

Rail Project Scorecards **PRELIMINARY**

To develop criteria for the identification and recommendation of rail infrastructure development projects, a public meeting was held March 8, 2012 in downtown Youngstown. It was attended by citizens, urban planners, municipal officials, shippers, business owners and representatives, commercial real estate professionals and others. Separately, representatives of railroads, chamber of commerce and other business and logistics experts were contacted for their input to this assessment. Through that input, numerous criteria were suggested to help identify potential projects and, ultimately to evaluate the projects that were suggested by railroads, shippers and others.

A follow-up meeting was held May 10, 2012 at the same location in downtown Youngstown and attended by many of the same persons as the first meeting. There, they reviewed the projects and saw how the projects scored using a point system based on the suggested criteria. These are the suggested criteria and the points that were assigned to them.

Scorecard criteria descriptions

TIMELINE – Since this report is an assessment of “immediate needs” then Timeline is one of the most crucial criteria. In fact, RESTORE’s contract with the Western Reserve Port Authority precludes it from recommending any projects whose implementation will likely require more than two years of planning, procurement of most of the funding package, property acquisition, permits and construction. So, for a project to be recommended, planning might have to be already completed or well-advanced at the time of this assessment for construction to be underway within two years of the issuance of this report.

Therefore, if a project’s construction can be underway in one year, it is assigned ten (10) points; if a project’s construction can be underway in two years, it is assigned five (5) points. If construction is unlikely to begin until three years or more after the issuance of this report, then it is assigned zero (0) points.

UNFUNDED CAPITAL COST – The ability to realize projects often depends on the cost. The larger the cost, the fewer potential funders there are with the capacity to pay for it. Capacity is not limited to finances, but also to experience with rail projects. If a rail project carries a relatively small price tag, it is also likely to be less complicated (ie: requires less environmental review, needs little or no property acquisition, involves little or no earthmoving, etc.). Or if there is significant funding already in place for a large project but the unfunded portion is relatively small, then much of the planning framework is probably already far advanced. New funding might simply be plugged in to implement the project.

Therefore, a project having unfunded capital costs less than \$500,000 is assigned ten (10) points), a project needing \$500,000-\$999,999 is assigned eight (8) points), \$1 million-\$2,499,999 is assigned six (6) points, \$2,500,000-\$4,999,999 is assigned four (4) points), and a project needing \$5 million or more is assigned two (2) points.

ESTIMATED CARLOADS PER YEAR – Input encouraged the pursuit of projects that are financially sustainable. A good way to measure the otherwise abstract notion of financial sustainability (ie: whether a project is a sound financial investment) is the existing and or potential use of it. In the railroad industry, use is typically measured in carloads (often for unfinished/bulk goods) or intermodal units (often for finished/manufactured goods). Since no freight rail-involved intermodal facilities are planned in the Mahoning Valley at this time, carloads are used to measure financial sustainability. Because mainline freight trains often measure more than 50 cars in length, and branchline freight trains are typically 50 cars or less, a shipper that can generate enough carloads to fill a significant portion of a train’s consist is very attractive to a railroad. Input encouraged measuring existing carload traffic on the right of way to be improved because its revenues can help sustain expanded capacity, in addition to potential carload traffic achieved as a result of the project.

Therefore, total predicted traffic on the right of way to be improved or built measuring 10,000 or more carloads per year (equals 27.4 carloads per day) is assigned ten (10) points, 5,000-9,999 carloads per year is assigned eight (8) points, 2,500-4,999 carloads per year is assigned six (6) points, 1,000-2,499 per year is assigned four (4) points, 1-999 carloads per year is assigned two (2) points, and a project whose demand/user is not yet identified is assigned zero (0) points as the project does not represent an immediate need.

WATERWAY (NAVIGABLE) ACCESS – Projects having existing rail access to nearby navigable waterways (Lake Erie and Ohio River), or projects that would create access to those waterways were considered important by public meeting attendees. However, waterway access needs to be quantified. When two or more railroads are needed to move a shipment, costs rise, delivery times may increase, reliability may diminish and the risk of damage or theft grows. Not only do shippers tend to prefer dealing with just one carrier, but so do railroads even if it means an indirect routing so that it can retain all the revenue from moving the shipment. It should also be noted that the major railroads like CSX and Norfolk Southern prefer to not ship the 50 miles or less to Lake Erie or Ohio River ports unless the shipment is very large, such as train-loads of iron ore brought from the Port of Ashtabula to RG Steel in Warren. Instead, they prefer to handle shipments over longer distances to salt-water ports, such as on the East Coast. Exceptions are the shortline railroads which generally would be happy to move as little as a few carloads per week to ports on Lake Erie or the Ohio River.

Therefore, if the project's location today or as a result of proposed project provides rail access to both Lake Erie AND Ohio River ports without interchange between carriers, then the project is assigned four (4) points. If a lake OR river port can be reached by rail without interchange, the project is assigned two (2) points. If a port on neither waterway is accessible without interchange (0 points). If a regional (Class II) or shortline (Class III) railroad can be the only carrier involved, then multiply the point total by two (2).

NEAR MAJOR ASSETS – Another way to measure financial sustainability is the project's proximity to major assets that can generate rail freight traffic. Physical closeness is only part of the equation however. If there is a physical obstruction (river, large embankment, cemetery, school, etc), between the project and the major asset that requires burdensome expense, legal complications or environmental issues to overcome, then the value of that proximity is reduced. A project can be assigned up to eight points based on the following criteria.

Therefore, if a project is within 500 feet with some physical obstructions or within 1,000 ft with no physical obstructions of a site that can serve as drilling-related transload area within two weeks it is assigned two (2) points; an existing/willing rail shipper; two (2) points; and an existing/planned industrial park, two (2) points. And, if the project is within two miles of an interchange with a limited-access highway it is assigned two (2) points or within four miles of an interchange with a limited-access highway it is assigned one (1) point.

