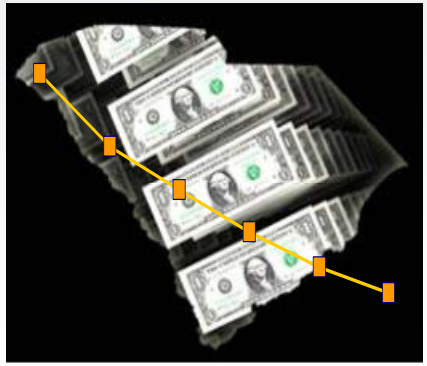
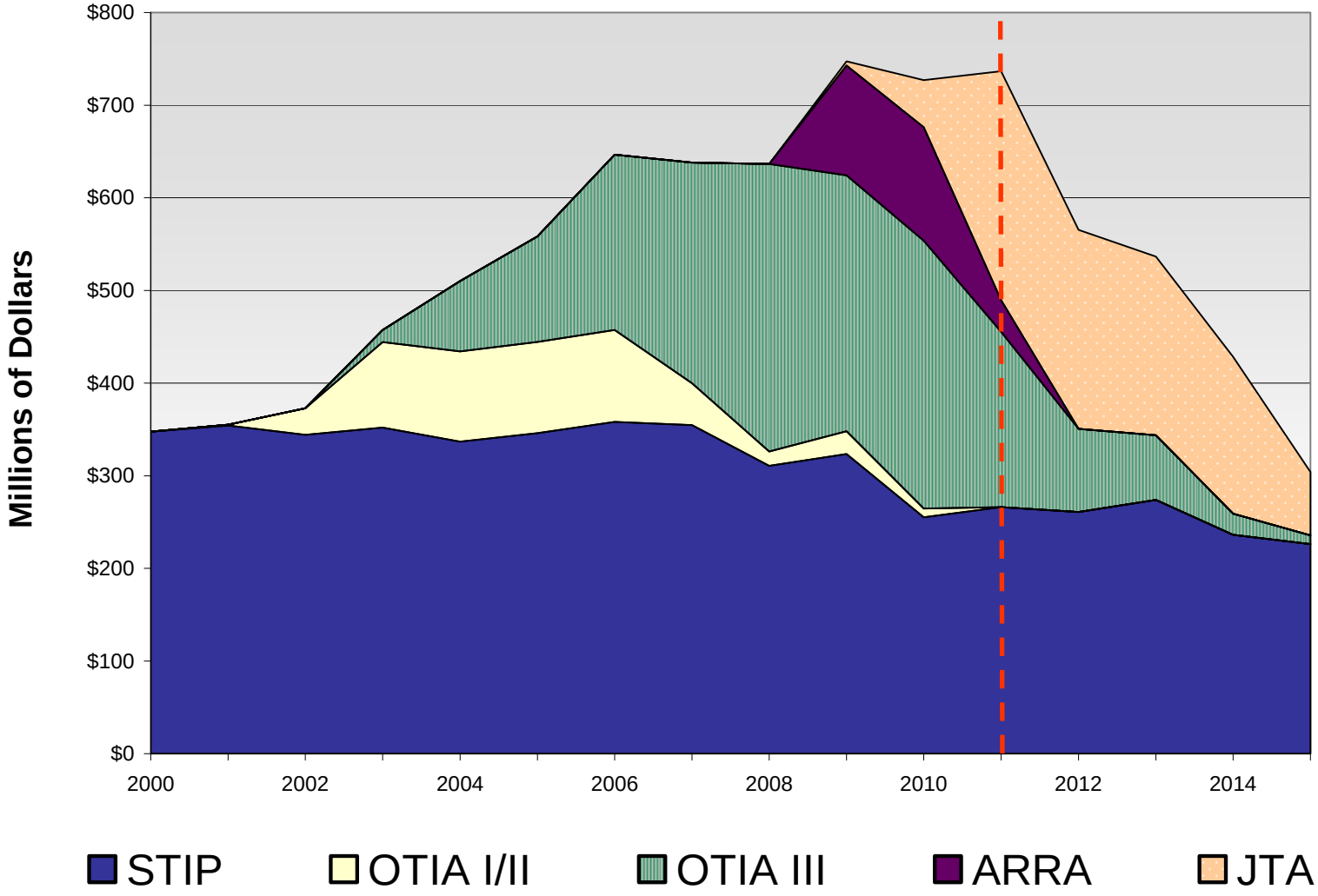
Looking Forward: Projected Funding and Impacts on Highway Conditions



Overview

- The transportation system is facing significant funding challenges
- The highway system will deteriorate at projected investment levels
- New strategies are needed to preserve the highway system

