Governor Rendell's Rebuild Pennsylvania Agenda



House Transportation Committee

Eric G. Madden
PennDOT Deputy Secretary for Aviation and
Rail Freight
and
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PennDOT Bureau of Design - Acting Director

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Protecting Pennsylvania's Progress

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.

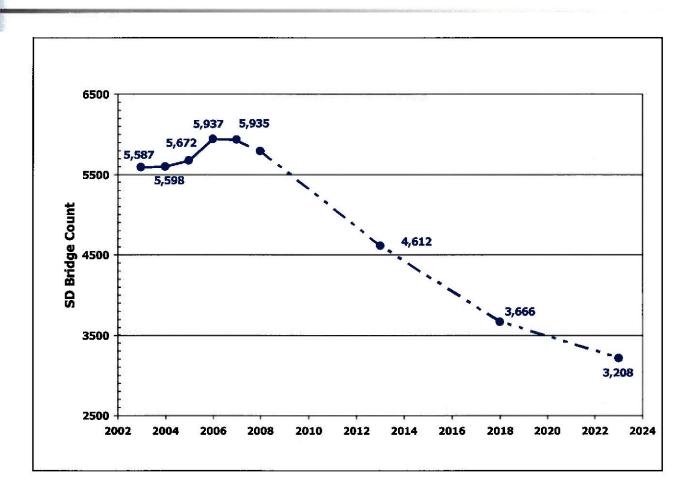
Why this works: Over the next three years at least 1,000 bridges will be repaired, all state-owned high hazard dams will be addressed and matching funds will be provided to help local government repair their dams. The Pennsylvania design and construction industries will directly benefit from this infusion 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.

