

# *The Shellpot Bridge Replacement*

## **A Successful Public-Private Partnership**

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# The End of the Story: Delaware Governor Ruth Ann Minner in the Cab of the First Train Across the New Bridge



# But How Did She Get There? Some Background...

- The Shellpot Bridge crosses the Christiana River downstream from Wilmington, DE
- The track it carries is part of the former Conrail "Shellpot Secondary", a freight bypass around downtown Wilmington
- The Shellpot diverges from Amtrak's Northeast Corridor at "Holly Oak" interlocking in Claymont, DE and returns to the NEC at "Ragan", about two miles south of downtown Wilmington
- North of the bridge is Edgemoor Yard, once a major industry support yard in Wilmington



## In late 1994, a pier on one of the approach spans shifted under a train...

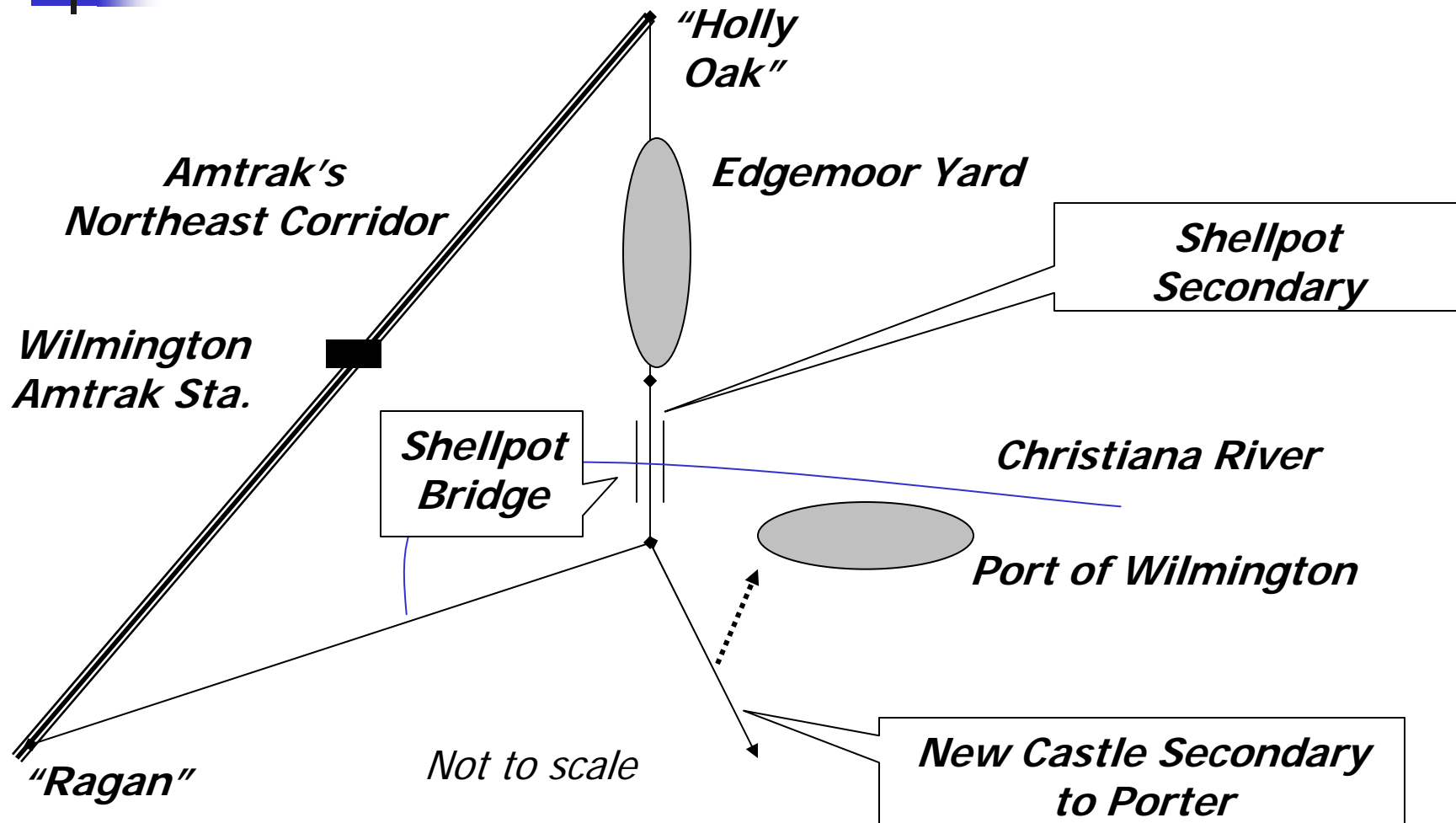
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- ...but fortunately the train made it across
- The bridge, however, was out of service
- Conrail elected not to repair the span, choosing instead to re-route freight traffic
- For ten years, the Shellpot Bridge sat unused