LARGE VACANT LAND – Financial sustainability can be measured by proximity to large vacant land on which a shipper or shippers can establish facilities. Proximity to large tracts of vacant land was separated from "Near Major Assets" because it should be closer to the it demonstrates a potential for long-term financial sustainability, such as over many years if not decades. Acres of vacant land per route-mile of railroad right of way were considered to be a fair measure by those giving input. Fewer points are assigned here than with existing/planned carloads because existing/planned use is considered more valuable than potential use resulting from future development of vacant land.

Therefore, a project that is within 500 feet with some physical obstructions or 1,000 feet with no physical obstructions of 40+ acres of vacant, developable land per route-mile is assigned five (5) points, 30-39 acres per route-mile is assigned four (4) points, 20-29 acres is assigned three (3) points, 10-19 acres is assigned two (2) points, and 9 acres or less per route-mile is assigned one (1) point.

FOSTERS RAILROAD COMPETITION – Railroad competition was desired to keep shipping rates low and to encourage improved customer service. The identity, performance and reputation of individual railroad carriers involved with a project/site were less important because these characteristics can change over time. In fact, their performance can and often does change when a competing carrier is present. This is important to keep, retain and expand shippers in the Mahoning Valley. The presence of one rail carrier was considered to be worth one point because the project could make a rail carrier available to a site where it was not available before. Having at least one rail carrier available was deemed more valuable than having none at all.

Therefore, a project accessible to four or more railroad carriers is assigned four (4) points; three carriers, three (3) points; two carriers, two (2) points; and one carrier, one (1) point.

WIDE RAILROAD RIGHT OF WAY – The presence of a wide railroad right of way associated with a project was deemed valuable for two reasons. First, the availability of a wide right of way could allow a pipeline, utility or some other non-rail longitudinal use to share the right of way with a rail use. It could potentially provide a funding mechanism to enable the acquisition of the right of way and/or the development of railroad infrastructure. Second, a wide right of way could allow the shipment of high-wide loads such as large machinery/presses, military assets to/from Camp Ravenna or the airport, and oversized finished goods such as blades for wind turbines.

Therefore, a project associated with a right of way having a width no less than 110 feet is assigned four (4) points; 100-109 feet, three (3) points; 80-99 feet, two (2) points; and 60-79 feet, one (1) point.

CLASS OF RAILROAD – For purposes of accounting and reporting, the Surface Transportation Board (STB, the federal body which regulates railroads) generally classifies railroads according to their carrier operating revenue from the base year of 1991 and then adjusting it for inflation. Class I carriers (called “major” railroads) have annual operating revenues of \$398.7 million or more. Class II carriers (called “regional” railroads) have annual operating revenues of less than \$398.7 million but more than \$31.9 million. Class III carriers (often called “shortlines”) include those with annual operating revenues of \$31.9 million or less, and all switching and terminal companies regardless of operating revenues. For this report, input provided at the March 8 public meeting considered it more important to support projects that benefit Class II/III carriers for two reasons. First, Class I carriers are found by the STB as generating sufficient revenues to achieve (or come close to achieving) their cost of capital. In contrast, regional/shortline railroads typically are far less revenue adequate and often need financial assistance to carry out capital projects. Second, Class I railroads’ marketing tends to focus on larger shippers (including interchange of large numbers of carloads from shortlines). By comparison, regional/shortline railroads aggressively market their services to smaller shippers and can aid in their development and expansion. Thus, support of projects that directly benefit regional/shortline railroads was deemed to be of a higher priority.

Therefore, if a project is located on a right of way owned/leased or served by a major (Class I) railroad, it is assigned two (2) points. If it is on a right of way owned/leased or served by a regional/shortline (Class II or III) railroad, it is assigned four (4) points. And, if a proposed right of way ownership resulting from the project or an existing trackage rights agreement allows two more classes of railroad to use/serve the same project, then the project is assigned six (6) points.

LONG TERM USE – Input provided at the March 8 public meeting considered it important to emphasize that this report not be limited to the shale gas industry, even though many industrial shippers in the region are growing because of it. The input wanted to include criteria which placed value on projects that offered a clear, known use after the initial spike in traffic growth at the onset of shale drilling.

Therefore, does the project serve an identified, long-term purpose after shale gas drilling ends in this region? If the answer is “Yes”, then the project is assigned four (4) points. If the answer is “No”, then no points are assigned.

Project: Carson, Jefferson transload expansions
Sponsor: Ashtabula, Carson & Jefferson Railroad Inc.

Project Summary: Robert Callahan, COO of AC&J Railroad Inc., reports that added sidings totaling 2,000 feet in length are needed now for railcar storage and to handle surges in traffic or unit trains at the railroad's aggregates transload at Carson and at its plastics transload in Jefferson. This includes a second pit at Carson for transloading more aggregates, including future sand transloading for drillers. The aggregates transload at Carson is 2,000 feet east of the SR46 interchange with SR11. Existing and proposed rail infrastructure could serve an adjacent, vacant 62-acre parcel owned by an AC&J-affiliated company at Carson. A vacant 170-acre site currently zoned for agriculture is located about 4,000 feet north of the northernmost track turnout in Jefferson, across both sides of the rail right of way and owned by two local businessmen.

