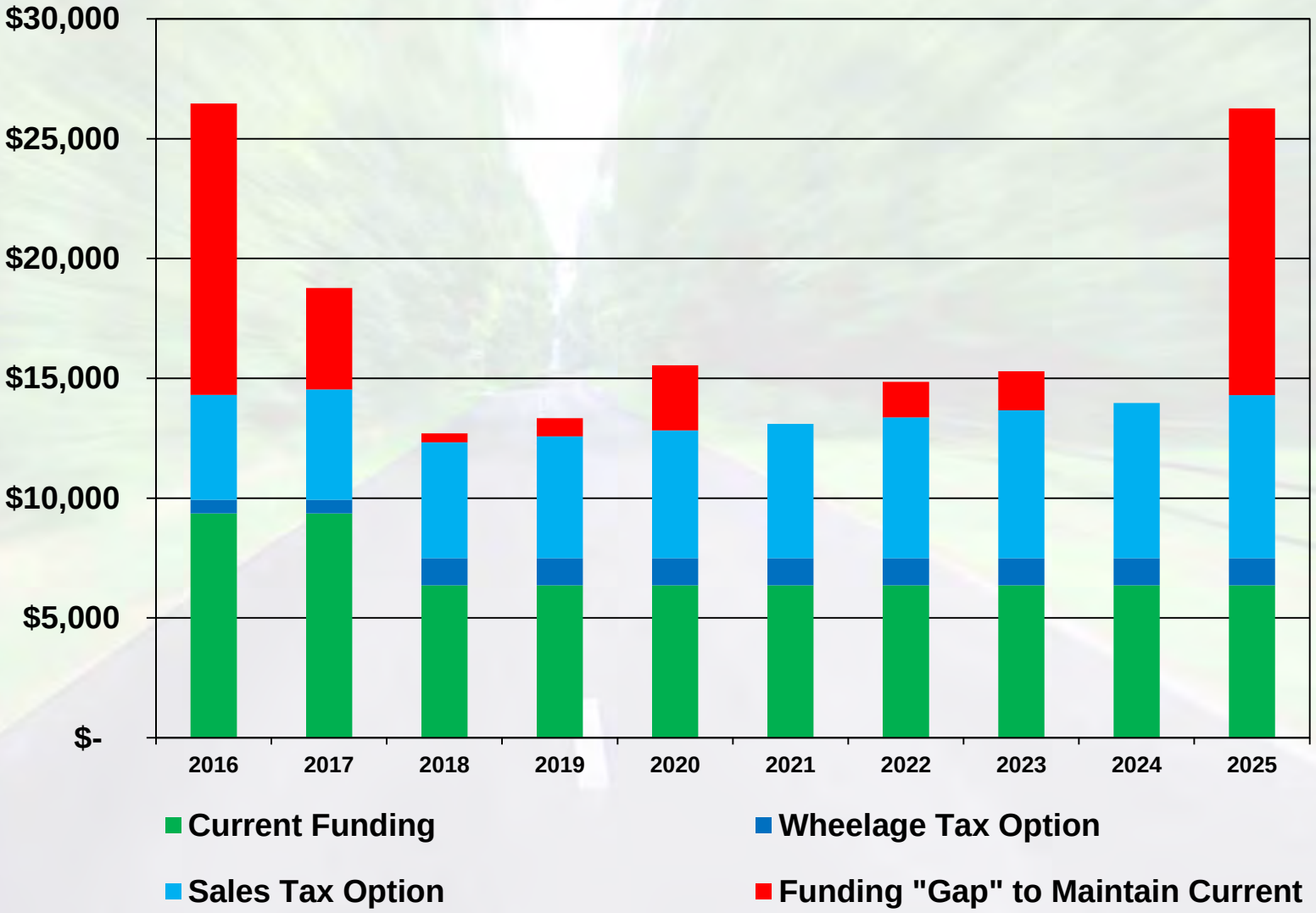
