

Table 1. Phase I List of Obstructions.

NAME	CITY	STATE	ID	TYPE	FUNDING	ESTIMATED COSTS
TR 391	Sullivan	OH	BG 175.70	Replace Bridge	State	\$3,306,923
CR 150	Sullivan	OH	BG 175.30	Remove Bridge	State	\$3,428,336
River Corners Road	Pawnee	OH	BG 169.70	Replace Bridge	State	\$3,196,693
Pawnee Road	Pawnee	OH	BG 168.70	Remove Bridge	State	\$3,870,702
Mud Lake Road	Westfield	OH	BG 160.20	Replace Bridge	ARRA	\$4,299,000
Thornton Street	Akron	OH	BG 131.00	Lower Track	TIGER	\$251,926
Overhead Walkway	Akron	OH	BG 130.13	Lower Track	TIGER	\$323,919
Park Street	Akron	OH	BG 129.50	Remove Bridge	ARRA	\$1,984,154
W&LE Railroad Bridge	Kent	OH	BG 118.20	Lower Track	TIGER	\$5,393,803
Main Street	Kent	OH	BG 117.30	Lower Track	TIGER	\$14,376,894
Crain Avenue	Kent	OH	BG 117.00	Replace Bridge	ARRA	Under Construction
Recreational Trail	Kent	OH	BG 115.80	Raise Bridge	TIGER	\$2,579,457
W&LE Railroad Bridge	Kent	OH	BG 115.67	Raise Bridge	TIGER	Included Within 115.80 costs of \$2,579,457
NS Railroad Bridge	Ravenna	OH	BG 110.80	Lower Track	TIGER	\$6,347,259
Knapp Road	Ravenna	OH	BG 107.10	Replace Bridge	ARRA	\$3,096,562
Rock Spring Road	Newton Falls	OH	BG 105.40	Replace Bridge	ARRA	\$3,086,462
5th Street	Niles	OH	BG 85.70	Replace Bridge	ARRA	\$4,159,432
Abandoned Railroad Bridge	Youngstown	OH	BG 76.60	Remove Bridge	TIGER	\$480,037
Overhead Walkway	Coraopolis	PA	PLE 10.25	Remove Bridge	TIGER	\$852,162
Ohio Central Railroad	McKees Rocks	PA	PLE 3.79	Lower Track/ Raise Bridge	TIGER	\$2,751,940
Chartiers Creek	Pittsburgh	PA	PLE 3.36	Bridge Modification	TIGER	\$115,247
Smithfield Street	Pittsburgh	PA	PLY 0.09	Lower Track	TIGER	\$3,006,596
West End of J&L Tunnel	Pittsburgh	PA	PLY 1.96	Remove Bridge	TIGER	\$190,869
J&L Tunnel	Pittsburgh	PA	PLY 2.00	Raise Tunnel Roof	TIGER	\$27,589,386
East End of J&L Tunnel	Pittsburgh	PA	PLY 2.37	Bridge Modification/Remove Portion of Bridge	TIGER	\$466,579
Walnut Street	McKeesport	PA	BF 309.70	Lower Track	TIGER	\$865,813
Benford Tunnel	Confluence	PA	BFJ 5.00	Open Cut	TIGER	\$1,099,278
Brook Tunnel	Confluence	PA	BF 239.70	Tunnel Liner Removal	TIGER	\$9,621,460

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Shoo Fly Tunnel	Confluence	PA	BF 236.80	Open Cut	TIGER	\$1,099,278
Pinkerton Tunnel	Pinkerton	PA	BF 235.40	Open Cut/Tunnel Liner Removal	TIGER	\$6,082,532
Church Street	Garrett	PA	BF 220.00	Replace Bridge	TIGER	\$4,969,791
Blue Lick Truss	Sand Patch	PA	BF 212.83	Raise Bridge	TIGER	\$328,598
Sand Patch Tunnel	Sand Patch	PA	BF 210.60	Liner Notching	TIGER	\$5,469,385
Falls Cut Tunnel	Fairhope	PA	BF 198.40	Tunnel Liner Removal	TIGER	\$5,422,670
Railroad Bridge	Hyndman	PA	BF 191.92	Bridge Modification	TIGER	\$89,804
CSX Railroad Bridge	Mexico Farms	MD	BA 172.70	Remove Bridge	TIGER	\$858,448
Carothers Tunnel	Paw Paw	WV	BA 147.00	Tunnel Liner Removal	TIGER	\$12,615,060
Graham Tunnel	Magnolia	MD	BA 145.80	Tunnel Liner Removal	TIGER	\$19,022,780
Stuart Tunnel	Hansrote	WV	BA 144.50	Liner Notching	TIGER	\$7,507,075
Randolph Tunnel	Hansrote	WV	BA 142.30	Tunnel Liner Removal	TIGER	\$12,616,677