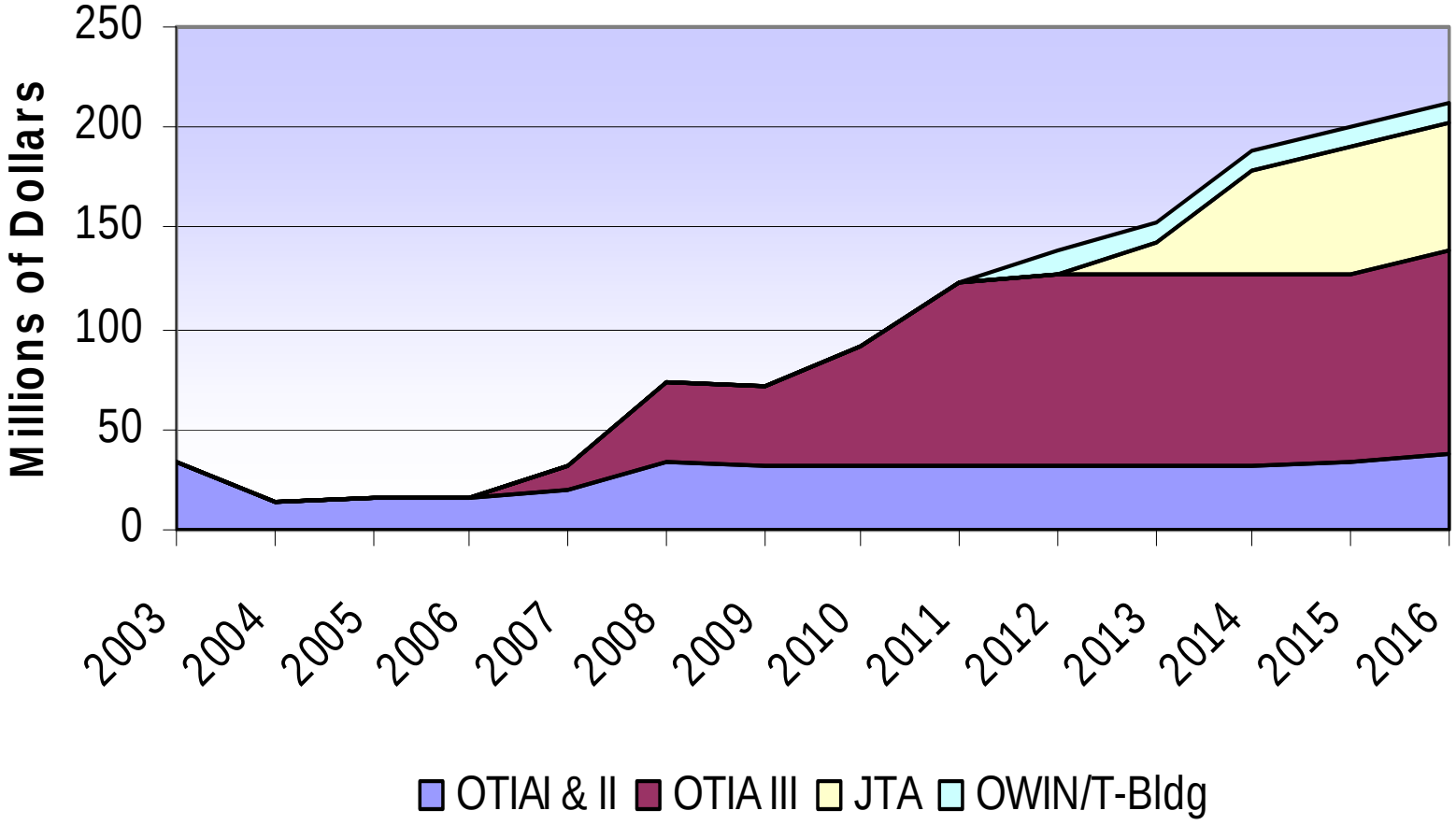
ODOT Capital Program



Funding Challenges

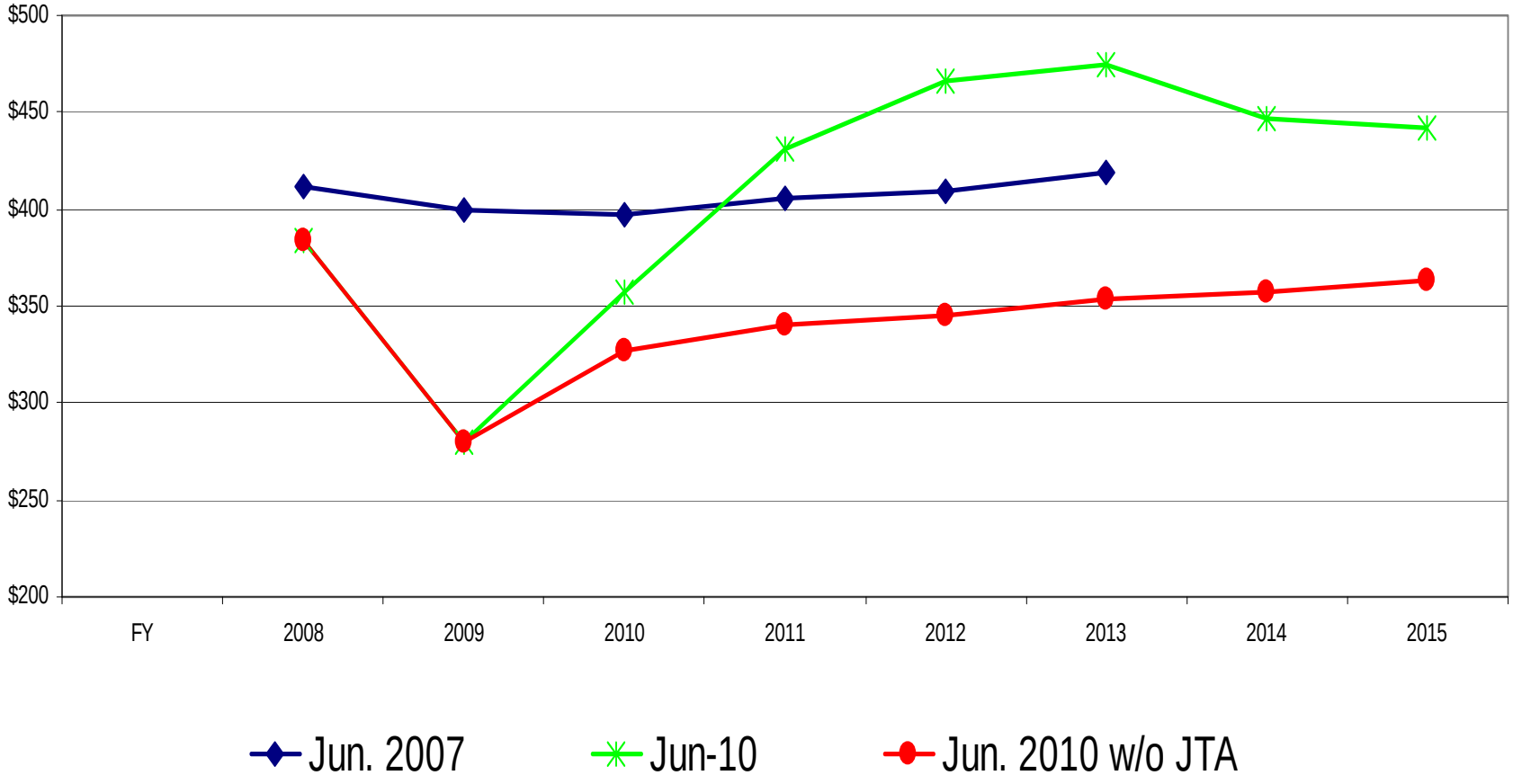
- The OTIA and JTA programs were frontloaded and will involve significant debt service
- State highway fund revenue is down significantly
- Federal transportation funding is likely to fall
- The gas tax may not be a sustainable funding source in the long-term

