The Ravenna Connection

NEOtrans

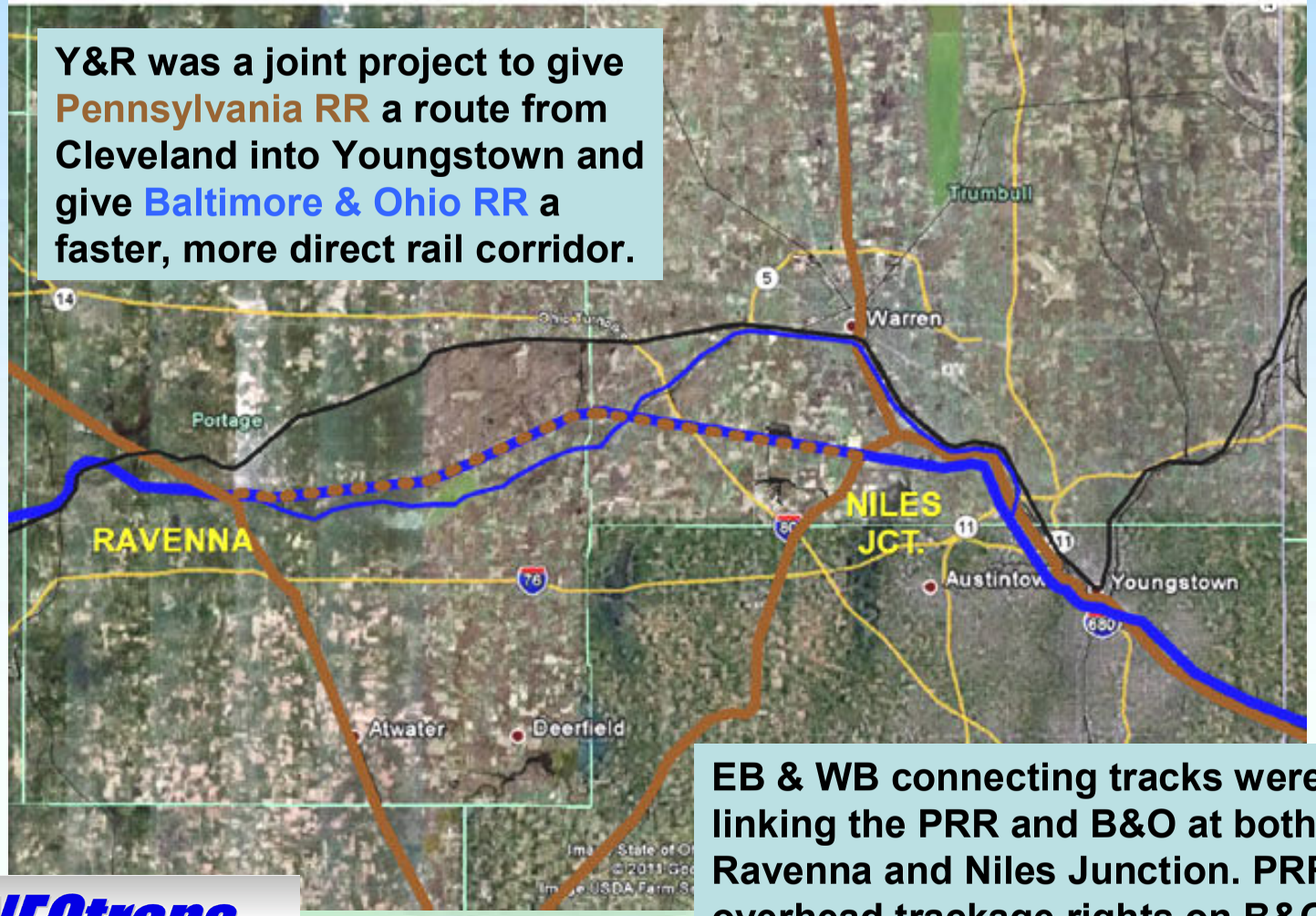
Presentation overview

- Origins of the Ravenna Connection
- Eighty years of railroad operations
- Demise of the connecting tracks
- Past attempts to restore the Ravenna Connection
- Resurgence of Mahoning Valley manufacturing
- Potential freight users of a restored Ravenna Connection
- Vital statistics and restoration options

