



Transportation Day at the Capitol

Charlie Zelle | Commissioner, MnDOT

Feb. 16, 2017

State Transportation System

- **Highways**

- 59.1 billion annual vehicle miles traveled
 - 33.1 billion on trunk highways

- **Bridges (10+ feet)**

- 19,801 bridges carry a roadway in Minnesota
- Over 4,800 bridges carry or cross a trunk highway

- **Aviation**

- 135 state-funded airports in Minnesota
 - Over half owned by cities under 5,000
- Includes 9 commercial service airports
- Includes 7 Metropolitan Airports Commission airports



State Transportation System (cont.)

- **Water Freight**

- 57 million tons shipped via Great Lakes
- 12 million tons via river
- Public ports in Duluth, Winona, Red Wing and St. Paul

- **Rail Freight**

- 253 million tons shipped
- 4,500 miles of railroads
- 19 railroad companies



State Transportation System (cont.)

- **Transit**
 - All 80 greater Minnesota counties have public transit
 - 12.2 million greater Minnesota transit trips in 2015
 - 47 public bus systems funded
- **Bicycle and pedestrian facilities** throughout the state
 - Mississippi River Trail—US Bike Route 45
 - North Star—US Bike Route 41
 - 2nd most bike-friendly state by League of American Cyclists



We know what's ahead

- Freight truck and rail traffic to increase 30 percent by 2030
- 850 bridges will require significant work by 2025
- Nearly 1 million new Minnesotans by 2050
- Local roads and bridges unfunded need=\$18 billion over 20 years
- More than 600 identified state road and bridge projects go unfunded