ODOT Highway Fund Debt Service

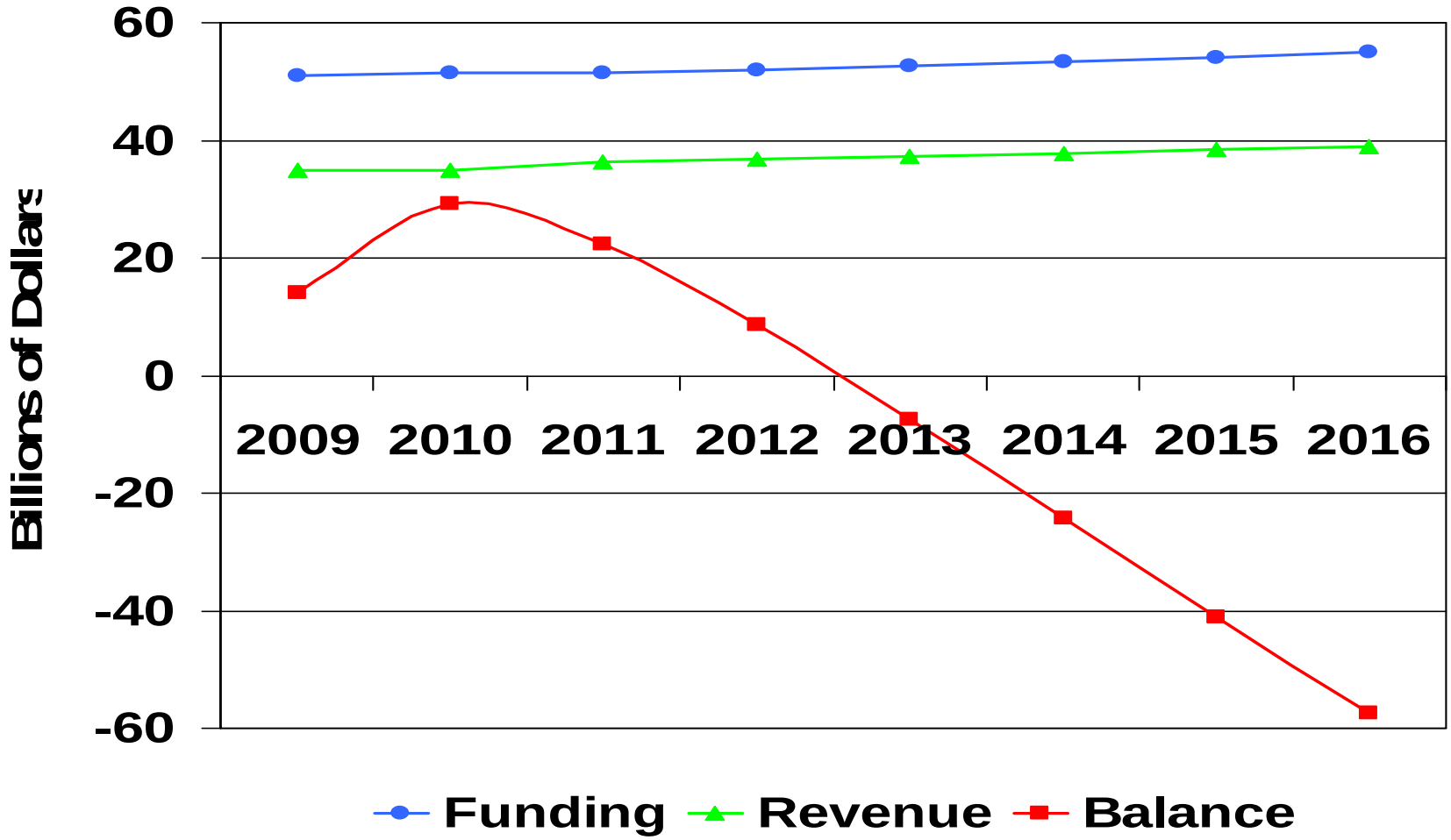


State Highway Program Revenue Forecasts

(In Millions)

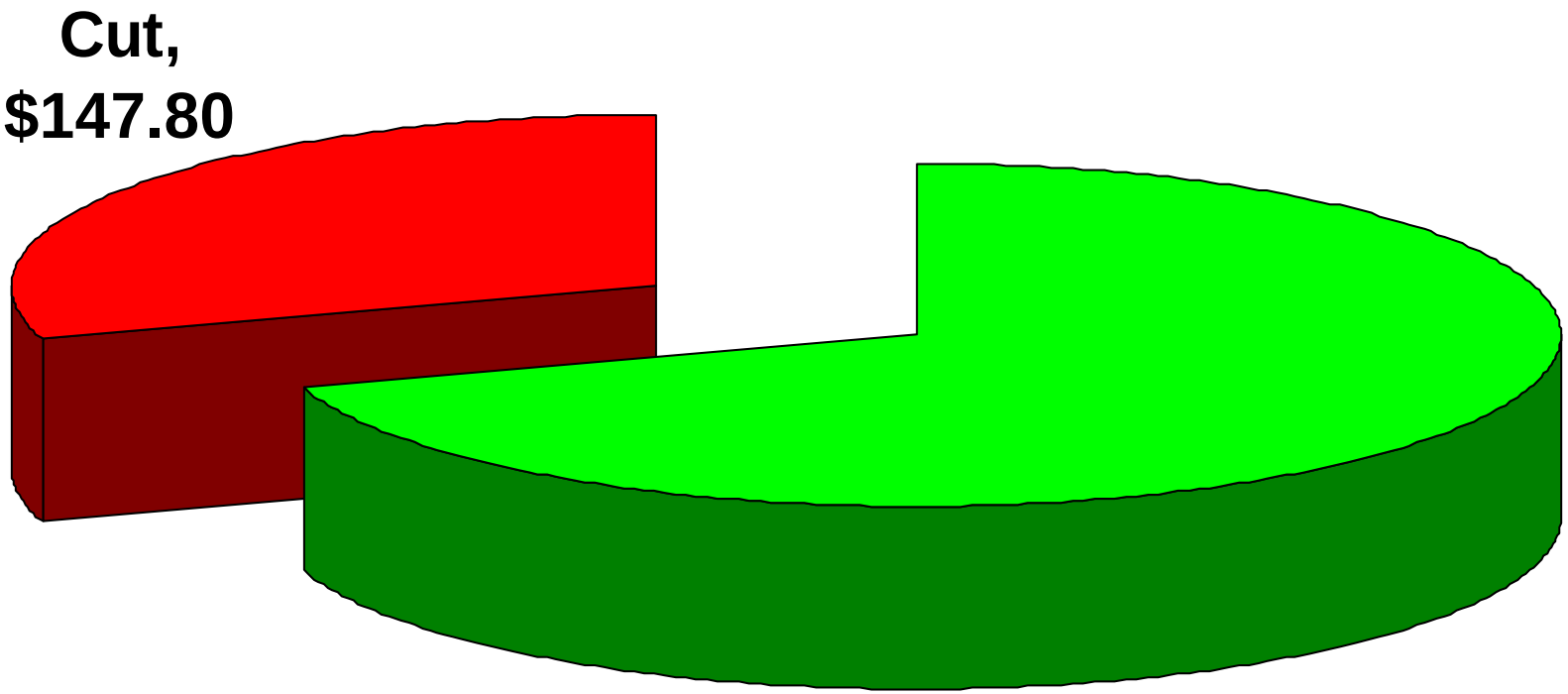


Federal Highway Trust Fund Finances



Oregon's Annual Federal Highway Program Funding

(In Millions)



