

Aging Pipes and Crumbling Infrastructure: The Cost of Maintenance

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Pew

The Pew Charitable Trusts

- Nonpartisan, non-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 like 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

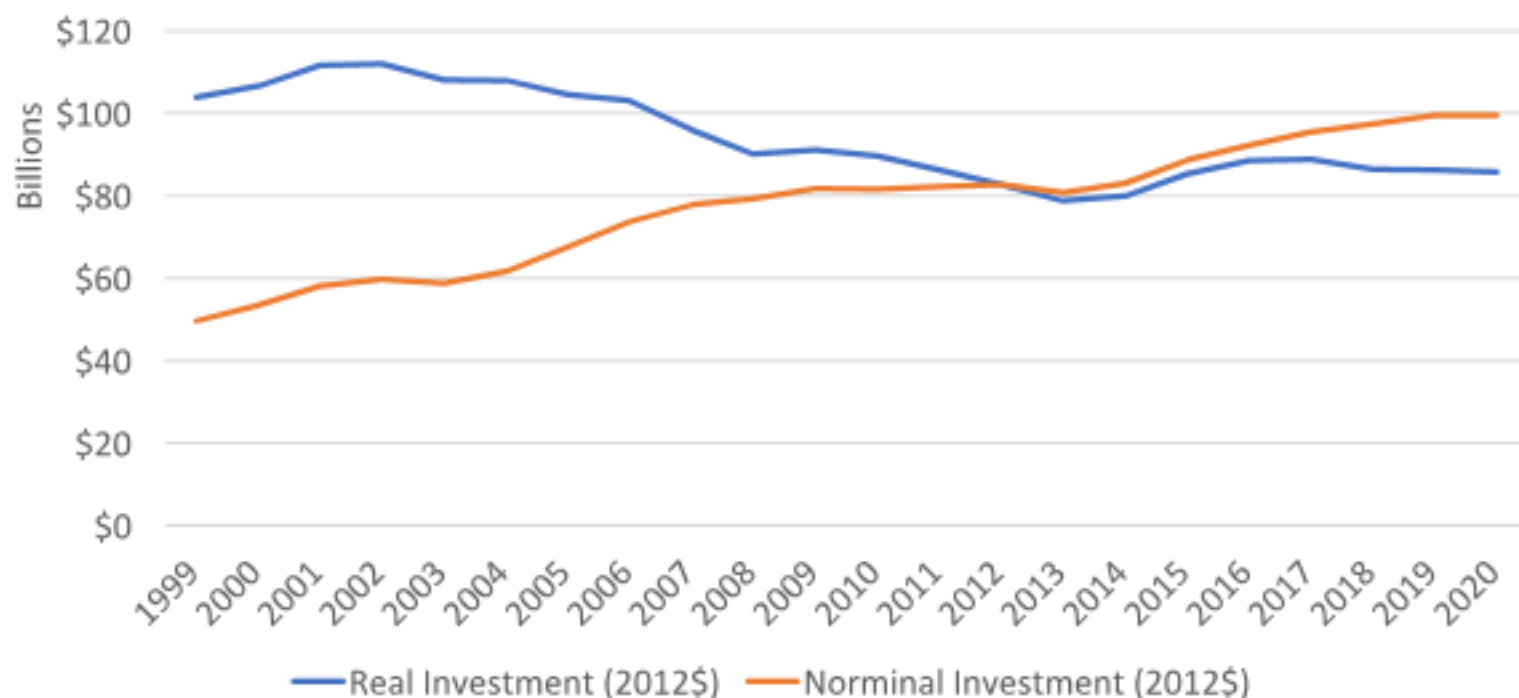
- Since 2007, Pew has examined state policies for public employee pension and retiree health benefits. While our work began with a fiscal lens, our research has covered plan design and retirement security, governance and investment practices, and an examination of tools to measure and manage risk.
- 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.

