

Pickaway East-West Connector Evaluation Matrix

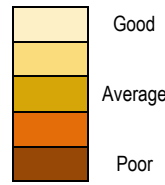
Concepts				DRAFT Purpose and Need			NEPA Factors					Preliminary Design Issues					
Explanation	Interchanges	Overpasses on US 23	Access Modifications	Projected Traffic (Impact on Network)	Train Blockage at Existing Duvall Road At-grade Crossing	Consistent with Existing Transportation Plans	Cultural Resources	Wooded Areas	EJ Populations	Residences (within the Corridor)	Business & Farms (within the Corridor)	Other Property Issues	Length of Four-Lane (miles)	Length of Connector (miles)	Intermodal Operations	Airport Operations	Planning-Level Const. Costs* (2008 dollars)
A Concepts - Duvall Road																	
A1: Duvall Upgrade Existing	1 (Duvall)	0	Middle Connector (Shepherd closed)	• Duvall Road and Lockbourne Eastern directly improved to serve projected volumes • Traffic volumes on Ashville Pike reduced – no need for widening	No at-grade crossing	Consistent with Plans	Potential impact with NRHP eligible resources along Duvall	1	No substantial impact anticipated	73	12	No potential issues	4.0	1.7	Duvall crossing closed - improves flexibility for operations	No potential issues	\$35,200,000
A2: North/South Duvall Bypass	1 (Duvall)	0	Middle Connector (Shepherd closed & Duvall cul-de-sac)	• Duvall Road realigned and improved to serve traffic volumes • Lockbourne-Eastern directly improved to serve projected volumes • Traffic volumes on Ashville Pike reduced – no need for widening	No at-grade crossing	Consistent with Plans	Potential impact with NRHP eligible resources along Duvall	2	No substantial impact anticipated	43	12	No potential issues	4.1	1.7	Duvall crossing closed - improves flexibility for operations	No potential issues	\$35,300,000
A3a: Far Southern Duvall Bypass	1 (Duvall)	0	Middle Connector (Shepherd closed & Duvall cul-de-sac)	• Duvall Road realigned and improved to serve traffic volumes • Lockbourne-Eastern directly improved to serve projected volumes • Traffic volumes on Ashville Pike reduced – no need for widening	No at-grade crossing	Consistent with Plans	No impact anticipated	1	No substantial impact anticipated	31	12	No potential issues	4.4	1.7	Duvall crossing closed - improves flexibility for operations	No potential issues	\$35,300,000
A3b: Far Southern Duvall Bypass (relocated US 23 access)	1 (South of Duvall)	Duvall	Middle & South Connector (Shepherd closed & Duvall grade separation & Duvall cul-de-sac)	• New route provided south of Duvall Road to serve majority of traffic. • Lockbourne-Eastern directly improved to serve projected volumes • Traffic volumes on Ashville Pike reduced – no need for widening	No at-grade crossing	Modification of MORPC corridor	No impact anticipated	2	No substantial impact anticipated	29	13	No potential issues	4.0	2.3	Duvall crossing closed - improves flexibility for operations	No potential issues	\$37,400,000
A4: Near Southern Duvall Bypass	1 (Duvall)	0	Middle Connector (Shepherd closed & Duvall cul-de-sac)	• Duvall Road realigned and improved to serve traffic volumes • Lockbourne-Eastern directly improved to serve projected volumes • Traffic volumes on Ashville Pike reduced – no need for widening	No at-grade crossing	Consistent with Plans	Potential impact with NRHP eligible resources along Duvall	2	No substantial impact anticipated	45	11	No potential issues	4.0	1.7	Duvall crossing closed - improves flexibility for operations	No potential issues	\$35,100,000
A5a: Northern Duvall Bypass (southern intersection at Lockbourne-Eastern)	1 (Duvall)	0	Middle Connector (Shepherd closed & Duvall cul-de-sac)	• Duvall Road realigned and improved to serve traffic volumes • Lockbourne-Eastern directly improved to serve projected volumes • Traffic volumes on Ashville Pike reduced – no need for widening	No at-grade crossing	Consistent with Plans	Potential impact with NRHP eligible resources along Duvall	2	Potential impact between Ashville & Lockbourne-Eastern	33	12	No potential issues	4.0	1.7	Corridor would impact NS IMF expansion area	No potential issues	\$34,200,000
A5b: Northern Duvall Bypass (northern intersection at Lockbourne-Eastern)	1 (Duvall)	0	Middle Connector (Shepherd closed & Duvall cul-de-sac)	• Duvall Road realigned and improved to serve traffic volumes • Lockbourne-Eastern directly improved to serve projected volumes • Traffic volumes on Ashville Pike reduced – no need for widening. • Increases volume on SR 762 west of US 23	No at-grade crossing	Modification of MORPC corridor & portion of Lockbourne-Eastern not upgraded	Potential impact with NRHP eligible resources along Duvall	1	Potential impact between Ashville & Lockbourne-Eastern	7	12	No potential issues	3.5	1.7	Corridor would impact NS IMF expansion area	No potential issues	\$32,600,000

Note: All of the Concepts would have similar impacts to the following resources: Wetlands, Streams, and the Mackey Ford Wildlife Area.