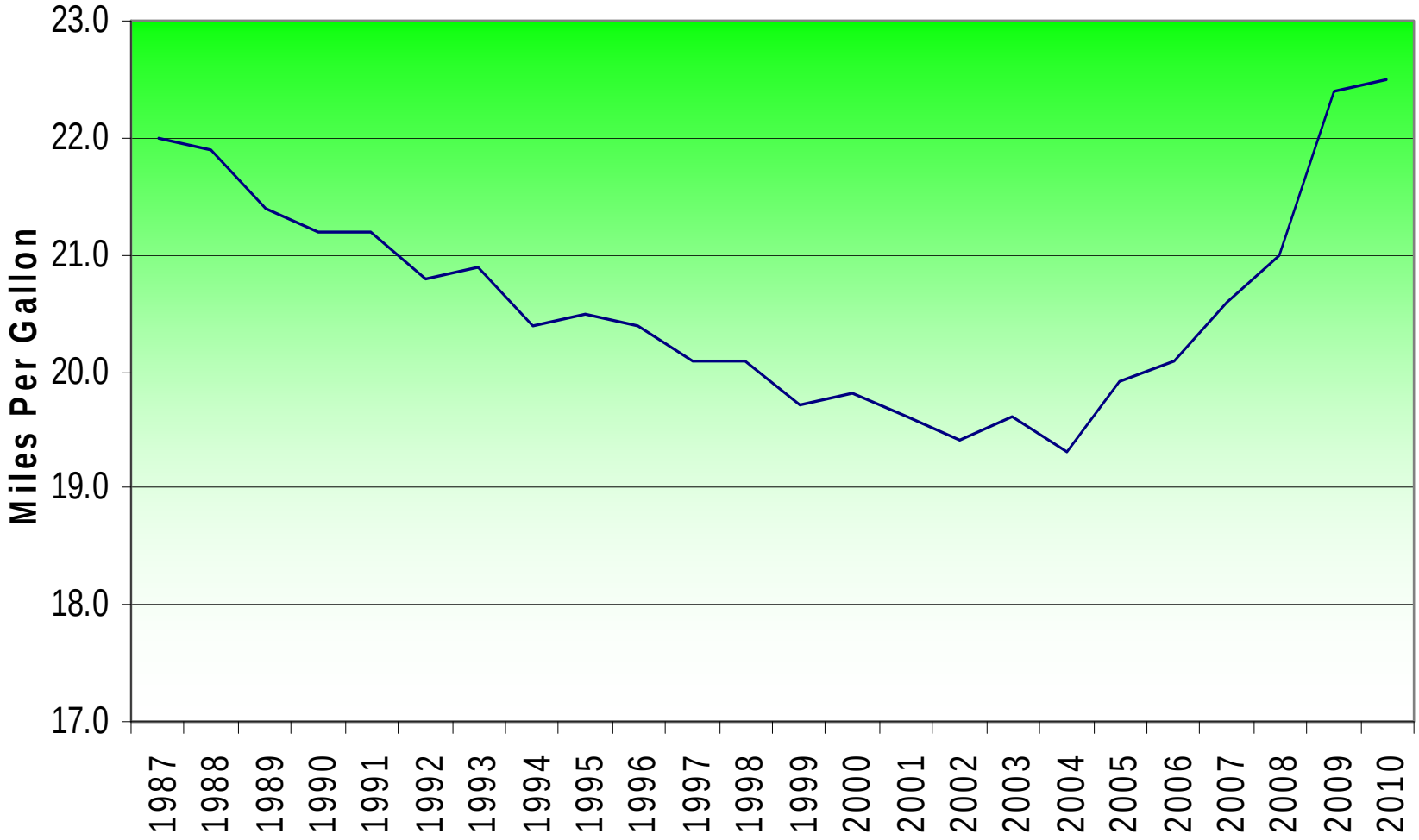
Future of the Gas Tax

Whether the gas tax is a sustainable funding source for the long-term is in question

- Gas tax provides 40% of State Highway Fund's revenues and majority of federal Highway Trust Fund
- More fuel efficient vehicles and alternative fuels are reducing revenue
- Gas use peaked in 2006, fuel efficiency has increased 16% since 2004

Light Duty Vehicle Fuel Efficiency

(By model year)



Bridge Conditions

Bridge conditions will significantly deteriorate over the next several decades

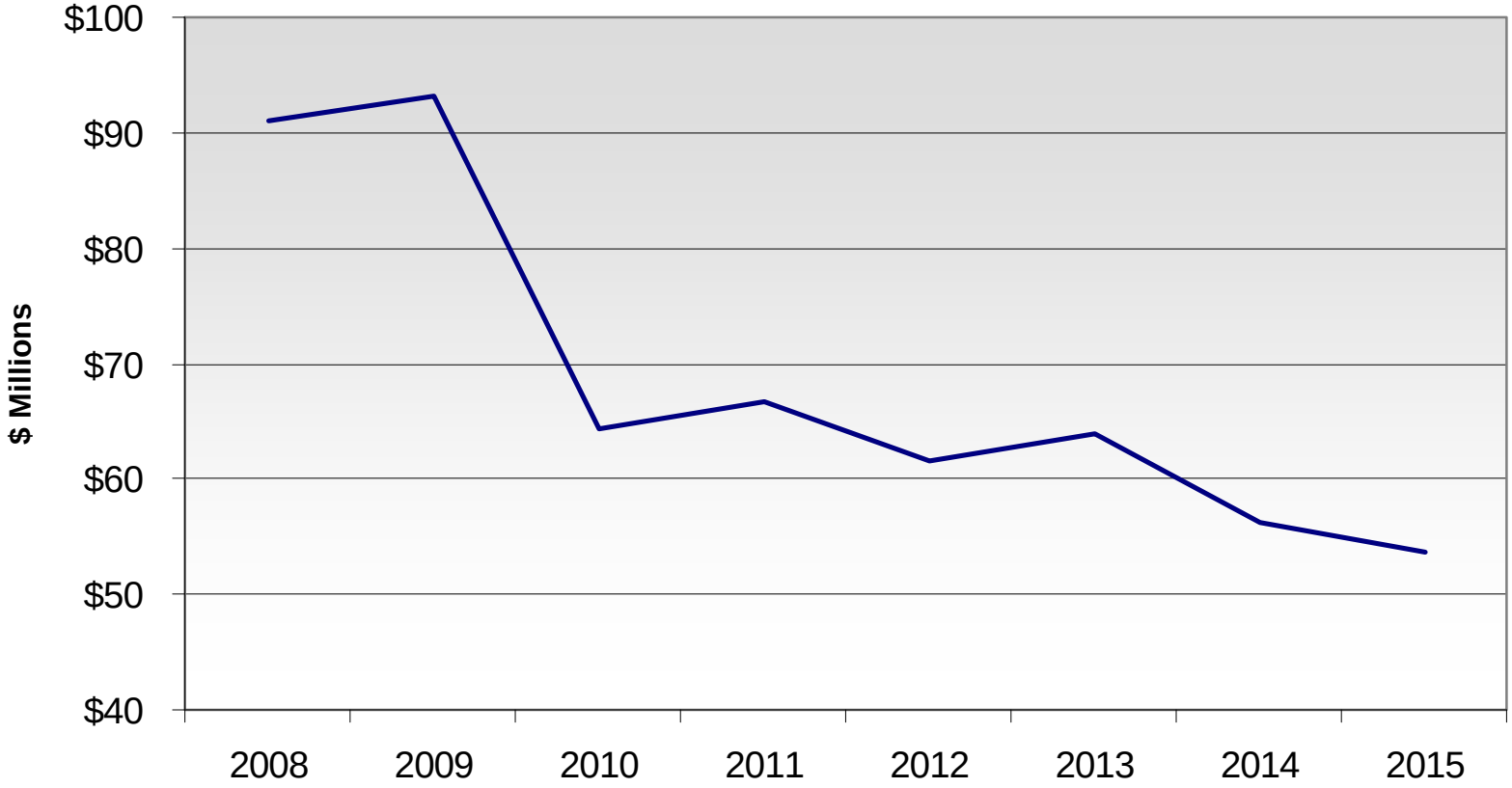
- OTIA III State Bridge Program helped bring bridges up to better condition
- 75% of bridges now classified as non-distressed
- OTIA III did not provide long-term sustainable funding for bridges

Bridge Funding

- OTIA III bond debt repayments will require reductions to the Bridge Program
- Federal bridge funds are expected to fall
- Inflation has further reduced purchasing power
- Funding levels for 2012-15 are the lowest since the mid-1990s