Criteria	Comments	Score
TIMELINE	Aggregates transload capacity expansion at Carson and plastic transload capacity expansion at Jefferson could be underway within one year.	10
UNFUNDED CAPITAL COST	According to Ohio Rail Development Commission, total projected capital cost is estimated at about \$300,000. RESTORE's estimate is \$416,000. Both estimates result in the same score.	10
EST. CARLOADS PER YEAR	About 500 carloads currently and nearly 1,000 total projected in the near-term.	2
WATERWAY(S) ACCESS	Requires interchange with NS as AC&J does not have trackage rights over NS.	0
NEAR MAJOR ASSETS	Site can serve a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 2 miles of a highway interchange.	8
LARGE VACANT LAND	About 20 acres of vacant, developable land per route-mile is accessible to AC&J's ROW.	3
FOSTERS RR COMPETITION	Although the Carson site is between AC&J and Norfolk Southern (over which CSX trackage rights), AC&J is captive to NS because CSX has overhead rights.	1
WIDE RR RIGHT OF WAY	Ashtabula County Auditor GIS shows the State of Ohio-owned right of way, leased by AC&J, is approximately 90-95 feet wide.	2
CLASS OF RAILROAD	The projects are on a right of way owned by the State of Ohio leased only by AC&J, a shortline (Class III) railroad.	4
LONG TERM USE	Rail capacity, unrelated to the shale gas business, is already cramped. Expanded capacity will likely continue to be used for many years by non-shale gas users.	4
TOTAL		44

Project: CASTLO/Lally Rail Service Yard repairs/rehabilitation
Sponsor: CASTLO Community Improvement Corp.

Project Summary: Track and railroad bridge repairs are needed for the ongoing redevelopment of CASTLO's Area 7 including its Rail Service Yard concept and to accommodate an increase in steel pipe business at Lally Pipe & Tube Corp. Lally receives pipe by rail from V&M's growing steel plant on the Northwest side of the city. Total track length measures about 13,000 lineal feet plus two steel girder bridges – one over Yellow Creek (about 90 feet long) and Hines Run (about 55 feet long). A Job Ready Sites grant was recently awarded to CASTLO to demolish and remediate a 300,000-square-foot building, construct a sanitary lift station, remediate soil, grade the 60-acre site, construct roadways and utilities, and repair track. Due to other priorities, only about \$100,000 of the \$5 million JRS grant will be used to repair track. Up to \$1.33 million is needed to carry out CASTLO's remaining Rail Service Yard plan and improve rail access to Lally Pipe & Tube Corp.

Criteria	Comments	Score
TIMELINE	Funded track/bridge repairs could begin within one year.	10
UNFUNDED CAPITAL COST	CASTLO estimates up to \$1.175 million to complete rail improvements; RESTORE estimates up to \$1.33 million is needed. Both estimates result in the same score.	6
EST. CARLOADS PER YEAR	Between CASTLO and Lally, existing rail traffic is perhaps 200 carloads per year. This could double with the development of CASTLO's Area 7 and with growth at V&M and Lally to 400 carloads or more per year.	2
WATERWAY(S) ACCESS	NS and CSX are both Class I RRs that provide rail access without interchange to the Lake Erie port of Ashtabula and to transloading terminals on the Ohio River.	4
NEAR MAJOR ASSETS	Site can serve a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 2 miles of a highway interchange.	8
LARGE VACANT LAND	CASTLO's Area 7 has 24 acres of developable vacant land per route-mile of track.	3
FOSTERS RR COMPETITION	The site is accessible by four railroad carriers – CSX, G&W, NS and Y&S.	4
WIDE RR RIGHT OF WAY	The onsite right of way, owned by CASTLO, is in excess of 110 feet wide.	4
CLASS OF RAILROAD	Proposed improvements are to rights of way accessible by CSX, NS (Class I) and G&W, Y&S (Class III).	6
LONG TERM USE	Certain rail infrastructure is more than 100 years old and needs renewal so it can continue to serve non-shale gas users.	4
TOTAL		51

Project: Cleveland direct rail corridor to Mahoning Valley (Option 1-via Mantua)
Sponsor: None

Project Summary: At this time, this is only a concept for linking Northeast Ohio industrial shippers by shortline railroad. Such shippers are producing or using finished steel, scrap steel, coke, aggregates, natural gas liquids, polyethylene and other products in Greater Cleveland and the Mahoning Valley. This concept, the shortest but potentially most expensive of three known route options for linking the two regions, measures 47 route-miles from Rockefeller Avenue in Cleveland east to South Leavitt Road in Leavittsburg. It is via the former Randall Secondary and requires reactivation of 23 miles of railroad abandoned in 1982 and 12 miles of railroad railbanked in 1993. At least one structure (an outlot gas station) would have to be relocated and numerous properties belonging to 27 individual owners would have to be controlled. Considering these issues and that the Surface Transportation Board typically takes at least two years to conduct a review pursuant to the National Environmental Policy Act of the proposed reactivation of an abandoned rail corridor, it is extremely unlikely this entire project could see construction within two years. However, 12 miles of railbanked corridor west of Mantua could see construction sooner, assuming funding availability. The STB and/or Public Utilities Commission of Ohio have typically approved reactivation of railbanked rights of way in less than one year. No shortline has confirmed a implementation plan, so reactivation of abandoned and railbanked segments should be considered as speculative.

Criteria	Comments	Score
TIMELINE	A supportive STB NEPA review of reactivating abandoned portions could allow property acquisition to begin in as little as three years. Construction would then follow.	0
UNFUNDED CAPITAL COST	A rough estimate of capital costs, including right of way acquisition and construction is about \$62 million.	2
EST. CARLOADS PER YEAR	Cleveland Commercial Rail Lines handled 5,400 carloads in 2010. Estimated traffic on reactivated portions needs to be many times larger to sustain them. Future carloads are unknown.	8
WATERWAY(S) ACCESS	Westernmost end of NS-owned (Class I) and CCRL-leased (Class III) ROW of way in Cleveland is 700 feet from a navigable portion of the Cuyahoga River.	4
NEAR MAJOR ASSETS	Online sites can serve as a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 2 miles of a highway interchange.	8
LARGE VACANT LAND	Along the 47-mile right of way are about 800 acres of developable properties for commercial purposes, or 17 acres per route-mile.	2
FOSTERS RR COMPETITION	Provides a direct railroad link between Greater Cleveland and Youngstown-Warren in competition with less direct Class I RRs and would interchange with three rail carriers.	3
WIDE RR RIGHT OF WAY	Some sections of reactivated right of way may have to be less than 80 feet wide to fit past structures or other uses built on or along the abandoned right of way.	1
CLASS OF RAILROAD	NS, a Class I carrier, owns much of the right of way and is leased to CCRL is a Class III carrier.	6
LONG TERM USE	Most existing customers are unrelated to the shale gas business and will likely continue for many years. A much larger number of daily carloads are needed to sustain the Randall Secondary if reactivated in its entirety. Although potential users have been identified, none have committed so it is premature to assign a score to this criterion.	NA
TOTAL		34