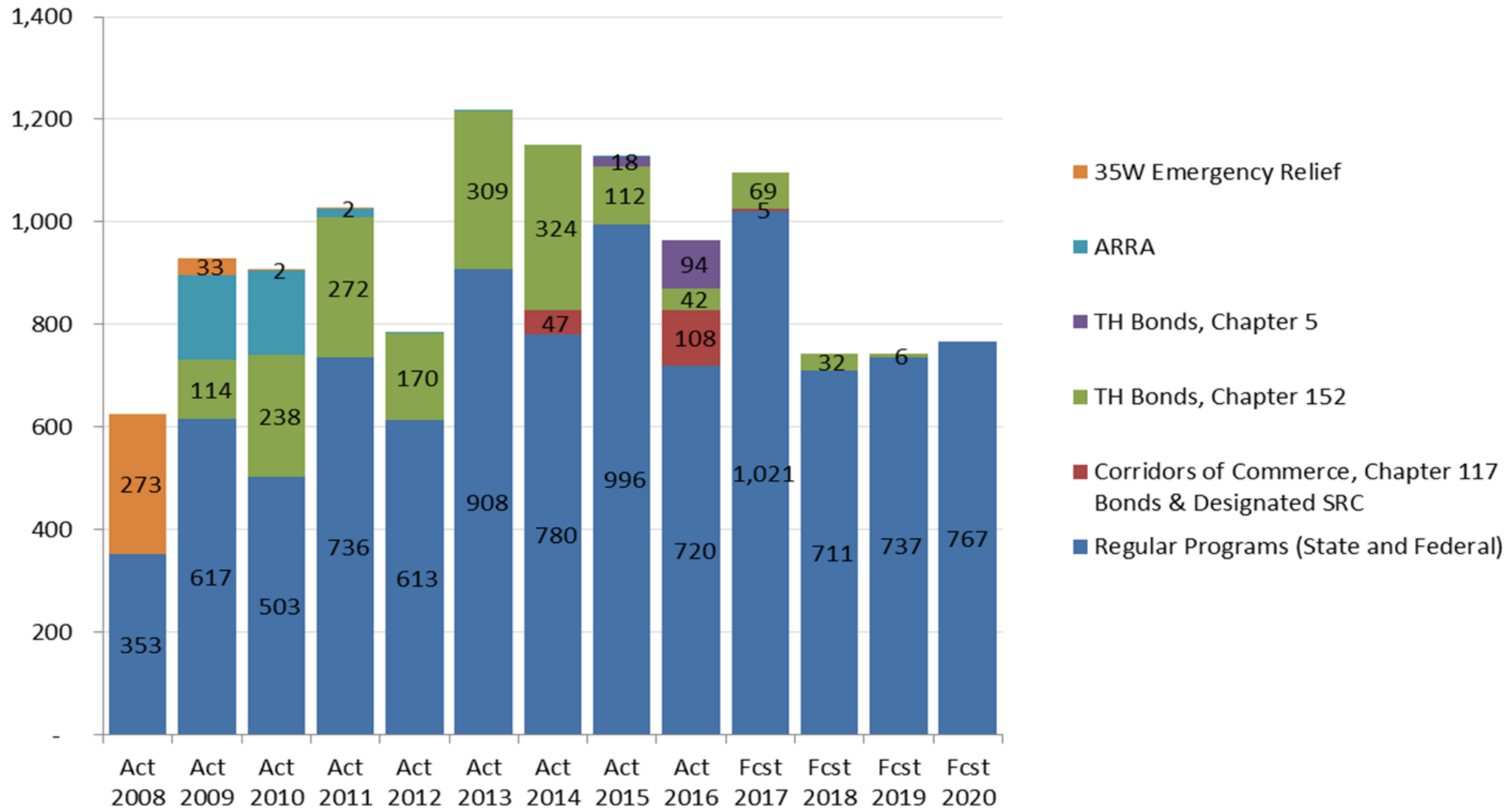


Harsh climate, heavy use

- 50% state highway pavements over 50 years old; 20% have <3 years useful life
- 40% of MnDOT bridges over 40 years old
- Minnesota weather extremes
- Snow and ice costs are climbing



State Road Construction Program Outlook



**STATE ROAD CONSTRUCTION PROGRAM FUNDING
BY DISTRICT/ATP AND YEAR
(\$ MILLIONS)**

DISTRICT/ATP	2017	2018	2019	2020	TOTAL*
1	99	78	83	87	347
2	44	50	37	31	162
3	53	63	76	58	250
4	55	43	37	32	167
6	161	49	84	55	349
7	137	94	54	81	366
8	37	37	36	63	173
SUBTOTAL*	587	414	406	407	1,815
METRO	412	240	281	305	1,238
MISC	27	57	49	55	188
TOTAL*	1,026	711	737	767	3,241

*may not total correctly due to rounding

Preservation versus Modernization



Standard green epoxied steel reinforcement lasts 50 years in our climate



Stainless steel reinforcement costs 3-4 times as much as green epoxied and lasts at least 100 years



Standard 16 gauge galvanized pipe lasts 25 years

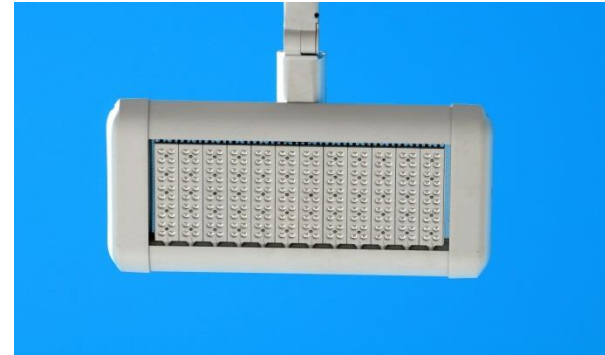


Aluminized pipe costs 17% more but lasts 50+ years

Preservation versus Modernization



Standard HPS luminaire lasts 4-5 years and costs \$260 to replace plus \$250 if lane closures are required



LED luminaire costs 25% more, lasts for 17 years and uses 65% less energy



City of Glenwood—Standard Mill and Overlay of Hwy 28



City of Glenwood—Complete Streets vision includes parking lane, trail connections, pedestrian enhancements