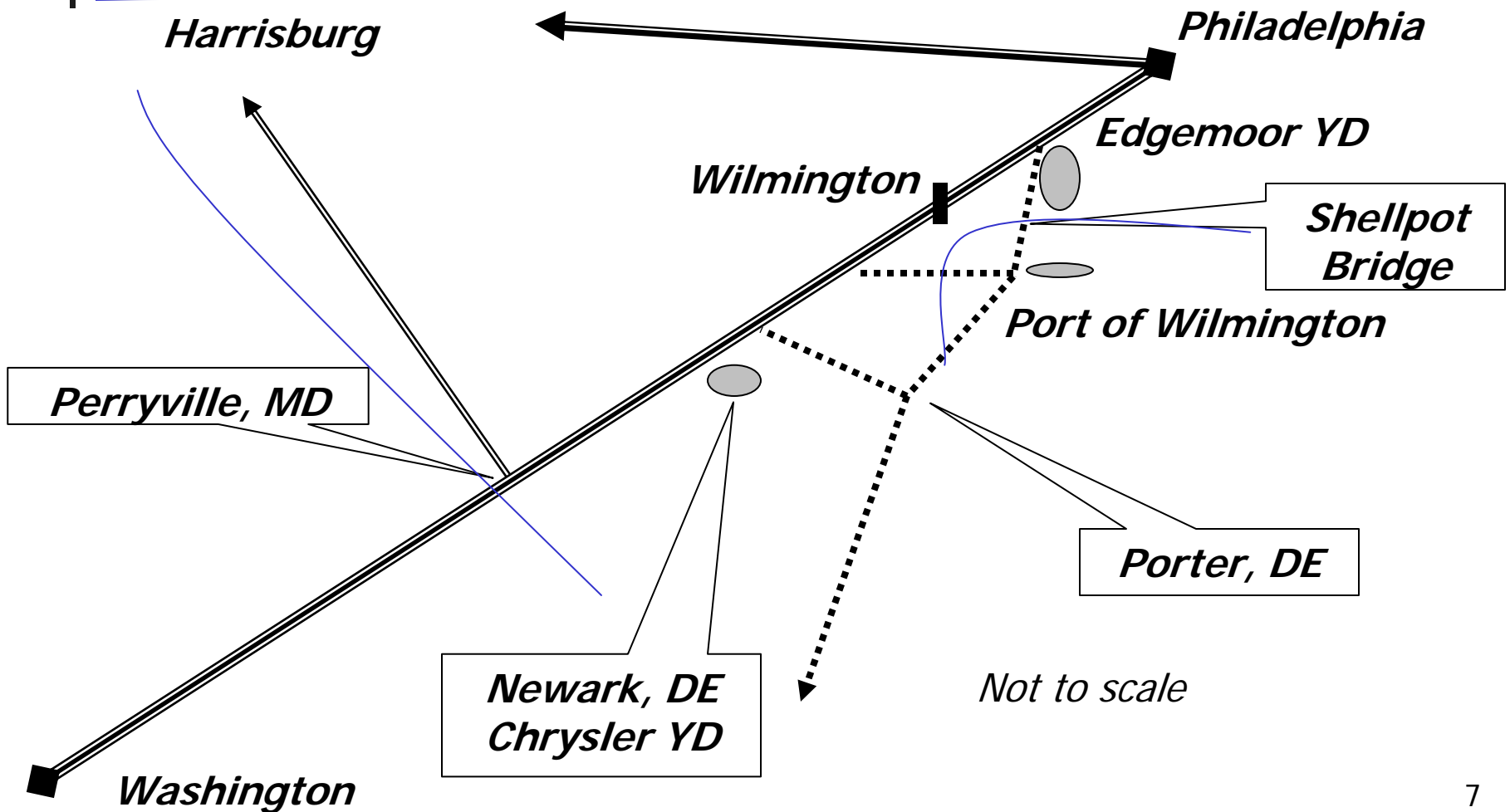
# The Shellpot Bridge in 2000



# The Wilmington Rail Situation



# The Eastern Rail Network





# The Conrail Purchase

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- In 1995, Conrail announced its intention to merge with CSX Transportation
- Following a bidding war that pushed the price of Conrail to nearly \$11 billion, CSXT and Norfolk Southern Corp. agreed to buy Conrail and divide it between them
- The Shellpot Secondary was to go to NS
- NS further committed to restore the bridge to operation



# NS Has Second Thoughts

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- The initial estimate for restoring the Shellpot Bridge was about \$6.5 million
- Following the Conrail purchase, NS determined that the price would be more than double that
- NS therefore decided to continue the existing service pattern, serving Delaware from the south, via Perryville, as had Conrail



# A Role for Public Finance?

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- Neither the State of Delaware nor the Port of Wilmington was happy with the NS decision
  - Without the bridge, Edgemoor Yard was essentially abandoned. NS used the Chrysler Yard in Newark instead. This created conflicts with Chrysler
  - The rail route to the port was roundabout and slow
  - The state was concerned for the future of rail service further south on the Delmarva Peninsula, for which NS provided the only link
- The state determined to investigate the possibility of using public funds to repair the bridge
  - This required negotiation with NS over cost, use, and ownership
  - The state hoped to recoup most or all of its planned investment through fees on NS rail traffic over the bridge



## In this case, yes

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- Senate Bill 250 of the 101<sup>st</sup> Delaware General Assembly provided the Delaware Department of Transportation with \$5 million to begin work
- SB 250 also gave the Delaware Secretary of Transportation authority to negotiate an agreement with NS, and also to return to the Legislature for additional funding if needed