Project: Cleveland direct rail corridor to Mahoning Valley (Option 2-via Kent)
Sponsor: None

Project Summary: At this time, this is only a concept for linking Northeast Ohio industrial shippers by shortline railroad. Such shippers are producing or using finished steel, scrap steel, coke, aggregates, natural gas liquids, polyethylene and other products in Greater Cleveland and the Mahoning Valley. This concept represents the longest but probably least capital-intensive of three potential routing options for linking the two regions. It totals about 61 route-miles from Rockefeller Avenue in Cleveland east to South Leavitt Road in Leavittsburg. It is via:

- Cleveland-Glenwillow (14.6 miles) – Cleveland Line owned by Wheeling & Lake Erie RR but leased to CCRL;
- Glenwillow-Kent (17.4 miles) – Cleveland Line owned and operated by W&LE;
- Kent-Ravenna (9 miles) – Freedom Secondary owned by Portage County and leased to W&LE subsidiary Akron Barberton Cluster Railway. Mileage includes reversing move required at Kent;
- Ravenna-Leavittsburg (20 miles) – Freedom Secondary owned by Norfolk Southern over which Warren & Trumbull RR (a Genesee & Wyoming Corp. subsidiary) has a lease for non-common carrier operations, and is self-renewing annually at \$1 per year until terminated.

This route option assumes that right-of-way access is granted by W&LE, Portage County and NS. It also requires reactivation of 20 miles of NS-owned Freedom Secondary between Ravenna-Leavittsburg railbanked since about 1998. The STB and/or the PUCO have typically approved the reactivation of railbanked rights of way in less than one year. No shortline has confirmed implementation plans so the following should be considered as speculative.

Criteria	Comments	Score
TIMELINE	A supportive STB review could allow inactive portions of the Freedom Secondary to see construction in less than two years of funding becoming available.	5
UNFUNDED CAPITAL COST	A rough estimate of capital costs is \$4.9 million.	4
EST. CARLOADS PER YEAR	An existing shortline handled 5,400 carloads in 2010. Estimated traffic on reactivated portions needs to be many times larger to sustain them. Future carloads are unknown.	8
WATERWAY(S) ACCESS	Westernmost end of NS-owned (Class I) and CCRL-leased (Class III) ROW of way in Cleveland is 700 feet from a navigable portion of the Cuyahoga River.	4
NEAR MAJOR ASSETS	Online sites can serve as a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 2 miles of a highway interchange.	8
LARGE VACANT LAND	Along 43.6 miles of CCR leased + Freedom Secondary ROW are about 2,100 acres of developable properties for commercial purposes (including 1,500 acres unused by Camp Ravenna Joint Military Training Center), or 48 acres per route-mile.	5
FOSTERS RR COMPETITION	Provides a direct railroad link between Greater Cleveland and Youngstown-Warren in competition with less direct routes used by Class I RRs and would interchange with four rail carriers.	2
WIDE RR RIGHT OF WAY	Relevant portions of the Freedom Secondary are more than 75 ft wide.	1
CLASS OF RAILROAD	Rail segments are owned by NS, a Class I carrier, and W&LE, a Class II carrier, and portions are leased to CCRL, a Class III carrier.	6
LONG TERM USE	Most existing customers are unrelated to the shale gas business and will likely continue for many years. A much larger number of daily carloads are needed to sustain the Freedom Secondary if reactivated in its entirety. Although potential users have been identified, none have committed so it is premature to assign a score to this criterion.	NA
TOTAL		43

Project: Cleveland direct rail corridor to Mahoning Valley (Option 3-via Kent Bypass)
Sponsor: None

Project Summary: At this time, this is only a concept for linking Northeast Ohio industrial shippers by shortline railroad. Such shippers are producing or using finished steel, scrap steel, coke, aggregates, natural gas liquids, polyethylene and other products in Greater Cleveland and the Mahoning Valley. This concept represents the mid-range option in terms of capital costs and mileage among three routing choices. It totals about 56 route-miles from Rockefeller Avenue in Cleveland east to South Leavitt Road in Leavittsburg. It is via:

- Cleveland-Glenwillow (14.6 miles) – Cleveland Line owned by Wheeling & Lake Erie RR but leased to CCRL;
- Glenwillow-Raccoon Hill/North Kent (13.7 miles) – Cleveland Line owned and operated by W&LE;
- Raccoon Hill-Brady Lake (3.7 miles) – proposed “Kent Cutoff” to avoid 5 miles and 9 at-grade street crossings through Kent. This option requires reactivating the former Lake Erie & Pittsburgh RR ROW, abandoned west of Hugo Sand & Gravel at SR43 circa 1970. Properties belonging to four owners must be controlled;
- Brady Lake-Ravenna (4.3 miles) – Freedom Secondary owned by Portage County and leased to W&LE subsidiary Akron Barberton Cluster Railway;
- Ravenna-Leavittsburg (20 miles) – Freedom Secondary owned by Norfolk Southern over which Warren & Trumbull RR (a Genesee & Wyoming Corp. subsidiary) has a lease for non-common carrier operations, and is self-renewing annually at \$1 per year until terminated. Reactivation issues are the same as in Option 2.

