
CONRAIL DELAIR BRIDGE PRESENTATION

Delaware Valley Regional Planning Commission

January 17, 2003



Conrail Delair Bridge Update

- Built in 1896
- 4,170 feet long
- Vertical lift movable bridge of unique pin connected truss construction
- 10 mph freight, 30 mph passenger speeds
- 263,000 lb. rating



Conrail Delair Bridge Update

- Only freight access route into South Jersey
- 4 - CSXT trains/day
- 4 - NS trains/day
- 2 - Conrail trains/day
- 28 - passenger trains/day
- 12 - bridge openings/day



Conrail Delair Bridge Update

- Reserve fund was established to address reliability concerns with the Delair Bridge
- Structural analysis completed on 9/11/02 determined need for both short term and long term investment
- Short Term - 11 priority repairs to begin in 2003 - funded by the Delair Bridge Reserve Fund
- Long Term - 60 approach spans on the Conrail single track require replacement in 8-10 years - not funded
- 286 K is achievable during short term investment



Conrail Delair Bridge Next Steps

- Conrail
 - 286 K study of Beesley's Point and Penns Grove Secondary will be completed by Spring 2003
 - Work with NJDOT's Rail Freight Assistance Program on future capacity initiatives in South Jersey
- NS/CSX
 - Develop the priority and timing for specific line capacity upgrades for 286K in South Jersey area
- New Jersey Transit
 - Joint involvement in future planning of capital bridge rehabilitation