NEOtrans

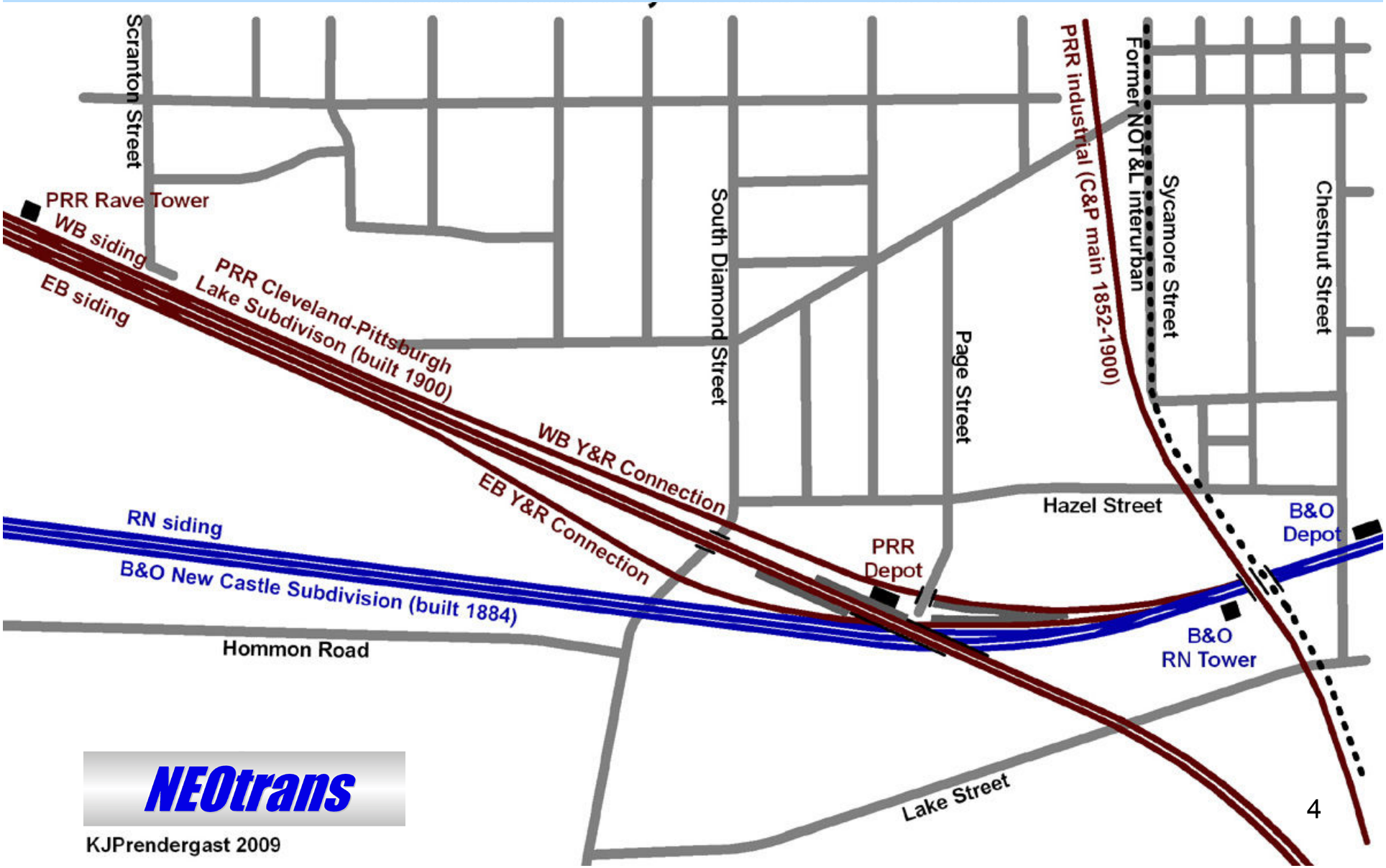
Origins of the Ravenna Connection

Youngstown & Ravenna RR - 1905-1984



NEOtrans

Origins of the Ravenna Connection



NEOtrans

KJPrendergast 2009

80 years of railroad operations

Right, the view west in 1905 at PRR station from between the two connections with PRR main above; B&O tracks out of view at left.

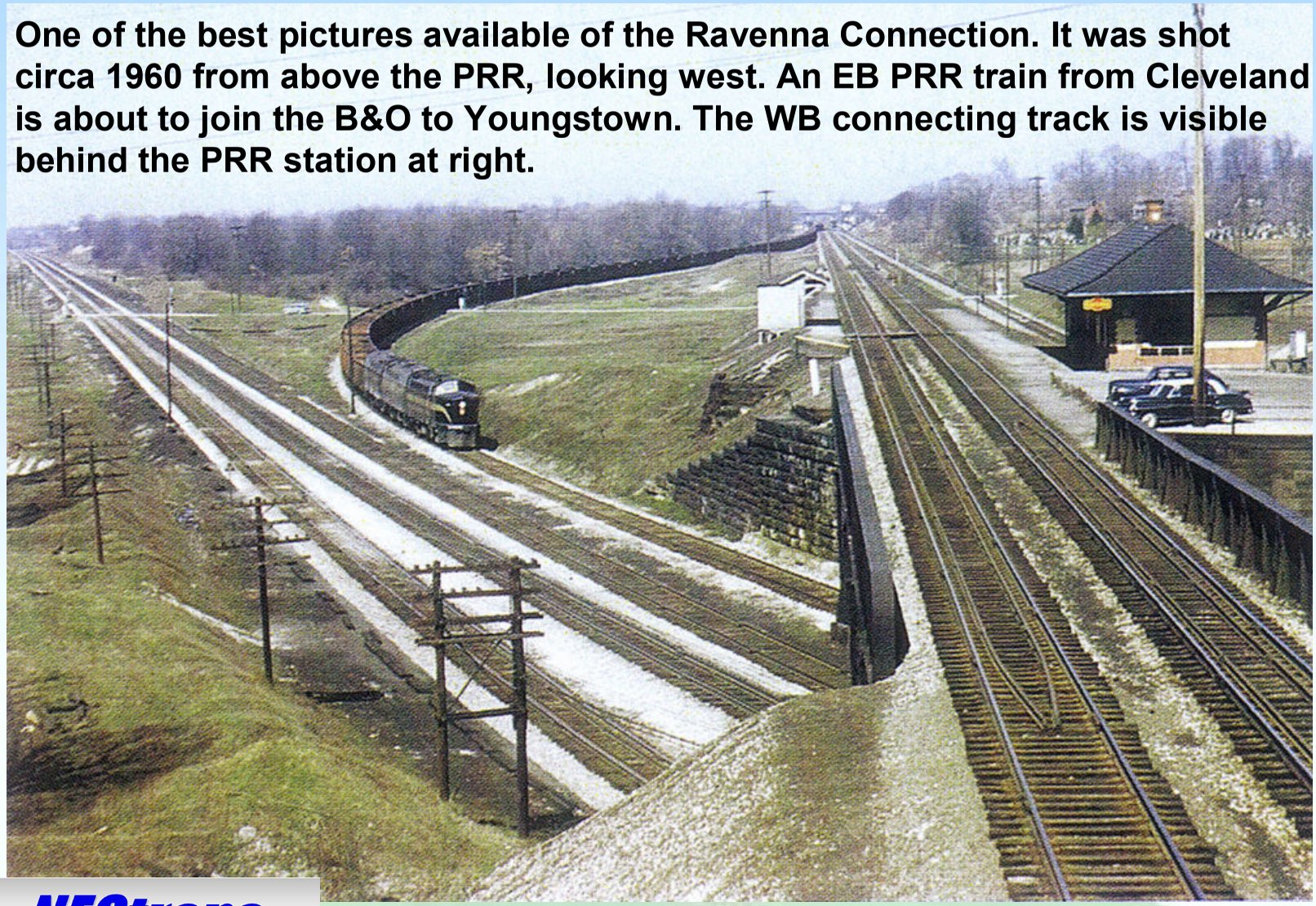
Left, east view from Diamond Street in 1955, an EB PRR passenger train is about to enter the B&O, seen at right.

Right, New York Central RR also used the Ravenna Connection. In 1957, an EB NYC train passes B&O's RN switch tower. The WB connection track is seen at right.