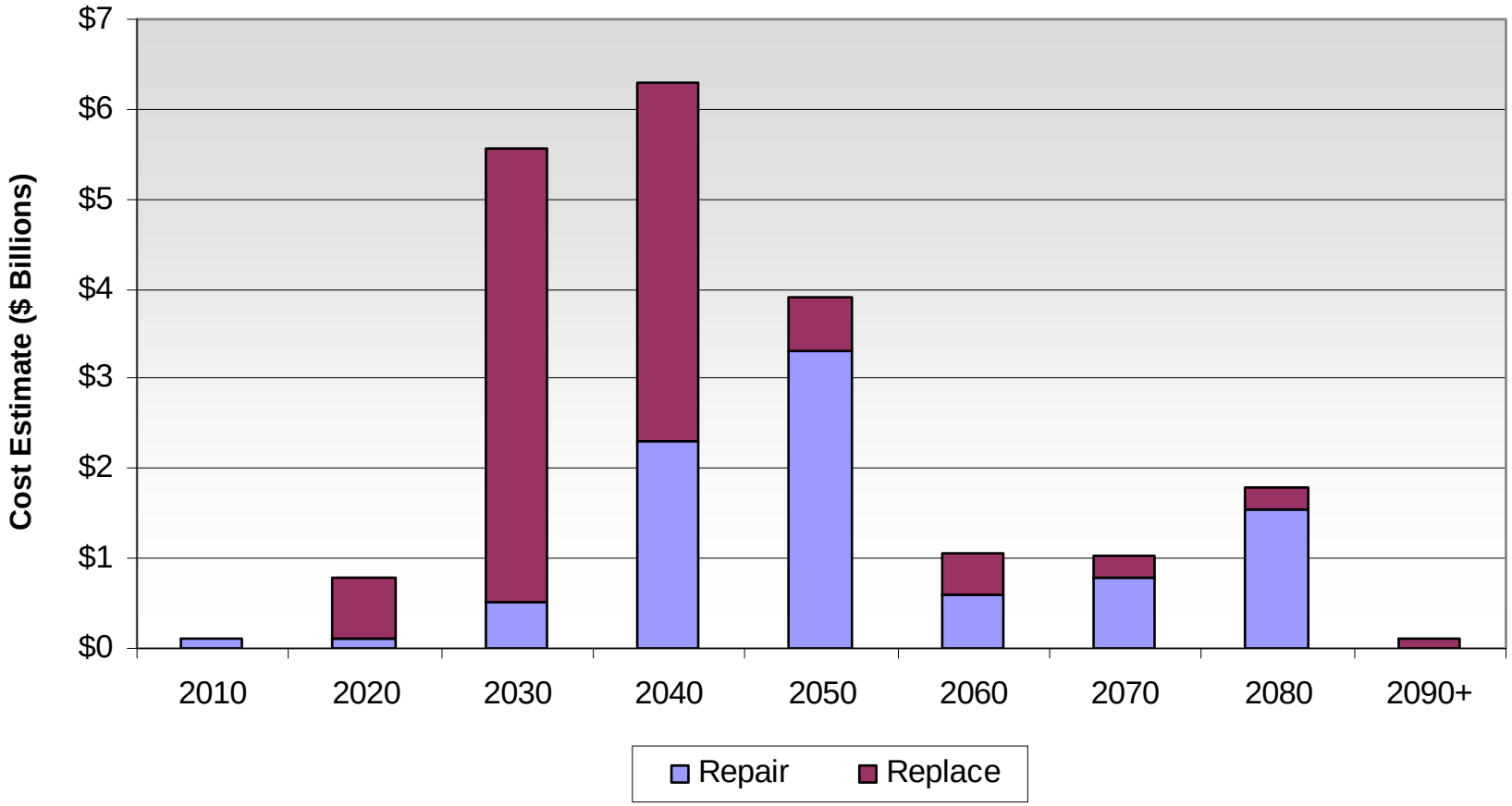
STIP Bridge Funding

(2008-2015)



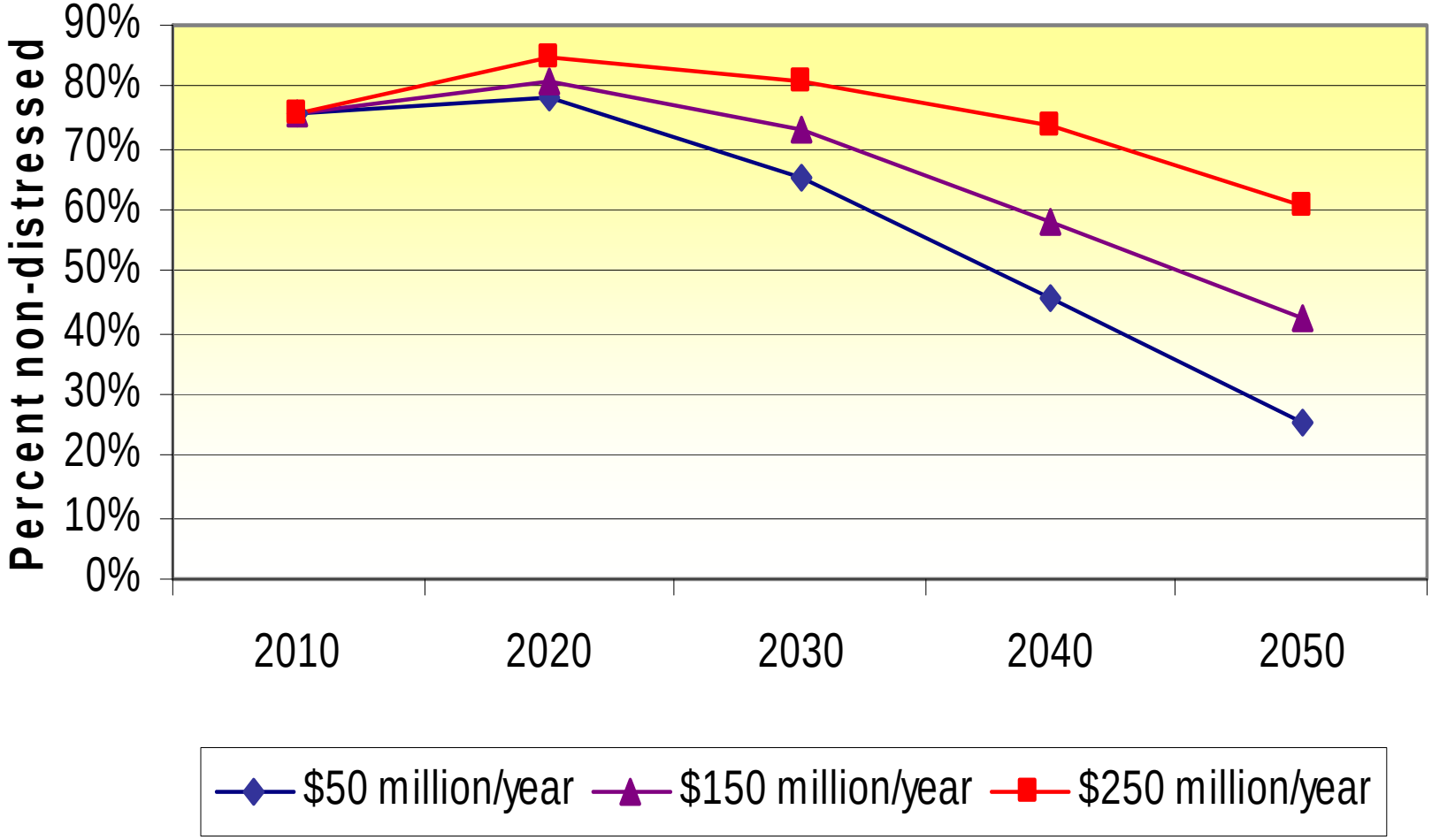
Bridge Needs By Decade

(2010-2090)



Non-Distressed Bridges

(2010-2050)



Out of 2692 Bridges

Bridge Preservation Strategies

- Protect high value coastal, historic, major river crossings, and border structures by **acting before cost becomes prohibitive**
- Use **Practical Design** and fund only basic bridge rehabs and rare replacements with bridge funds
- Give priority to **maintaining the highest priority freight corridors**
- Develop **bridge preventive maintenance program** to extend the service life of decks and other components