Paying for deferred maintenance for state infrastructure

- The BEA estimated that the value of state and local highway, transit, and water infrastructure in 2020 was nearly \$6 trillion. Meanwhile, many states are struggling to manage the cost of maintaining and preserving those assets.
- When state investments in capital maintenance and preservation fall short, it effectively adds long-term liabilities to state balance sheets while simultaneously leaving state residents with crumbling roads and bridges and aging water systems.
- A forward-looking framework for assessing needs, identifying required investments, and funding those costs sustainably can empower states to effectively manage this fiscal and policy challenge, ensuring the long-term health and sustainability of their infrastructure.
- Pew's research and exploration into state surface transportation is meant to both examine an important area of state infrastructure and to identify broadly applicable best practices in sustainably managing public infrastructure assets.

Investment in State and Local Highways Over Time

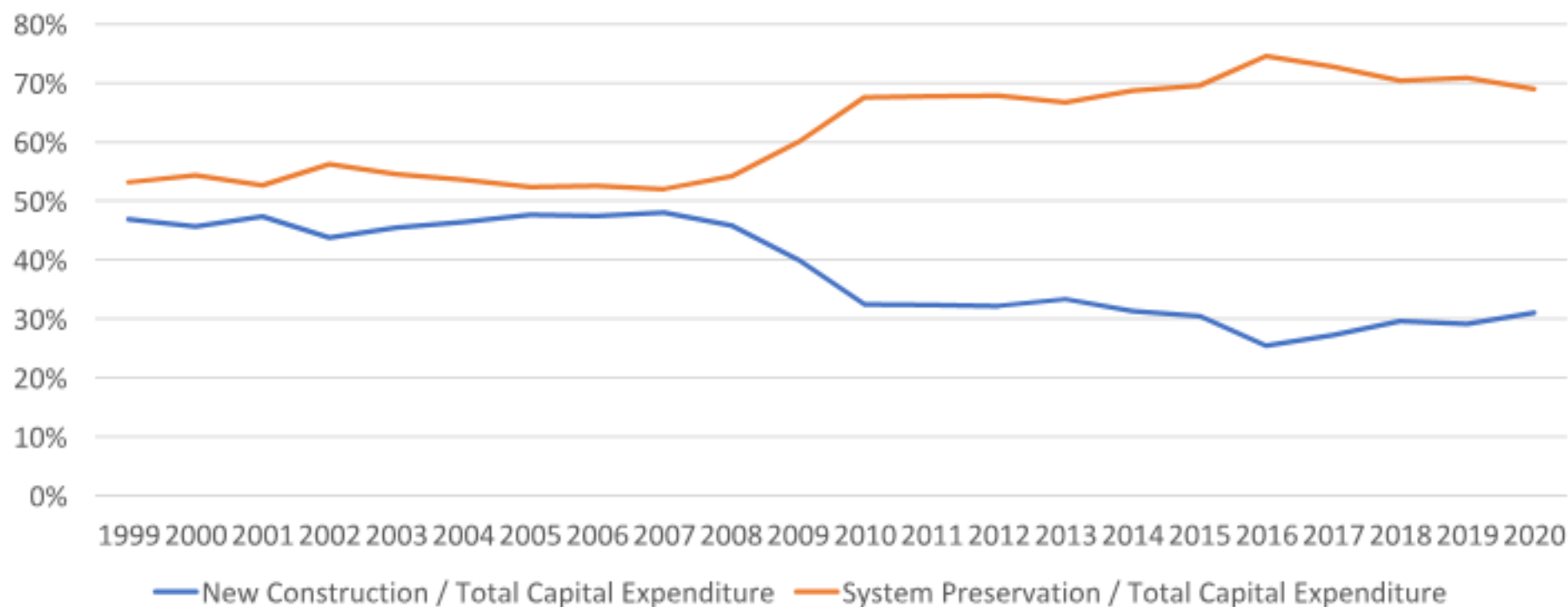
Real investments in state and local highways dropped from a peak of over \$100 billion in 2001 to about \$85 billion in 2020.



Source: Measuring infrastructure in the Bureau of Economic Analysis National Economic Accounts (2020)

How Are States Using Road and Bridge Dollars?