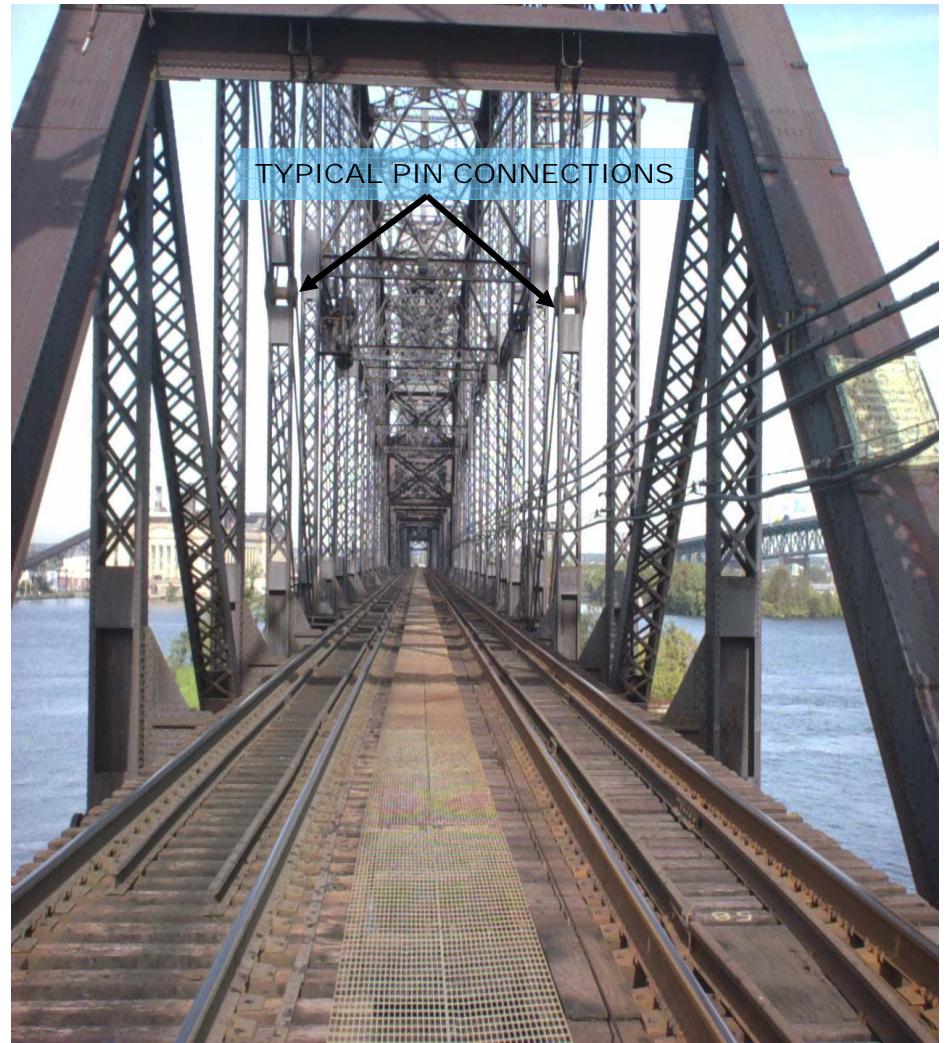




PIN CONNECTED
TRUSS SPANS
BUILT 1896