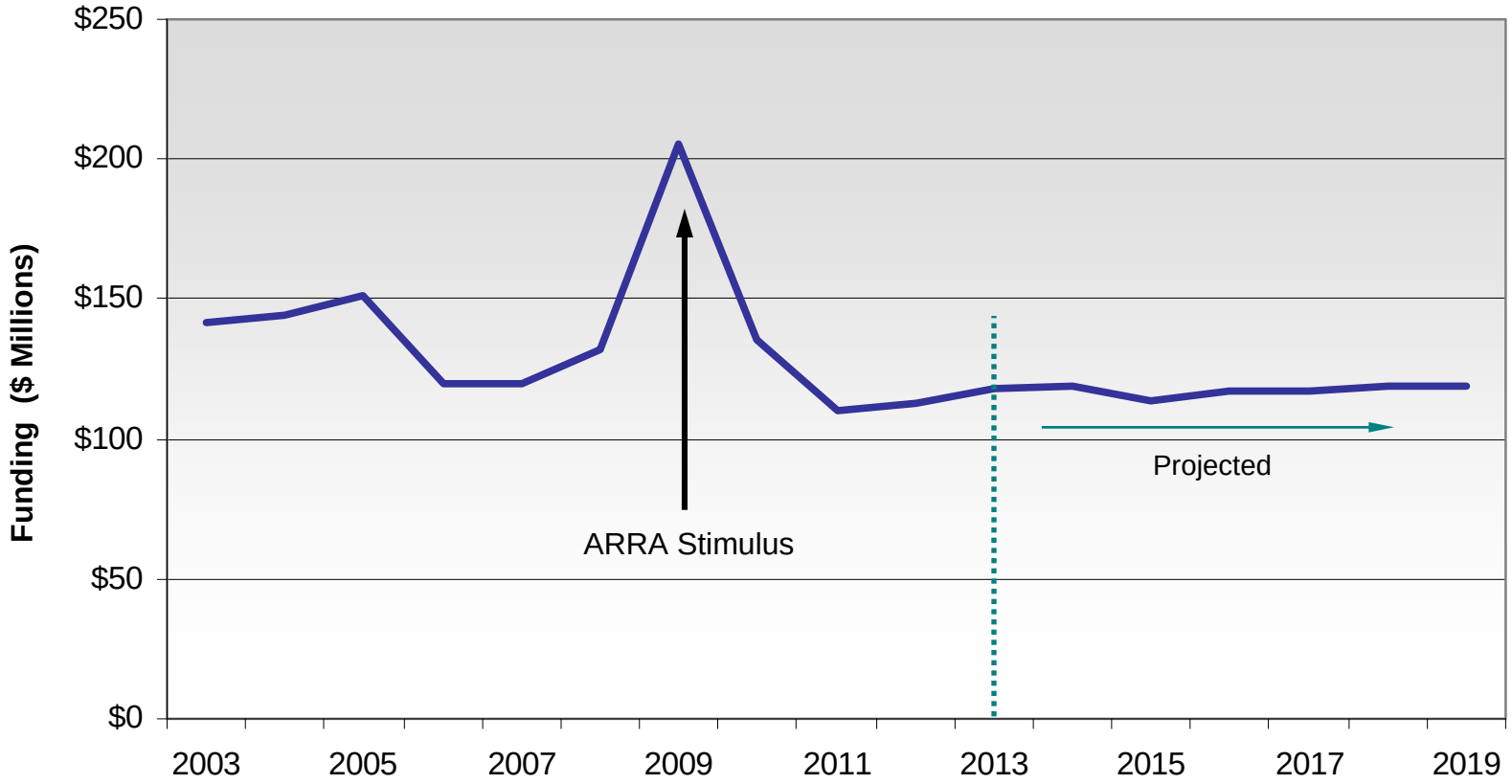
Pavement System Conditions

Pavement conditions will significantly deteriorate over the next decade

- **Expected decline in federal funds** has resulted in cuts to Preservation funding
- **Inflation** has significantly reduced purchasing power

Pavement Funding

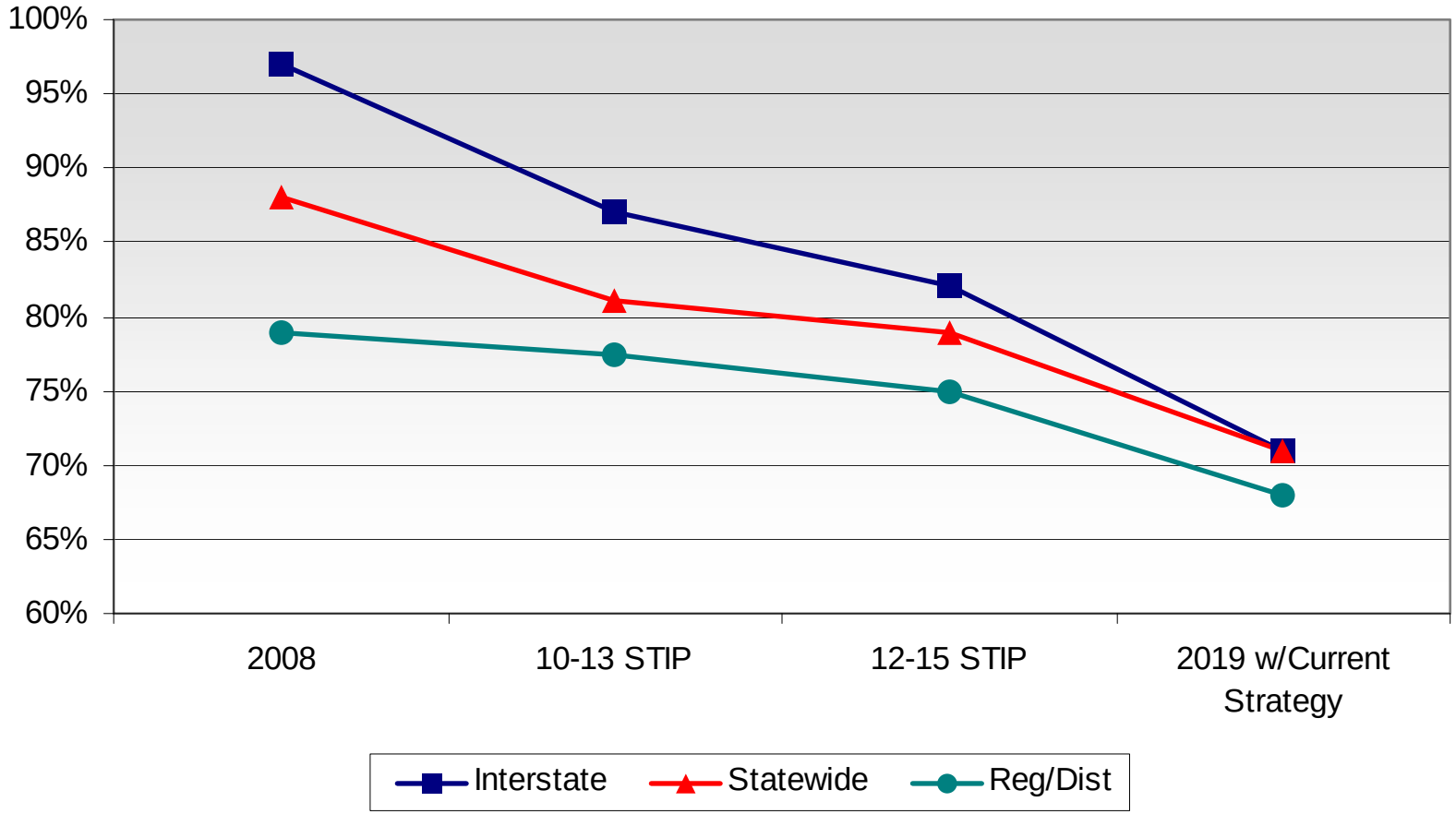
(2003-2019)



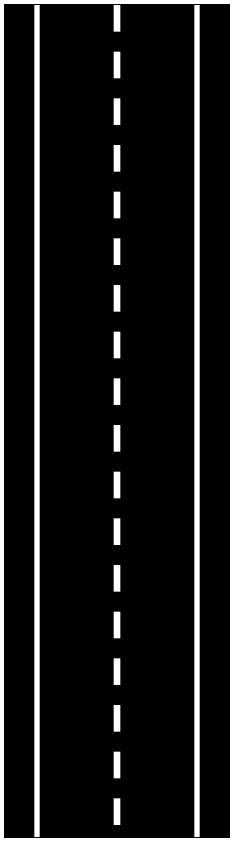
Actual funding levels are shown. Values are not adjusted for inflation effects.