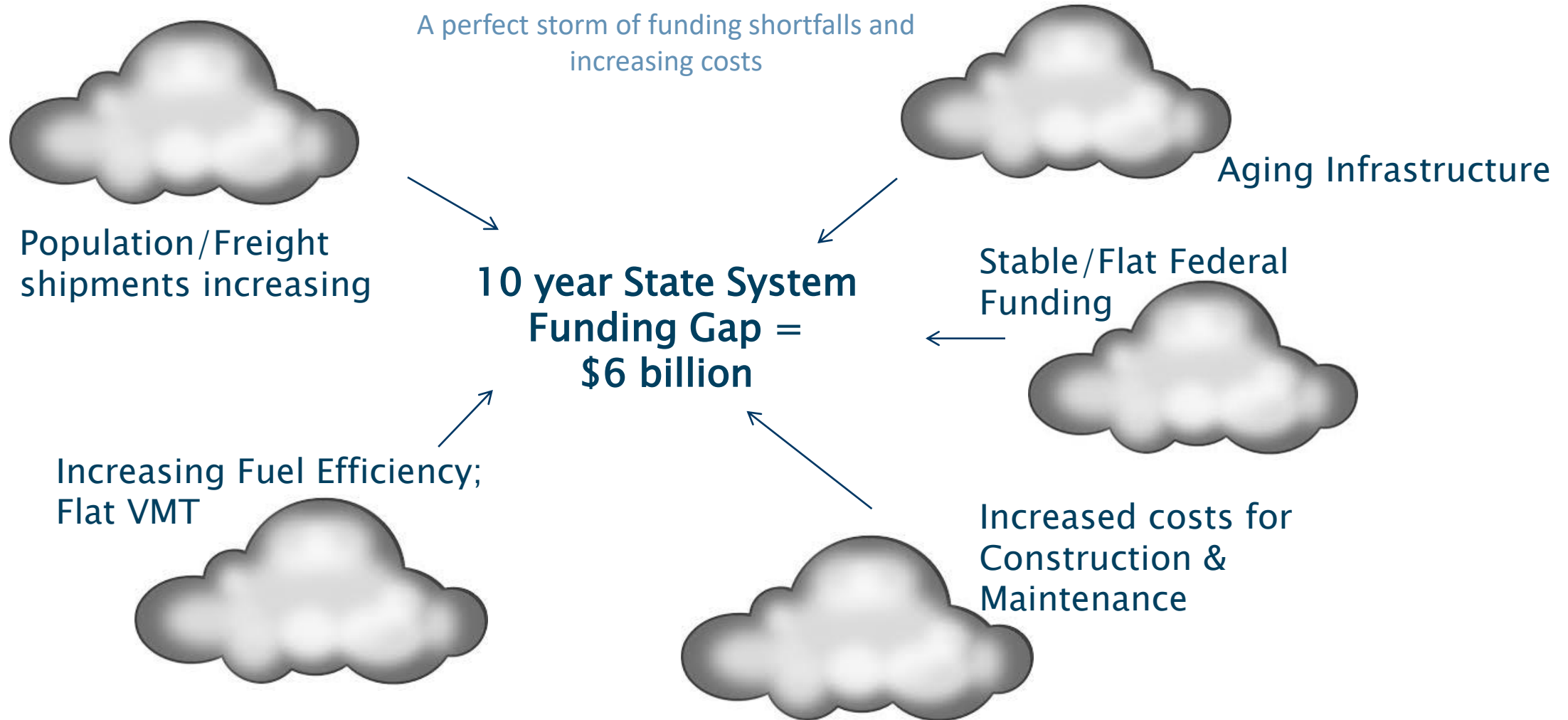
The Funding Gap

- Reality: the existing system needs additional resources to maintain and modernize our roads and bridges
- Prudent, modest expansion is also needed
- Status quo funding forces dollars toward preservation, no strategic system expansion projected after 2023

