

Why Is Everything Crumbling? A Look at Deferred Maintenance

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State Fiscal Policy Project

Pew

The Pew Charitable Trusts

- Nonpartisan, not-for-profit philanthropic organization with more than 40 active, evidence-based research projects on public policy issues.
- Projects include a variety of state and local economic policy and government performance initiatives ranging from public safety, state tax incentives, rainy day funds, state-sponsored private retirement security initiatives, and state pension plans for the public sector workforce.
- All follow a common approach: data-driven, inclusive, and transparent.

State Fiscal Policy Project: Long-term Liabilities

- Since 2007, Pew has examined state policies for public employee pension and retiree health benefits. While our work began with a fiscal lens, our research has covered plan design and retirement security, governance and investment practices, and an examination of tools to measure and manage risk.
- We've expanded our work to include a broader set of long-term liabilities that can have major impacts on state fiscal sustainability.
- Our recent research examines the bill coming due for deferred maintenance in investments needed to preserve and rehabilitate state infrastructure.

Deferred Maintenance for State Transportation Infrastructure

Why Do We Care About Deferred Maintenance?

- § **Fiscal Challenge**— Represents a claim on future budgets to pay down long-term liabilities. When states fail to adequately preserve infrastructure assets, long-term costs increase.
- § **Government Performance**—States need tools to measure and manage deferred maintenance liabilities, which are essential for making informed decisions about prioritization and how to stabilize costs.
- § **Resilience**—Building a framework to assess needed investments based on current conditions will enable states to ensure future infrastructure investments are adapted to a changing climate or other risks.

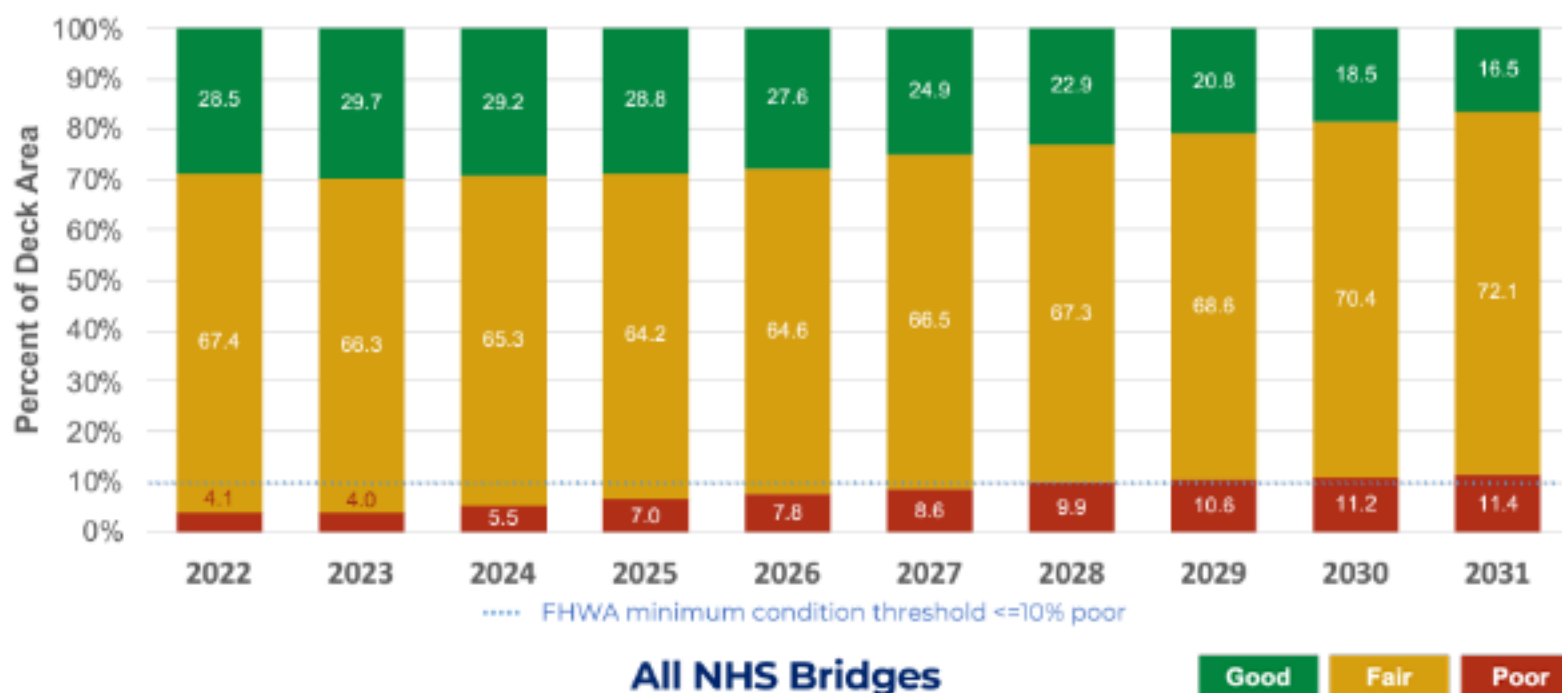
Introduction to Transportation Asset Management Plans