NEOtrans

80 years of railroad operations

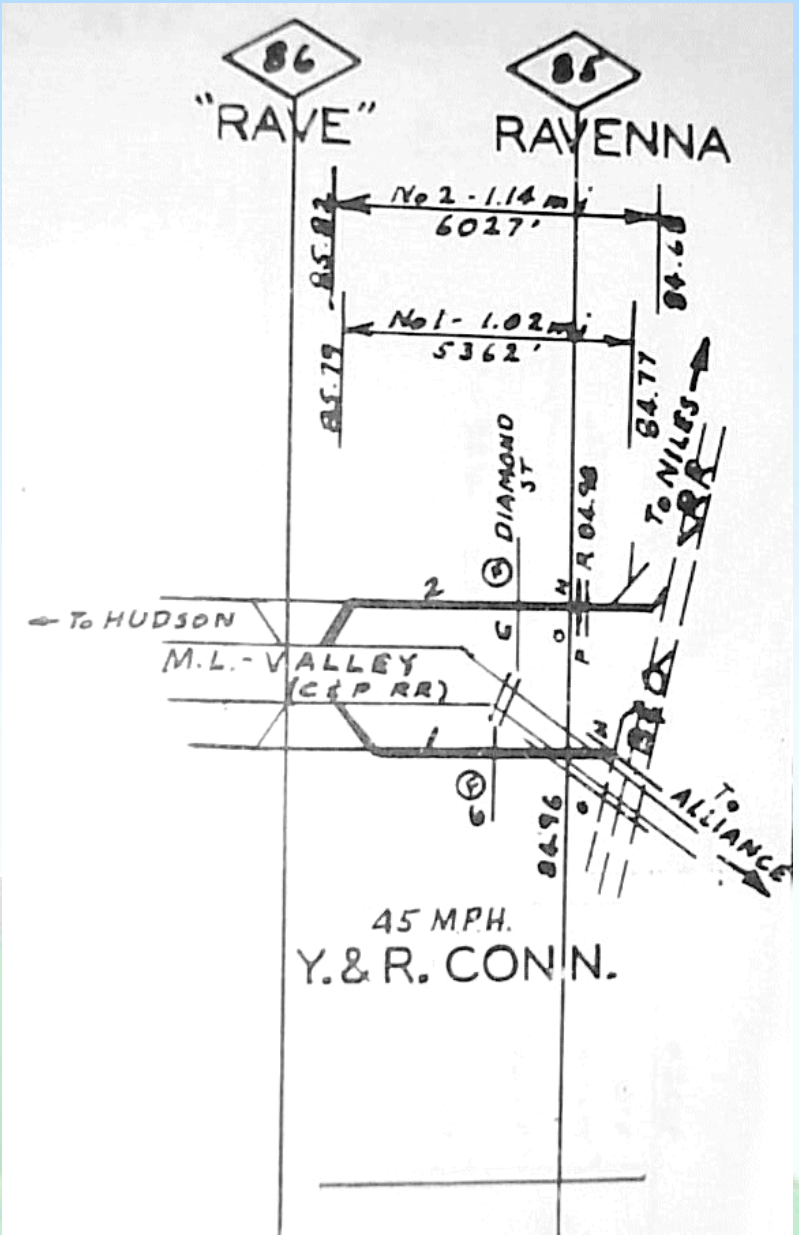
One of the best pictures available of the Ravenna Connection. It was shot circa 1960 from above the PRR, looking west. An EB PRR train from Cleveland is about to join the B&O to Youngstown. The WB connecting track is visible behind the PRR station at right.



NEOtrans

80 years of railroad operations

Penn Central RR took over after PRR and NYC merged in 1968. This is PC's first track chart for the Ravenna Connection (then-called the Youngstown & Ravenna Connection) showing both the eastbound (No. 1) track and the westbound (No. 2) track. NOTE THE THICKER LINES IDENTIFYING THE Y&R CONNECTING TRACKS. The track chart shows the length of both tracks in feet and miles, plus the grade crossing with Diamond Street, the alignment of tracks at PC's RAVE Tower, the placement of crossover tracks between the B&O RR's two main tracks and the top speed (45 mph) for all trains using the Y&R connecting tracks.



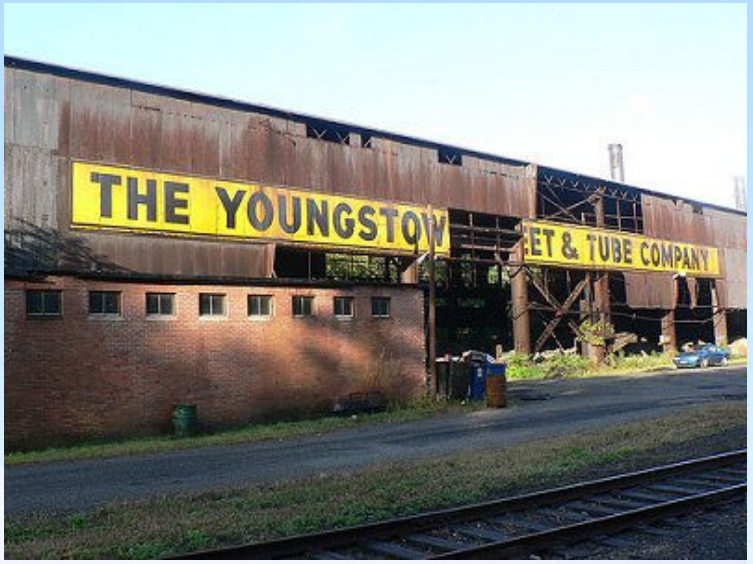
NEOtrans

Demise of the connecting tracks

As the government built interstate highways, privately run passenger trains went into decline in the 1960s. Both connecting tracks were no longer needed. Rather than repair the EB connecting track after a 1970 freight train derailment, Penn Central removed the EB connecting track. The WB connecting track was kept.

NEOtrans

Demise of the connecting tracks



The near-total collapse of the steel industry in the Mahoning Valley in the 1970s/80s eliminated most local and regional rail shipments such as iron ore from Lake Erie ports and coal from Ohio and Pennsylvania mines.