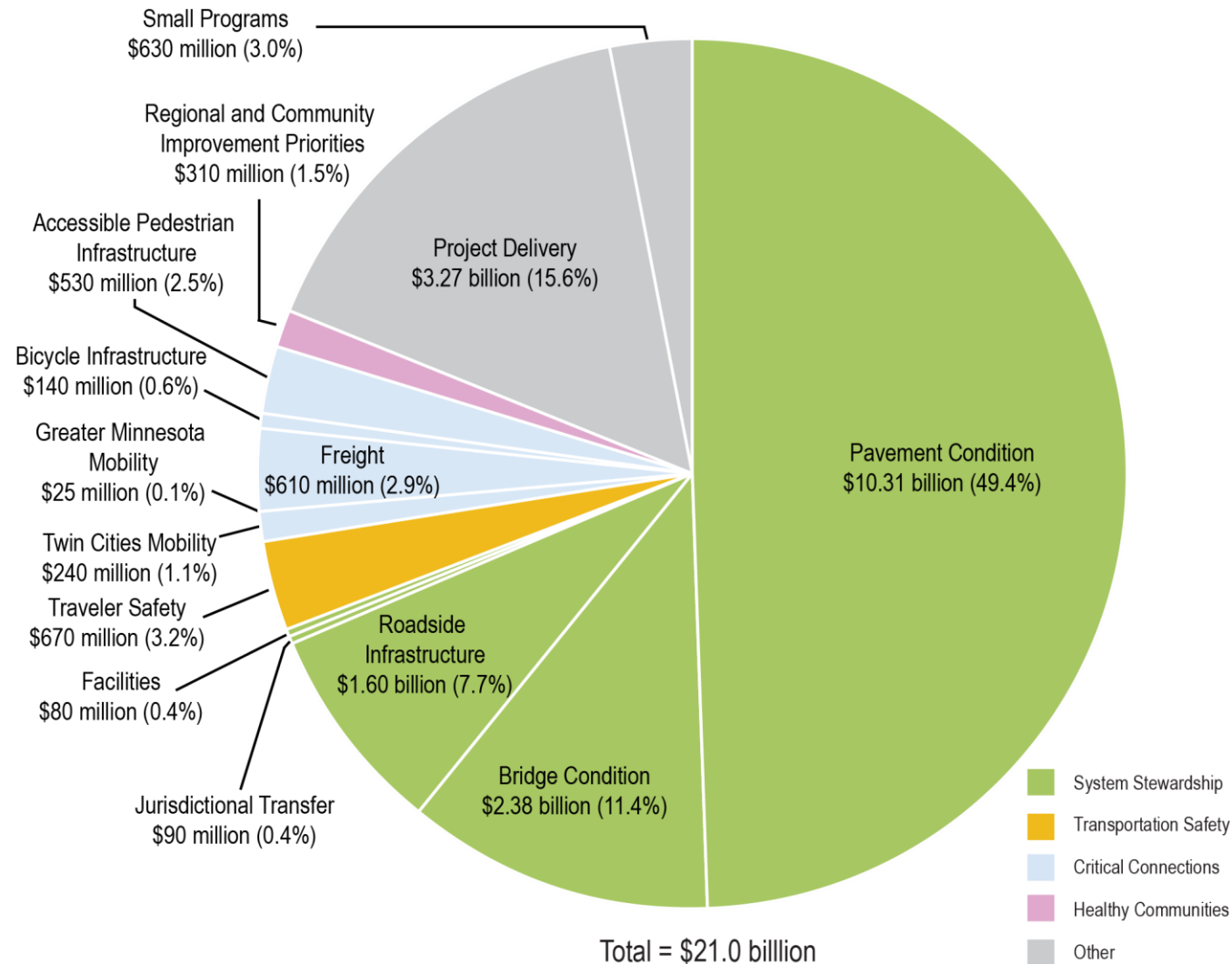
Years	Capital Investment Preservation <u>Current Funding</u>	Strategic Expansion Investment <u>Current Funding</u>		Preservation and Modernization Gap	Strategic Expansion Investment Gap	Total Gap
2018-2027	\$8.5 B	\$0.7 B		\$4 B	\$2 B	\$6 B