- States are required to release Transportation Asset Management Plans (TAMPs) as part of reporting requirements in the MAP-21 legislation. Initial TAMPs were released in 2019, and most states have issued a 2022 update.
- While there is no comprehensive, 50-state data on state deferred maintenance liabilities, state TAMPs offer a view into how states are managing their transportation infrastructure.
- The TAMP offers a place for state Departments of Transportation (DOTs) to provide forward-looking projections over a 10-year horizon to assess future road and bridge conditions against a target *State of Good Repair*, and compare future needs with projected spending on preservation and repair.

Deferred Maintenance: Pennsylvania's Bridges are Declining

Pennsylvania projects that the state's National Highway System bridges will see a drop in the share in good condition and a rise in the share in poor condition.

All NHS Bridges



Source: Pennsylvania DOT 2022 Transportation Asset Management Plan

Deferred Maintenance: Michigan's Funding Shortfall

Michigan is expected to fall nearly \$15 billion short of investments needed to keep pavement in a state of good repair by 2031.

**Figure 8-3:
State of Good Repair NHS Pavement
Investment Strategy Based on RSL and PASER (in millions)**

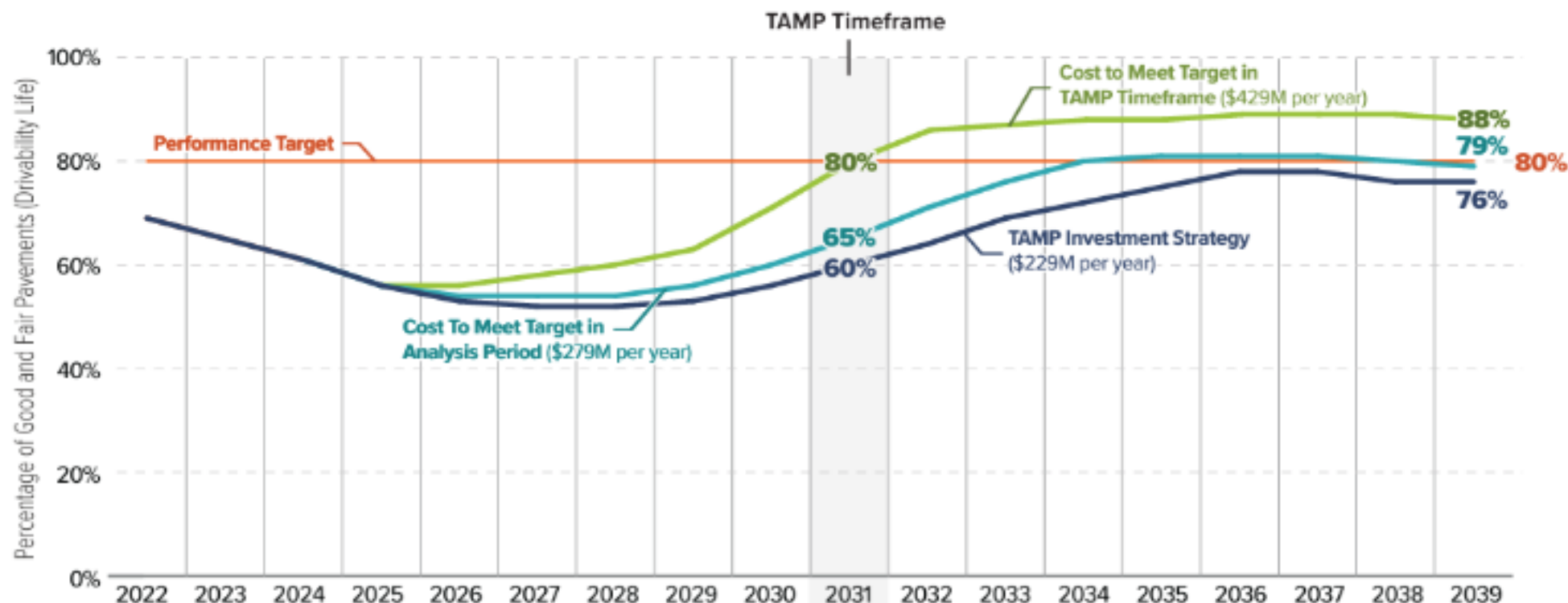
	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	10 Year Total
Expected Cost of Future Work - Constrained Target											
NHS pavement (Trunkline and Local)	\$1,771	\$1,193	\$861	\$611	\$592	\$819	\$836	\$832	\$833	\$826	\$9,177
Pavement State of Good Repair - Expected Work Needed											
Reconstruction	\$1,512	\$1,512	\$1,411	\$1,411	\$1,469	\$1,527	\$1,590	\$1,653	\$1,721	\$1,788	\$15,596
Rehabilitation	\$887	\$887	\$929	\$947	\$986	\$930	\$618	\$386	\$260	\$268	\$7,101
Preservation	\$109	\$109	\$120	\$118	\$124	\$128	\$135	\$139	\$147	\$152	\$1,286
Initial construction*	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Pavement Total	\$2,508	\$2,508	\$2,461	\$2,477	\$2,581	\$2,586	\$2,344	\$2,179	\$2,129	\$2,208	\$23,984
State of Good Repair - NHS Pavement Revenue Gap	(\$737)	(\$1,314)	(\$1,600)	(\$1,866)	(\$1,988)	(\$1,767)	(\$1,508)	(\$1,347)	(\$1,295)	(\$1,382)	(\$14,807)