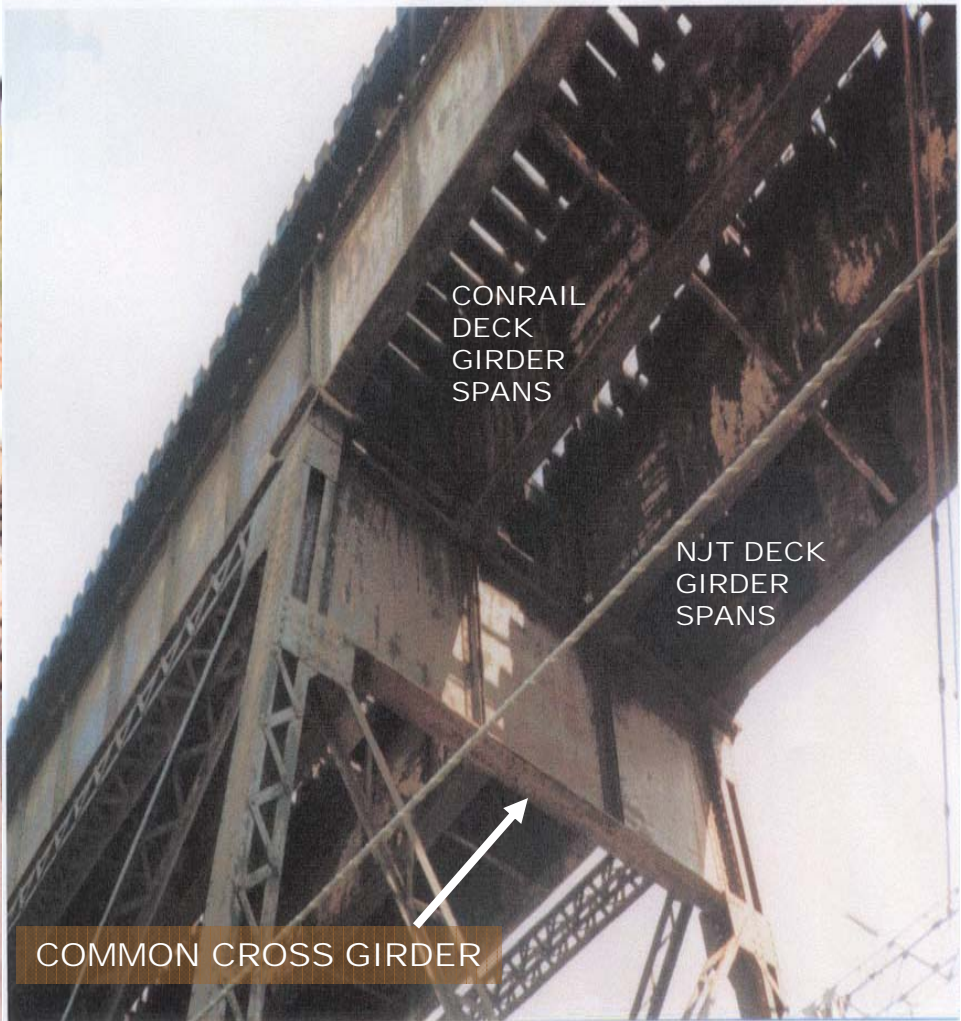
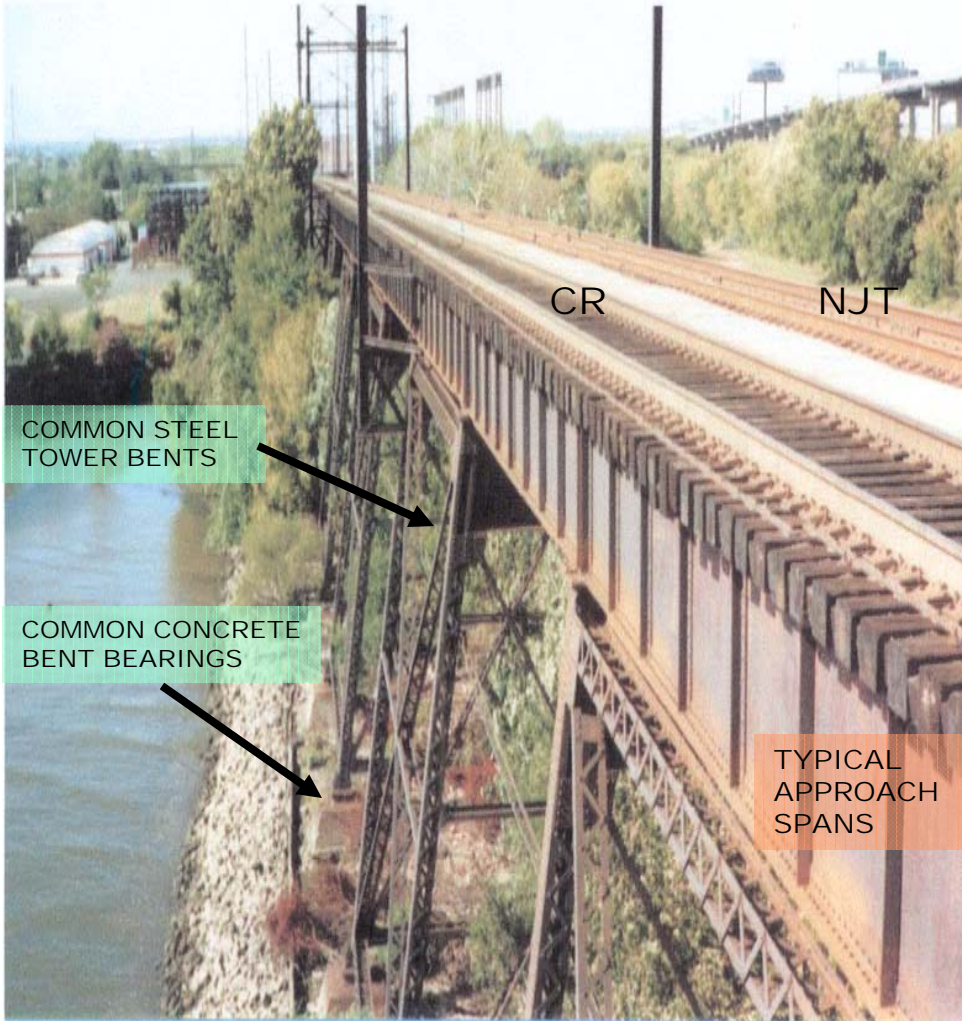
LIFT SPAN
BUILT 1961