NEOtrans

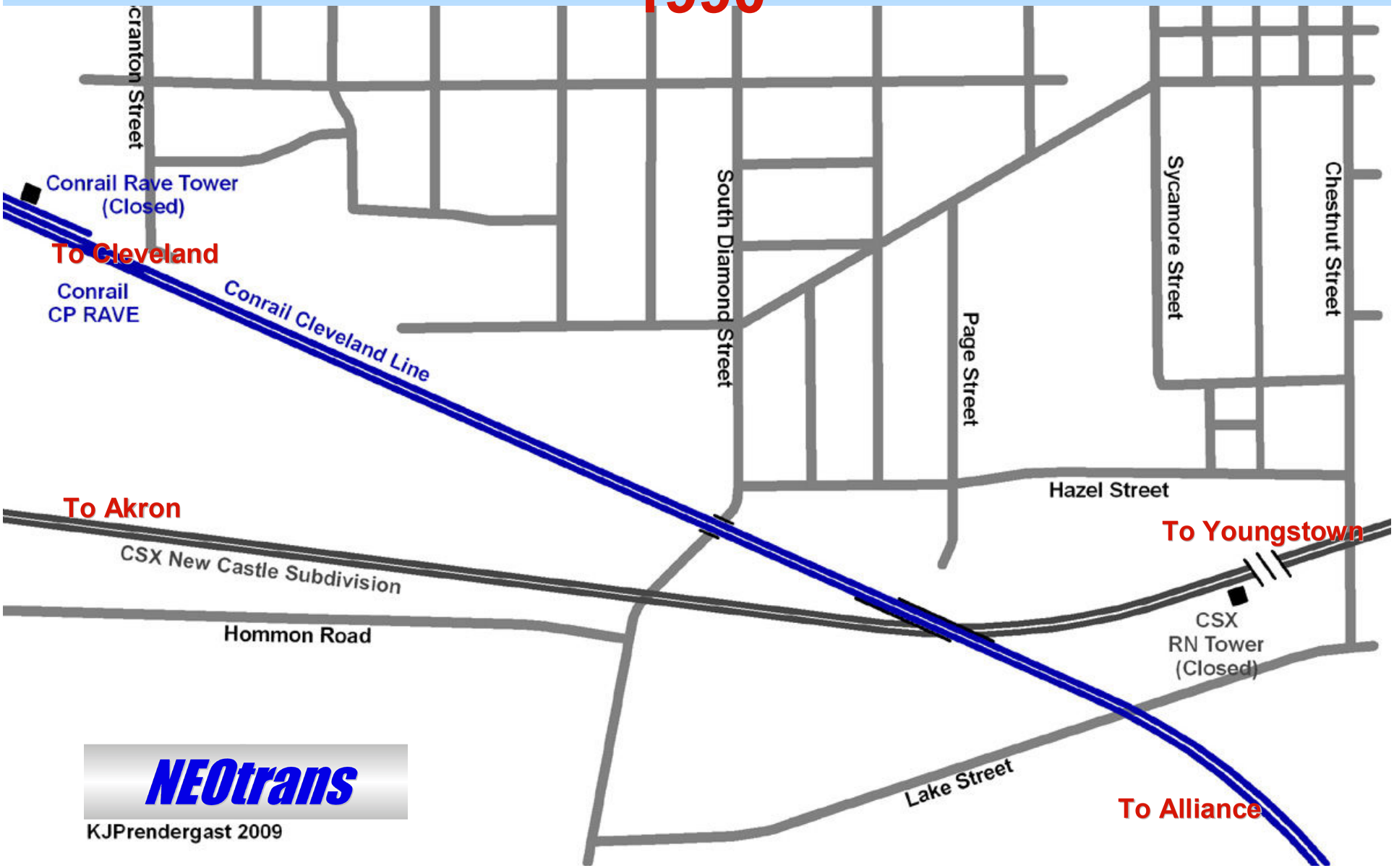
Demise of the connecting tracks

The remaining Ravenna Connection track, curving off the left side of this photo, was last used by a scheduled train in 1980 and mothballed until 1984 (the date of this photo). The track was fully removed by 1986. This view looks east at B&O's RN Tower from the Conrail bridge. Conrail took over for PC in 1976.

This was the last direct rail link between the industries of Mahoning Valley and the industries and port of Cleveland.

NEOtrans

Demise of the connecting tracks
1990



Past attempts to restore the Connection

- Studies by Amtrak in 1984, ODOT's Rail Division in 1990, & Ohio Rail Development Commission in 1995 all identified restoration of the Ravenna Connection as needed before any rail service could operate directly between Cleveland and Youngstown.
- $200,000 was appropriated to the office of the Federal Railroad Administrator by Congress in 1997 for feasibility & environmental studies of restoring the Ravenna Connection (Amendment #47 in House Report 104-785). This appropriation was never used.
- Eastgate COG has the Ravenna Connection in its 2030 Long Range Transportation Plan. It estimated the cost of restoring the Ravenna Connection at $4,178,318 (1996 dollars).

NEOtrans

Resurgence of Mahoning Valley manufacturing

- The Youngstown-Warren-Boardman metro area ranked #1 in manufacturing job growth in the nation in 2010, according to the Brookings Institution.
- Strong growth continued into 2011, when American City Business Journals ranked Youngstown-Warren-Boardman as 14th-best in the nation for manufacturing job growth.
- Construction of large, new manufacturing facilities in the Mahoning Valley and the start of drilling into the massive Marcellus/Utica shale oil/gas play suggest more demand for manufactured goods to service these and other customers.