No shortline has confirmed an implementation plan so the following should be considered as speculative.

Criteria	Comments	Score
TIMELINE	A supportive STB NEPA review of reactivating abandoned portions could allow property acquisition to begin in as little as three years. Construction would then follow.	0
UNFUNDED CAPITAL COST	A rough estimate of capital costs is \$16.5 million.	2
EST. CARLOADS PER YEAR	An existing shortline handled 5,400 carloads in 2010. Estimated traffic on reactivated portions needs to be many times larger to sustain them. Future carloads are unknown.	8
WATERWAY(S) ACCESS	Westernmost end of NS-owned (Class I) and CCRL-leased (Class III) ROW of way in Cleveland is 700 feet from a navigable portion of the Cuyahoga River.	4
NEAR MAJOR ASSETS	Online sites can serve as a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 2 miles of a highway interchange.	8
LARGE VACANT LAND	Along 42.6 miles of CCR leased + Freedom Secondary + LE&E ROW are about 2,100 acres of developable properties for commercial purposes (including 1,500 acres unused by Camp Ravenna Joint Military Training Center), or 49 acres per route-mile.	5
FOSTERS RR COMPETITION	Provides a direct railroad link between Greater Cleveland and Youngstown-Warren in competition with less direct routes used by Class I RRs and would interchange with four rail carriers.	3
WIDE RR RIGHT OF WAY	Relevant portions of the Freedom Secondary are more than 75 feet wide. Relevant portions of the LE&E ROW are at least 150 feet wide.	1
CLASS OF RAILROAD	Rail segments are owned by NS, a Class I carrier, and W&LE, a Class II carrier, and portions are leased to CCRL, a Class III carrier.	6
LONG TERM USE	Most existing customers are unrelated to the shale gas business and will likely continue for many years. A much larger number of daily carloads are needed to sustain the Freedom Secondary if reactivated in its entirety. Although potential users have been identified, none have committed so it is premature to assign a score to this criterion.	NA
TOTAL		37

Project: On-site and site access track improvements
Sponsor: Ohio Commerce Center

Project Summary: To accommodate growing manufacturing, storage and distribution use of its 476-acre facility, including as a transload site for energy-related companies, numerous rail infrastructure investments are planned. These include street resurfacing, railroad crossings, rehab of track and turnouts for drop-and-swap tracks, construction of new track including a parallel access track and headroom track extension, plus modification of the underside of the SR 45 overpass for the headroom track. A retaining wall will be built to support the embankment for the overpass bridge. About 200 acres of the Ohio Commerce Center are rail accessible. Rail traffic capacity needs to be enhanced to accommodate projected growth from shippers already on site, new shippers that are constructing facilities or those seeking to locate shipping activities at the OCC. The sum of rail traffic from current and potential shippers is projected to be significant – more than 35 carloads daily.

Criteria	Comments	Score
TIMELINE	Funded track and underpass work could begin within one year. No property needs to be acquired.	10
UNFUNDED CAPITAL COST	Up to \$2.173 million may be needed to complete rail improvements.	6
EST. CARLOADS PER YEAR	Existing and projected traffic within two years is estimated by OCC at more than 13,000 carloads per year.	10
WATERWAY(S) ACCESS	CSX, a Class I RR, provides rail access without interchange to the Lake Erie port of Ashtabula (via trackage rights on NS) and to transloading terminals on the Ohio River.	4
NEAR MAJOR ASSETS	Site can serve a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 4 miles of a highway interchange.	7
LARGE VACANT LAND	OCC has 67 acres of rail-accessible, developable land per route-mile of track.	5
FOSTERS RR COMPETITION	The site is accessible by one railroad carrier.	1
WIDE RR RIGHT OF WAY	Parallel rights of way allow for lateral clearances of 200+ feet for pipelines, utilities or rail including for high/wide loads.	4
CLASS OF RAILROAD	Proposed improvements are to rights of way accessible by Class I RR.	2
LONG TERM USE	Rail capacity, unrelated to the shale gas business, is already cramped without the presence of rail/shale customers. Expanded capacity will likely continue to be used for many years by non-shale gas users.	4
TOTAL		53

Project: Ohio Junction rail yard expansion
Sponsor: Ohio Central RR (a Genesee & Wyoming Company)

Project Summary: To accommodate growing steel pipe business at V&M Star's Youngstown Works, expansion of the interchange yard at Ohio Junction between CSX and Ohio Central (G&W) has been considered by Ohio Central. Prior to 2012, V&M's Youngstown Works produced about 500,000 tons of seamless steel pipe each year. With the \$707 million in total investment underway for expansion, this output is projected by V&M to grow by another 350,000 tons of seamless tubes in the near term, and potentially as much as 500,000 tons over the long term. Thus, it is assumed that capacity of the CSX/Ohio Central interchange yard may need to double to accommodate this growth, as well as to serve other growing industries and shippers nearby. Two design options for this expansion were considered – a long, two-track yard option and a short, four-track yard option. Both options offer similar capacity, may incur nearly identical costs and use the same CSX-owned parcel, so they do not need to be assessed on separate scorecards. Ultimately it will be up to the railroads to decide how to design the expanded yard to suit their own operating preferences. There is sufficient CSX-owned land for additional yard expansion as well as vacant land in the nearby Ohio Works Industrial Park for more industrial users.