TYPICAL PIN CONNECTIONS



DELAIR MOVABLE BRIDGE TRUSS SPANS



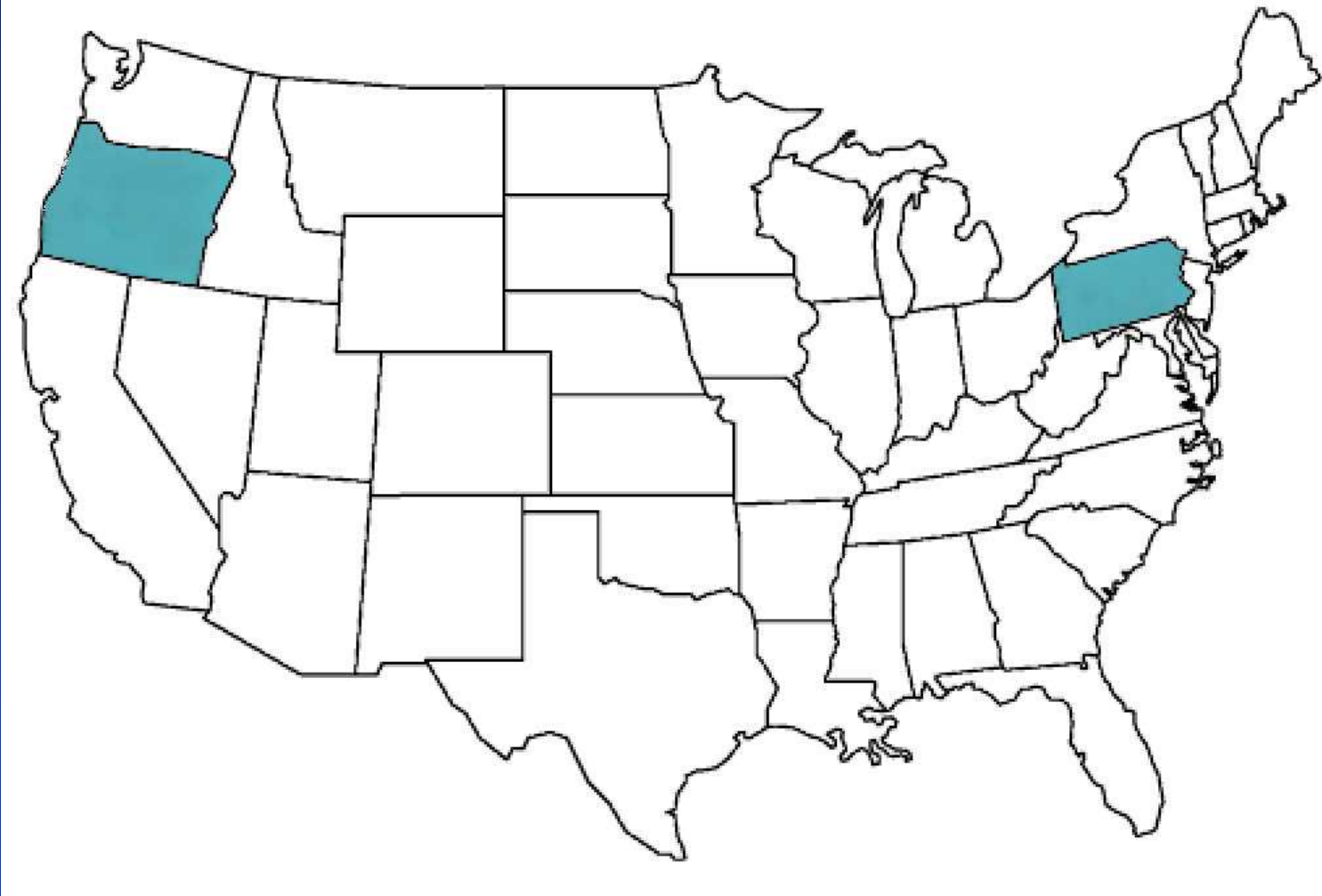
TYPICAL APPROACH SPANS

Freight Planning in Oregon

Objectives

- ... Provide Oregon-Pennsylvania comparisons*
- ... Review OR DOT freight organizational situation*
- ... Identify OR freight system, current issues, and funding*
- ... Provide information about the TRB Intermodal Freight Transport Committee*





Population

	Population (2002)	Rank (2002)
Oregon	3,521,515	27th
Pennsylvania	12,335,091	6th

	Population (2000)	Rank (2000)
Portland-Salem OR-WA PMSA	2,265,000	22nd
Philadelphia PA-NJ PMSA	6,188,000	6th
Pittsburgh MSA	2,359,000	21st