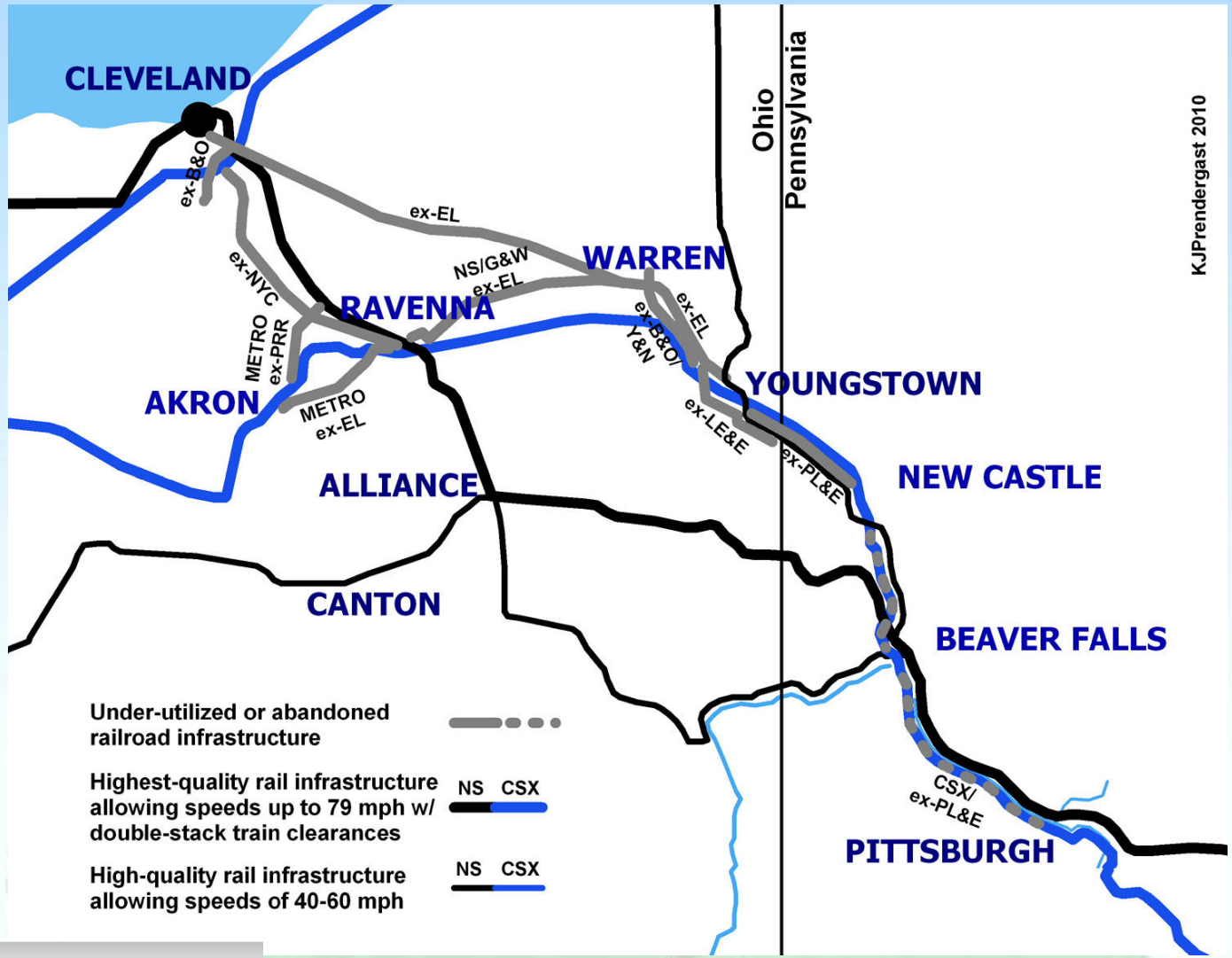
NEOtrans

Resurgence of Mahoning Valley manufacturing

- Mahoning Valley industries are not as well-served by low-cost, energy-efficient freight rail as they were before the 1980s.
- Infrastructure cuts were made too deeply, leaving gaps in rail corridors, poor track conditions & stranded/captive shippers.
- Rail infrastructure losses are restraining the region's industrial and commercial growth and redevelopment.

NEOtrans

Gray rail lines are abandoned or downgraded



NEOtrans

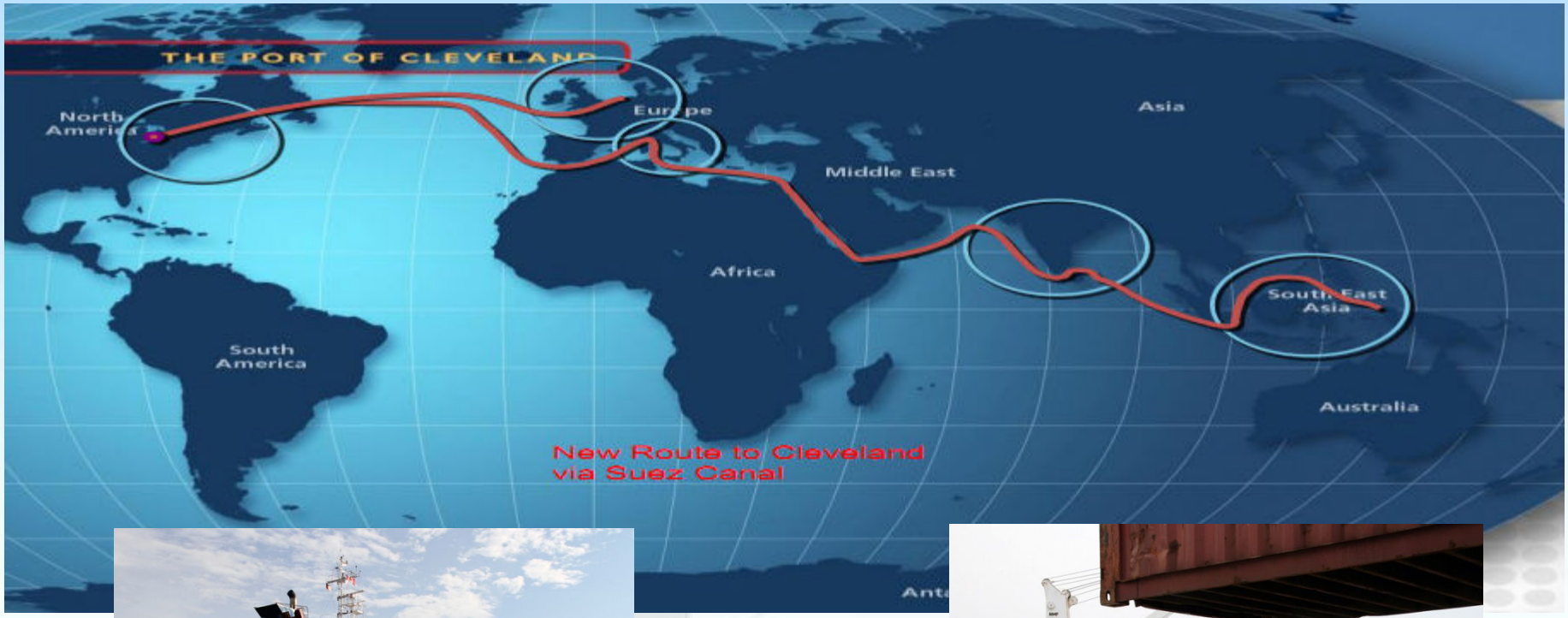
Recent developments, potential freight users of restored Ravenna Connection

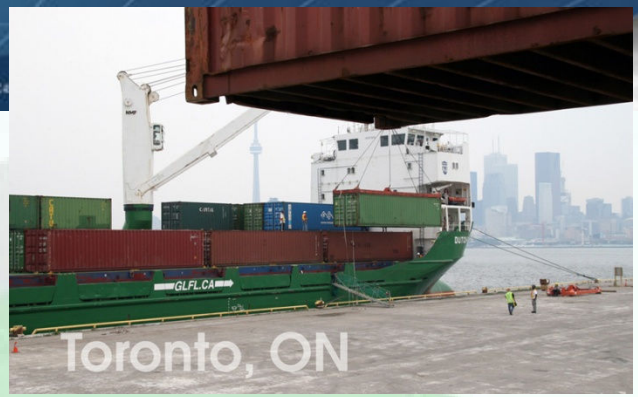
- Conrail-Pennsylvania double-stack clearance program (1995)
- CSX National Gateway Corridor (2014)
- Cleveland-Cuyahoga County Port Authority SSS initiative
- Direct/spin-off economic development from gas/oil activity
- Ohio Commerce Center access
- Camp Ravenna Joint Military Training Center access

NEOtrans

Double-stack container train routes-2015

Cleveland-Cuyahoga County Port Authority SSS initiative





NEOtrans

Cleveland-Cuyahoga County Port Authority SSS initiative

- Short-Sea Shipping initiative seeks to add container shipping at Cleveland to/from Montreal, Halifax and overseas;
- Negotiating with Great Lakes Feeder Lines for use of their ships, Arctic Sea (270 containers) and the Dutch Runner (211);
- Each ship can make four-day turns to Montreal and back;
- Cleveland Commercial RR hired to oversee port rail marketing and dockside rail loop construction, now underway.
- But due to the “missing mile” at Ravenna, no direct rail link exists between Cleveland and Mahoning Valley.