# Norfolk Southern and the State of Delaware Reach Agreement

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- On May 3<sup>rd</sup>, 2002, the railroad and the Delaware Secretary of Transportation reached agreement
- The primary objective was the restoration of the Shellpot Bridge; however, the agreement also provides that:
  - The state shall have the right to operate passenger trains over any NS track in Delaware “without further rent or user fees”



# Payment Provisions

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- The agreement provides that Norfolk Southern will pay a per-car charge for use of the bridge
- This charge varies with volume; the charge for the first 5,000 cars per year is highest
- The per-car charge was specified in the agreement; however, it was subject to adjustment if the state's contribution exceeded the original \$5 million



# Minimum Annual Payment

| <b>Years From Re-Opening</b> | <b>Minimum Payment</b> |
|------------------------------|------------------------|
| 1 through 5                  | \$150,000              |
| Years 6 through 10           | \$200,000              |
| Years 11 through 15          | \$250,000              |
| Years 16 through 20          | \$300,000              |

# Some Observations About the Payment Terms



- Twenty years of minimum payments by NS will recover only \$4.75 million for the state; obviously, it is better for the state if NS actually uses the bridge
- The agreement provides for indexing of the payments based on the total spending by the state
- Total state spending as of October 2004 stood at \$13.2 million



# Payment Terms

| <b>Number of Cars</b> | <b>Original Payment per Car</b> | <b>Adjusted Payment per Car</b> |
|-----------------------|---------------------------------|---------------------------------|
| Up to 5,000           | \$35                            | \$36.08                         |
| 5,000 to 20,000       | \$20                            | \$20.62                         |
| 20,000 to 35,000      | \$15                            | \$15.46                         |
| 35,000 to 50,000      | \$10                            | \$10.31                         |
| More than 50,000      | \$5                             | \$5.15                          |