*MDOT does not plan to construct additional routes within the time frame of the TAMP under any investment strategy.

Source: Michigan DOT 2022 Transportation Asset Management Plan.

Deferred Maintenance: Colorado's Road Conditions Under Different Investment Approaches

Additional investments would be needed to meet the state's performance target.



Source: Colorado DOT 2022 Transportation Asset Management Plan

Deferred Maintenance: Montana is Catching Up

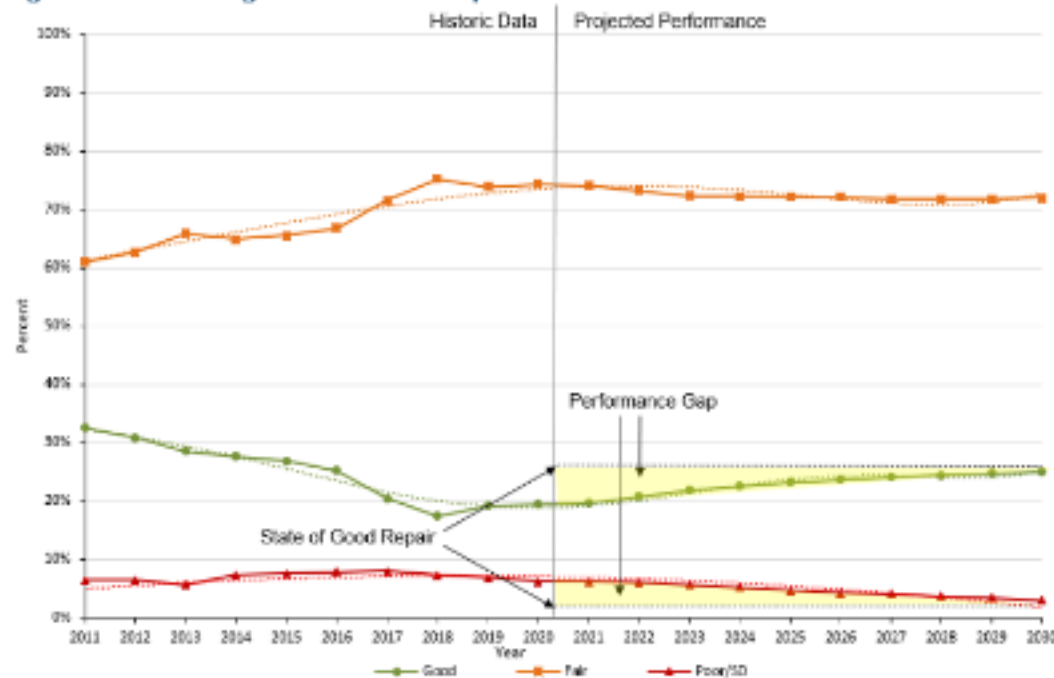
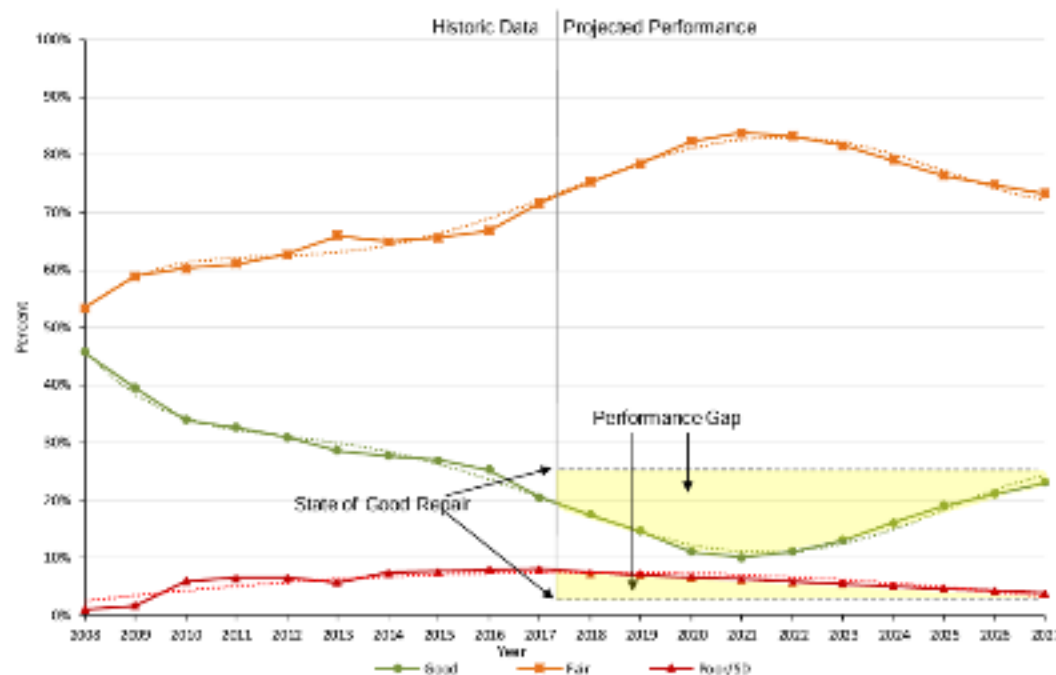
Montana Department of Transportation doubled investments in bridges from \$25 million annually in 2017 to \$50 million in 2022.

2019 TAMP

2022 TAMP

Figure 6-2 NHS Bridge Performance Gaps

Figure 6-2 NHS Bridge Performance Gaps



Source: Montana DOT 2019 and 2022 Transportation Asset Management Plan

Deferred Maintenance: Illinois TAMP Evaluates Strategies

Illinois DOT found an optimized approach to preserving roads could increase the share in acceptable condition.