NEOtrans

Direct/spin-off economic development from gas/oil activity

Steel/pipe makers, steel scrap recyclers, equipment manufacturers, frack sand companies, water treatment plants and many more will benefit from restoring the Ravenna Connection.

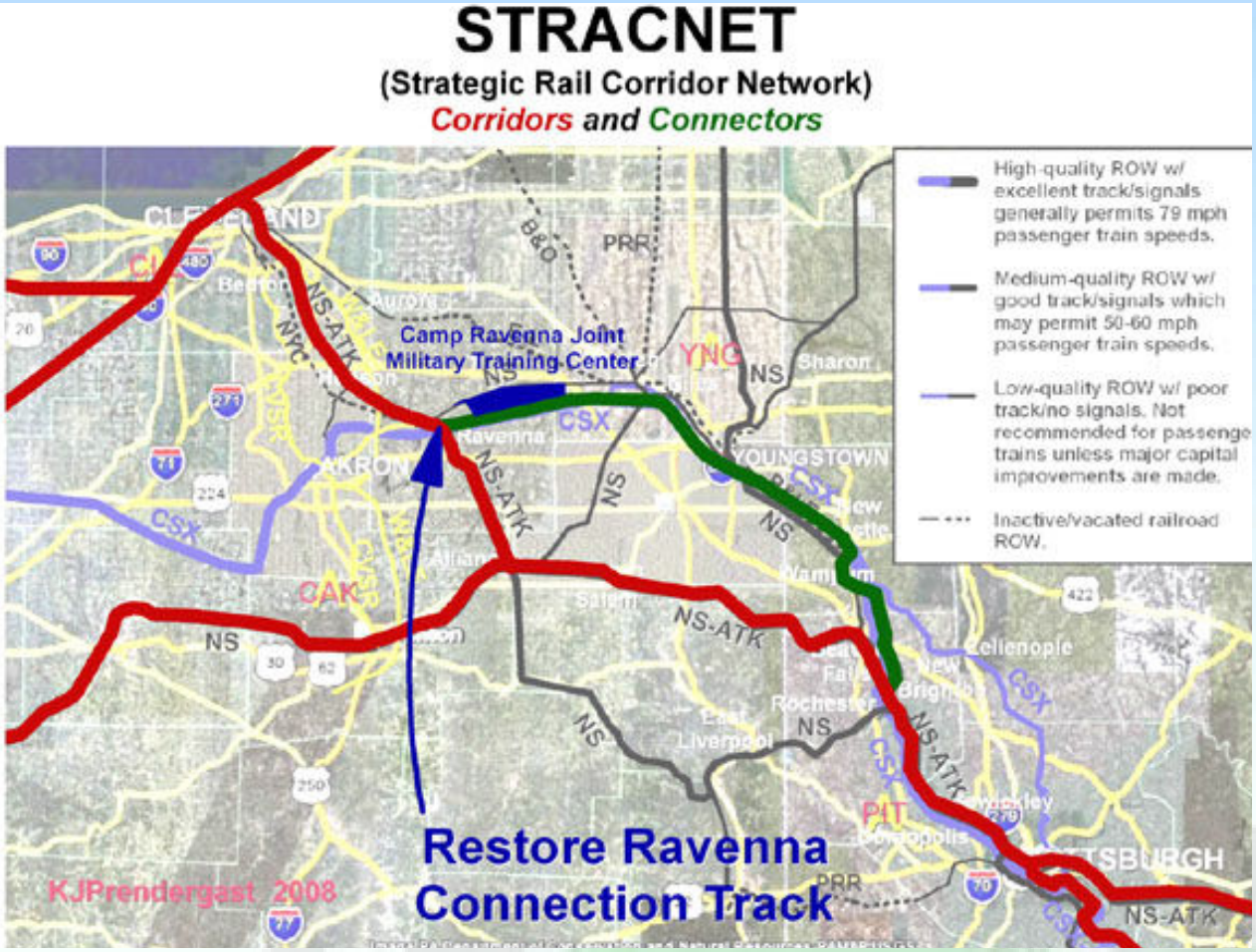
NEOtrans

Ohio Commerce Center access

Ravenna Connection will improve access to the growing transload facilities at the Ohio Commerce Center, including from ports on Lake Erie and the Ohio River.

NEOtrans

Military/Strategic access



Ravenna Connection restores Department of Defense's STRACNET link to/from Camp Ravenna from/to Port of Cleveland, Western US including for the movement of armored equipment and heavy artillery pieces that cannot be moved on highways.

NEOtrans

Vital statistics of the Ravenna Connection

1905-1970

Number of connecting tracks: TWO, one each for eastbound and westbound rail traffic.
Length of each track connection: Eastbound (No. 1) track = 5,362 feet or 1.02 miles; Westbound (No. 2) track = 6,027 feet or 1.14 miles.
Owner of rights of way: before 1968, the Youngstown & Ravenna Railroad Co., a wholly owned subsidiary of the Pennsylvania RR; after 1968, the Penn-Central Transportation Co.
Users of Ravenna Connection: PRR operated about 5-15 daily freight trains and 10 daily passenger trains before 1950, but ended all regular passenger service in 1964. From 1911-68, New York Central RR operated about 5-10 daily freight trains on the connection.
Traffic control: PRR end of connecting tracks overseen by RAVE Tower, B&O end by RN Tower, staffed 24 hours. Switches/signals changed by mechanical interlocking equipment.

