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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

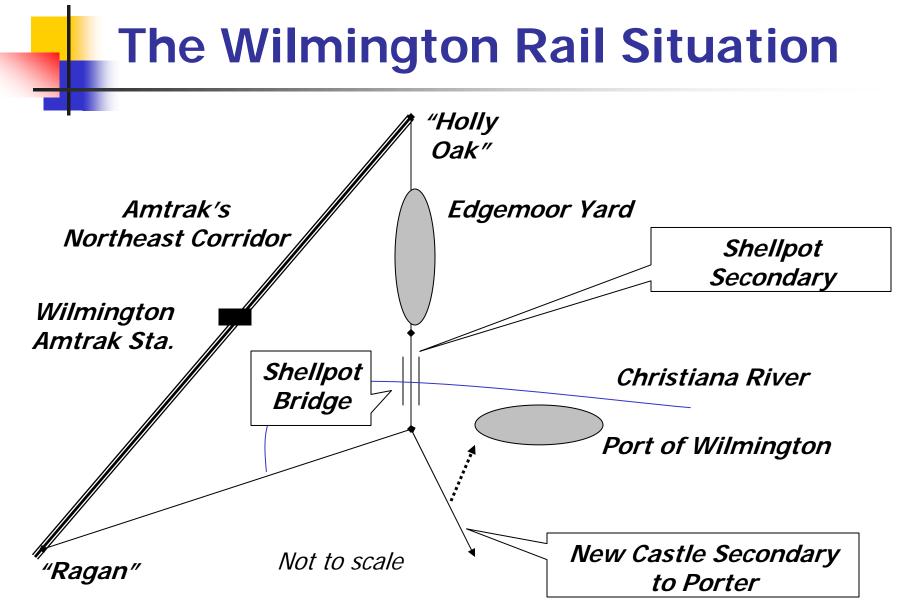
In late 1994, a pier on one of the approach spans shifted under a train...

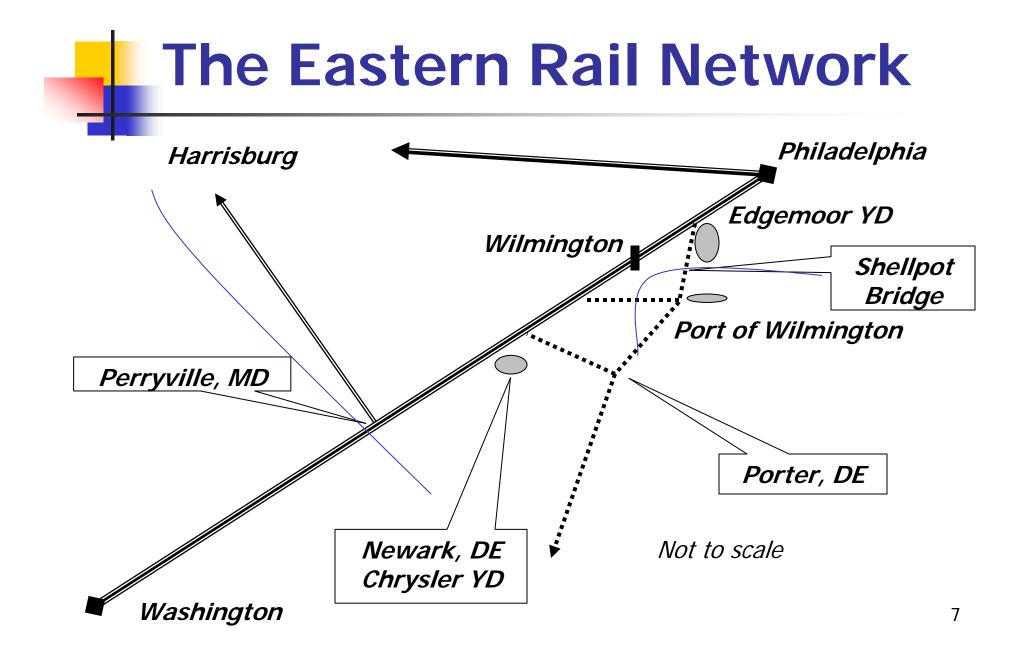
- ...but fortunately the train made it across
- The bridge, however, was out of service
- Conrail elected not to repair the span, choosing instead to re-route freight traffic
- For ten years, the Shellpot Bridge sat unused



The Shellpot Bridge in 2000







The Conrail Purchase

- 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

- 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?

- 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

- Senate Bill 250 of the 101st 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

- On May 3rd, 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

- 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

Years From Re- Opening	Minimum Payment
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

Number of Cars	Original Payment per Car	Adjusted Payment per Car
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?

- 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?