Percent Pavements Fair or Better

(By Highway Type 2008-19)

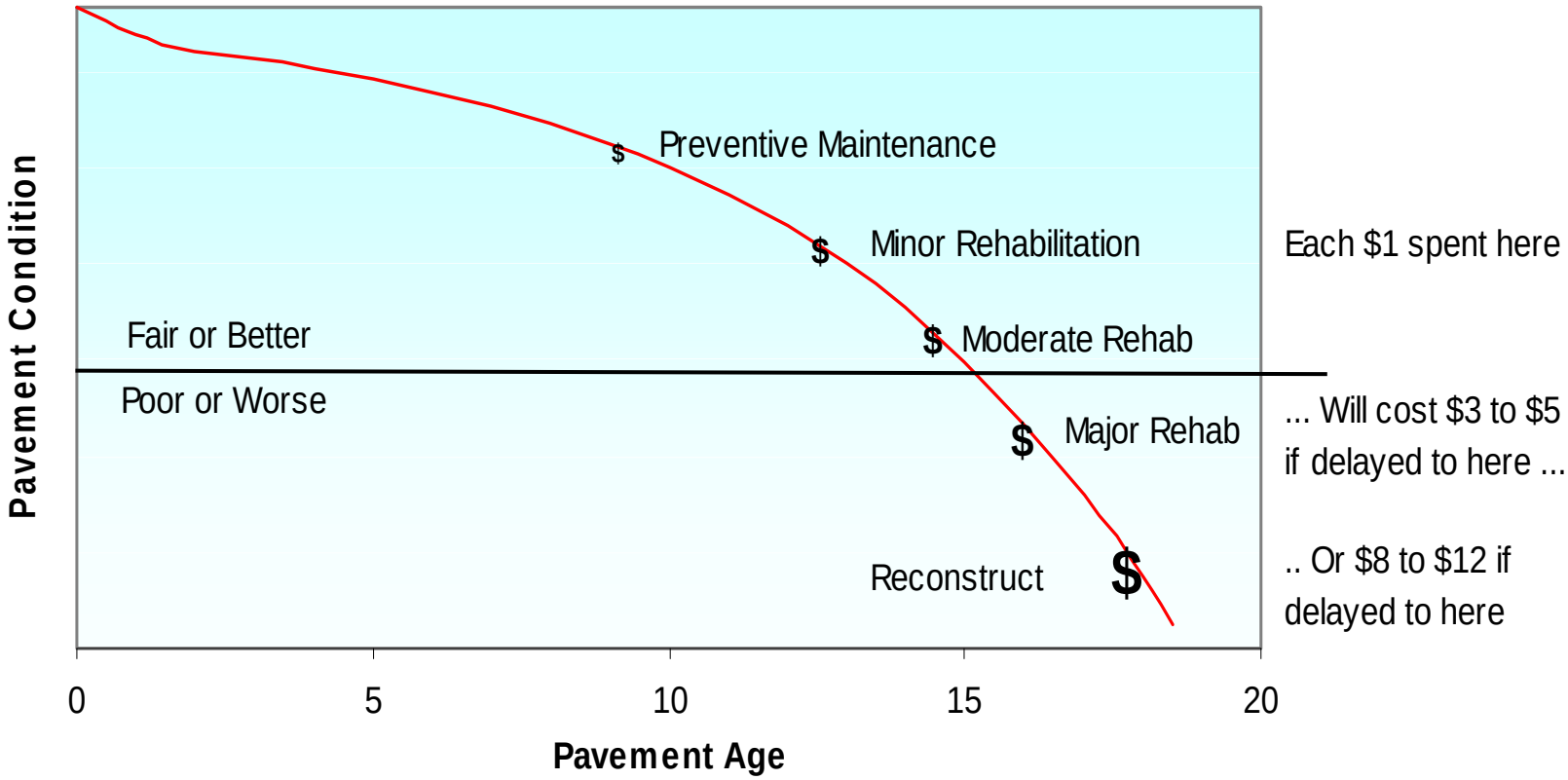


Lane Mile Strategies

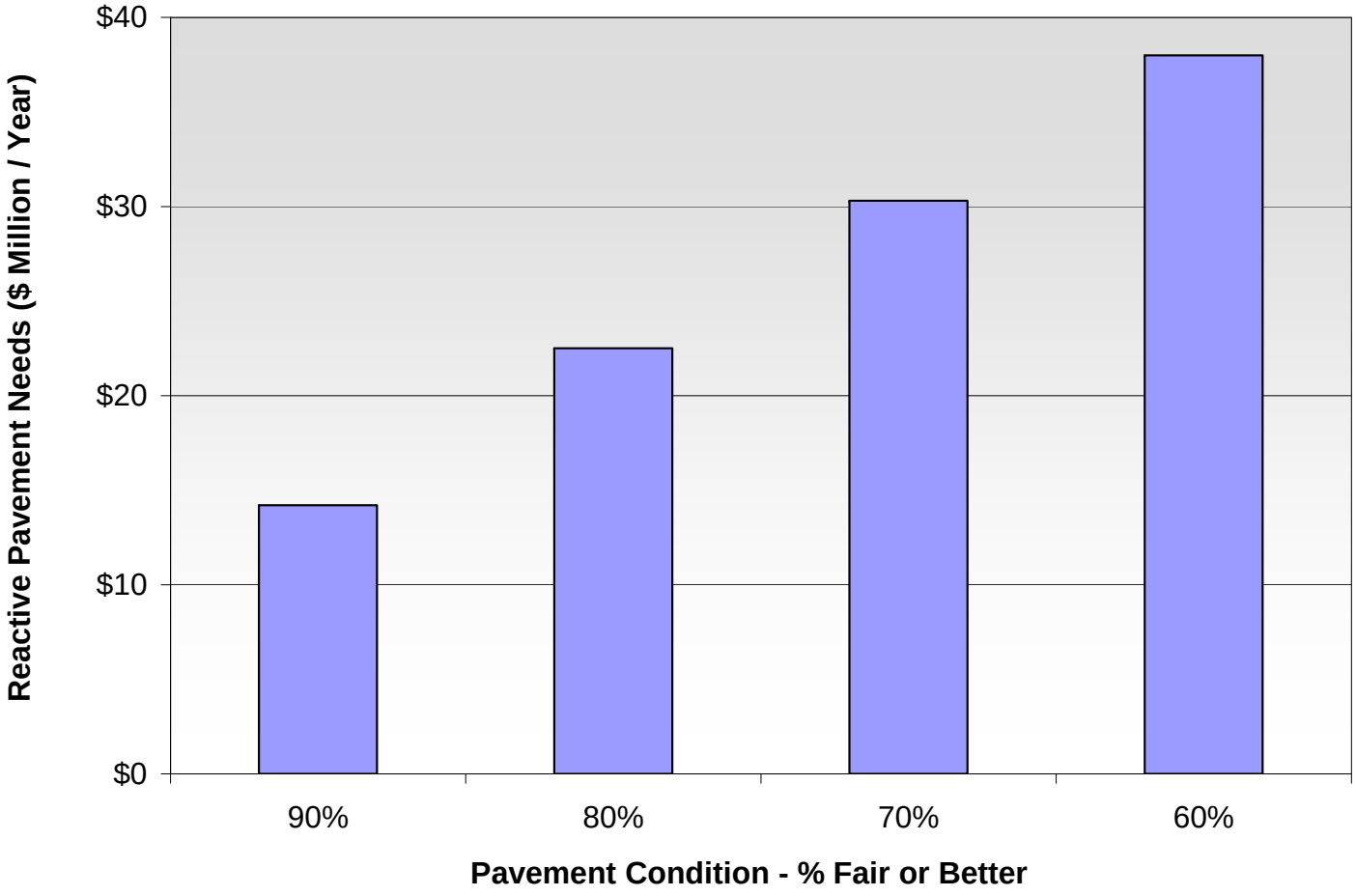


LM/Year	Outcome
780	Sustain Current (above target) Levels for Long Run
690	Hit ODOT Target
355	Current Strategy *(47-year resurfacing interval)*

Pavement Treatment Cost vs. Condition



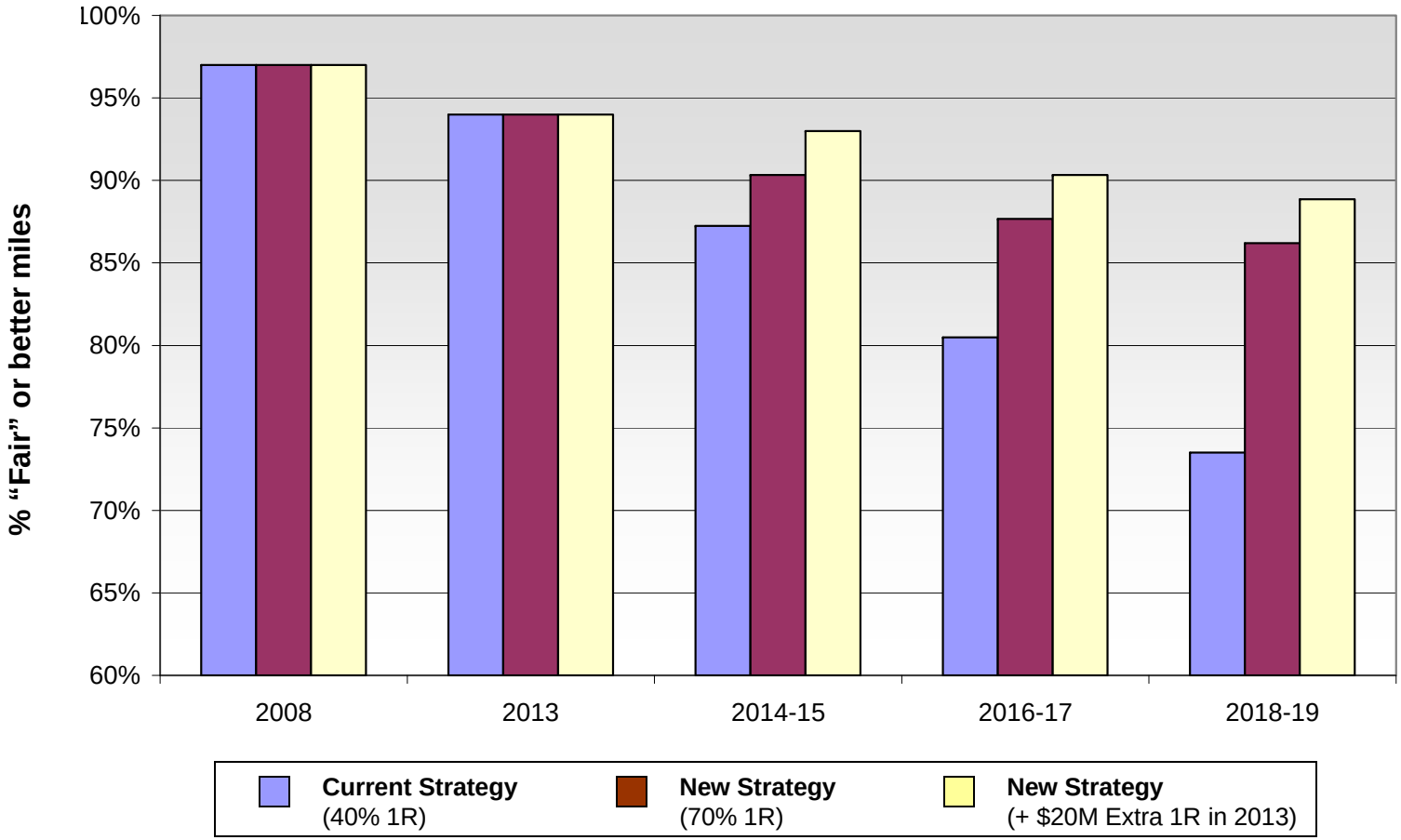
Reactive Preservation Needs vs. Pavement Conditions



Statewide Pavement Strategies

- **Re-evaluate the budget split** between Interstate and non-Interstate systems
- Look at adding statewide highways under **5,000 ADT to low volume program**
- Pursue a **multi-lift pavement 1R** program with FHWA
- Implement more **low cost 1R and chip seal** type treatments