Criteria	Comments	Score
TIMELINE	Project could be underway within one year of funding becoming available as no property needs to be acquired.	10
UNFUNDED CAPITAL COST	Estimated at \$2.3 million.	6
EST. CARLOADS PER YEAR	Actual carload data for the interchange yard was unavailable but is estimated at 5,000-10,000 per year currently, growing to 10,000 to 20,000 per year after V&M's expansion.	10
WATERWAY(S) ACCESS	CSX, a Class I RR, provides rail access without interchange to the Lake Erie port of Ashtabula (via trackage rights on NS) and to transloading terminals on the Ohio River.	4
NEAR MAJOR ASSETS	Site can serve a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 2 miles of a highway interchange.	8
LARGE VACANT LAND	About 50 total acres of vacant land is adjacent to the project site, divided by about 13,000 feet of new track is 20 acres per track-mile.	3
FOSTERS RR COMPETITION	The project site is accessible by two railroad carriers.	2
WIDE RR RIGHT OF WAY	CSX rights of way to the site are at least 100 feet wide, and Ohio Central rights of way and/or clearances (including lateral/overhead bridge structures) to V&M are not constrained.	3
CLASS OF RAILROAD	CSX is a Class I carrier and Ohio Central is a Class III carrier.	6
LONG TERM USE	The existing Ohio Junction interchange rail yard serves non-V&M shippers in the area, but the expansion is clearly motivated by the expansion of V&M. If shale drilling activities were curtailed, the existing rail yard might be sufficient to serve the area's remaining shippers.	0
TOTAL		52

Project: Ohio River NS Direct Track Connection at Alliance, OH
Sponsor: None

Project Summary: At the March 8 public input meeting, there was a desire for improving rail access between the Youngstown-Warren area and a port on the Ohio River, especially the port at Wellsville, OH. There are two existing routing options, both involving Norfolk Southern Corp. rights of way, between the Mahoning Valley and Wellsville. Both options also require freight trains to make a back-up move in busy rail traffic conditions. One routing is via a back-up move at Alliance, OH. The other is via a back-up move at Rochester-Conway, PA. Track connections were considered at both locations. However, in discussion with an NS representative, the complications involved in bridging the Beaver River (a requirement to build a track connection) could be overcome by using rotated train crews dispatched from NS's existing crewbase at Conway Yard. This may, in fact be the best option for accommodating Youngstown-Warren rail traffic to the Wellsville port as it requires no rail capital investment and uses an NS route with less steep grades. The other option, via Alliance, could involve building a track connection in the southeast quadrant of the all-NS junction on NS-owned land. This would also require shortening/moving two existing sidings, moving an existing crossover track, altering NS's dispatching software, and adding a grade crossing at East Broadway Street. The NS representative indicated there could be a potential interest in this project if significant traffic developed someday between the Mahoning Valley shippers and the port of Wellsville. No direct rail traffic between these locations currently exists, however.

Criteria	Comments	Score
TIMELINE	Considering that no property may need to be acquired, the project could be under construction in one year or less of funding becoming available.	10
UNFUNDED CAPITAL COST	Estimated capital cost of \$4.97 million.	4
EST. CARLOADS PER YEAR	Unknown.	0
WATERWAY(S) ACCESS	NS, a Class I RR, provides rail access without interchange to the ports of Ashtabula and Cleveland on Lake Erie and to the Port of Wellsville and other terminals on the Ohio River.	4
NEAR MAJOR ASSETS	Site can serve a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 4 miles of a highway interchange.	7
LARGE VACANT LAND	About 25 total acres of vacant land is adjacent to the project site, divided by about 1,600 feet of new track is 20 acres per track-mile.	5
FOSTERS RR COMPETITION	The project site is accessible by one railroad carrier.	1
WIDE RR RIGHT OF WAY	Width of right of way is not known due to lack of data. Widths of the Lordstown Secondary track north of Sebring and the Cleveland Line south of Alliance appear to be in the 60-79 foot range.	1
CLASS OF RAILROAD	Proposed improvements are to rights of way accessible by Class I RR.	2
LONG TERM USE	While there is a potential for future traffic between the Youngstown-Warren area and the Port of Wellsville, nearly all of this may be associated with shale-related traffic. This traffic volume cannot be quantified at this time.	NA
TOTAL		34

Project: Ohio River Y&S corridor restoration
Sponsor: None

Project Summary: At the March 8 public input meeting, there was a desire for improving rail access between the Youngstown-Warren area and a port on the Ohio River for moving aggregates, tubular steel products and other bulk goods manufactured in the Mahoning Valley. There was also interest expressed in using and investing in short-line railroads which would be more likely to handle such a short-distance move (nearly 50 miles). The combination of the two inputs pointed this study to review, for comparison purposes, the reactivation 13 miles of the abandoned Youngstown & Southern RR from Negley, Ohio south to Glasgow, PA. This former coal-hauling railroad was built in the 1930s to serve a barge dock at the mouth of the Little Beaver Creek, off the Ohio River. There was no track connection with the Pennsylvania RR (now Norfolk Southern Corp.) along the north bank of the Ohio River between Pittsburgh with Steubenville. Construction of a track connection was assessed as part of this study, as well as reactivation of the rail/barge transload dock. Youngstown & Southeastern Railroad operates the existing rail line north of Negley and is proposed to continue operating it despite the recently announced purchase by Tervita Corp. A representative of Y&S expressed no interest in extending its service south of Negley to the Ohio River nor did he see any value to the Mahoning Valley in reactivating this rail line.