Employment by Industry

	Oregon compared to Pennsylvania (2000)	Portland compared to Philadelphia (2000)
Farm	+	+
Ag. Services, forestry, fishing	+	disclosure
Mining	-	disclosure
Construction	+	+
Manufacturing	-	+
Wholesale trade	+	+
Retail trade	+	+
Transportation and public utilities	-	+
Finance, insurance, real estate	+	-
Services	-	-
Government	+	-



Exports

	Total Value (2001, in millions)	Rank (2001)	Value per Person (2001)	Rank (2001)
Oregon	\$8,900	23rd	\$2,562	9th
Pennsylvania	\$17,433	11th	1,417	34th



Exports

**Five Leading
Commodities as
% of Total
(2000)**

Five Leading Commodities

Oregon

36.5

Semiconductors, wheat, ADP parts and accessories, fertilizers, integrated circuits

Pennsylvania

7.5

Motorcycles, trucks/forklifts, electric plugs and sockets, ADP parts and accessories, coal



Waterborne Tonnage

	Tonnage (2000)	Rank (2000)
Oregon	40,380,000	24th
Pennsylvania	121,552,000	6th

	Tonnage (2000)	Rank (2000)
Portland	34,314,000	22nd
Philadelphia	40,824,000	21st
Pittsburgh	53,923,000	12th



Waterborne Tonnage by Leading Commodity

	Port of Portland (% of total, 2000)	Philadelphia Harbor (% of total, 2000)
Petroleum	32	83
Wheat	28	
Chemicals and related products	13	7
Sand, gravel, stone, soil	8	
Iron and steel products		3
Paper products		2



Waterborne Tonnage Destination

	Domestic (% of total, 2000)	Export (% of total, 2000)	Import (% of total, 2000)
Portland	47	38	14
Philadelphia	34	1	64
Pittsburgh	100	0	0



Other

	Unemployment Rate (Nov. 2002)	Per Capita Income (% of US, 2000)	Area (Square Miles)
Oregon	7.1%	94	97,132
Pennsylvania	5.6%	100	46,058
U.S.	6.0%	100	3,717,796
Portland	7.0%	107	134*
Philadelphia	5.3%	114	135*
Pittsburgh	5.1%	104	56*

*City area only



Oregon Freight Advisory Committee

- ... Initially established by former ODOT Director in August 1998*
- ... Formally authorized by the Oregon Legislature in 2001 Legislative session*
- ... Scheduled to “sunset” on December 31, 2005 (unless re-authorized)*



Oregon Freight Advisory Committee (cont.)

- ... *Comprised of representatives from shippers, carriers, port districts, associations, governmental organizations, and others*
- ... *Charged with*
 - ☞ *advising the ODOT director and OR Transportation Commission on issues policies, and programs impacting multimodal freight mobility in Oregon*
 - ☞ *identifying high priority freight mobility projects*



Oregon Freight Advisory Committee (cont.)

... *More information on web site at*

http://www.odot.state.or.us/intermodal-freight/OFAC/OFAC_cover_page.htm



Oregon DOT Freight Staff

... Director's Office:

- ☞ Chief of Staff (less than 0.25)**
- ☞ Support Staff (less than 0.25)**

... Planning Section:

- ☞ 1.5 Senior Planners**
- ☞ 0.5 Technician**

... Rail Division:

- ☞ State Rail Planner**



Examples of Freight Staff Activities

... Provide staff support to the FAC

... Prepare/support development of studies and plans

- ☞ Freight Moves the Oregon Economy (1999)**
- ☞ Oregon Highway Plan (1999)**
- ☞ Oregon Rail Plan (2001)**
- ☞ Oregon Transportation Plan update (2003-04)**
- ☞ Statewide Commodity Flow Study (2003)**

... Help maintain NHS Intermodal Connector data



Interaction with MPOs

... Extensive interaction with Portland MPO

- ☞ Intermodal Management System***
- ☞ Freight Data Group***
- ☞ Freight Modeling***
- ☞ I-5 Transportation and Trade Partnership***