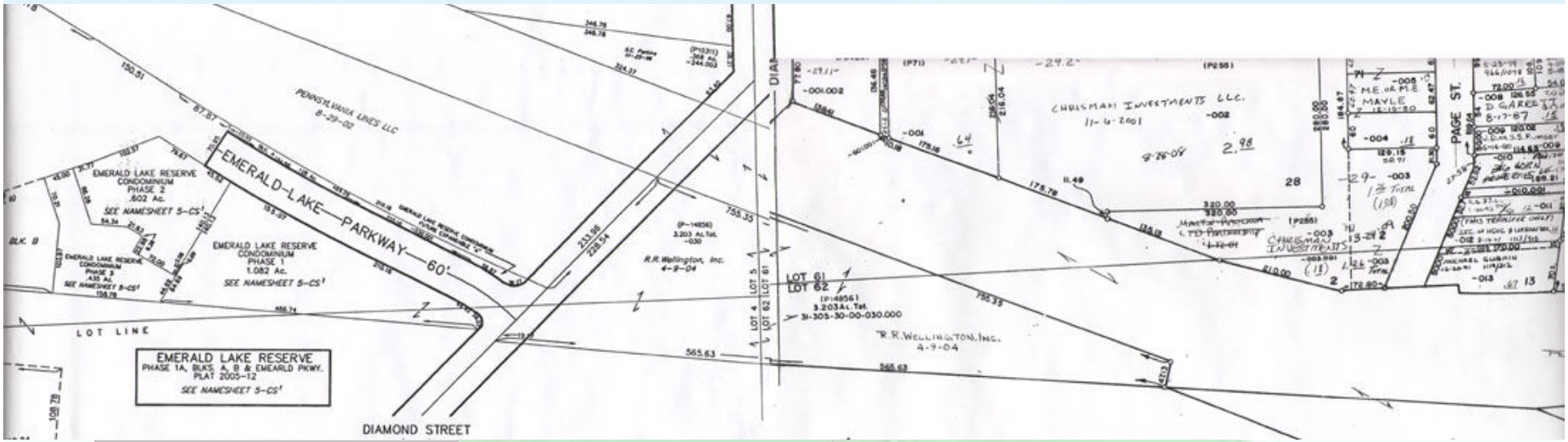
1970-1984

Number of connecting tracks: ONE for both eastbound and westbound rail traffic.
Length of remaining track connection: No. 2 track was shortened to about 5,500 feet or 1.04 miles to use the easternmost crossover track at B&O's RN Tower.
Owner of rights of way: PC from 1968-76; Consolidated Rail Corp. (Conrail) after 1976.
Users of Ravenna Connection: PC operated about 10 daily freight trains, mostly iron ore from Cleveland's docks to Youngstown; Conrail ended regular use of connection in 1980.
Traffic control: PC/Conrail staff at RAVE Tower, B&O/Chessie System staff at RN Tower. Both towers relied on original 1905 switch/signal equipment but were now radio-equipped.

NEOtrans

Vital statistics of the Ravenna Connection

Who owns the land in 2011 on which the Ravenna Connection tracks previously sat?
Norfolk Southern Corp. (dba Pennsylvania Lines LLC) owns the westbound connection property in its entirety. The eastbound connection right of way is owned by NS west of Diamond Street and R.R. Wellington Inc. east of Diamond Street. See tax map below.



NEOtrans

Which connecting track should be restored?

If the old Eastbound (No. 1) connecting track is restored…

Length of track: 5,362 feet or 1.02 miles (could be shortened by about 1,700 feet).

Gradient of track: about 0.37 percent at 5,362 feet of track length, or 0.57 percent at 3,700 feet of track length. The latter option includes joining the CSX tracks immediately west of the NS bridge where the CSX tracks are lowered for 21 feet of vertical clearance.

Grade crossing: with Diamond Street, offers good visibility of crossing by motorists.

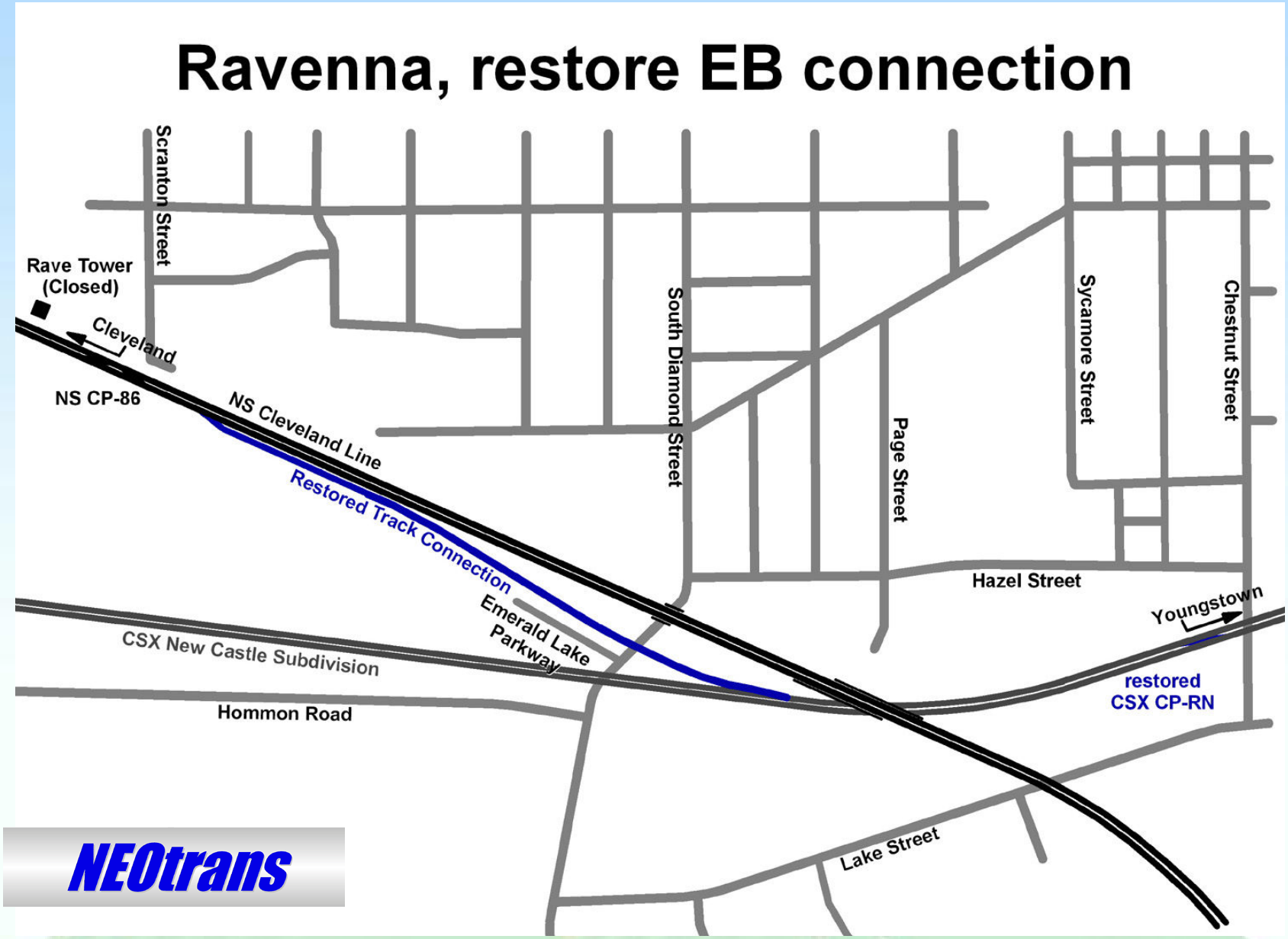
Overhead clearance: less than 21-foot vertical clearance below NS bridge unless connecting track is shortened to tie into CSX mainline west of bridge to take advantage of CSX track-lowering project below the NS bridge as part of National Gateway Corridor.