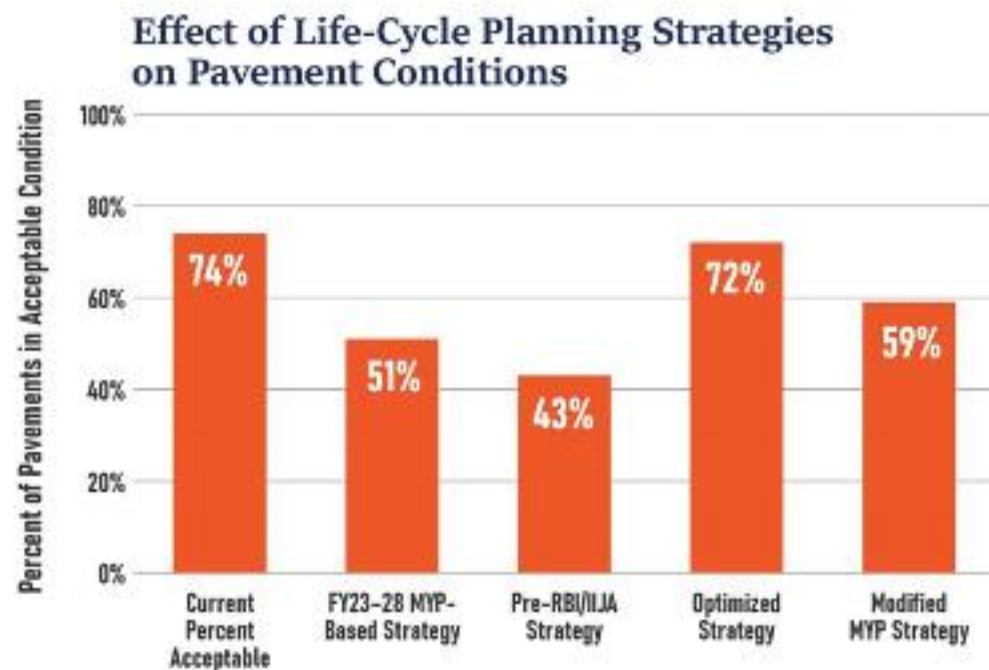
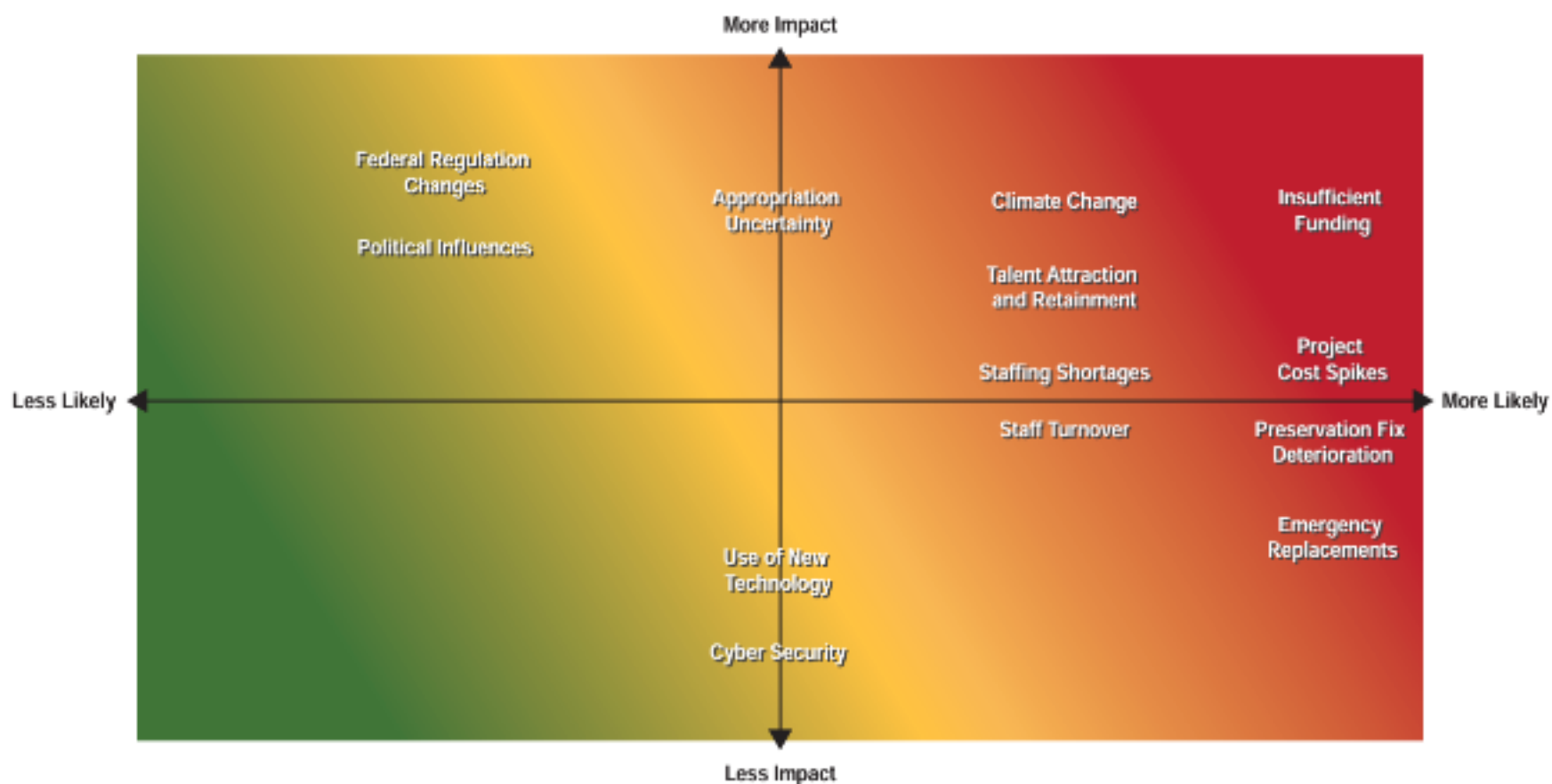


Figure 5-3. Life-Cycle Planning Strategies Effect on Pavement Conditions.

