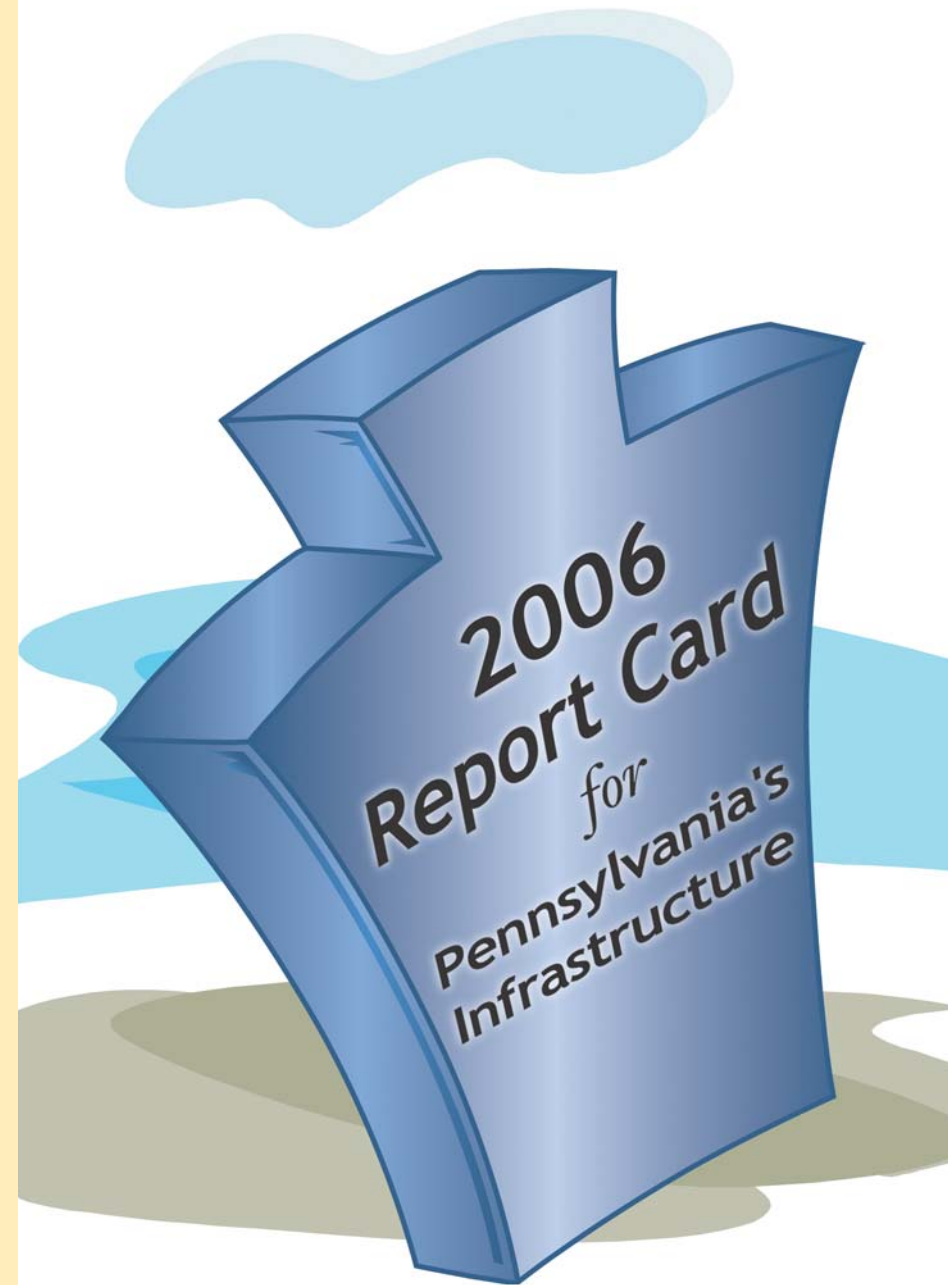


## 2006 Report Card for Pennsylvania's Infrastructure

Each category was evaluated on the basis of condition and performance, capacity vs. need, and funding vs. need.