*Planning Level Construction Cost includes costs for interchange(s)

**Does not include additional undetermined costs for other Network Improvements





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Concepts				DRAFT Purpose and Need			NEPA Factors						Preliminary Design Issues				
Explanation	Interchanges	Overpasses on US 23	Access Modifications	Projected Traffic (Impact on Network)	Train Blockage at Existing Duvall Road At-grade Crossing	Consistent with Existing Transportation Plans	Cultural Resources	Wooded Areas	EJ Populations	Residences (within the Corridor)	Business & Farms (within the Corridor)	Other Property Issues	Length of Four-Lane (miles)	Length of Connector (miles)	Intermodal Operations	Airport Operations	Planning-Level Const. Costs* (2008 dollars)
B Concepts - Ashville Pike																	
B1: Ashville Upgrade	2 (Ashville & Duvall)	0	North Connector (Shepherd & Picway closed)	• Reduces traffic on Duvall. • Does not reduce traffic on Ashville Pike N-S, which would still need improvement	at-grade crossing stays open	Not consistent with plan for Lockbourne-Eastern	Potential archaeological resources near Big Walnut Creek	1	Potential impact near Shepherd/Picway Roads	5	9	Potential AEP Substation impact	2.5	0.7	Duvall crossing stays open -- fewer benefits to operations	Potential Airway-Roadway Clearance Issues	\$37,500,000**
B2: Southern Ashville Alignment	2 (Ashville & Duvall)	0	North Connector (Shepherd & Picway closed)	• Reduces traffic on Duvall. • Does not reduce traffic on Ashville Pike N-S, which would still need improvement	at-grade crossing stays open	Not consistent with plan for Lockbourne-Eastern	Potential archaeological resources near Big Walnut Creek	1	Potential impact near Shepherd/Picway Roads	5	9	Potential AEP Substation impact	2.5	0.7	Duvall crossing stays open -- fewer benefits to operations	Potential Airway-Roadway Clearance Issues	\$37,800,000**
C Concepts - Shepherd Road/New US 23 Access (Northern Configuration)																	
C1: Shepherd to Ashville with Connector to Duvall	1 (Shepherd)	Duvall	Middle Connector (Picway closed)	• Reduces traffic on Duvall. • Does not reduce traffic on Ashville Pike N-S, which would still need improvement	at-grade crossing stays open	Modification of MORPC corridor & not consistent with plan for Lockbourne-Eastern	No impact anticipated	0	Potential impact near Shepherd/Picway Roads	6	7	Potential AEP Substation impact	2.4	1.7	Duvall crossing stays open -- fewer benefits to operations	Potential Airway-Roadway Clearance Issues	\$31,500,000**
C2: New Interchange to Ashville with Connector to Duvall and Shepherd	1 (between Shepherd & Duvall)	Duvall	Middle Connector (Shepherd/Picway closed & Duvall grade separation)	• Reduces traffic on Duvall. • Does not reduce traffic on Ashville Pike N-S, which would still need improvement	at-grade crossing stays open	Modification of MORPC corridor & not consistent with plan for Lockbourne-Eastern	No impact anticipated	0	No substantial impact anticipated	1	4	Potential AEP Substation impact	2.7	1.7	Duvall crossing stays open -- fewer benefits to operations	Potential Airway-Roadway Clearance Issues	\$32,500,000**
D Concepts - Ashville/Duvall Combination																	
D1: Duvall to Ashville with Connector to Shepherd	1 (Duvall)	0	Middle Connector (Shepherd/Picway closed)	• Reduces traffic on Duvall. • Does not reduce traffic on Ashville Pike, which would still need improvement. • Increases volume on SR 762 west of US 23.	at-grade crossing stays open	Modification of MORPC corridor & not consistent with plan for Lockbourne-Eastern	No impact anticipated	0	No substantial impact anticipated	2	8	Potential AEP Substation impact	3.2	1.7	Duvall crossing stays open -- fewer benefits to operations	Potential Airway-Roadway Clearance Issues	\$31,500,000**
E Concepts - New US 23 Access (Southern Configuration)																	
E1a: New Interchange to Duvall with Connector to Shepherd and Duvall (southern intersection at Lockbourne-Eastern)	1 (between Shepherd & Duvall)	Duvall	Middle Connector (Shepherd/Picway closed, Duvall grade separation, & Duvall cul-de-sac)	• Reduces traffic on Duvall. • Does not reduce traffic on Ashville Pike, which would still need improvement. • Increases volume on Lockbourne-Eastern south of Duvall, which would require additional improvements.	No at-grade crossing	Modification of MORPC corridor	No impact anticipated	2	No substantial impact anticipated	35	9	No potential issues	3.9	1.7	Corridor would impact NS IMF expansion area	No potential issues	\$35,700,000**
E1b: New Interchange to Duvall with Connector to Shepherd and Duvall (northern intersection at Lockbourne-Eastern)	1 (between Shepherd & Duvall)	Duvall	Middle Connector (Shepherd/Picway closed, Duvall grade separation, & Duvall cul-de-sac)	• Reduces traffic on Duvall. • Reduces traffic on Ashville Pike. • Lockbourne-Eastern directly improved to serve projected volumes.	No at-grade crossing	Modification of MORPC corridor & portion of Lockbourne-Eastern not upgraded	No impact anticipated	1	Potential impact between Ashville & Lockbourne-Eastern	3	5	No potential issues	3.4	1.7	Corridor would impact NS IMF expansion area	No potential issues	\$34,000,000

Note: All of the Concepts would have similar impacts to the following resources: Wetlands, Streams, and the Mackey Ford Wildlife Area.

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