

# Governor Rendell's Rebuild Pennsylvania Agenda



## House Transportation Committee

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Rail Freight  
and  
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PennDOT Bureau of Design - Acting Director

April 28, 2008



# Protecting Pennsylvania's Progress

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Goal: Keep Pennsylvanians Working Repairing Pennsylvania's Infrastructure

## Action Item #4

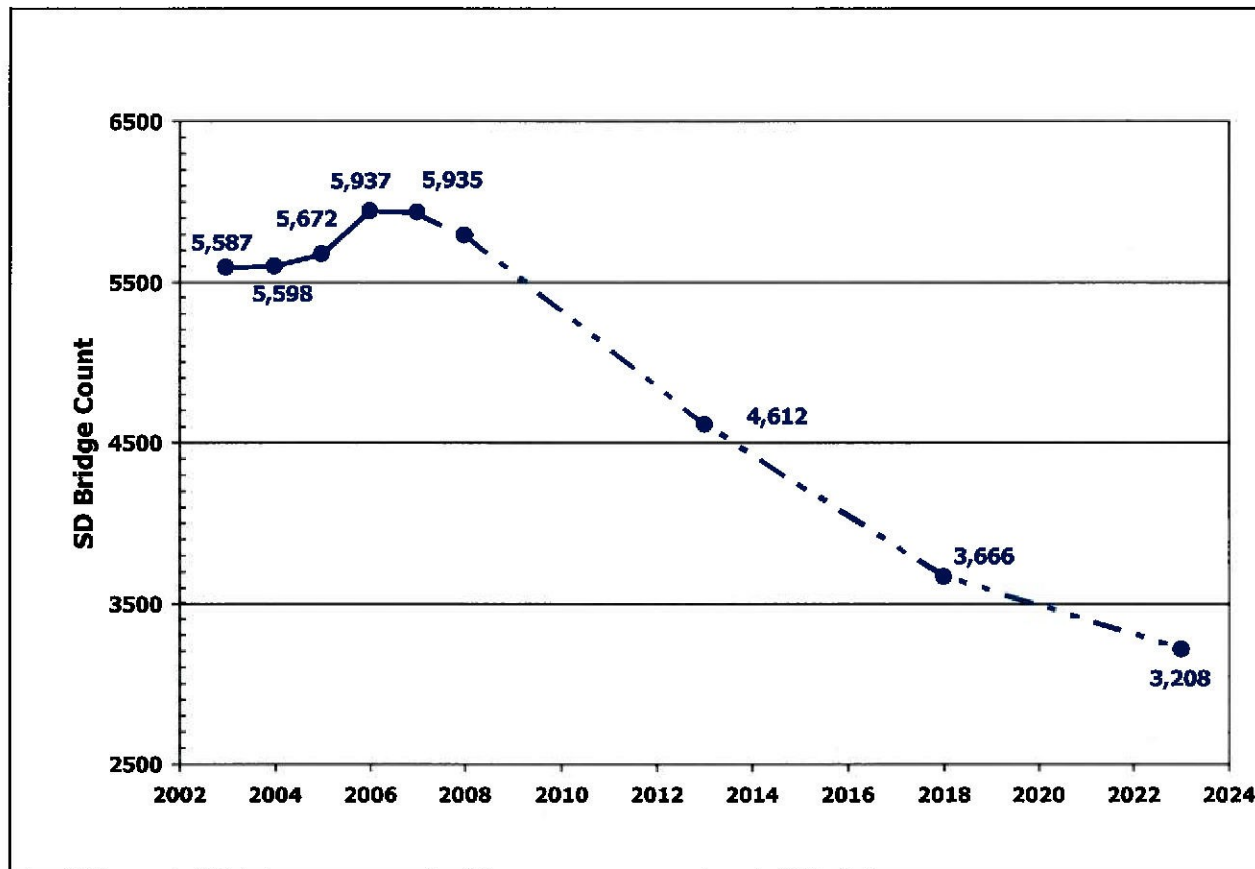
**Launch Rebuild Pennsylvania to repair the state's aging infrastructure with over \$700 million to accelerate progress in next three years.**

***Why this works: Over the next three years at least 1,000 bridges will be repaired, all state-owned high hazard dams will be addressed and matching funds will be provided to help local government repair their dams. The Pennsylvania design and construction industries will directly benefit from this infusion of funds. In addition, capital funds will provide targeted infrastructure improvements necessary to protect and expand businesses, complete a record number of flood mitigation projects, improve the state's rail/freight lines and expand the capacity of regional airports.***

## Details

**These infrastructure improvements require passage of legislation. PennDOT will begin immediately to prepare for an accelerated bridge program.**