Criteria	Comments	Score
TIMELINE	A supportive STB NEPA review of reactivating abandoned portions could allow property acquisition to begin in as little as three years. Construction would then follow.	0
UNFUNDED CAPITAL COST	A rough estimate of capital costs, including right of way acquisition and construction is about \$56 million.	2
EST. CARLOADS PER YEAR	Right of way buyer Tervita Corp. estimates traffic on the existing portion of the Y&SE could grow to 7,000 carloads per year in the next few years. But a traffic estimate for the line south of Negley has not been developed as there are no potential users.	8
WATERWAY(S) ACCESS	Y&SE, a Class III RR, is the current operator of the northern portion of the rail line. The southern part, if reactivated to the Ohio River dock, would also likely be served by a shortline railroad.	4
NEAR MAJOR ASSETS	Project site can serve an existing/planned Industrial park, and is within 2 miles of a highway interchange.	4
LARGE VACANT LAND	The abandoned Y&S ROW has 5 acres of developable vacant land per route-mile of track.	1
FOSTERS RR COMPETITION	A shortline like Y&SE (a Class III RR) would provide competition to CSX and NS (both Class I RRs) in accessing the Ohio River with a more direct route than the two Class I RRs.	3
WIDE RR RIGHT OF WAY	Much of the former Y&S ROW is less than 80 feet wide.	1
CLASS OF RAILROAD	The reactivated Y&S is proposed to be used by a Class III RR.	4
LONG TERM USE	While there is a potential for future traffic between the Youngstown-Warren area and the Glasgow, PA dock, nearly all of this may be associated with shale-related traffic. This traffic volume cannot be quantified at this time.	0
TOTAL		27

Project: WSH onsite track & West Warren track connection
Sponsor: Warren & Trumbull RR (a Genesee & Wyoming Company).

Project Summary: Warren Steel Holdings is producing steel but using trucks for transportation. The need for up to \$300,000 in onsite rail infrastructure improvements are a hurdle to using more rail service and keeping shipping costs down for long-distance moves. Enhanced rail infrastructure can improve effective rail service and open up development opportunities. Combined with track improvements to the former Freedom Secondary track and construction of a new West Warren track connection immediately west of Martin Luther King Boulevard allows Warren & Trumbull RR to reach CSX's Newton Falls Subdivision, an interchange with the CSX mainline at Newton Falls, as well as new industries resulting from the West Warren Industrial Partnership and the Warren Commerce Park. At minimum, W&T RR would use a mix of its own rails and those of the Mahoning Valley Economic Development Corp.'s "Rail II Corp."

Criteria	Comments	Score
TIMELINE	Project could be underway within one year of funding becoming available as no property needs to be acquired.	10
UNFUNDED CAPITAL COST	Estimated capital cost of \$1.9 million.	6
EST. CARLOADS PER YEAR	Actual carload data for the project area was unavailable but is estimated at 5,000-10,000 per year based on WSH's annual production capacity of 500,000 tons as well as other potential users.	8
WATERWAY(S) ACCESS	Requires interchange with NS or CSX unless Cleveland Commercial RR extends service to this area (see Cleveland Corridor).	0
NEAR MAJOR ASSETS	Site can serve a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 2 miles of a highway interchange.	8
LARGE VACANT LAND	Along the total 8 miles Rail II Corp. and the new track connection are about 340 acres of developable properties for commercial purposes, or 42.5 acres per route-mile.	5
FOSTERS RR COMPETITION	The project area would offer W&T/G&W (Class III RR) carrier to provide access to CSX and NS, two Class I carriers.	3
WIDE RR RIGHT OF WAY	Some sections of right of way are flanked by obstructions narrowing it to as little as 30 feet.	0
CLASS OF RAILROAD	Proposed improvements are to rights of way accessible by CSX, NS (Class I) and W&T/G&W (Class III).	6
LONG TERM USE	Most of W&T's existing and future customers are unrelated to the shale gas business and will likely continue to want rail for many years.	4
TOTAL		50

Project: Campbell-Darlington track and capacity enhancements
Sponsor: Y&SE/Tervita

Project Summary: Before the Youngstown & Southern right of way was sold to Tervita Corp., the Y&S sought repairs and improvements to its tracks from Youngstown to Darlington, as well as capacity expansion of the sand transload at Signal, OH near Rogers and construction of a second track connection with CSX at Campbell. An agreement to sell the 36-mile rail line to Tervita by the Columbiana County Port Authority was announced April 17, 2012. A Y&SE RR representative reported that the Class III carrier would continue to operate the rail line and that the previously sought improvements would still be needed. Track conditions limit trains to 10 mph and projected traffic volumes of 7,000 carloads per year would require the added track capacity at the south and north ends.

Criteria	Comments	Score
TIMELINE	Project could be underway within one year of funding becoming available as no property needs to be acquired.	10
UNFUNDED CAPITAL COST	Estimated capital cost of \$4.9 million.	2
EST. CARLOADS PER YEAR	Right of way buyer Tervita Corp. estimates traffic on the existing portion of the Y&SE could grow to 7,000 carloads per year in the next few years.	8
WATERWAY(S) ACCESS	Requires interchange with NS or CSX unless the abandoned Y&SE ROW from Negley OH to Glasgow PA is restored (see Y&SE restoration to Ohio River).	0
NEAR MAJOR ASSETS	Project can serve a drilling-related transload within 2 weeks, an existing/willing rail shipper, an existing/planned Industrial park, and is within 2 miles of a highway interchange.	8
LARGE VACANT LAND	Along the 39 miles of ROW used by Y&SE are about 360 acres of developable properties for commercial purposes, or 9 acres per route-mile.	1
FOSTERS RR COMPETITION	The project site is accessible by one railroad carrier.	1
WIDE RR RIGHT OF WAY	Some sections of right of way are flanked by obstructions narrowing it to as little as 20 feet.	0
CLASS OF RAILROAD	Proposed improvements are to rights of way accessible by CSX, NS (Class I) and Y&SE (Class III).	6
LONG TERM USE	Although most of the new traffic to the Y&SE/Tervita ROW is shale-related, the rail line has been used for non-shale shipments for years.	4
TOTAL		40

Project: Reactivate State Line ROW from Lowellville to Hillsville, PA
Sponsor: Youngstown & Southeastern/Green Harvest Energy

Project Summary: Youngtown & Southeastern Railroad Co. and Green Harvest Energy LLC proposes to reactivate about 5 miles of railbanked ex-Pittsburgh & Lake Erie (CSX-owned) State Line right of way from Lowellville, Ohio up the hill to Green Harvest Energy-owned quarry and related properties in Hillsville, PA. The purpose is to develop a large expanse of land measuring about 3,000 acres with energy-related industrial activities. Previously these properties were owned by Carbon Limestone Inc. and dotted with quarries for mining limestone used by the steel industry. The quarries were later used as sanitary landfills by Browning Ferris Industries. The rail right of way accessing these lands was railbanked circa 1993 when P&LE was acquired by CSX. Tracks remain mostly in place, but crossings have been removed, including a leveling of the Washington Street crossing above Lowellville. Also, a turnout needs to be restored to link the State Line rail corridor with the former P&LE mainline next to the Lowellville High School football stadium.