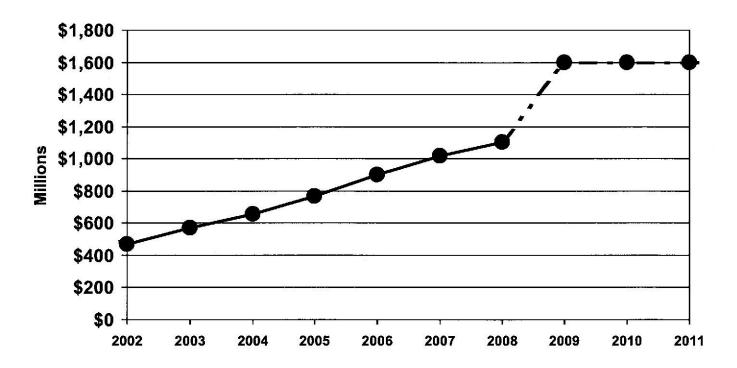


Decrease in structurally deficient bridges



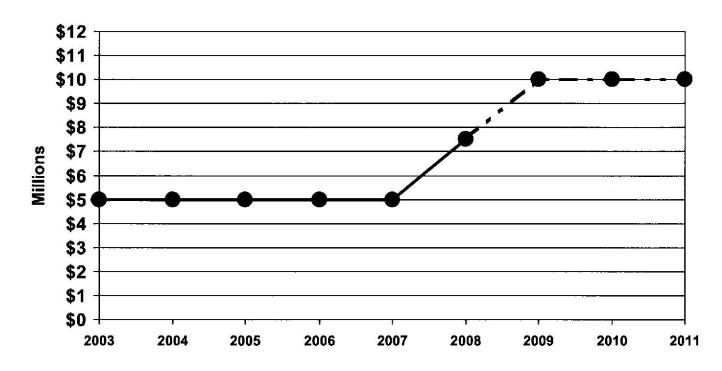


Bridge Funding



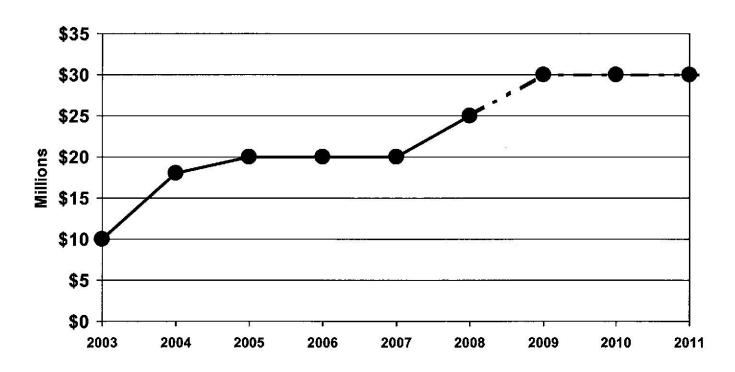


Aviation TAP Funding



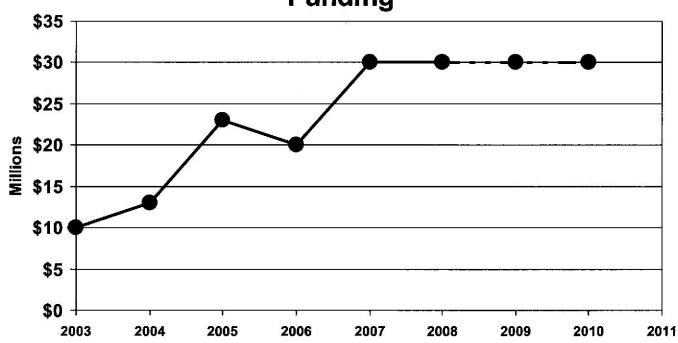


Rail Freight TAP Funding





Pennsylvania Infrastructure Bank Funding





Pennsylvania's Bridge Program

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

Condition of PA Bridges



PA Bridge Statistics

Bridges

Count: 25,314

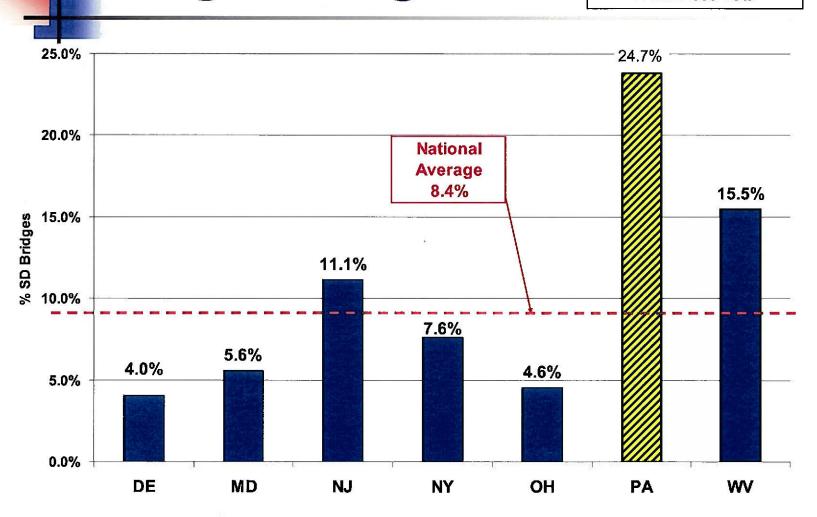
Deck Area: 110 Msf

State DOT Bridges > 8'

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

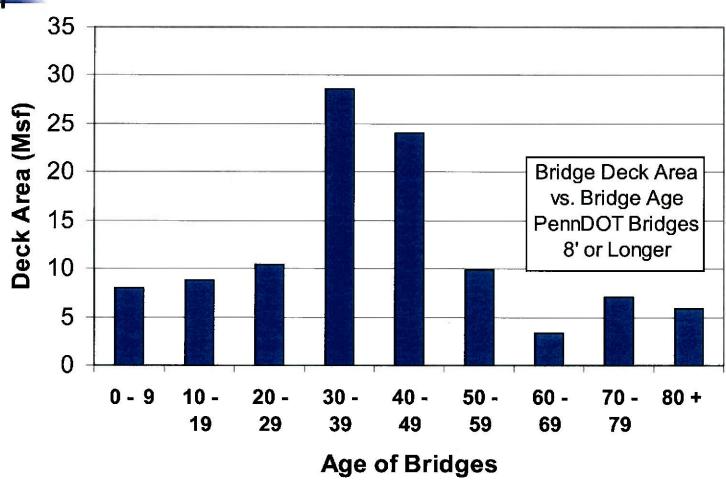
Comparison with Neighboring States State DOT Bridges > 20' FHWA 2006 Data