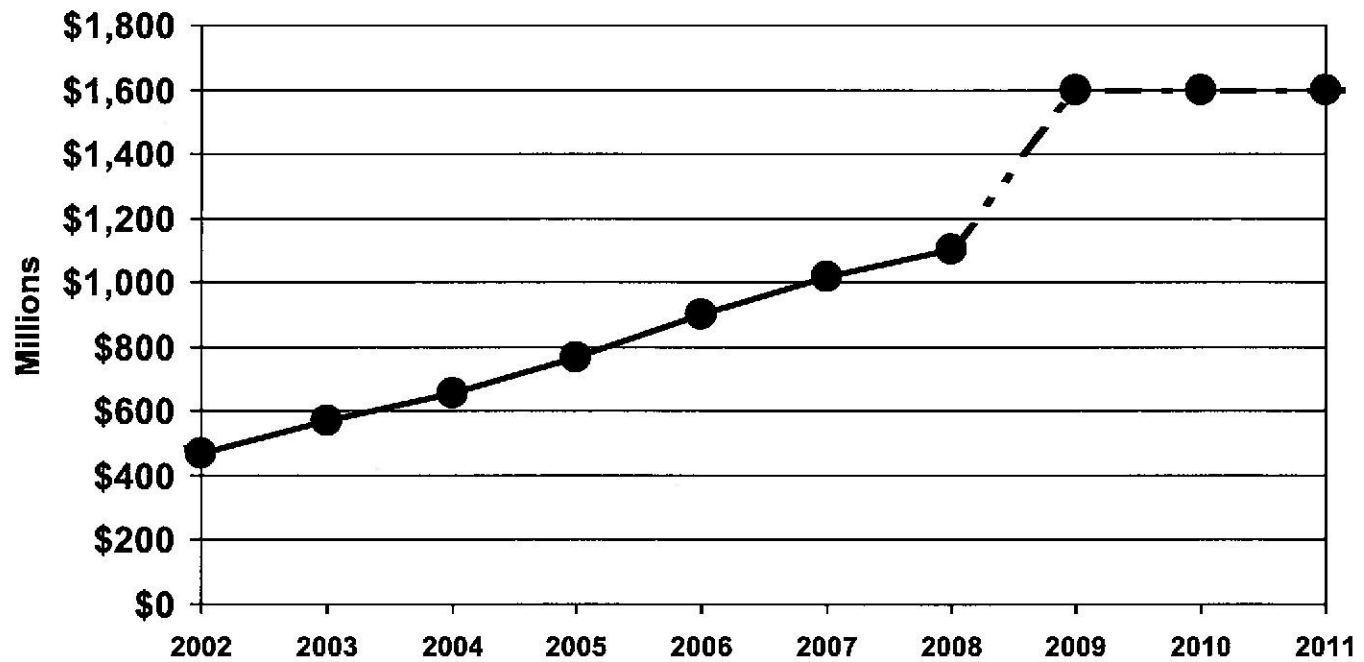
# Decrease in structurally deficient bridges