## So What's in it for NS?

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- Main benefit: the cost of the bridge becomes a variable cost rather than a fixed cost and an asset on the balance sheet
- Secondary benefit: state funding means the railroad needn't divert scarce capital resources from other pressing projects



## ...And for the state?

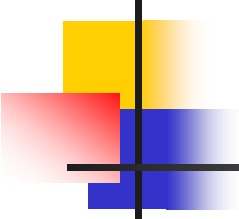
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- Improved rail service to the Port of Wilmington and to “downstate” shippers
- Avoidance of need to move freight cars through Wilmington station means DeIDOT can construct a second high-level passenger platform
- The state gets its money back – and based on early use, gets it back quickly

# Some Construction Photos

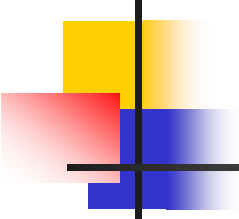
*The old span was a historic landmark, so it was decided to refurbish rather than replace it. Here the span has been cut in half and is being lifted off the support piers*





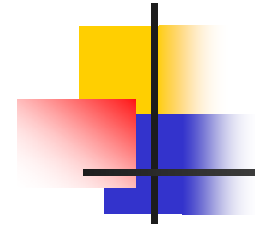
*Span being placed  
on a barge for  
movement to Balti-  
more for repair*





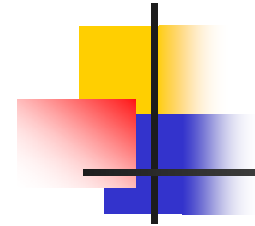
*Old approach  
spans to be re-  
placed with con-  
crete pile trestle*





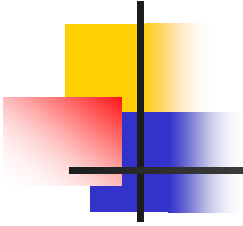
*Refurbished truss  
in Baltimore,  
awaiting move-  
ment back to  
Delaware*





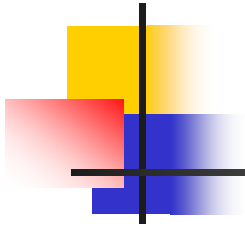
*Refurbished truss  
in place. Testing  
of machinery  
under way.*





*The new track is centered on the formerly double-track span*



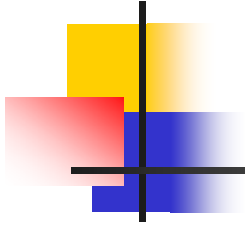


*New approach spans*



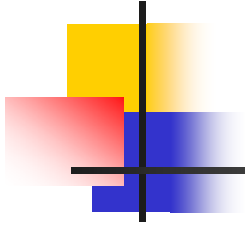
*Junction of  
Shellpot Sec-  
ondary and  
New Castle  
Secondary*





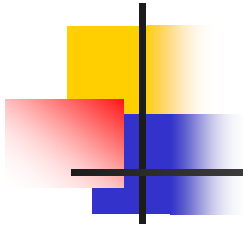
***New Castle  
Secondary to  
left, Shellpot  
Secondary to  
right***





*The new bridge,  
looking north*





*The governor with  
proud Delawareans  
at the Port of Wil-  
mington, September  
2004*





# So How is the Bridge Doing?

| <b>Period</b> | <b># of Cars</b> |
|---------------|------------------|
| November 2004 | 4,108            |
| December 2004 | 6,962            |
| January 2005  | 4,980            |



# Revenue Collected and Estimated

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- For 2004, total revenue of \$384,811.50 was collected, 2.8% of the total spent on the bridge by Delaware
- For 2005, with the current pricing structure and an estimated 5,000 cars per month or 60,000 per year, expected revenue will be: **\$876,154**
- An annual payment of \$887,247 would pay off the state's investment, at 3% interest, within the 20-year term of the contract



# Conclusions

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- The bridge appears likely to carry sufficient traffic to pay off the state's cost, with interest, in 20 years or less
- Norfolk Southern has obtained significant operating benefits at an acceptable per-car charge
- The future of rail service to the Port of Wilmington and the Delmarva Peninsula has been secured