Estimated Costs: Based on the TIGER grant application.

TIGER funding includes the \$98 million TIGER grant award, \$35 million in Pennsylvania TAP grant assistance, and up to \$20 million in CSX capital funding.

Crain Avenue- Separately funded Ohio ARRA grant, not included in Phase I estimated total cost.

Recreational Trail BG 115.80 and W&LE Railroad Bridge OH BG 115.67, Kent Ohio share abutments; project costs are combined.

Table 1a. Track Support Work.

NAME	CITY	STATE	ID	TYPE
New Interlocking	Kent	OH	BG 120.00	Support Track Work
Upgrade Existing Interlocking	Newton Falls	OH	BG 103.95	Support Track Work
Confluence EMPA	Confluence	PA	BF 243.10	Material Placement
Black Township EMPA	Rockwood	PA	BF 226.00	Material Placement
Sand Patch EMPA	Sand Patch	PA	BF 211.35	Material Placement
New Interlocking	Magnolia	WV	BA 145.00	Support Track Work

Costs for the support work are included in the estimated costs for individual obstructions provided in Table 1.

Table 2. General Conformity Rule De Minimis Emissions Levels Summary.

POLLUTANT	AREA TYPE	TONS/YEAR
Ozone (NOx)	Maintenance	100
Ozone (VOC)	Maintenance within an ozone transport region	50
	Maintenance outside an ozone transport region	100
Carbon monoxide, SO2 and NO2	All nonattainment and maintenance	100
PM-10	Moderate nonattainment and maintenance	100
PM2.5 - direct, SO2, and NOx	All nonattainment and maintenance	100

Table 3. Obstructions Location and Associated Nonattainment/Maintenance Status

M = maintenance; NA = nonattainment

PROJECT NAME	CITY	STATE	ID	ACTIVITY	POLLUTANT
Thornton Street	Akron	OH	BG 131.00	Lower Track	1997 8-hr ozone (M) PM 2.5 ¹ (NA)
Overhead Walkway	Akron	OH	BG 130.13	Lower Track	1997 8-hr ozone (M) PM 2.5 (NA)
W&LE Railroad Bridge	Kent	OH	BG 118.20	Lower Track	1997 8-hr ozone (M) PM 2.5 (NA)
Main Street	Kent	OH	BG 117.30	Lower Track	1997 8-hr ozone (M) PM 2.5 (NA)
Recreational Trail ²	Kent	OH	BG 115.80	Raise Bridge	1997 8-hr ozone (M) PM 2.5 (NA)
W&LE Railroad Bridge	Kent	OH	BG 115.67	Raise Bridge	1997 8-hr ozone (M) PM 2.5 (NA)
NS Railroad Bridge	Ravenna	OH	BG 110.80	Lower Track	1997 8-hr ozone (M) PM 2.5 (NA)
Abandoned Railroad Bridge	Youngstown	OH	BG 76.60	Remove Bridge	1997 8-hr ozone (M)
Overhead Walkway	Coraopolis	PA	PLE 10.25	Remove Bridge	1997 8-hr ozone (NA) PM 2.5 (NA)
Ohio Central Railroad	McKees Rocks	PA	PLE 3.79	Lower Track/ Raise Bridge	1997 8-hr ozone (NA) PM 2.5 (NA)
Chartiers Creek	Pittsburgh	PA	PLE 3.36	Bridge Modification	1997 8-hr ozone (NA) PM 2.5 (NA)
Smithfield Street	Pittsburgh	PA	PLY 0.09	Lower Track	1997 8-hr ozone (NA) PM 2.5 (NA) CO (M)
West End of J&L Tunnel ³	Pittsburgh	PA	PLY 1.96	Remove Bridge	1997 8-hr ozone (NA) PM 2.5 (NA) SO ₂ (M)