# Funding

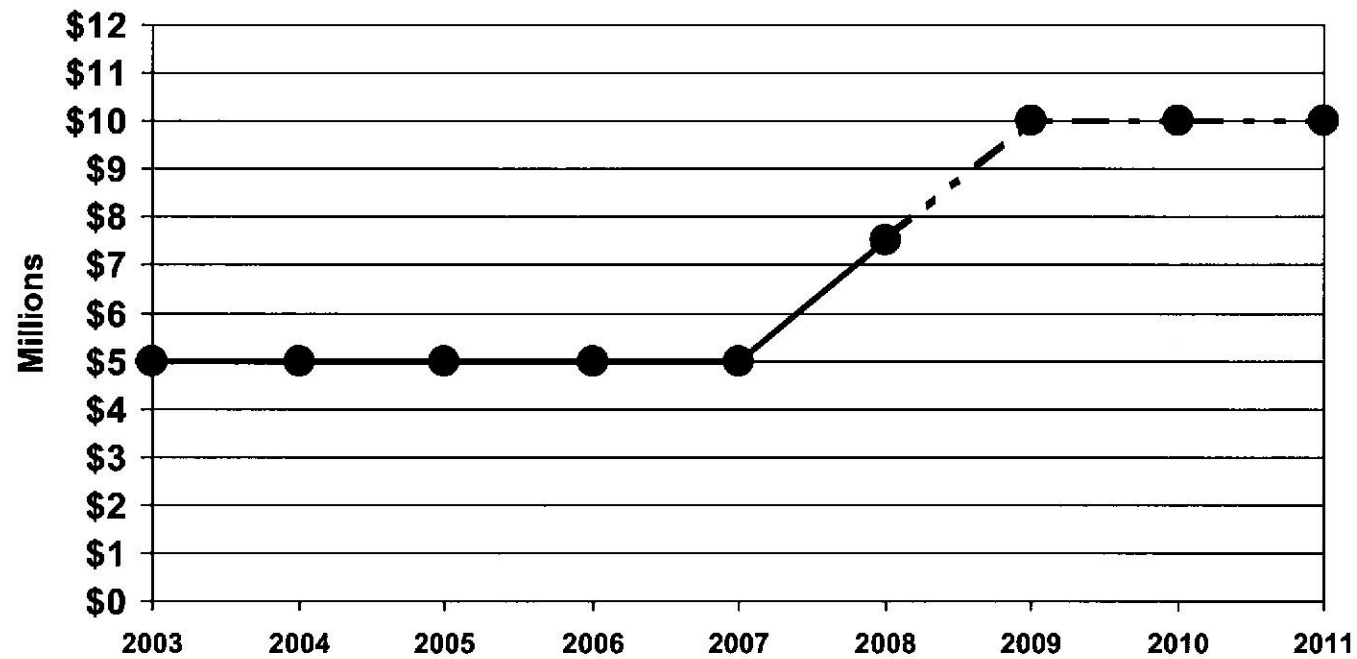
## Bridge Funding





# Funding

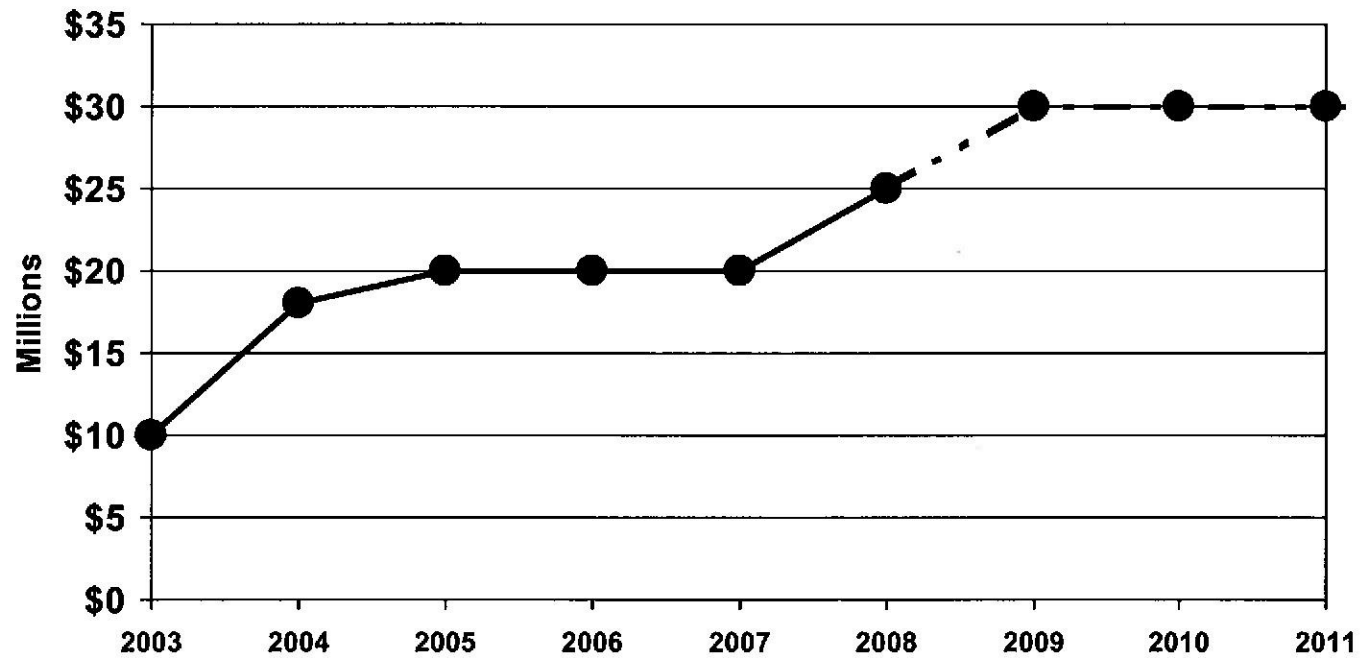
## Aviation TAP Funding





# Funding

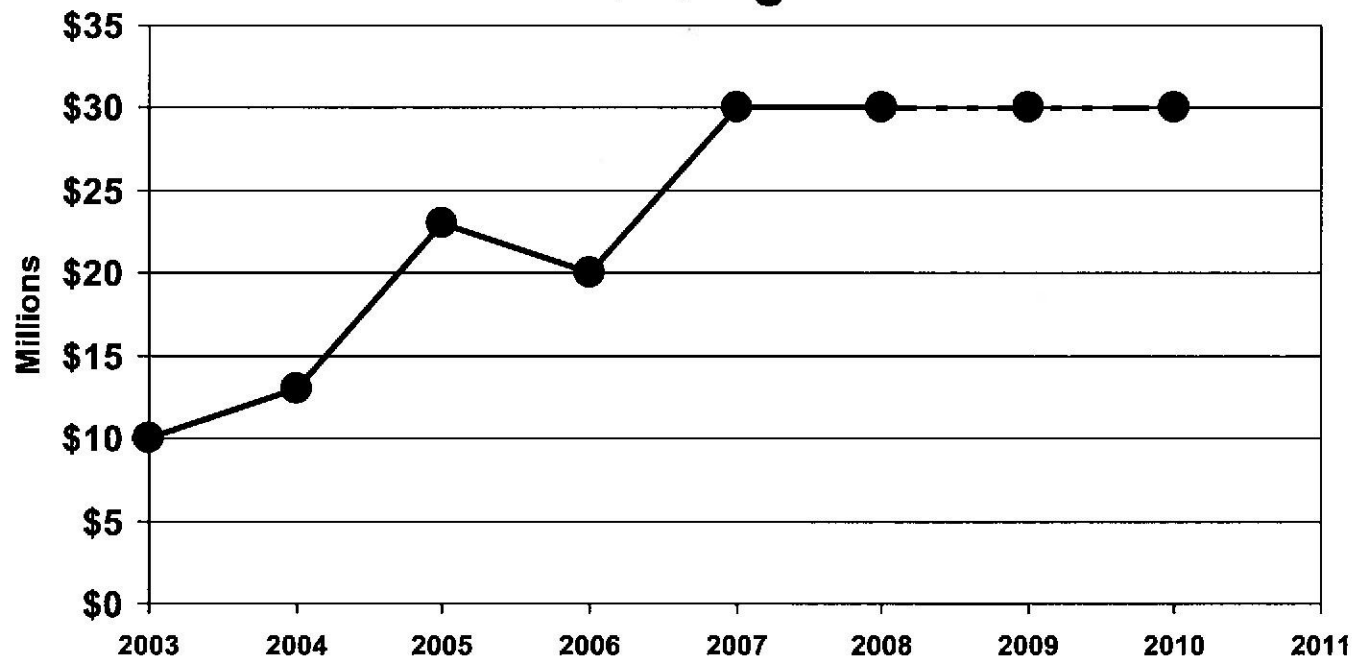
## Rail Freight TAP Funding





# Funding

## Pennsylvania Infrastructure Bank Funding





# Pennsylvania's Bridge Program

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- Condition of PA Bridges
- Bridge Letting Statistics
- Accelerated Bridge Program





