

**Table 14. Comparative Impact and Cost Summary – NEWTOWN/ANCOR SUBAREA**

Features/Considerations	Preliminary Alternative Corridor Segment			
	Alternative M	Alternative N	Alternative O	Alternative P
<b>General</b>				
Centerline Length	1.5 miles	1.1 miles	1.2 miles	1.3 miles
Total Area in Alignment Corridor	73 acres	56 acres	60 acres	63 acres
<b>Community and Land Use</b>				
Potential Residential Displacements	4	12	13	0
Potential Commercial Displacements	13 (1 vacant)	7 (1 vacant)	6 (1 landfill)	9 (1 county; 1 landfill)
Greenspaces – Private	0	0	0	0
Public (additional study required to determine Section 4(f) applicability)	0	0	0	0
Schools	0	0	0	0
Churches	0	0	0	0
Cemeteries	0	0	0	0
Hospitals/Emergency Service	0	0	0	0
Community Buildings/Facilities/County or State	0	0	0	1 (county)
Potential Job Displacements	84-174	86-156	48-97	72-142
EJ Communities	Low income, elderly, and disabled populations at or above reg. averages	Low income, elderly, and disabled populations at or above reg. averages	Low income, elderly, and disabled populations at or above reg. averages	Low income, elderly, and disabled populations at or above reg. averages
Agricultural Land	3 acres	4 acres	1 acre	0
Visual Resources	None	None	None	None
Public Involvement Considerations	Village of Newtown concerned about businesses/residential impacts	Village of Newtown concerned about businesses/residential impacts	Village of Newtown concerned about businesses/residential impacts	Village of Newtown concerned about businesses/residential impacts
<b>Little Miami River Crossing</b>				
Channel Stability Considerations	Not Applicable	Not Applicable	Not Applicable	Not Applicable
Crossing Suitability	Not Applicable	Not Applicable	Not Applicable	Not Applicable
<b>Floodplains and Groundwater</b>				
100 Year FEMA Floodway/Floodplain	<u>Floodway Length Bridged:</u> None <u>Floodplain:</u> Little Miami River (50 acres), Dry Run (1 acre)	<u>Floodway Length Bridged:</u> None <u>Floodplain:</u> Little Miami River (32 acres), Dry Run (1 acre)	<u>Floodway Length Bridged:</u> None <u>Floodplain:</u> Little Miami River (8 acres)	<u>Floodway Length Bridged:</u> None <u>Floodplain:</u> Little Miami River (8 acres)
Sole-Source Aquifer	73 acres	56 acres	60 acres	63 acres
Drinking Water Source Protection Area	0	0	0	0
Public Water Supplies	0	0	0	0
<b>Ecological Resources</b>				
Threatened and Endangered Species	Potential Indiana bat habitat (12 acres); limited potential running buffalo clover habitat	Potential Indiana bat habitat (7 acres); limited potential running buffalo clover habitat	Potential Indiana bat habitat (2 acres); limited potential Running buffalo clover habitat	Potential Indiana bat habitat (7 acres); limited potential Running buffalo clover habitat
Wetlands [total number (acres)]	0	0	0	0
Surface Streams				
Culvert Crossings (number/linear feet filled)	1 (448 feet)	1 (511 feet)	0	0
Bridge Crossings (number)	1	0	0	0
High Quality WWH/Class III PHWH Crossings	Dry Run (bridge and culvert crossing)	Dry Run (culvert crossing)	0	0
Ponds	2 (25 acres)	2 (4 acres)	2 (12 acres)	0
Woodlands	12 acres	7 acres	2 acres	7 acres
Other Notable Ecological Features	0	0	0	0
<b>Cultural Resources</b>				
Section 4(f) History/Architecture				
NRHP District?	No	No	No	No
Previously-Determined NRHP-Eligible Sites?	No	Yes (Wm. Edwards House, 0.8 acre)	No	No
Sites Warranting Further Study?	No	No	No	No
Section 4(f) Archaeology				
NRHP District?	No	No	No	No
High-Sensitivity Areas? (Gray & Pape, 2009)	No	No	No	No
Recorded/Unrecorded Sites? (Gray & Pape, 2010)	Yes (2 sites)	Yes (1 site)	Yes (4 Sites)	Yes (4 Sites)
Site Complexity (Gray & Pape, 2010)	Complex (1), Simple (1)	Destroyed	Destroyed (4)	Destroyed (4)
Site Disturbance Level (Gray & Pape, 2010)	Moderate (2)	Destroyed	Destroyed (4)	Destroyed (4)
Sites with Human Burials Confirmed or Suspected? (Gray & Pape, 2010)	Yes (1)	No	Yes (3 - destroyed by landfill)	Yes (3 - destroyed by landfill)