Criteria	Comments	Score
TIMELINE	A supportive STB review could allow inactive portions of the State Line ROW to see construction in less than two years of funding becoming available.	5
UNFUNDED CAPITAL COST	Estimated capital cost of \$2.45 million.	6
EST. CARLOADS PER YEAR	There is no existing traffic and future carloads are unknown.	0
WATERWAY(S) ACCESS	Requires interchange with NS or CSX unless the abandoned Y&SE ROW from Negley OH to Glasgow PA is restored (see Y&SE restoration to Ohio River).	0
NEAR MAJOR ASSETS	Online sites can serve as a drilling-related transload within 2 weeks, has no existing/willing rail shipper, an existing/planned Industrial park, and is more than 4 miles from a highway interchange.	4
LARGE VACANT LAND	Along the 5 miles of ROW used by Y&SE are about 3000 acres of developable properties for commercial purposes, or 600 acres per route-mile.	5
FOSTERS RR COMPETITION	The project site is accessible by one railroad carrier.	1
WIDE RR RIGHT OF WAY	Some sections of right of way are flanked by obstructions narrowing it to as little as 20 feet.	0
CLASS OF RAILROAD	The right of way is owned by CSX, a Class I carrier. Y&SE is a Class III carrier.	6
LONG TERM USE	Most, if not all, of the projected Y&SE traffic to/from the Green Mountain Energy-owned quarries would be shale-related.	0
TOTAL		27

Project: Youngstown-Warren Regional Airport Rail Link
Sponsor: Western Reserve Port Authority

Project Summary: The Western Reserve Port Authority is investigating the potential for constructing a rail link from Norfolk Southern's Youngstown Line to the Youngstown-Warren Regional Airport and its neighboring AeroPark Industrial Park. The goal is to help encourage development of 1 million square feet of potential commercial space. Some of these industrial/commercial users could become rail shippers. The rail link is proposed to be at least 4.5 miles in length to reach part of the airport's Foreign Trade Zone south of the airport grounds. To reach the AeroPark west of the airport, however, requires acquiring and constructing almost 2 miles more of new railroad right of way (one parcel that would need to be acquired is the unused north end of the Crown Hill Cemetery). Construction costs for the 4.5-mile rail link are limited to \$11.77 million due to the presence of two abandoned railroad roadbeds. One was a former New York Central Railroad corridor abandoned in the 1960s; the other was a former Erie Railroad right of way abandoned in the 1910s. A total of about two miles of these graded roadbeds are proposed to be used. The preferred option uses a "shortcut" from the abandoned NYC RR corridor to the NS Youngstown Line to avoid demolishing an 84 Lumber Co. office building constructed on the NYC RR right of way just north of old SR82 or taking part of a farm on old SR82. The rail corridor would come within 90-100 feet of two structures on Sodom-Hutchings Road (County Highway 45) which may require these homes to be buffered, soundproofed, relocated or razed. Properties belonging to about 10 individual owners would have to be controlled. There also is at least one wetland which must be traversed. The right of way is proposed to be built across the smallest area of wetland while providing the maximum amount of distance and natural buffering between the Four Seasons mobile home park and the proposed airport rail link right of way. Considering these issues and that the Surface Transportation Board (STB) typically takes at least two years to conduct a review pursuant to the National Environmental Policy Act (NEPA) of the creation of a proposed new railroad right of way, it is extremely unlikely this entire project could see construction within two years.

Criteria	Comments	Score
TIMELINE	A supportive STB NEPA review of reactivating abandoned portions could allow property acquisition to begin in as little as three years. Construction would then follow.	0
UNFUNDED CAPITAL COST	Estimated capital cost of \$11.77 million.	2
EST. CARLOADS PER YEAR	There is no existing traffic and future carloads are unknown.	0
WATERWAY(S) ACCESS	NS, a Class I RR, provides rail access without interchange to the ports of Ashtabula and Cleveland on Lake Erie and to the Port of Wellsville and other terminals on the Ohio River.	4
NEAR MAJOR ASSETS	Online sites can serve as a drilling-related transload within 2 weeks, has no existing/willing rail shipper, an existing/planned industrial park, and is less than 2 miles from a highway interchange.	6
LARGE VACANT LAND	There are 500 acres in the airport's AeroPark and up to 300 acres of vacant land across SR193 from the airport grounds which could be developed for commercial/industrial uses. That is about 178 acres per route-mile.	5
FOSTERS RR COMPETITION	The project site is accessible by one railroad carrier. CSX has only overhead trackage rights on the NS Youngstown Line which prevents it from serving enroute shippers.	1
WIDE RR RIGHT OF WAY	The former Erie RR (ex-Liberty & Vienna RR) ROW is 60 feet wide.	1
CLASS OF RAILROAD	It is assumed that NS, a Class I RR, would operate the Airport Rail Link.	2
LONG TERM USE	WRPA envisions a mix of potential rail customers, both related and unrelated to the shale gas business, would be served for many years.	4
TOTAL		25

END OF SCORECARDS