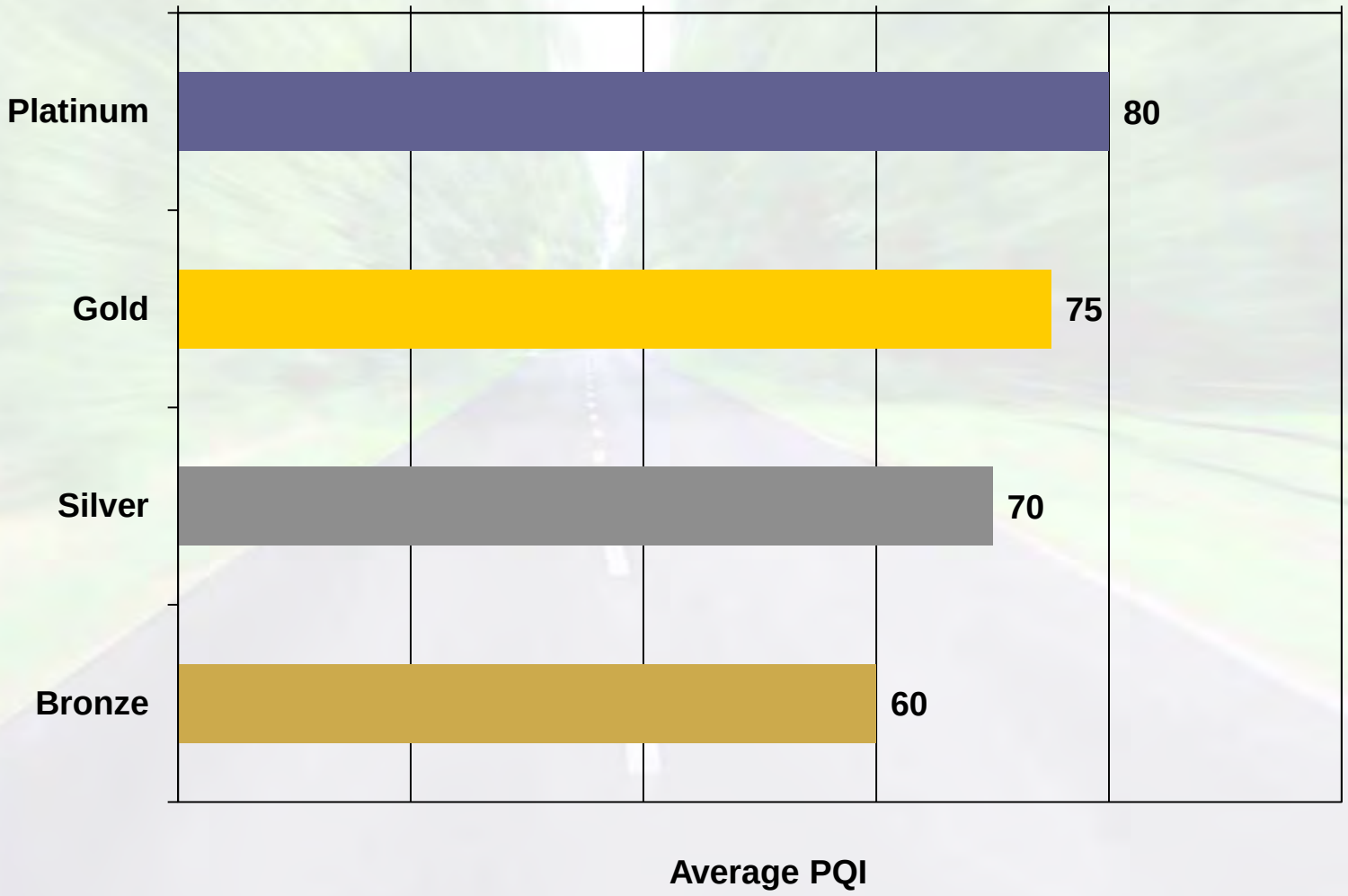