Managing Risks to Transportation Systems

Like other state DOTs, Michigan's risk analysis for roads and bridges assesses challenges based on likelihood and severity.

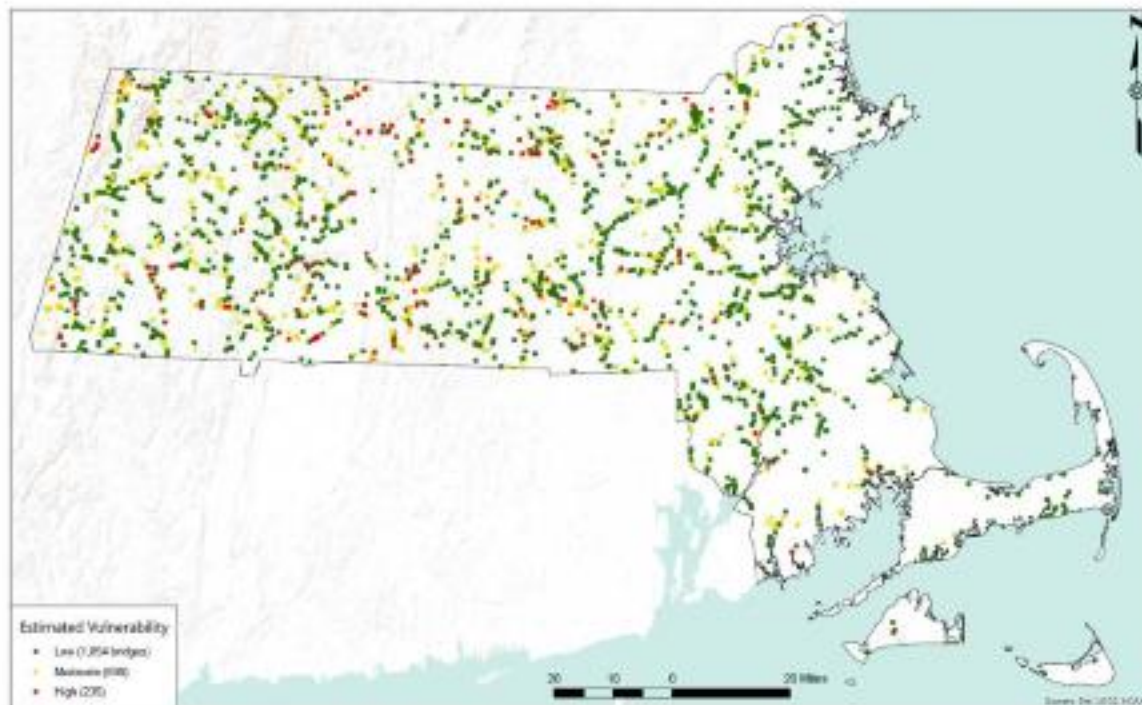


Source: Michigan DOT 2022 Transportation Asset Management Plan

Assessing Climate Risk: Massachusetts

Massachusetts identifies vulnerable bridges in their TAMP to help guide inspection and replacement efforts.

Exhibit 5.1 Vulnerable Bridges over Massachusetts Rivers and Streams, Physical Design and Flow Characteristics



This information will be used to drive inspection and replacement efforts going forward.