Table 3. Obstructions Location and Associated Nonattainment/Maintenance Status

M = maintenance; NA = nonattainment

PROJECT NAME	CITY	STATE	ID	ACTIVITY	POLLUTANT
J&L Tunnel	Pittsburgh	PA	PLY 2.00	Raise Tunnel Roof	1997 8-hr ozone (NA) PM 2.5 (NA) SO2 (M)
East End of J&L Tunnel	Pittsburgh	PA	PLY 2.37	Bridge Modification/Remove Portion of Bridge	1997 8-hr ozone (NA) PM 2.5 (NA) SO2 (M)
Walnut Street	McKeesport	PA	BF 309.70	Lower Track	1997 8-hr ozone (NA) PM10 (Mod- M) PM 2.5 (NA)

¹ All PM 2.5 areas are nonattainment under both 1997 and 2006 standards.

² Kent Recreational Trail and W&LE Bridge share abutments and were calculated as one construction project.

³ West End of J&L Tunnel, J&L Tunnel, and East End of J&L Tunnel were calculated as one construction project.

Table 5. Summary of Historic Properties and Assessment of Effect.

Obstruction Name	County	City	Proposed Work	Historic Property	Effect	Notes/National Register of Historic Places (NRHP) Eligibility
OHIO						
TR 391	Ashland	Sullivan	Replace Bridge	TR 391 Bridge	Adverse Effect on bridge	These bridges as well as, Knapp Road and 5th Street, are all Warren Pony Trusses and individually eligible. Individual Memorandum of Agreement (MOA) executed December 2009 and/or part of multi-state MOA. The bridges have/will be offered for beneficial reuse.
CR 150	Ashland	Sullivan	Replace Bridge	CR 150 Bridge	Adverse Effect on bridge	
River Corners Road	Medina	Pawnee	Replace Bridge	River Corners Road Bridge	Adverse Effect on bridge	
Pawnee Road	Medina	Pawnee	Replace Bridge	Pawnee Road Bridge	Adverse Effect on bridge	
Mud Lake Road	Medina	Westfield	Replace Bridge	Mud Lake Road Bridge	Adverse Effect on bridge	
Thornton Street	Summit	Akron	Lower Track	None	No Effect on Historic Resources	Bridge determined not eligible.
Overhead Walkway	Summit	Akron	Lower Track	None	No Effect on Historic Resources	Bridge determined not eligible.
Park Street	Summit	Akron	Remove Bridge	None	No Effect on Historic Resources	Bridge determined not eligible.
W&LE Railroad Bridge	Portage	Kent	Lower Track	None	No Effect on Historic Resources	Bridge determined not eligible.
Main Street	Portage	Kent	Lower Track	Kent Industrial Historic District, Main Street Bridge	No Adverse Effect on adjacent historic District or bridge	Bridge determined not eligible.
Crain Avenue	Portage	Kent	Replace Bridge	None	No Effect on Historic Resources	ODOT led project currently under construction.
Recreational Trail	Portage	Kent	Raise Bridge	None	No Effect on Historic Resources	Bridge determined not eligible.
W&LE Railroad Bridge	Portage	Kent	Raise Bridge	None	No Effect on Historic Resources	Bridge determined not eligible.
ABCR Bridge	Portage	Kent	Raise Bridge	None	No Effect on Historic Resources	Bridge determined not eligible.
NS Railroad Bridge	Portage	Ravenna	Lower Track	None	No Effect on Historic Resources	Bridge determined not eligible.
Knapp Road	Portage	Ravenna	Replace Bridge	Knapp Road Bridge	Adverse effect on bridge	Individual MOA executed December 2009.
Rock Spring Road	Portage	Newton Falls	Replace Bridge	None	No Effect on Historic Resources	Bridge determined not eligible.
5th Street	Trumbull	Niles	Replace Bridge	5 th Street Bridge	Adverse Effect on bridge	Individual MOA executed December 2009.
Abandoned Railroad Bridge	Mahoning	Youngstown	Remove Bridge	None	No Effect on Historic Resources	Bridge determined not eligible.