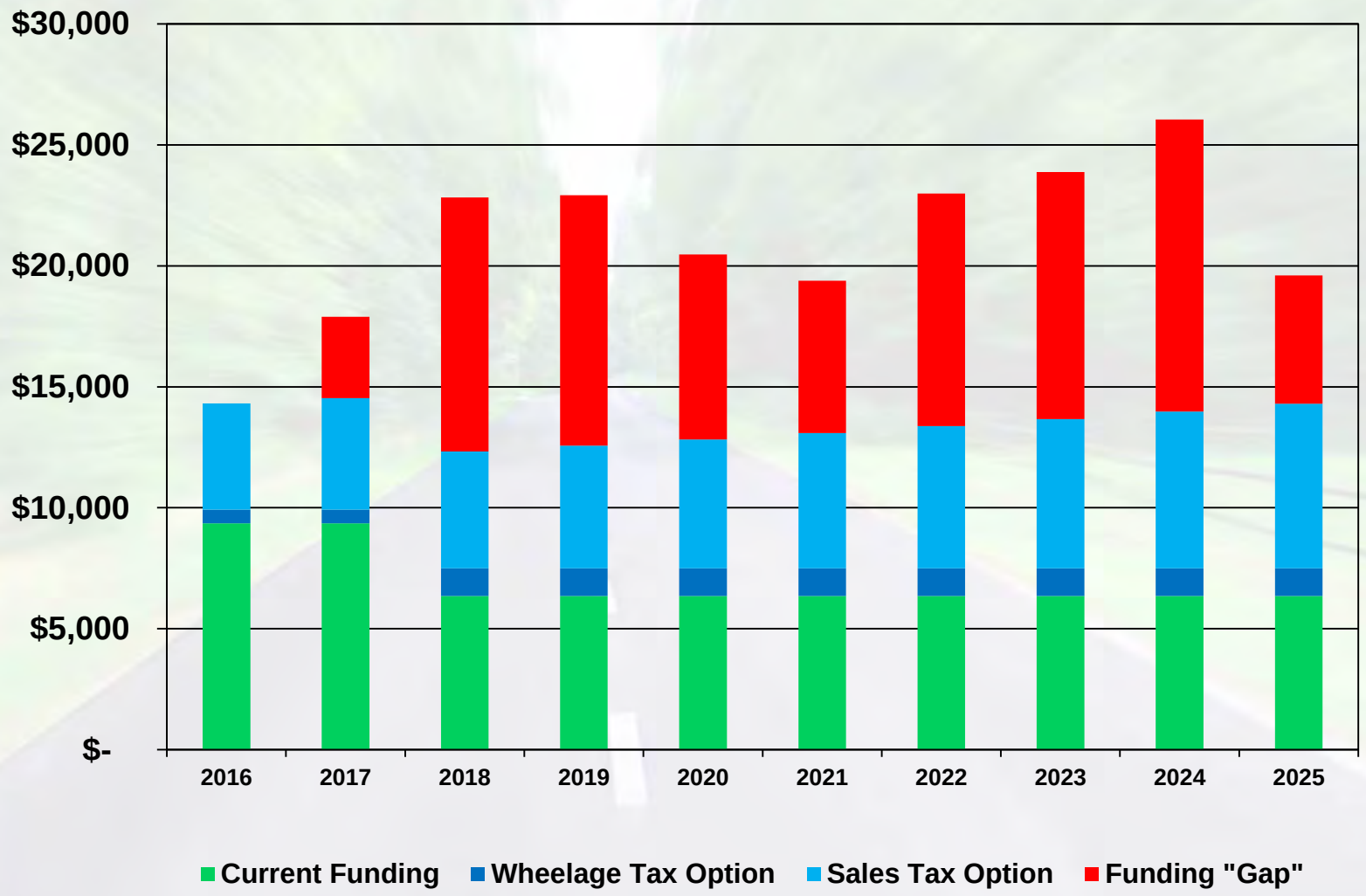
PQI Goals

2025 Condition

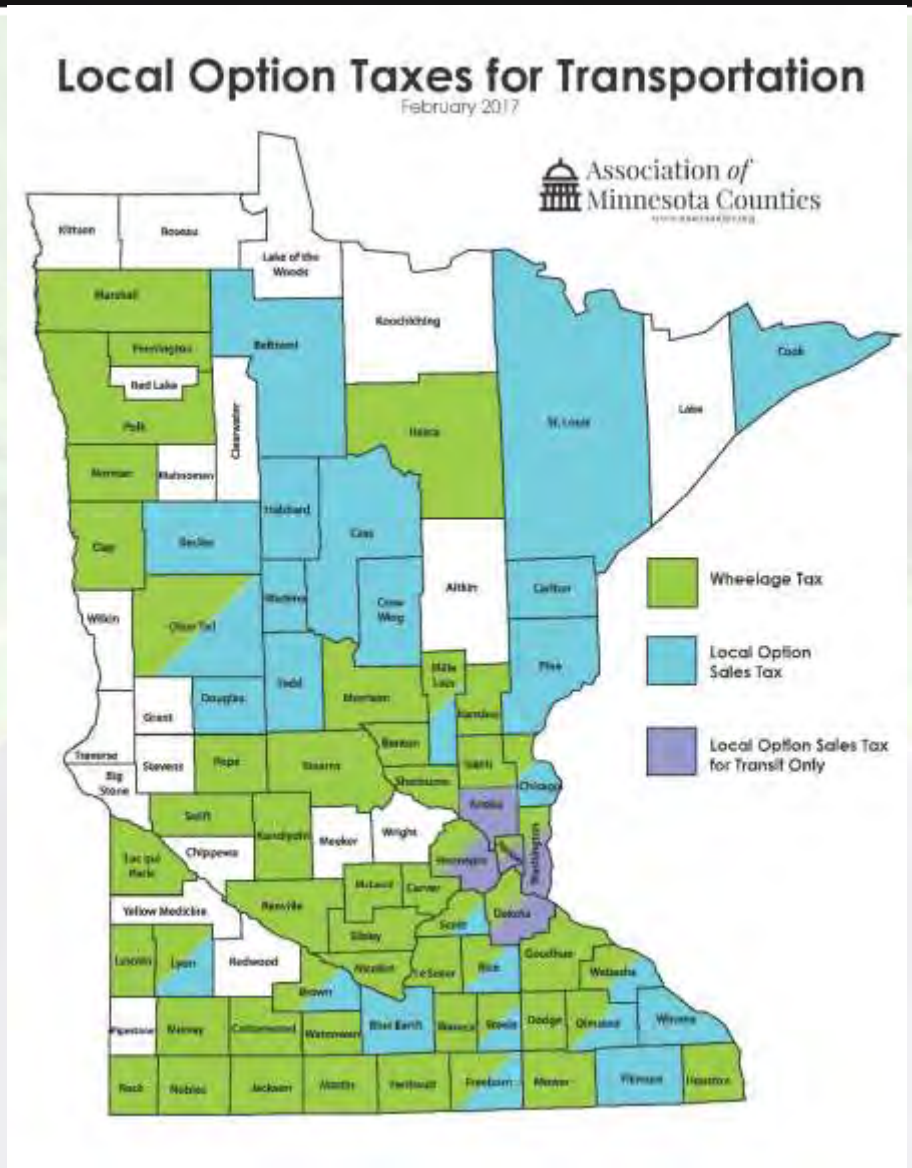


Funding to Meet PQI Goals

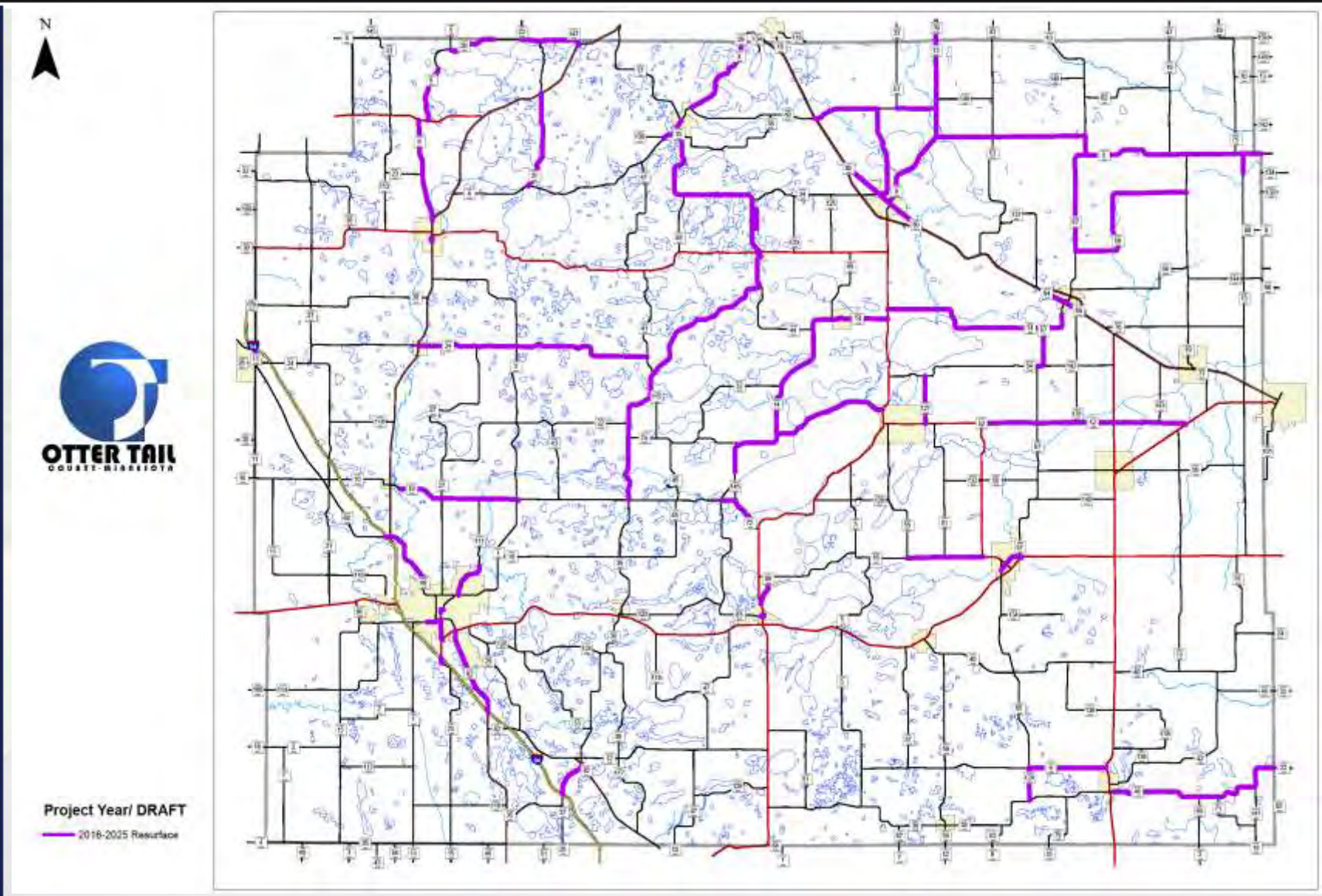
2025 Condition



Current Status – Implementation of Wheelage and Local Option Sales Tax



2016 -2025 Proposed Resurfacing Projects



Conclusions and Outcomes

- Public Outreach and Education
- Asset Management System
- Accurate Data
- 25 member Plan Steering Committee Involvement
- Provides for an Annual Plan Update Process
- Provides Resources for Plan and Plan Updates
- Provides a Time Frame to “Do It Right”
- Data Driven Project Selection Process
- Identified a Long Range Vision
- Public Understanding of What the Future Holds