... Less extensive interaction with small MPOs

- ☞ Medford MPO Freight Study***



Freight System in Oregon

... Highways

- *I-5 (north-south) and I-84 (east-west)*
- *State Highway Freight System*

... Rail

- *Union Pacific and Burlington Northern Santa Fe*
- *Eighteen regional and short-line railroads*



Freight System in Oregon

... *Marine*

- ➡ *Columbia-Snake River System*
- ➡ *Coastal ports*

... *Air*

- ➡ *Seven commercial airports*

... *Pipelines*

- ➡ *Pipelines*
- ➡ *Oil and natural gas*



Freight Issues in Oregon

... Highways

- *Congestion, primarily in the Portland area*
- *Bridge deterioration, especially bridge cracking*
- *Pavement deterioration*

... Rail

- *Congestion in the Portland area*
- *Tunnel clearances*
- *Deteriorated infrastructure for regional / short lines*
- *At-grade rail crossings*



Freight Issues in Oregon (cont.)

... *Marine*

- 👉 *Columbia River Channel Deepening from 40 to 43 feet*
- 👉 *Snake River Dam breachings in WA*
- 👉 *Coastal port dredging*
- 👉 *Barge navigation under interstate and rail bridges in Portland*



Freight Issues in Oregon (cont.)

... *Air*

- ➡ *Security*
- ➡ *Service reductions*
- ➡ *Lack of service*

... *Pipelines*

- ➡ *Safety*
- ➡ *NIMBY ism*
- ➡ *Lack of service in some areas (natural gas)*



Funding

- ... *Not enough to keep up with needs*
- ... *Last state gas tax increase in 1993*
- ... *Oregon Transportation Investment Act (2001)*
 - 👉 *Funded by increase in fee for motor vehicle transfers*
 - 👉 *Expected to generate \$500 million in bonds*
 - 👉 *Freight mobility one of the criteria for project selection*



Funding (cont.)

- ... *Oregon Road User Fee Task Force . . . looking at*
 - ☞ *Mileage based fees*
 - ☞ *Congestion pricing*
 - ☞ *New facility tolling (only two toll bridges at present)*
 - ☞ *Studded tire usage fee*
- ... *2003 Legislative session began January 13*



Funding (cont.)

- ... ***Rail: State rehabilitation funds for short lines***
 - ☞ *\$2 million, one time only in 2001 Legislature*
 - ☞ *Funded nine projects, mostly tie replacement*
 - ☞ *Funding also used to pay federal credit risk premium for federal RRIF program*
- ... ***Rail: Grade crossing protection funds***
- ... ***Rail: State economic development funds***



Funding (cont.)

... *Marine: Port Revolving Loan Fund*

- 👉 *administered through state economic development agency*
- 👉 *maximum loan of \$700,000*
- 👉 *funding is for infrastructure or business development projects*



Funding (cont.)

... Marine: Special Public Works Fund

- ☞ administered through state economic development agency**
- ☞ loans up to \$11,000,000; grants up to \$500,000**
- ☞ funding is for municipally owned public infrastructure projects**



ODOT TEA 21 Reauthorization Freight Recommendations

- ... Strengthen federal programs, research, and innovative financing tools to improve freight mobility (e.g., National Corridor Program)*
- ... Establish interoperability standards for truck transponders among jurisdictions and promote the integration of pre-clearance systems*



ODOT TEA 21 Reauthorization Freight Recommendations (cont.)

- ... Increase flexibility of federal funds to include rail capital improvements*
- ... Modify light density rail line pilot program to increase its effectiveness*



TRB Intermodal Freight Transport Committee

- ... *Addresses connections between modes*
- ... *Members: 25 full, 2 “under 30,” 2 international*
- ... *Focus is on freight research*
 - 👉 *Annual meeting: Review papers, organize sessions, and make presentations*
 - 👉 *Develop freight research ideas and participate on panels for TRB NCHRP projects*
 - 👉 *Maintain Web page and prepare newsletter*



***Thank
You !***