Property acquisitions: 3.203 acres of vacant land owned by RR Wellington Inc. appraised at $8,400 by the Portage County Auditor. Norfolk Southern owns all other right of way.

Environmental remediation: Emerald Lake Condos built next to old Eastbound (No. 1) track right of way and the busy CSX grade-crossing of Diamond Street. Remediation could include safety enhancements at Diamond Street for gaining a Quiet-Zone designation.

NEOtrans

Which connecting track should be restored?



NEOtrans

Which connecting track should be restored?

If the old Westbound (No. 2) connecting track is restored…

Length of track: 6,027 feet or 1.14 miles (could be shortened by about 600 feet).

Gradient of track: about 0.33 percent at 6,027 feet of track length, or about 0.37 percent at 5,400 feet of track length.

Grade crossing: with Diamond Street, offers poor visibility of crossing by motorists.

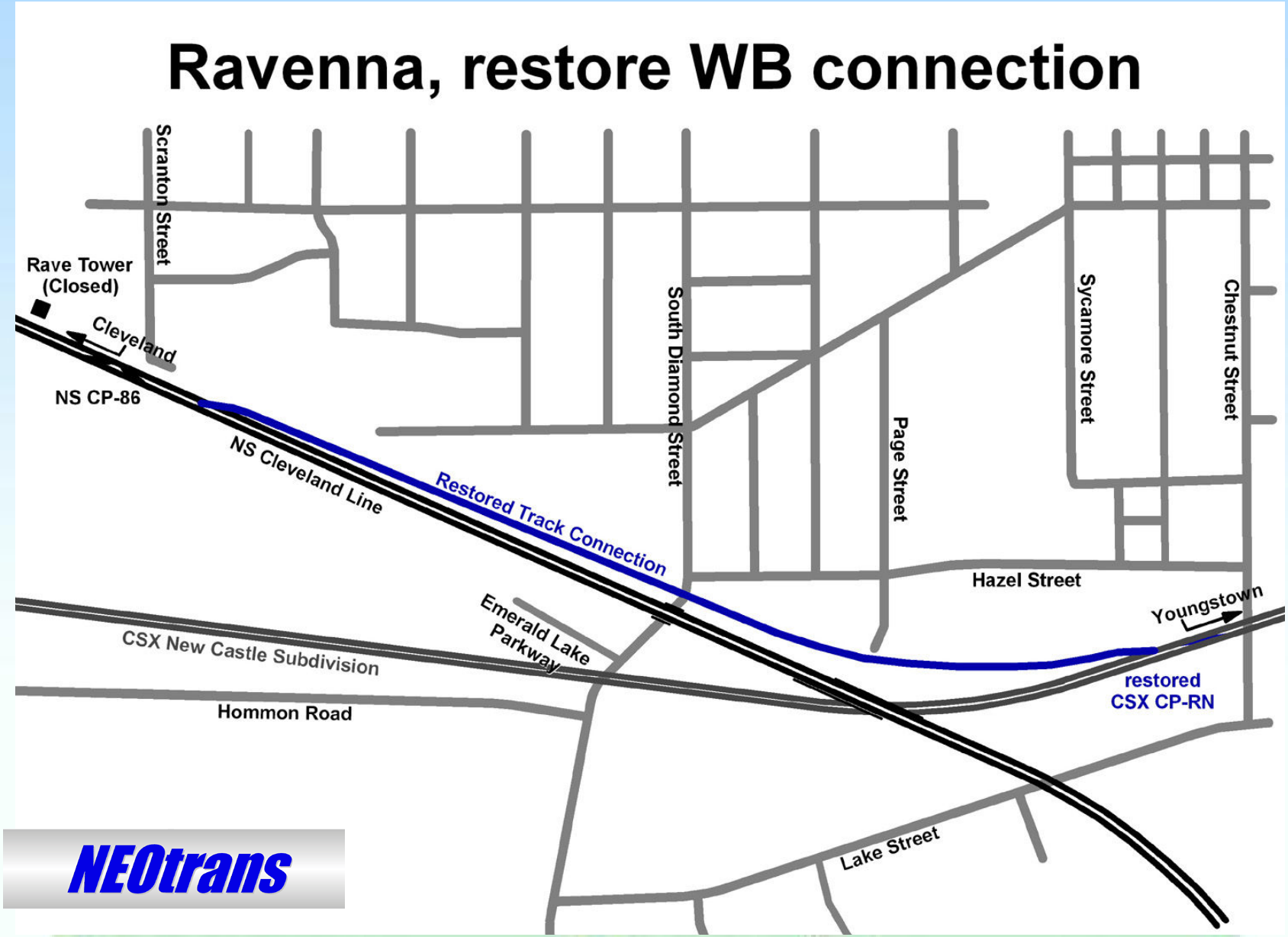
Overhead clearance: no clearance restrictions.

Property acquisitions: none needed. Norfolk Southern owns entire right of way.

Environmental remediation: poor visibility of Diamond Street crossing by motorists due to a curve in the street north of crossing and NS overpass/abutments south of crossing will likely require extra safety enhancements (four-quadrant gates, over-the-road cantilevered crossing signals, rumble strips in pavement, or advance warning signs, etc). Noise walls or other buffering on both sides of crossing may be added to protect existing housing from horn noise as Quiet Zone is unlikely due to the crossing's poor visibility.

NEOtrans

Which connecting track should be restored?



Possible next steps…..

- Identify project sponsor and determine if the project can be financed entirely by private funds. If federal funds are needed, then the following steps would likely be taken.
- Secure stakeholder letters, agreements to seek project.
- Secure funding for an Alternatives Analysis and Environmental Assessment; award bid to qualified firm to conduct analysis.
- Conduct analysis and receive a record of decision from Federal Railroad Administration.
- Secure funding for final design and construction.
- Planning and construction could take about 2-5 years total.

NEOtrans

CONTACT US:

NEOtrans
12029 Clifton Blvd., Suite 505
Cleveland, OH 44107-2189
(216) 288-4883
NEOtransConsultancy@gmail.com

NEOtrans