- 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 highlevel 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



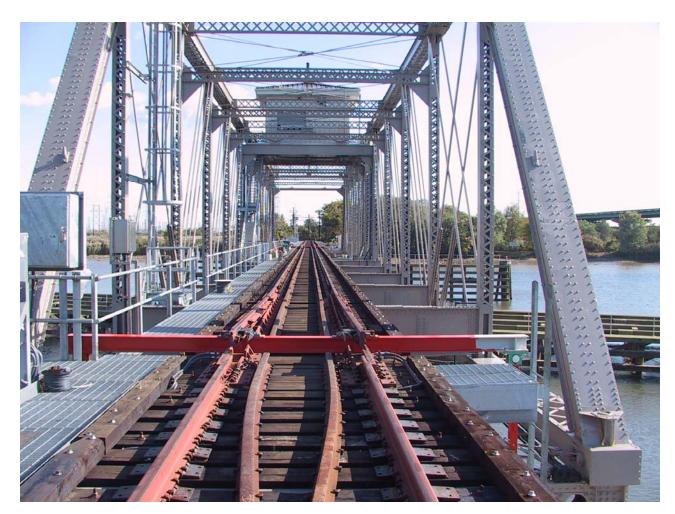
Old approach spans to be replaced with concrete pile trestle



Refurbished truss in Baltimore, awaiting movement back to Delaware



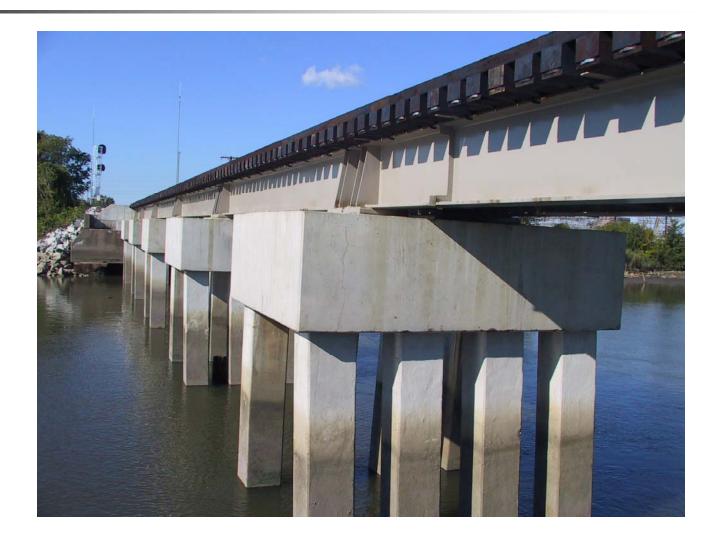
Refurbished truss in place. Testing of machinery under way.



The new track is centered on the formerly doubletrack span



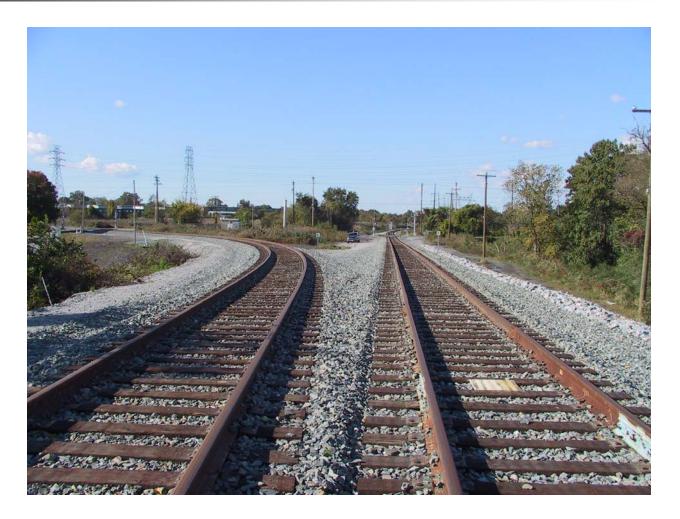
New approach spans



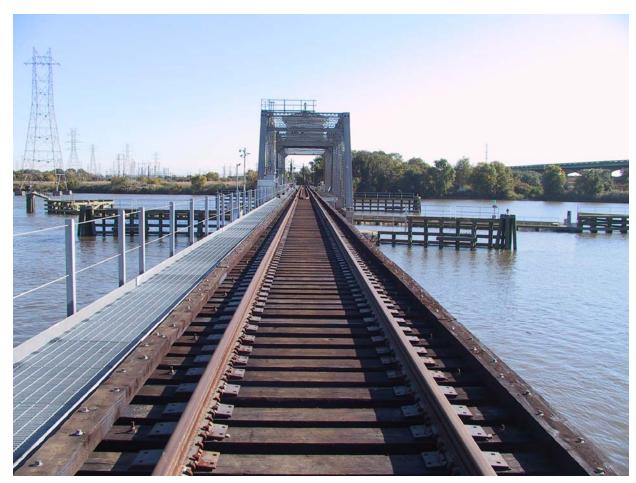
Junction of Shellpot Secondary and New Castle Secondary



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?

Period	# of Cars
November 2004	4,108
December 2004	6,962
January 2005	4,980

Revenue Collected and Estimated

- 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

- 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