

Summary of Impacts of All Build Alternatives

RESOURCE			ALTERNATIVES 3A/B¹	ALTERNATIVES 4A/B¹	ALTERNATIVES 5A/B¹	ALTERNATIVE 5C¹	ALTERNATIVES 6A/B²	ALTERNATIVES 7A/B²	NOTES:
Natural Environment			DEIS Alternatives				AA/EA Alternatives		<div>1. Impacts of Alternatives 3A/B, 4A/B, 5A/B and 5C are from the 2002 DEIS.</div> <div>2. Alternatives 6A/B and 7A/B have an identical highway footprint.</div> <div>3. Total includes all soils in Frederick County (including prime farmland and soils of statewide importance) plus soils of statewide importance in Montgomery County (as calculated in the 2002 DEIS).</div> <div>4. Does not include potential impacts of transit O&M facilities, as only one may be chosen.</div> <div>5. Potential direct and indirect impacts to two fish species: pearl dace and comely shiner.</div> <div>6. Does not include ephemeral streams</div> <div>7. Since 2002, the USACE has broadened the definition of waters of the US to include ephemeral channels. Ephemeral channels were not quantified in the 2002 DEIS.</div> <div>8. The Atomic Energy Commission Building was not evaluated for eligibility in the 2002 DEIS and is not included in these numbers. It is presumed that the DEIS alternatives 3A/B, 4A/B and 5A/B would have similar impacts as Alternatives 6A/B and 7A/B. Alternative 5C would only have highway impacts.</div> <div>9. Two resources, Seneca Creek State Park and the Atomic Energy Commission Building, are impacted by both highway and transitway. One additional property is only affected by noise.</div> <div>10. One park is impacted by both the highway and transit components.</div> <div>11. Highway component for Alternatives 6A/B and 7A/B includes one park and ride lot. Highway component for the 2002 DEIS alternatives includes three park and ride lots.</div> <div>12. Updates to displacements are ongoing.</div> <div>For O&M facility impacts, see Table S-3.</div>
Total Limit of Disturbance (Edge of Pavement to new ROW) Highway Component Transitway Component							1,476 acres 1,192 acres 284 acres⁴	1,476 acres 1,192 acres 284 acres⁴	
Prime Farmland Soils	Total		284.6 acres	284.6 acres	290.2 acres	207.7 acres	742.6 acres	742.6 acres	
	Highway component		195.8 acres	195.8 acres	202.4 acres	207.7 acres	642 acres	642 acres	
	Transitway component		88.8 acres	88.8 acres	88.8 acres	n/a	100.6 acres⁴	100.6 acres⁴	
Soils of Statewide Importance	Total		367 acres³	367 acres³	391.9 acres³	339.6 acres³	488.7 acres	488.7 acres	
	Highway component						460 acres	460 acres	
	Transitway component						28.7 acres⁴	28.7 acres⁴	
Number of farmlands			30	30	30	27	38 parcels	38 parcels	
Active Farmland required			133 acres	133 acres	143 acres	106 acres	191 acres	191 acres	
Floodplains – Total			23 acres	23 acres	24 acres	21 acres	28.4 acres	28.4 acres	
	Highway component		20 acres	20 acres	21 acres	21 acres	25.6 acres	25.6 acres	
	Transitway component		3 acres	3 acres	3 acres	n/a	2.8 acres⁴	2.8 acres⁴	
Forest – Total			183 acres	183 acres	199 acres	180 acres	295.8 acres⁴	295.8 acres⁴	
	Highway component		156 acres	156 acres	172 acres	180 acres	268.6 acres	268.6 acres	
	Transitway component		27 acres	27 acres	27 acres	n/a	27.2 acres	27.2 acres	
Rare, Threatened and Endangered Species							Potential⁵	Potential⁵	