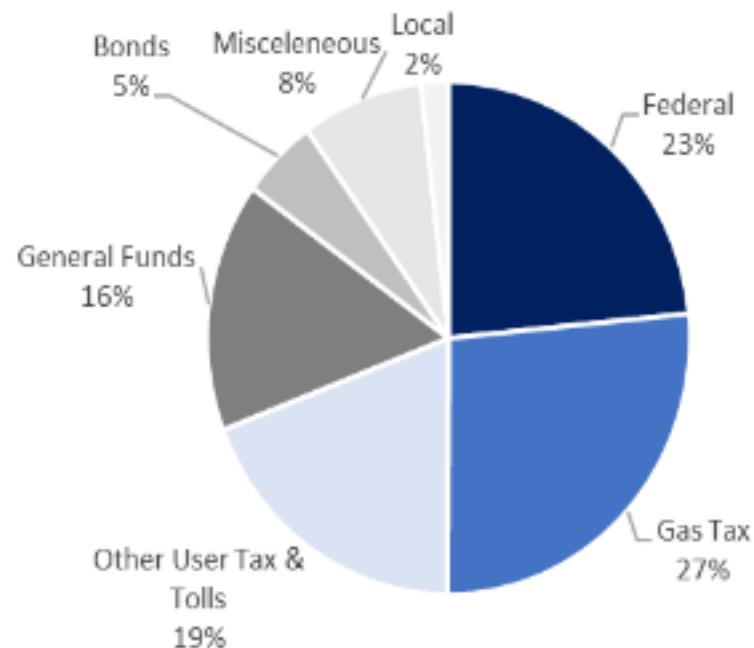
Source: Massachusetts DOT 2022 Transportation Asset Management Plan

Considerations for Future Transportation Funding

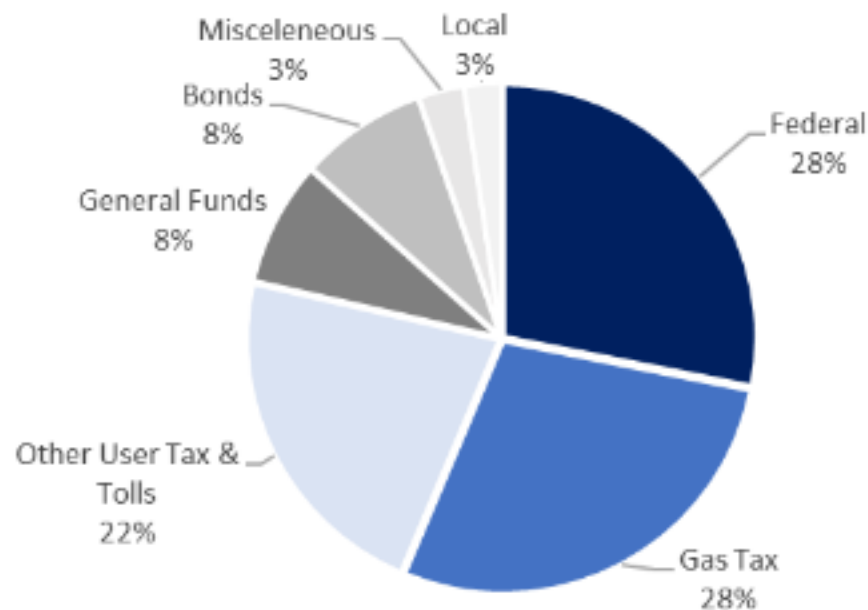
Where Does Money for Highways Comes From?

About half of highway revenues comes from gas taxes and the Federal government.

50-State Revenue Sources for Highways, 2022



50-State Revenue Sources for Highways, 2002



Source: Federal Highway Administration (FHWA)

What will the Federal Role be going Forward?

The American Society of Civil Engineers estimated the infrastructure gap based on IJA-level investments continuing as well as a “snap-back” to prior levels of funding.