- Focus **preservation dollars on pavements only**. Seek exceptions on some 3R projects

Interstate Pavement Strategy Comparison

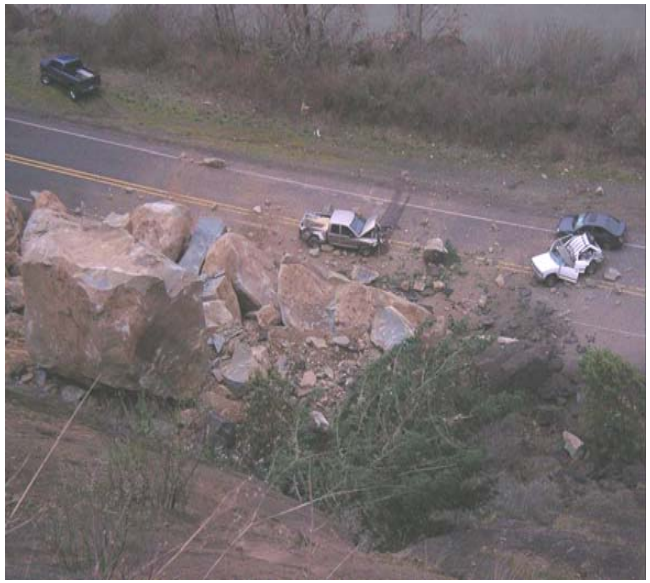


Culverts

- 31% of assessed culverts were in **Poor or Critical condition**
- Annual gap between needs and funding is **$77 million**

Slides and Rockfall

- Managing unstable slopes is important for **public safety, mobility, and the economy**
- **Current funding of $7.4 million per year** = 25 years to address immediate need sites
- **More feasible level of $15 million per year** = 12 years to address immediate need sites



Summary

- The system is in decline with reduced funding
- A more deteriorated system is more expensive to maintain
- New strategies will slow the decline in the short term
- Investing funds in these new strategies will have benefits