Source: 20-Year State Highway Investment Plan, January 2017

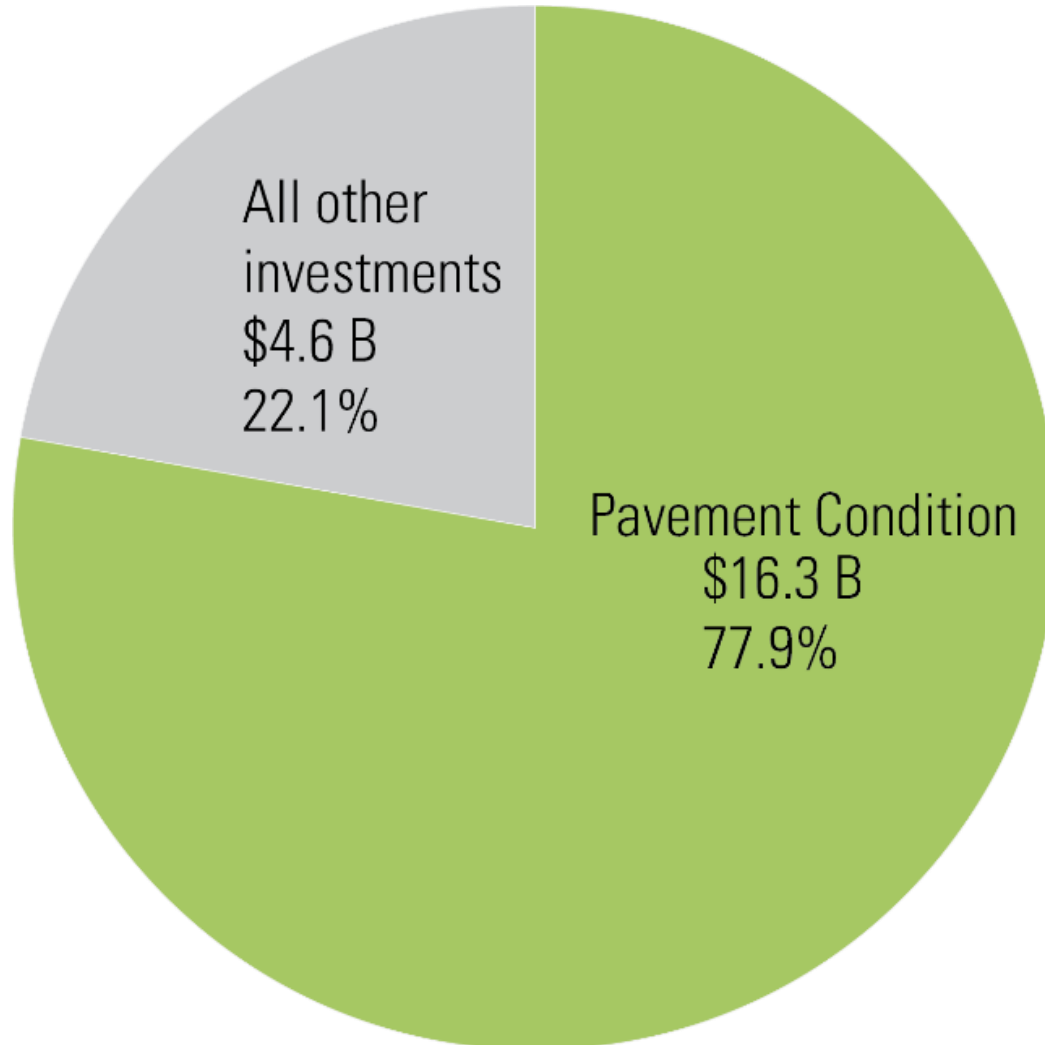
The Perfect Storm of Need Drives the Funding Gap



MnSHIP Investment Direction (2018-2037)