# Condition of PA Bridges

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# PA Bridge Statistics

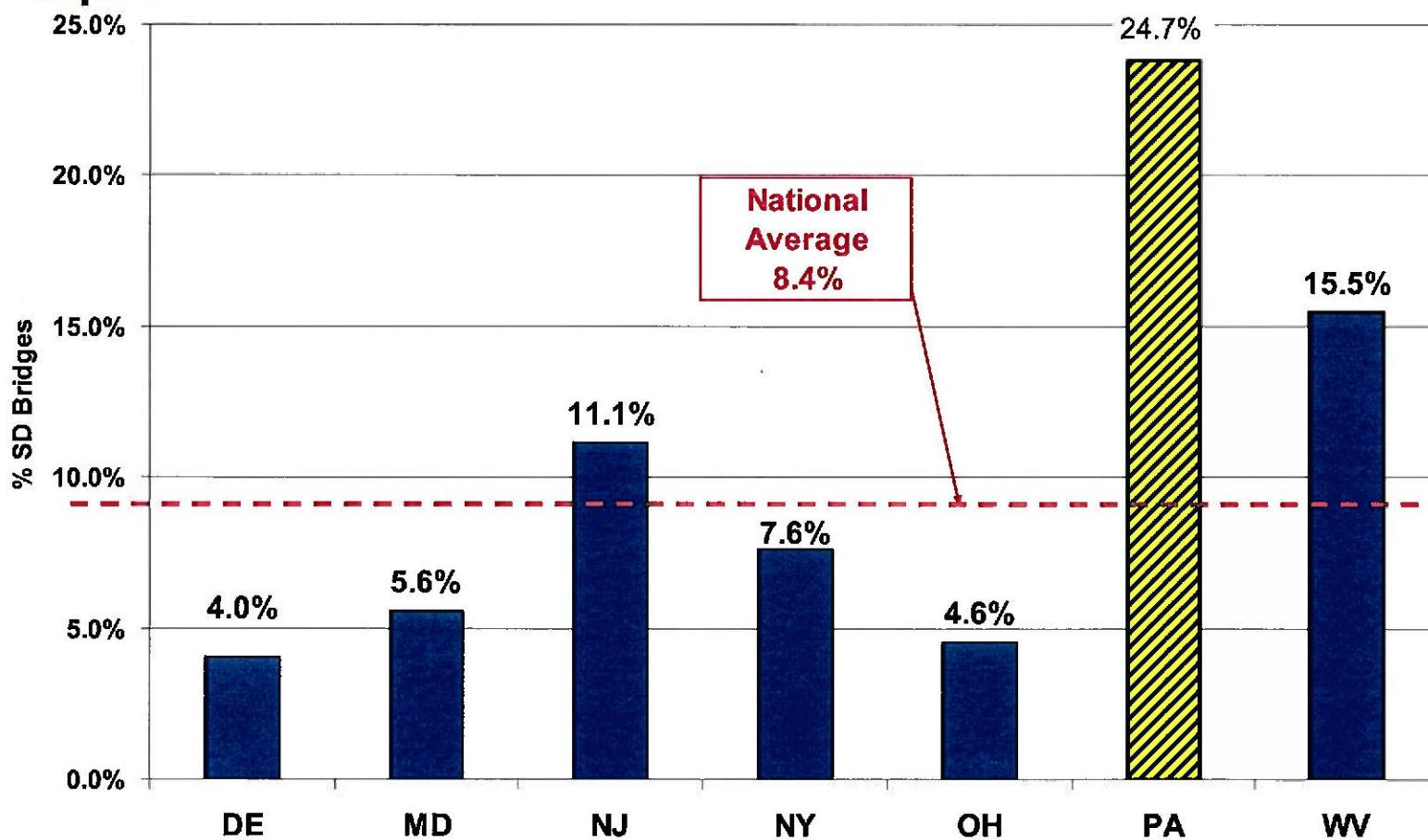
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- Bridges
  - Count: 25,314
  - Deck Area: 110 Msf
- Structurally Deficient (SD) Bridges
  - Count: 5,935 – 23.5%
  - Deck Area: 22.5 Msf – 20.5%
- Average age 50 years