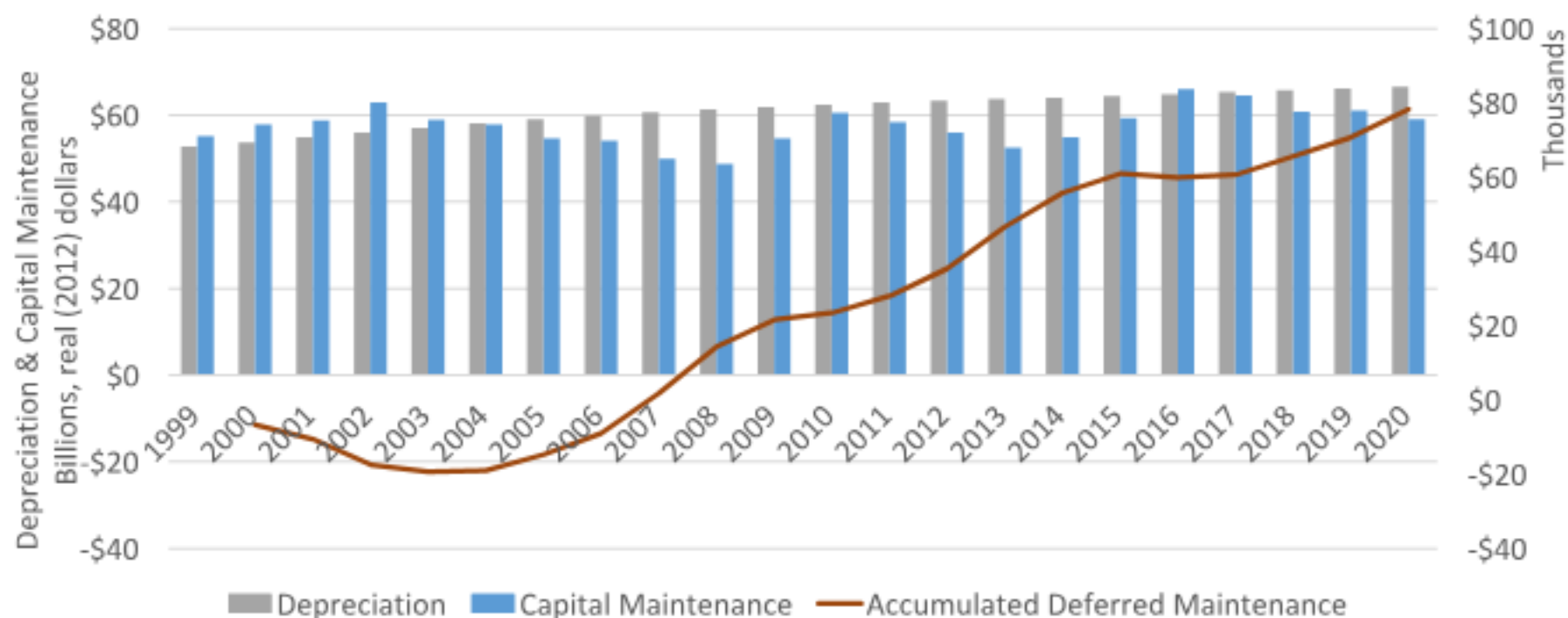
State reporting to FHWA indicates that the majority of state road and bridge investments are going to existing assets rather than new projects.



Source: FHWA Highway Statistics Series

Investments Can't Keep Up with Deterioration

Starting in 2006, state and local investments have been unable to keep pace with the estimated annual decline in the value of existing state and local highways and streets.