A= Exceptional  
 B= Good  
 C= Mediocre  
 D= Poor

Aviation . . . . .	C-
Bridges . . . . .	C
Dams . . . . .	C-
Drinking Water . . . . .	D+
Navigable Waterways . . . . .	D-
Rail . . . . .	B
Roads . . . . .	D
Transit . . . . .	D+
Wastewater . . . . .	D-
Pennsylvania's Infrastructure GPA . . . . .	D



## Aviation

C-



The Commonwealth faces several obstacles to ensure that its airports can meet future demand. Philadelphia International Airport's Capacity Enhancement Program has been designated as one of the nation's 13 highest priority transportation projects. Pittsburgh International is in good position relative to infrastructure and is addressing future service by US Airways and several low-cost carriers. The Commonwealth's remaining airports require adequate funding to insure the preservation and investment needs for airport infrastructure are met.

## Rail

B



In 1998, 919 million tons of freight passed through the Commonwealth. Projects that could be undertaken to address the state's current infrastructure needs total some \$280 million. Class I and mid-sized railroads are generally able to finance capital improvements on their own. However, problems arise with short line railroads, which have difficulty in making infrastructure investments to remain viable and competitive. The regional and short line railroads are the feeders and supporting players in Pennsylvania's overall transportation network.

## Bridges

C



Of Pennsylvania's 22,276 bridges, 25% are considered structurally deficient and 18% are considered functionally obsolete. This may be a contributing factor to traffic congestion and may also put local communities at risk – forcing ambulances and fire trucks to take lengthy detours because of speed and/or weight limitations. In its 2006-2007 budget, the state has taken a step in the right direction, allotting an additional \$20 million for bridge preservation and \$10 million for emergency highway and bridge repairs.

## Roads

D



Pennsylvania has some of the nation's oldest highways and nearly the most lane miles that must contend with severe winters. 27% of the state's roads are in mediocre or poor condition, in comparison to 18% at the national level, and an inevitable increase in commercial traffic will further add to deterioration. In its 2006-2007 budget, the state has taken a step in the right direction, allotting an additional \$100 million for highway maintenance and resurfacing of 1,080 miles of roadway.

## Dams

C-



Due to the establishment of PADEP's Bureau of Dams and Waterways Management in the late '70s, Pennsylvania has remained ahead of most other states in the area of dam safety. However, about 35% (266) of the state's "high hazard" dams – dams whose failure would cause probable loss of human life and substantial property damage – are considered deficient. The estimated cost to repair all 725 deficient dams statewide over the next five years is more than \$1 billion.

## Transit

D+



In recent years, transit use has increased faster than any other mode of transportation. More than one million Pennsylvanians use public transit on a daily basis. Although transit spent almost \$1.1 billion on materials and services contracts with more than 2,000 Pennsylvania businesses in 2005, the statewide need for additional resources is tremendous: more than \$500 million annually to stabilize operations, fund "state of good repair" capital projects and allow for major capital investments to expand and improve existing systems.

## Drinking Water

D+



Over the next 20 years, the Commonwealth will require \$12 billion to expand, rehabilitate and bring drinking water systems into compliance with current regulations and protect public health. Though improved regulations have reduced waterborne outbreaks to nearly zero, the number of drinking water systems in violation is trending upwards. In 2003, 2,479 systems were cited for a total of 10,782 violations. If investment needs are not met, the state will risk reversing public health, environmental and economic gains of the past three decades.

## Wastewater

D-



Aging wastewater management systems discharge billions of gallons of untreated sewage into Pennsylvania's surface waters each year. In addition failing on-lot systems and non-point source pollution from agricultural and mining activities are further impacting the Commonwealth's rivers, lakes and streams. The U.S. Environmental Protection Agency estimates that the state must invest \$12.7 billion over the next 20 years to replace existing systems and build new ones to meet increasing demands.

## Navigable Waterways

D-



A typical Ohio River tow of 15 barges can move the same amount of cargo as 225 rail cars or 900 semi-trucks – reducing highway congestion and saving money. Commercial shipping is big business along the Allegheny, Ohio and Monongahela Rivers and the navigation channel that connects Philadelphia to the Delaware Bay. However, future viability of the state's waterway infrastructure has been threatened due to an unreliable lock and dam system, less than optimal funding and delays to the Delaware River Deepening Project.

For more information, explore the *Report Card* website at [www.pareportcard.org](http://www.pareportcard.org) or visit one of ASCE's Pennsylvania Sections online:

Central PA - [www.asce-pa.org](http://www.asce-pa.org)

Lehigh Valley - [www.lvasce.org](http://www.lvasce.org)

Philadelphia - [www.asce-philly.org](http://www.asce-philly.org)

Pittsburgh - [www.asce-pgh.org](http://www.asce-pgh.org)