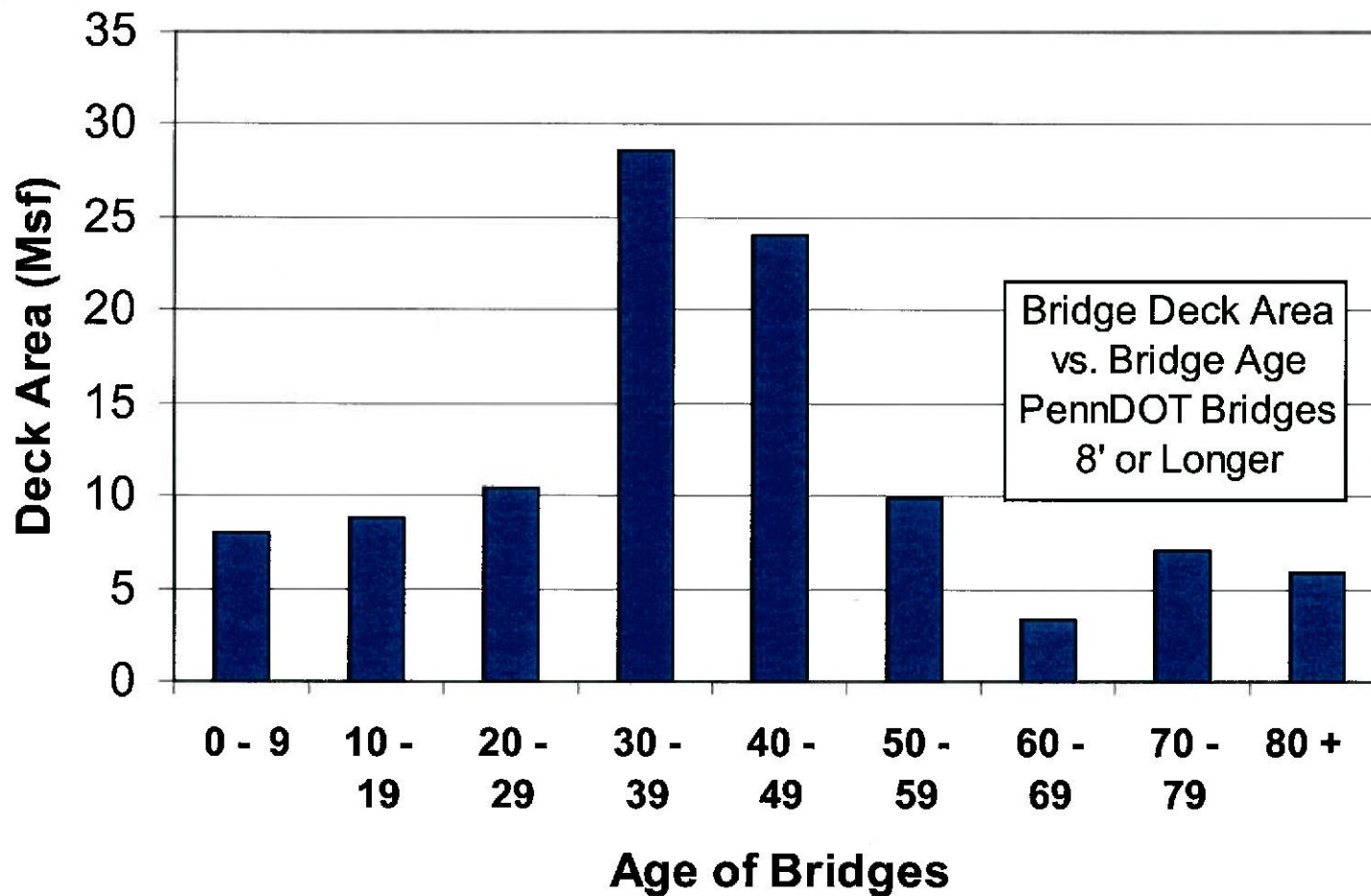
State DOT  
Bridges > 8'

# Comparison with Neighboring States

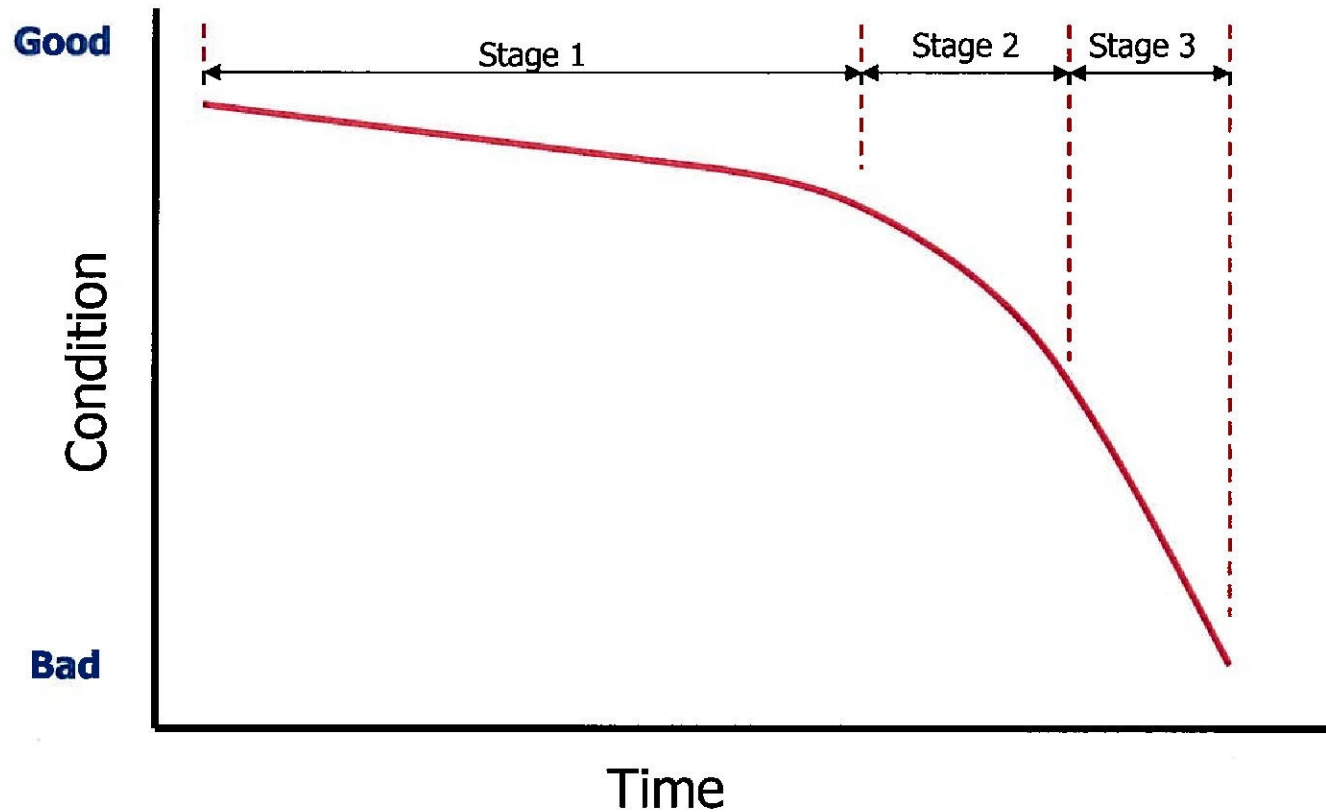
State DOT Bridges > 20'  
FHWA 2006 Data