Table 5. Summary of Historic Properties and Assessment of Effect.

Obstruction Name	County	City	Proposed Work	Historic Property	Effect	Notes/National Register of Historic Places (NRHP) Eligibility
PENNSYLVANIA						
Overhead Walkway	Allegheny	Coraopolis	Remove existing bridge	P&LE Railroad	No Effect on Historic Resources	Walkway determined not contributing to P&LE Railroad.
Ohio Central Railroad	Allegheny	McKees Rocks	Alternative 1. Lower track. Install temporary track to south. Alternative 2. Raise bridge.	P&LE Railroad	No Effect on Historic Resources	Ohio Central Railroad Bridge (not previously evaluated) and P&LE Railroad Complex, McKees Rocks (eligible 1990) adjacent but no potential effect. Tracks do not contribute to the P&LE Railroad.
Chartiers Creek	Allegheny	Pittsburgh	Existing bridge modification (modify/ replace diagonal bracing members meant for wind bracing and connection plates). Changes will not be visible.	P&LE Railroad	No Adverse Effect P&LE Railroad; minor changes to secondary structural members; bridge will continue to serve function; no significant visual changes.	Bridge is eligible as a contributing feature to P&LE Railroad.
Smithfield Street	Allegheny	Pittsburgh	Lower tracks. Install temporary track to south.	P&LE Railroad	No Effect on Historic Resources	Smithfield Street Bridge (designated NHL 1976), Liberty Street Bridge (listed in NR), Panhandle Division Bridge (not previously evaluated), and P&LE Railroad Complex/Station Square (listed in NR 1979) are outside of the limits of disturbance. Tracks to be lowered do not contribute to the P&LE Railroad. Smithfield Street Bridge is National Historic landmark. Project will not effect resources.
West End of J&L Tunnel	Allegheny	Pittsburgh	Retain majority of substructure for retaining walls.	None	No Effect on Historic Resources	West end bridge is not eligible and not contributing to P&LE Railroad.
J&L Tunnel	Allegheny	Pittsburgh	Replace entire roof slab with new roof. Raise to higher elevation and build up tunnel walls. Stone retaining walls will remain.	P&LE Railroad	No adverse Effect to P&LE Railroad.	Tunnel was determined not individually eligible (1991), but is eligible as a contributing feature to the P&LE Railroad.
East End of J&L Tunnel	Allegheny	Pittsburgh	Remove abandoned RR bridge superstructure and steel substructure units on south side of track.	None	No Effect on Historic Resources	East end bridge is not eligible and not contributing to P&LE Railroad.
Walnut Street	Allegheny	McKeesport	Lower tracks by 7.5" by using an under cutter.	B&O Railroad Pittsburgh Division	No Effect on Historic Resources	Bridge was determined eligible under the name Boston Bridge No. 6 (1985), but will not be directly impacted. Tracks to be lowered do not contribute to the B&O Railroad Pittsburgh Division

Table 5. Summary of Historic Properties and Assessment of Effect.