FHWA 2006 Data

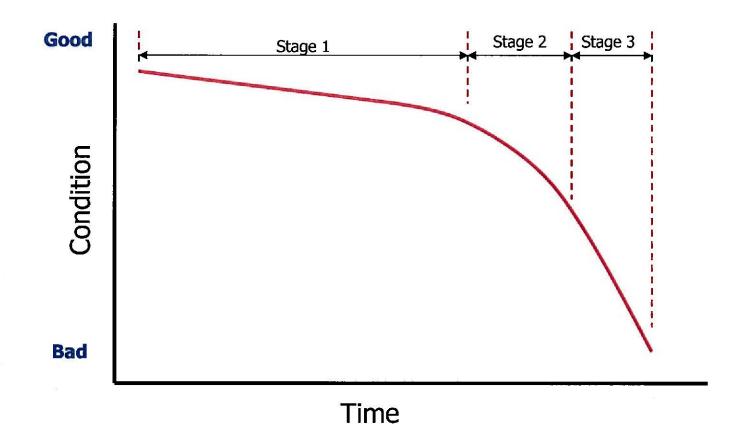




Statewide - Age vs. Deck Area



Bridge Condition Deterioration Curve





Emergency Repairs



Web deterioration on SR 743 in Hershey – January 2008

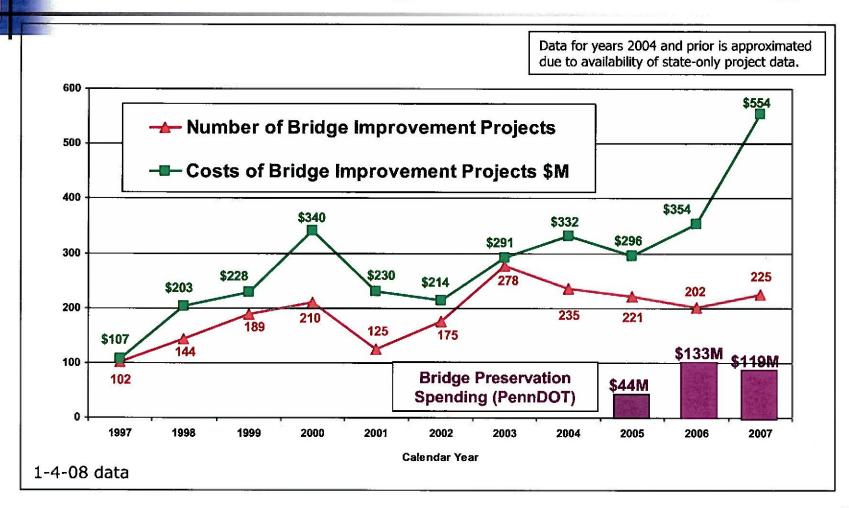
Bridge Deterioration



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

Bridge Letting Statistics

PennDOT Bridge Project Lettings

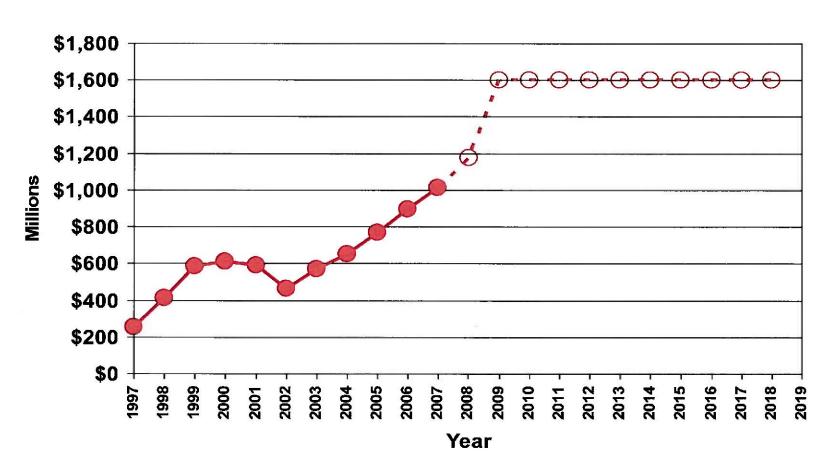


Accelerated Bridge Program



- 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



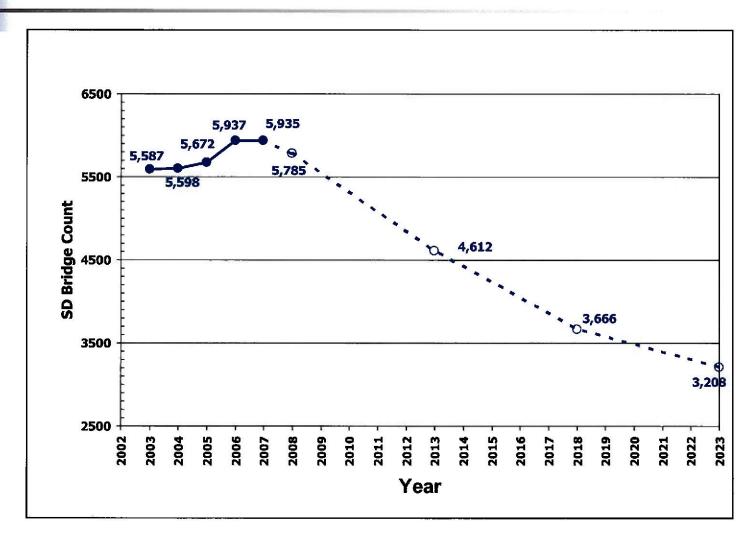


Projected SD Bridge Results

Time	Cumulative Funding	Remaining SD %	Remaining SD Bridges