# Statewide - Age vs. Deck Area



# Bridge Condition Deterioration Curve





# Emergency Repairs



Web deterioration on SR 743 in Hershey – January 2008

# Bridge Deterioration



Bottom flange section loss and rusting of webs near backwall  
in Somerset County (SR 2037)



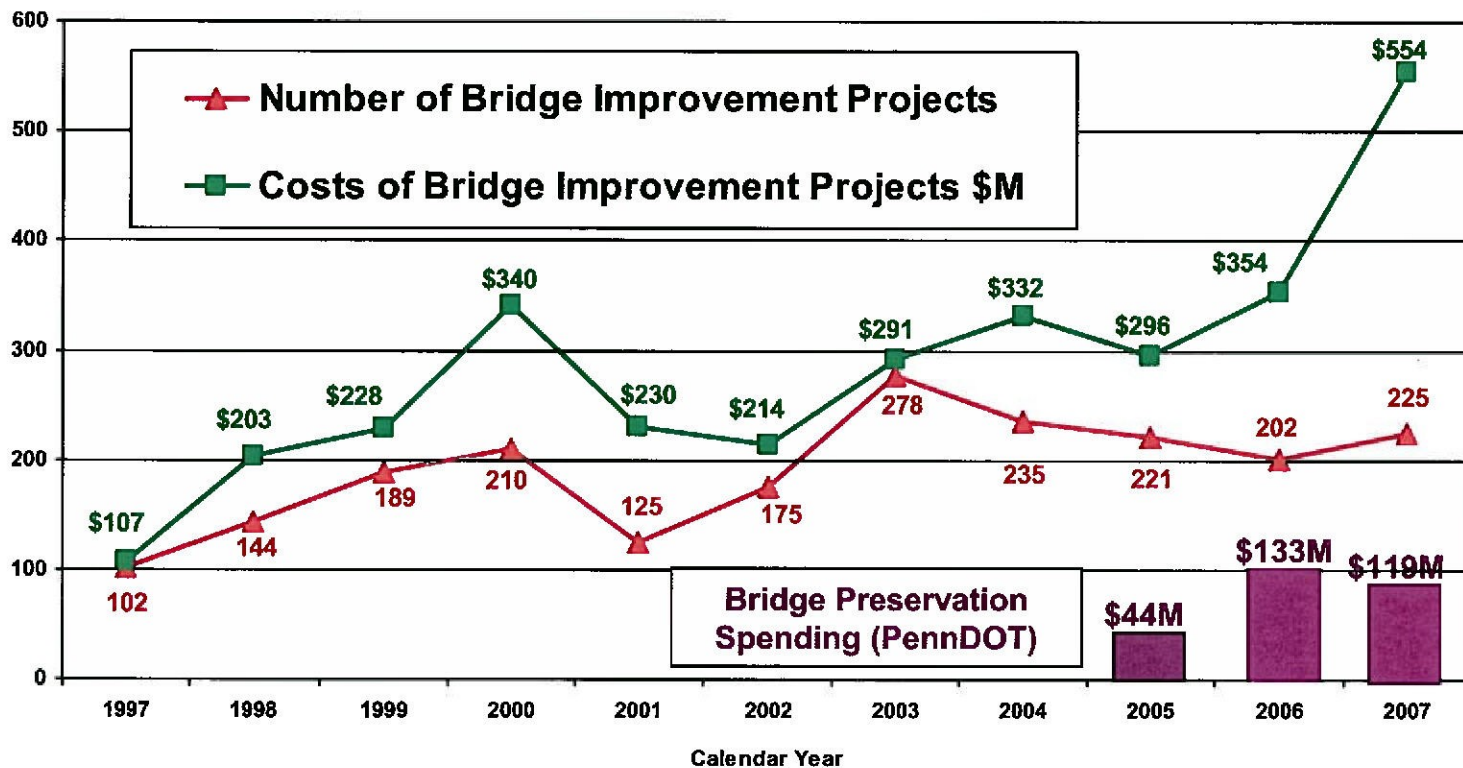
# Bridge Letting Statistics

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# PennDOT Bridge Project Lettings

Data for years 2004 and prior is approximated due to availability of state-only project data.