Waters of the US – Total Streams⁷			14,185 linear feet streams⁶,⁷	14,185 linear feet streams⁶,⁷	16,331 linear feet streams⁶,⁷	13,407 linear feet streams⁶,⁷	24,204 linear feet streams⁴,⁶,⁷	24,204 linear feet streams⁴,⁶,⁷	
Waters of the US – Total Wetlands			10.7 acres wetlands	10.7 acres wetlands	11.6 acres wetlands	10.7 acres wetlands	15.6 acres wetlands	15.6 acres wetlands	
Highway Component	Streams		11,245 linear feet	11,245 linear feet	13,391 linear feet	13,407 linear feet	20,198 linear feet	20,198 linear feet	
	Ephemeral channels⁷		–	–	–	–	10,812 linear feet⁷	10,812 linear feet⁷	
	Wetlands		9.1 acres	9.1 acres	10.0 acres	10.7 acres	13 acres	13 acres	
Transitway Component	Streams		2,940 linear feet	2,940 linear feet	2,940 linear feet	n/a	4,006 linear feet	4,006 linear feet	
	Ephemeral channels⁷		–	–	–	–	1,646 linear feet	1,646 linear feet	
	Wetlands		1.6 acres	1.6 acres	1.6 acres	n/a	2.6 acres	2.6 acres	
Cultural Resources									
Historic Properties			7 properties⁸	7 properties⁸	7 properties⁸	5 properties⁸	7 properties/43.28 acres⁹	7 properties/43.28 acres⁹	
Highway component (number/acres)							5/31.17 acres	5/31.17 acres	
Transitway component (number/acres)							3/12.11 acres	3/12.11 acres	
Socioeconomic Resources									
Public Parks – Total			11 parks/37 acres	11 parks/37 acres	12 parks/44 acres	13 parks/48 acres	13 parks/42.72 acres¹⁰	13 parks/42.72 acres¹⁰	
Highway component (number/acres)							13/37.56 acres	13/37.56 acres	
Transitway component (number/acres)							1/5.16 acres	1/5.16 acres	
Right-of-Way – Total¹¹			562 acres	562 acres	592 acres	446 acres	748 acres	748 acres	
	Highway component		392 acres	392 acres	422 acres	446 acres	578 acres	578 acres	
	Transitway component (not including O&M facility)		170 acres	170 acres	170 acres	n/a	170 acres	170 acres	
Residential Displacements¹² – Total			64-127	64-127	64-128	127-385	256-260	256-260	
Highway component							251	251	
Transitway component							5-9	5-9	
Business Displacements¹²– Total			4-11	4-11	4-12	2-11	13-43	13-43	
Highway component							10-11	10-11	
Transitway component (not including O&M facility)							3-32	3-32	
Air Quality - Number of receptors with CO violations			0	0	0	0	0	0	
Noise – Highway	Total monitored/modeled locations		55 locations	55 locations	55 locations	55 locations	55 locations	55 locations	
	Locations exceeding abatement criteria		26 residential impacts	26 residential impacts	26 residential impacts	35 residential impacts	27 residential impacts	26 residential impacts	
	Transitway		10 non-residential impacts	10 non-residential impacts	9 non-residential impacts	9 non-residential impacts	13 non-residential impacts	13 non-residential impacts	
	Total monitored/modeled locations		15 locations	15 locations	15 locations		5 locations	25 locations	
	Locations exceeding abatement criteria		13 residential impacts with horn noise (LRT)	13 residential impacts with horn noise (LRT)	13 residential impacts with horn noise (LRT)		4 residential impacts (LRT)	4 residential impacts (LRT)	
			7 residential impacts without horn noise (LRT)	7 residential impacts without horn noise (LRT)	7 residential impacts without horn noise (LRT)				
Hazardous Materials – Number of affected properties			6 (4 highway, 2 transitway)	6 (4 highway, 2 transitway)	6 (4 highway, 2 transitway)	4 (highway)	6 (4 highway, 2 transitway)	6 (4 highway, 2 transitway)	