Today		23.5%	5,935
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



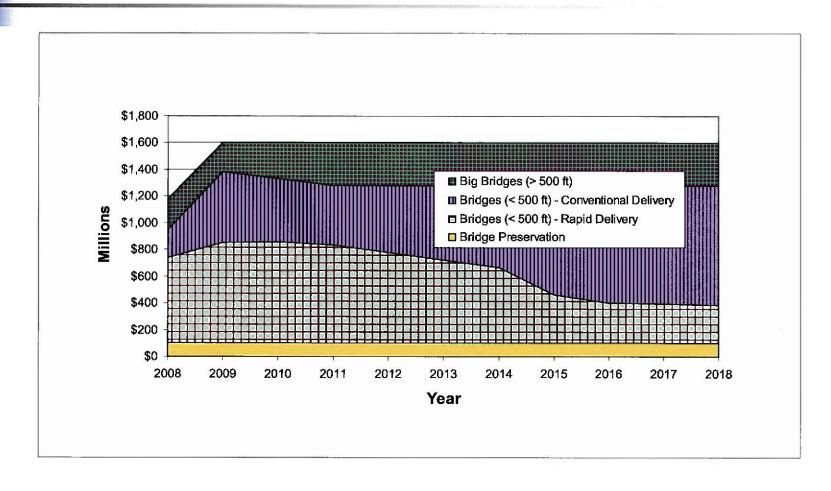


Key Components

- Focus on SD Bridges
- Risk Assessment Tool
- Big Bridges (> 500 feet)
- Bridges (< 500 feet)</p>
 - Rapid Delivery
 - Conventional Delivery
- Bridge Preservation



Allocation of Funds





Project Delivery Methods

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



Implementation

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



Authorizations Needed

- Capital Budget
- Bonding



Summary

- \$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?