1-4-08 data



# Accelerated Bridge Program

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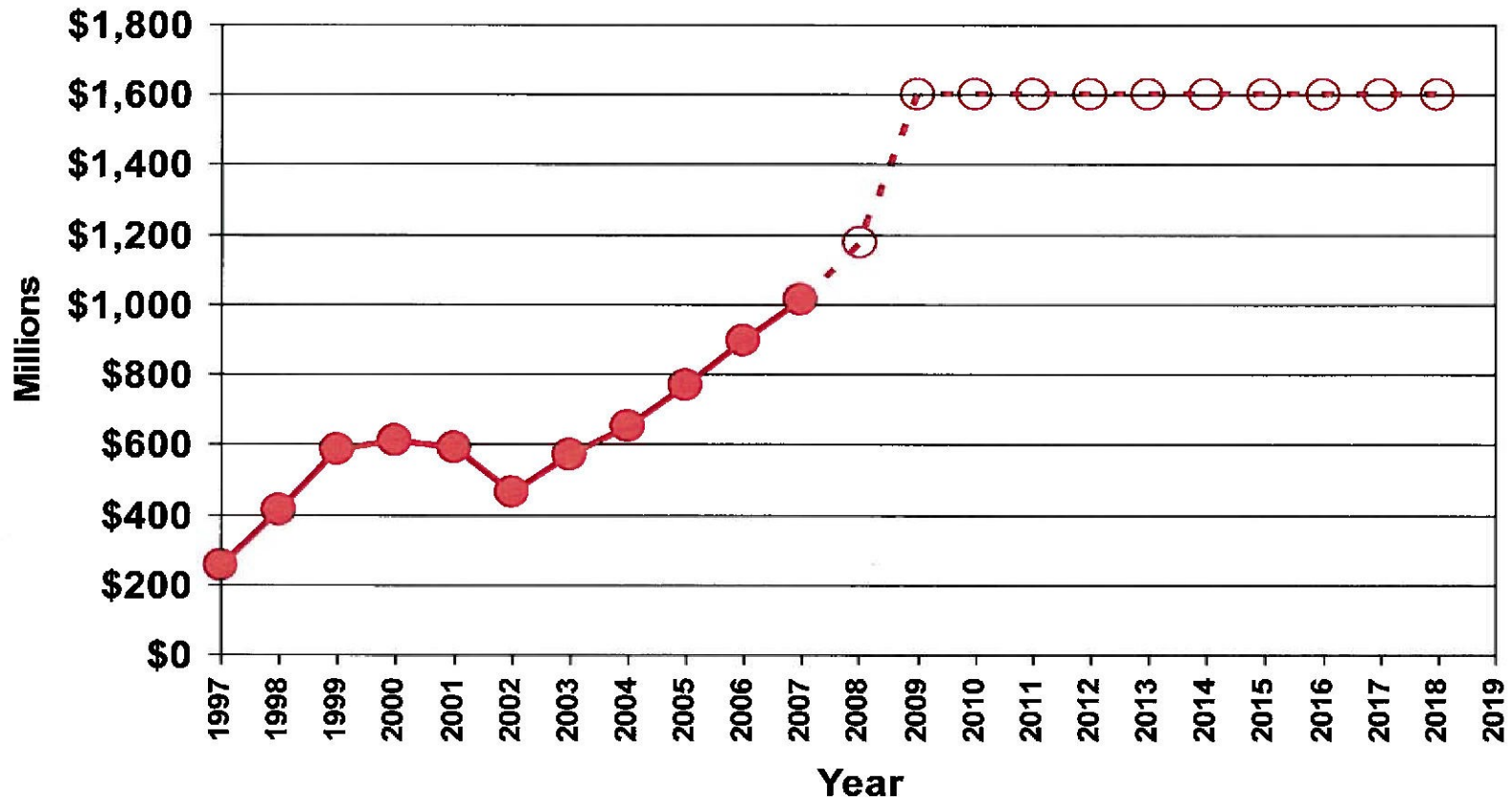


# Funding

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- Current Bridge Funding Program – \$1.1 Billion/year
- Accelerated Bridge Funding Program - \$1.6 Billion/year
  - Direct larger portion of current funding to bridges
  - Bond \$200 million a year for 10 years