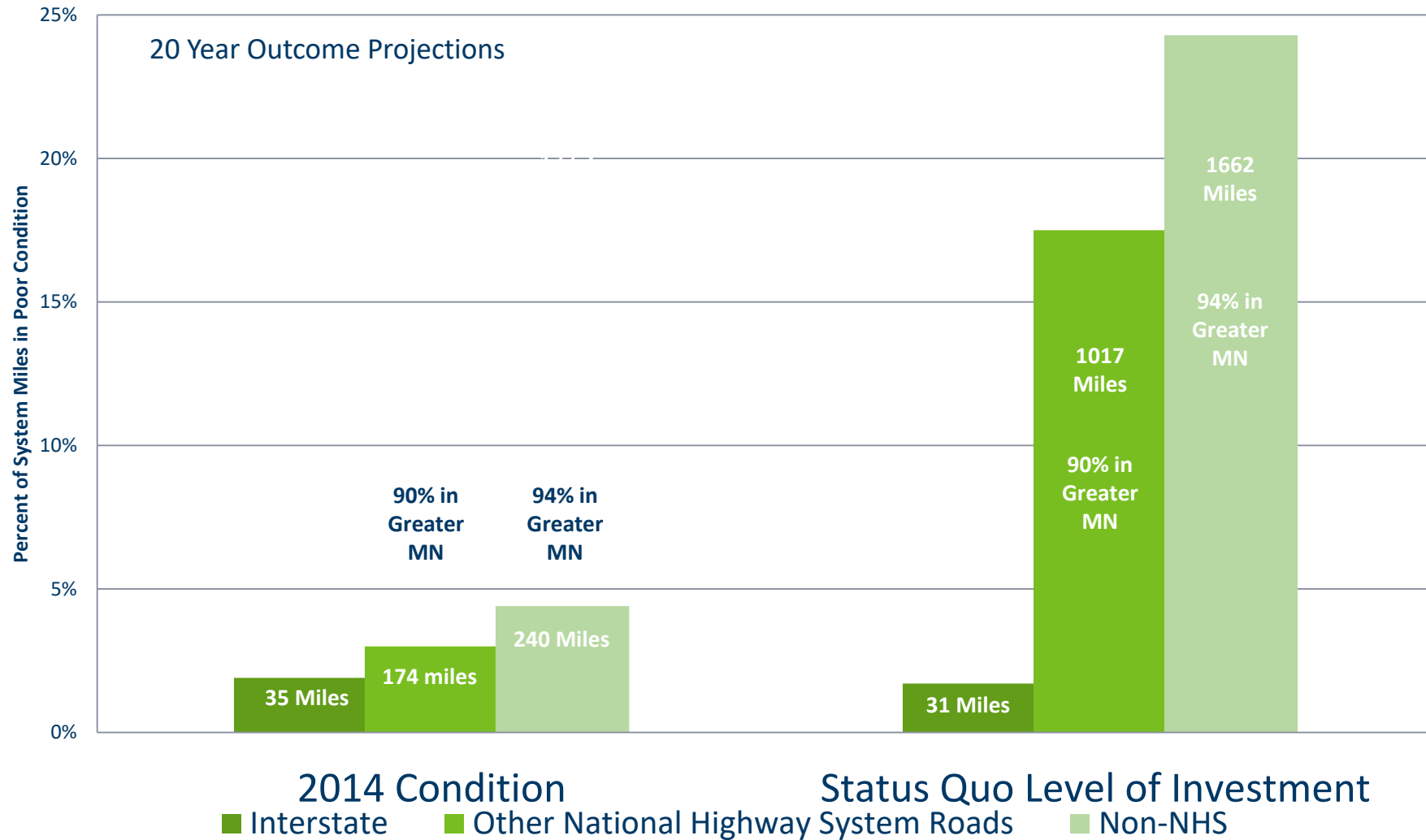


A Financially Unstable Path Forward



No New Funding Scenario
Maintaining Pavements to 2014 Condition
(2018-2037)
\$21 Billion

The Vast Majority of Poor Quality Roads will be in Greater MN with No New Funding



Funding Choices

Scenario	10-year additional \$	Key Outcome
Status Quo	\$0	<ul style="list-style-type: none">• 115% increase in state highway miles in poor condition by 2026• 16% of state roads will have zero remaining service life in 10 years• Limited expansion; preservation only after 2023• More rural roads and bridges in poor condition
Be Economically Competitive/Fund the Gap (sustainable, dedicated long-term funding)	\$6 Billion (gas tax, license tabs, bonding)	<p>Preserve modernize, strategically expand</p> <ul style="list-style-type: none">• Improve 1,700 additional miles of pavement; 235 state bridges• Extend current system's service life; improve safety and access• Complete Corridors of Commerce expansion projects• Remove bottlenecks and improve traffic flow

Additional Investment at a Glance

\$11.946B

\$8.861B
Roads and Bridges

.025B
Bike and Ped

Transit
\$3.06B

\$6B State road
\$5.46B investment
\$.54 efficiencies

\$2.416B County, City,
Townships

\$.19B Cities Under 5,000

\$.19B Large Cities

\$.025B Tribal Road

.04B ADA Local Projects

\$.10B Greater MN
Transit

\$2.96B Metro Transit

What we need to do

- Long-term investment
 - Sustainable
 - Dedicated
 - Predictable
 - \$6 billion for state (ongoing)
 - \$2.41 billion for local governments (ongoing)
- This will provide
 - Fuel economic growth, support business expansion
 - Enhance safety for traveling public
 - Strong, well maintained infrastructure
 - Reduced costs with early fixes
 - Support to thousands of jobs in transportation sector

We need a transportation system that works

- Attracts businesses, employees
- Enables more efficiency
- Reduces congestion
- Enhances road safety
- Fixes our system for future generations