Table 3. Twenty-Year Gaps by Scenario 2024-2043

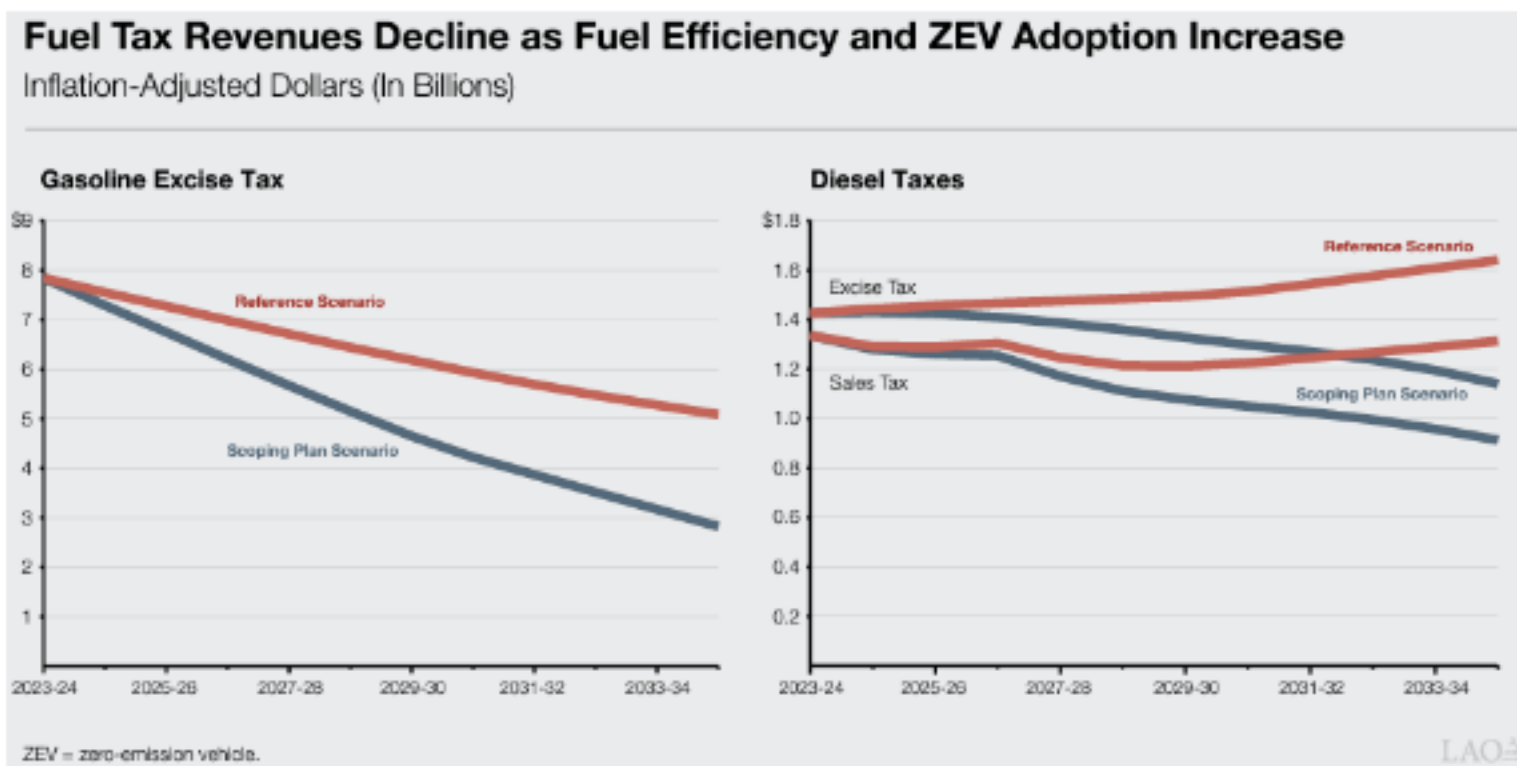
Scenario		Continuing to Act		Snapback	
Major Infrastructure Sector	Needs	Anticipated Investment	Gap	Anticipated Investment	Gap
Surface Transportation	\$6,718	\$4,450	\$1,768	\$3,481	\$3,237
Energy	\$4,101	\$2,686	\$1,415	\$2,345	\$1,756
Drinking Water, Wastewater, & Stormwater	\$3,587	\$1,469	\$2,118	\$1,344	\$2,243
Water Transportation	\$110	\$79	\$31	\$61	\$49
Aviation	\$675	\$394	\$281	\$310	\$365
TOTALS	\$15,190	\$9,578	\$5,612	\$7,541	\$7,650

Dollars in 2022 Billions

Source: American Society of Civil Engineers, “Bridging the Gap Report” (2024).

California Estimates a 31% Drop in Transportation Revenue

A LAO analysis showing the effects of policies to reduce GHG as well as the impact of increased fuel efficiency and EV adoption on gas and diesel taxes.



Source: Assessing California's Climate Policies, California Legislative Analyst Office

Framework for Long-term State Policy Planning

Discussion

- § How does your state assess its infrastructure assets and current and future investments needed to preserve those assets?
- § Is there medium- and long-range planning integrated into the capital budgeting process?
- § Is your state prepared to adapt to different fiscal conditions depending on the future of Federal spending or a reductions in fuel tax collections?
- § What lessons-learned in your state could others benefit from knowing?
- § How can Pew's research help?

For more information:

<https://www.pewtrusts.org/en/projects/state-fiscal-policy>

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