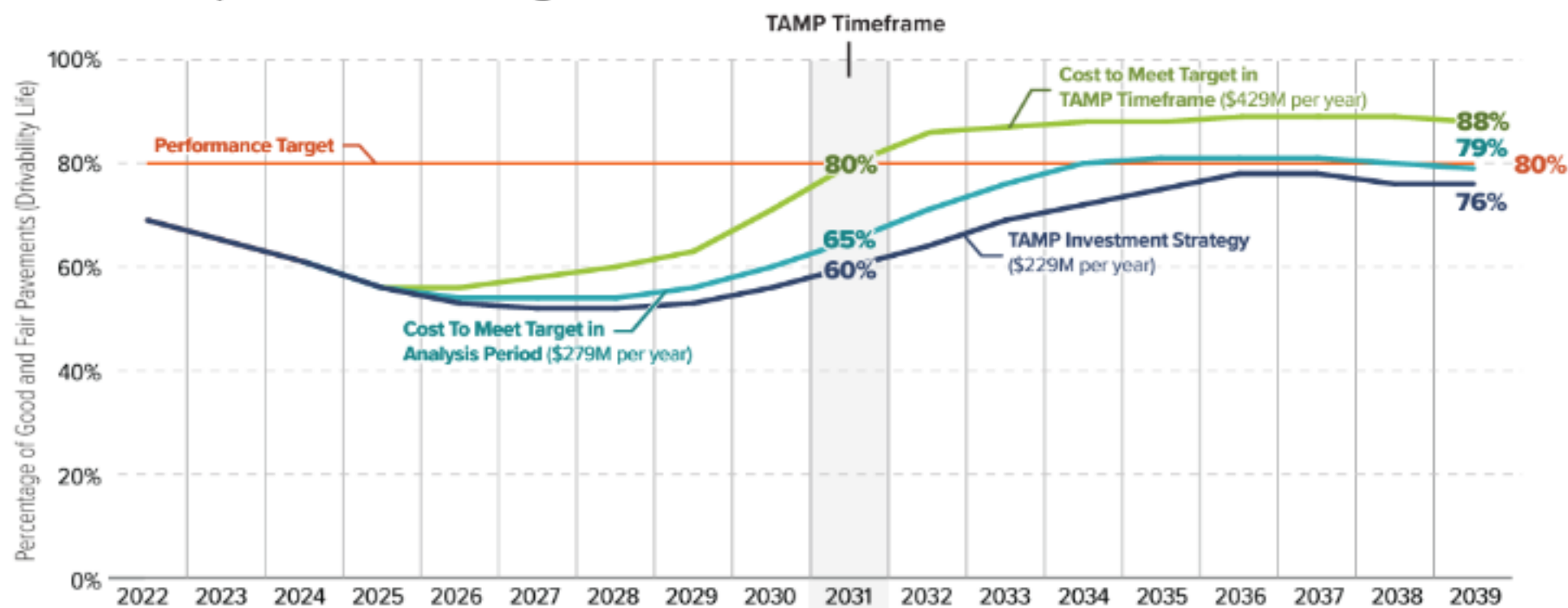
Source: Pew's own calculation based on FHWA and BEA data from 1999 to 2020

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.

State DOT Reporting Can Help Policymakers Assess Gaps

Colorado would need to invest an additional \$50 million annually into the state highway system to meet the state's performance target.



Source: Colorado DOT 2022 Transportation Asset Management Plan

Inventory Based Assessments Can Track Backlogs

An analysis of roads in Washington State indicated a \$3.5 billion deferred maintenance shortfall, concentrated in county and urban roads.

	Total Lane-Miles	Total Deferred Maintenance	Total "Very Poor and "Poor" Condition Lane-Miles	Deferred Cost for "Very Poor" and "Poor" Condition	Total "Fair" Condition Lane-Miles	Deferred Cost for "Fair" Condition	Total "Good" Condition Lane-Miles	Deferred Cost for "Good" Condition	Total "Very Good" Lane-Miles
State	16,370	\$801 Million	2,194	\$596 Million	4,472	\$205 Million	9,704		
Counties	49,017	\$1.990 Billion	5,868	\$1.440 Billion	10,444	\$436 Million	14,026	\$114 Million	18,679
Cities in Study	4,283	\$723 Million	2,004	\$683 Million	1,341	\$34 Million	656	\$6 Million	282
TOTAL	69,670	\$3.51 Billion	10,066	\$2.72 Billion	16,257	\$675 Million	24,386	\$120 Million	18,961

Source: Analysis produced by Paul Chinowsky and Resilient Analytics for Pew

What Comes Next—Future Fiscal Challenges

- ☐ How does changing climate conditions and the need for resilience add to the liability?
- ☐ Will there be a fiscal cliff from IIJA?
- ☐ What will the budget impact of electric vehicle transition be?
- ☐ How can states effectively manage all categories of public infrastructure?
- ☐ How can states work with local governments and with each other?

Discussion

- ☐ What information on roads, bridges, or other infrastructure would be most useful for budgeting and fiscal decisions?
- ☐ How can long-term considerations be brought into infrastructure investment choices?
- ☐ Is your state prepared to manage uncertainty from Federal policy changes, climate change, or the electric vehicle transition?
- ☐ How can Pew help?