Obstruction Name	County	City	Proposed Work	Historic Property	Effect	Notes/National Register of Historic Places (NRHP) Eligibility
PENNSYLVANIA						
Benford Tunnel	Somerset	Confluence	Open cutting of tunnel, removing rock cover and roof of tunnel.	B&O Railroad Pittsburgh Division	Adverse Effect to B&O Railroad Pittsburgh Division.	Tunnel is eligible as a contributing feature to B&O Railroad Pittsburgh Division.
Confluence Excess Material Placement	Somerset	Confluence	Open cut material storage.	None	No Effect on Historic Resources	Archeology site work completed, no resources identified.
Brook Tunnel	Somerset	Confluence	Total arch liner replacement.	B&O Railroad Pittsburgh Division	Adverse Effect to B&O Railroad Pittsburgh Division.	Tunnel is eligible as a contributing feature to B&O Railroad Pittsburgh Division.
Shoofly Tunnel	Somerset	Confluence	Open cutting of tunnel, removing rock cover and roof of tunnel.	B&O Railroad Pittsburgh Division	Adverse Effect to B&O Railroad Pittsburgh Division.	Tunnel is eligible as a contributing feature to B&O Railroad Pittsburgh Division.
Pinkerton Tunnel	Somerset	Pinkerton	Alternative 1. Total arch liner replacement. Mining of up to 9 feet into existing sidewall. Alternative 2. Open cutting of tunnel, removing rock cover and roof of tunnel.	B&O Railroad Pittsburgh Division	Adverse Effect to B&O Railroad Pittsburgh Division.	Tunnel is eligible as a contributing feature to B&O Railroad Pittsburgh Division. Archaeology studies for open cut alternative completed.
Rockwood Excess Material Placement	Somerset	Confluence	Open cut material storage.	None	No Effect on Historic Resources	Archeology site work completed, no resources identified.
Church Street	Somerset	Garrett	Replace existing bridge. Vertically align roadway approaches. Add new drainage features to realigned approaches. Replacement will be two-span.	None	No Effect on Historic Resources	Bridge was determined not eligible individually or as part of local historic district (2006). Not contributing to the B&O Railroad Pittsburgh Division due to lack of historical association.
Blue Lick Truss	Somerset	Sand Patch	Raise bridge superstructure (including repairing abutments, beam seat, back wall, pier cap, and modifying bearings) and approach deck profile; no changes to truss.	B&O Railroad Pittsburgh Division; Blue Lick Truss	No adverse Effect to Blue Lick Truss; function of crossing will be maintained; existing truss will not be altered; minor changes to superstructure; previously altered by introduction of trail in former location of rail; no significant visual changes.	Bridge was determined eligible under the name Keystone Viaduct (1995). Although bridge crosses the line, not associated with the B&O; erected by Western Maryland RR.

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Obstruction Name	County	City	Proposed Work	Historic Property	Effect	Notes/National Register of Historic Places (NRHP) Eligibility
PENNSYLVANIA						
Sand Patch Tunnel	Somerset	Sand Patch	Liner notching. Remedial liner strengthening. Shallow portal caps where liner extends beyond slopes.	B&O Railroad Pittsburgh Division	Adverse Effect to B&O Railroad Pittsburgh Division.	Tunnel is eligible as a contributing feature to B&O Railroad Pittsburgh Division.
Sand Patch Excess Material Placement	Somerset	Confluence	Open cut material storage.	None	No Effect on Historic Resources	Archeology site work completed, no resources identified.
Falls Cut Tunnel	Somerset	Fairhope	Total arch liner replacement for entire tunnel length.	B&O Railroad Pittsburgh Division	Adverse Effect to B&O Railroad Pittsburgh Division	Tunnel is eligible as a contributing feature to B&O Railroad Pittsburgh Division
Railroad Bridge	Bedford	Hyndman	Existing bridge modification (modify/ replace diagonal bracing members meant for wind bracing and connection plates. Changes will not be visible.	B&O Railroad Pittsburgh Division	No adverse Effect to B&O Railroad Pittsburgh Division; minor changes to secondary structural members; bridge will continue to serve function; no significant visual changes.	Bridge is eligible as a contributing feature to B&O Railroad Pittsburgh Division.
WEST VIRGINIA						
Carothers Tunnel	Morgan	Paw Paw	Tunnel Liner Removal	Magnolia Cutoff, B&O Railroad	Adverse effect to B&O Magnolia Cutoff	Tunnel is eligible as a contributing feature to B&O Railroad.
Stuart Tunnel	Morgan	Hansrote	Tunnel Liner Notching	Magnolia Cutoff, B&O Railroad	Adverse effect to B&O Magnolia Cutoff	Tunnel is eligible as a contributing feature to B&O Railroad.
Randolph Tunnel	Morgan	Hansrote	Tunnel Liner Removal	Magnolia Cutoff, B&O Railroad	Adverse effect to B&O Magnolia Cutoff	Tunnel is eligible as a contributing feature to B&O Railroad.
MARYLAND						
CSX Railroad Bridge	Allegany	Mexico Farms	Remove Bridge and construction of approximately 1500 feet of new industrial track.	None	No Effect on Historic Resources	Bridge was determined not eligible individually or as part of B&O Railroad. New track alignment cleared for archaeology.
Graham Tunnel	Allegany	Magnolia	Tunnel Liner Removal	Magnolia Cutoff, B&O Railroad	Adverse effect to Tunnel portal	Tunnel is eligible as a contributing feature to B&O Railroad.