<b>Public Parks and Recreation Areas</b>				
Section 4(f) Public Parks/Recreation Areas	0	0	0	0
Section 6(f) Public Parks/Recreation Areas	0	0	0	0
<b>Noise and Air Quality</b>				
Adjacent Noise Sensitive Areas	3	2	2	1
Preliminary Estimated Cost of Noise Mitigation	\$1,935,200	\$1,064,800	\$787,200	\$449,600
Potential Air Quality Issues	Located in non-attainment area for eight-hour ozone and PM <sub>2.5</sub> ; project-level hot-spot analyses not anticipated; MSAT analysis required	Located in non-attainment area for eight-hour ozone and PM <sub>2.5</sub> ; project-level hot-spot analyses not anticipated; MSAT analysis required	Located in non-attainment area for eight-hour ozone and PM <sub>2.5</sub> ; project-level hot-spot analyses not anticipated; MSAT analysis required	Located in non-attainment area for eight-hour ozone and PM <sub>2.5</sub> ; project-level hot-spot analyses not anticipated; MSAT analysis required
<b>Potential Hazardous Materials Sites</b>				
Suspect Sites Requiring Phase I Studies	5 (0 landfills)	6 (0 landfills)	5 (incl. Newtown Landfill)	9 (incl. Newtown Landfill)
<b>Rail Freight Considerations</b>				
Rail Freight Considerations	Crosses existing NS freight line	Crosses existing NS freight line	Crosses existing NS freight line	Parallels existing NS freight line
<b>Engineering and Design Considerations</b>				
Geotechnical Issues	Crosses two gravel pit lakes	Crosses one gravel pit lake	Crosses one gravel pit lake and Newtown Landfill	Crosses Newtown Landfill
Major Utilities	1 electric, 1 sewer (multiple crossings)	1 electric, 1 sewer (multiple crossings)	1 electric, 1 sewer	1 electric, 1 sewer
Earthwork and Drainage	Crosses two gravel pit lakes	Crosses one gravel pit lake	Crosses one gravel pit lake and the Newtown Landfill	Crosses the Newtown Landfill
Horizontal and Vertical Geometry	Valley Avenue intersection location	Valley Avenue intersection location	Valley Avenue intersection location	Valley Avenue intersection location
<b>Eastern Corridor Considerations</b>				
Fit with Eastern Corridor Improvements/Plans	Transit station location provides pedestrian link to parks/bikeway and opportunity for joint development; opportunity for infill/re-development of old industry, landfills and mines (identified goals in LUVVP); residential and commercial relocations a concern (does not support identified Newtown-area LUVVP goals)	Transit station location provides pedestrian link to parks/bikeway and opportunity for joint development; opportunity for re-development of landfills and mines (identified goals in LUVVP); residential and commercial impacts a concern (does not support identified Newtown-area LUVVP goals)	Transit station location provides pedestrian link to parks/bikeway and opportunity for joint development; opportunity for re-development of landfills and mines (identified goals in LUVVP); residential and commercial impacts a concern (does not support identified Newtown-area LUVVP goals); crosses Barber Lake (old gravel pit lake) owned by Village of Newtown	Bisects a portion of Newtown and has substantial business district impacts (does not support identified Newtown-area LUVVP goals)  Follows existing rail freight corridor and provides opportunity to evaluate highway/rail transit mode-split through Newtown as project further develops
<b>Preliminary Cost Estimates (current \$\$)</b>				
Multi-modal Construction Cost Estimate (Highway and Rail Transit)	\$78.9 Million to \$149.4 Million (fill vs bridge crossing of gravel pits)	\$50.0 Million	\$51.6 Million to \$101.4 Million (fill vs bridge crossing of gravel pits)	\$30.3 Million
Right-of-Way Cost Estimate	\$7.2 Million	\$6.7 Million	\$5.1 Million	\$7.3 Million
<b>SEGMENT RECOMMENDATION:</b>	<b>ADVANCE A MODIFIED HYBRID OF ALTERNATIVES M AND N (M1/N1)</b>	<b>ADVANCE A MODIFIED HYBRID OF ALTERNATIVES M AND N (M1/N1)</b>	<b>MODIFY AND ADVANCE</b>	<b>ADVANCE</b>