# Total Funding – 1997 to 2018

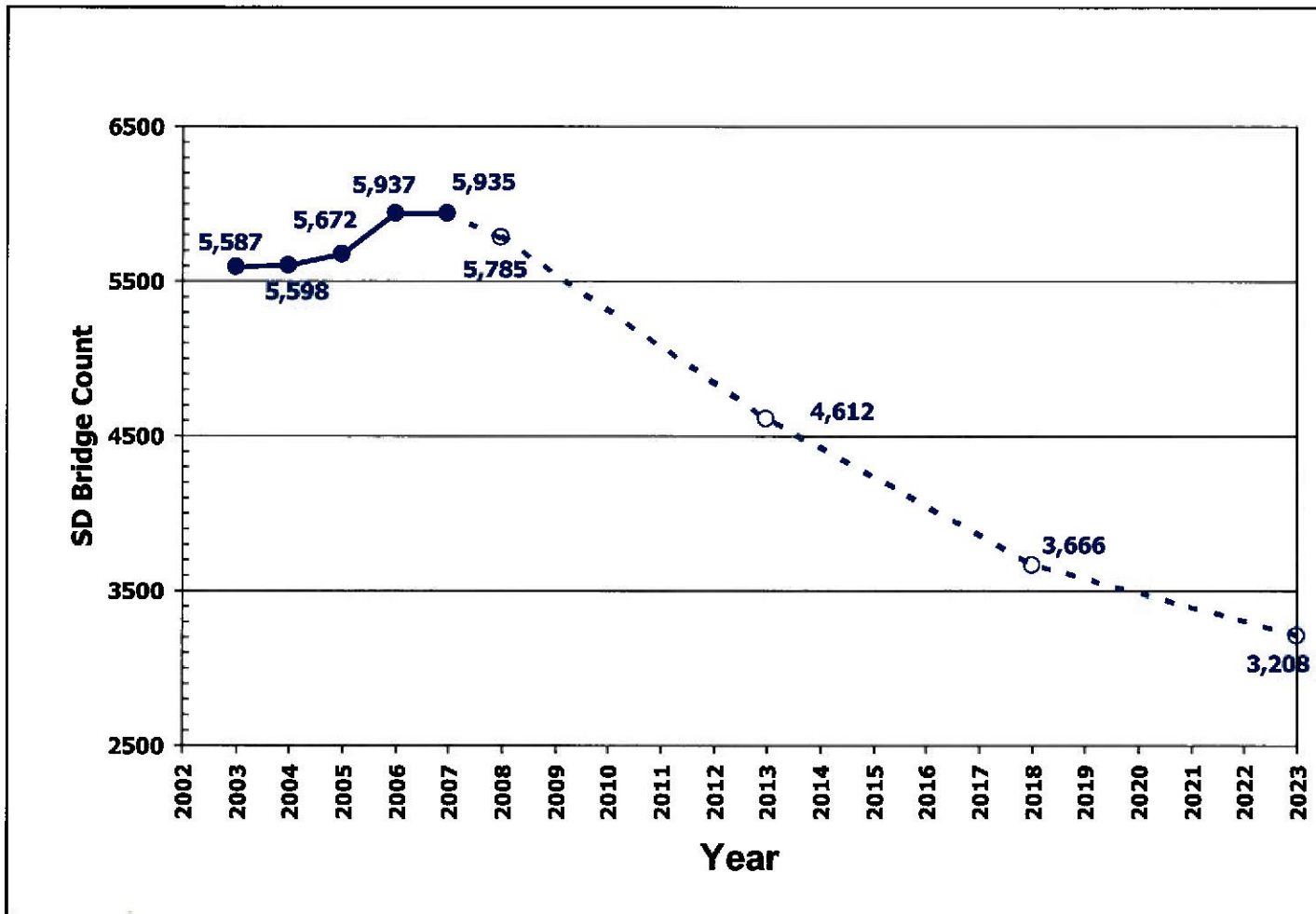




# Projected SD Bridge Results

<b>Time</b>	<b>Cumulative Funding</b>	<b>Remaining SD %</b>	<b>Remaining SD Bridges</b>
<b>Today</b>	-----	<b>23.5%</b>	<b>5,935</b>
5 years	\$7.6 B	18.3 %	4,612
10 years	\$15.5 B	14.5 %	3,666
15 years	\$23.0 B	12.7 %	3,208
25 years	\$39.8 B	11.5 %	2,890

# SD Bridges – 2002 to 2023





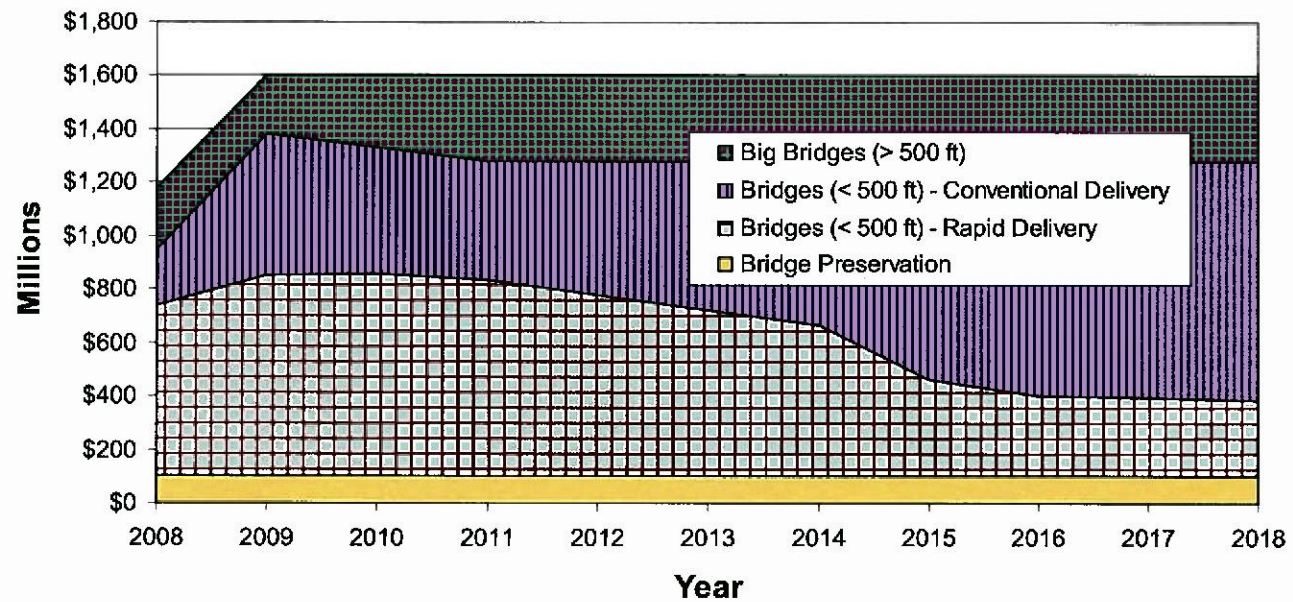
# Key Components

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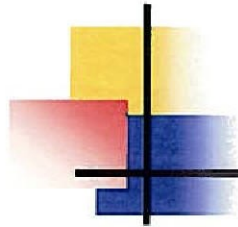
- Focus on SD Bridges
- Risk Assessment Tool
- Big Bridges ( $> 500$  feet)
- Bridges ( $\leq 500$  feet)
  - Rapid Delivery
  - Conventional Delivery
- Bridge Preservation



# Allocation of Funds







# Project Delivery Methods

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- Expanded Design Build Contracts
- Group contracts by region and type
- Continue Streamlining Design
- Use Smart Transportation principles
- Design 100 year life bridges



# Implementation

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- Accelerated Bridge Program Delivery Team
- Coordination with Agencies
- Coordination with MPO/RPO
- Coordination with Business Partners



# Authorizations Needed

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- Capital Budget
- Bonding



# Summary

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- \$2 B bonding over 10 years + larger focus of current funds
- Results in 3 years
  - 1,000 SD bridges let/rebuilt
- Results in the first 10 years:
  - \$15.5 B total expenditures on bridges
  - 4,100 SD bridges let/rebuilt
  - 40% Reduction in SD bridges



# Questions?

