



APPENDIX B

Preliminary Alternatives Evaluation Metrics

I-69 Section 6 Preliminary Alternatives Evaluation Measures



Purpose & Need Performance Measures						
		Alternative C	Alternative B	Alternative D	Alternative K3	Alternative K4
Length of Alternative						
New Terrain Freeway		1 miles	11 miles	12 miles	10 miles	14 miles
Reconstructed SR 37 Corridor		26 miles	9 miles	9 miles	17 miles	12 miles
Existing Interstate Highway		0 miles	10 miles	10 miles	0 miles	0 miles
	Total Distance, SR 39 to I-465	27 miles	30 miles	31 miles	27 miles	26 miles
Traffic Benefits						
Regional Traffic Safety						
Annual Crash Reduction in the Study Area		1,379 crashes	238 crashes	357 crashes	1,225 crashes	1,235 crashes
Peak Hour Travel Time						
Sample Trips:	No Build Travel Time:	Time Savings:¹				
SR 39 to Indianapolis International Airport	39 minutes	3 minutes	10 minutes	10 minutes	6 minutes	7 minutes
SR 39 to Downtown Indianapolis	50 minutes	11 minutes	10 minutes	10 minutes	12 minutes	13 minutes
SR 39 to I-69 Northeast	69 minutes	13 minutes	7 minutes	7 minutes	12 minutes	13 minutes
Regional Traffic Congestion						
Reduction in Congested Vehicle-Miles Traveled (VMT) ²		603,000 VMT	233,000 VMT	300,000 VMT	566,000 VMT	577,000 VMT
Regional Freight Truck Travel						
Daily Hours of Freight Truck Travel Saved		4,200 hours	1,200 hours	1,500 hours	4,100 hours	4,200 hours
Regional Economic Impact of I-69						
Increase in Wages ³		\$ 1.7 Billion	\$ 0.8 Billion	\$ 0.8 Billion	\$ 1.5 Billion	\$ 1.4 Billion
Increase in Regional Gross Domestic Product ⁴		\$ 2.4 Billion	\$ 1.1 Billion	\$ 1.0 Billion	\$ 2.1 Billion	\$ 1.9 Billion
Natural Environment Impact Assessment						
		Alternative C	Alternative B	Alternative D	Alternative K3	Alternative K4
Water Resources						
Floodplains						
Floodway		72 acres	178 acres	178 acres	106 acres	182 acres
Floodplain (Excludes Floodway)		403 acres	225 acres	233 acres	288 acres	262 acres
	Total	476 acres	403 acres	411 acres	394 acres	444 acres
Wetlands						
National Wetland Inventory (NWI) Wetlands (Excludes Open Water) ^{5M}		9 acres	19 acres	18 acres	12 acres	19 acres
Streams and River Crossings						
Streams and Rivers Impacted ^M		177,000 feet	150,000 feet	154,000 feet	172,000 feet	171,000 feet
Undisturbed		4,000 feet	20,000 feet	19,000 feet	13,000 feet	20,000 feet
Previously Undisturbed		173,000 feet	130,000 feet	135,000 feet	159,000 feet	151,000 feet
IDEM 303(d) Impaired Stream		1,600 feet	3,000 feet	2,600 feet	3,900 feet	3,200 feet
Wellhead Protection Area						
Wellhead Protection Area		440 acres	0 acres	0 acres	375 acres	326 acres
Land Resources						
Vegetation/Land Cover						
Agricultural		342 acres	1,073 acres	1,010 acres	837 acres	975 acres
Forested ^M		143 acres	229 acres	274 acres	238 acres	319 acres
Mitigation Area Requirements						
Forested (3 x the non-wetland forest)		413 acres	638 acres	776 acres	686 acres	910 acres
Emergent Wetlands (2 x impacted area)		6 acres	6 acres	6 acres	6 acres	6 acres
Forested Wetlands (4 x impacted area)		22 acres	65 acres	61 acres	37 acres	63 acres
	Total	441 acres	709 acres	843 acres	729 acres	979 acres
Streams and Rivers (1 x impacted length)		177,000 feet	150,000 feet	154,000 feet	172,000 feet	171,000 feet

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Human Environment Impact Assessment					
	Alternative C	Alternative B	Alternative D	Alternative K3	Alternative K4
Recreational Facilities & DNR Managed Lands					
Properties	● Denotes impact				
Cikana Fish Hatchery	●	●	●	●	●
Martinsville Golf Course ⁶	●	●	●	●	●
Southwestway Park - Mann Property ^{4(f)}	●	●	●	●	●
Whispering Meadows Horse Ranch ⁶	●	●	●	●	●
Trails					
Existing and Planned Trails ^{4(f)}	563 ft	0 ft	0 ft	0 ft	0 ft
Cultural and Historic Resources					
Historic Properties^{4(f)}					
Listed in National Register ⁷	0	0	0	1	1
Determined Eligible or Potentially Eligible for National Register ⁷	0	3	3	0	2
Determined Eligible or Potentially Eligible for National Register (Possible Avoidance) ⁸	2	1	2	2	2
Total	2	4	5	3	5
Recorded Archaeology Sites					
Potentially Eligible	0	0	0	0	0
Not Eligible	6	1	10	5	4
Eligibility Unknown	20	4	4	10	8
Total	26	5	14	15	12
Public Facilities					
School Properties ⁹	8 acres				
Religious Facilities	17 acres	12 acres	10 acres	15 acres	15 acres
Cemeteries	1 location	1 location	1 location	none	none
Property Impacts					
Acres of Property Impacted (by Zoning)					
Property Zoning:					
Residential	234 acres	175 acres	200 acres	357 acres	384 acres
Commercial	207 acres	106 acres	113 acres	106 acres	94 acres
Industrial	105 acres	1 acre	1 acre	12 acres	1 acres
Agricultural	510 acres	1,194 acres	1,174 acres	955 acres	1,077 acres
Total	1,056 acres	1,476 acres	1,488 acres	1,430 acres	1,556 acres
Relocations¹⁰					
Land Use:					
Residential	279	232	264	474	450
Commercial	96	42	47	67	46
Industrial	12	3	3	6	6
Agricultural	4	15	16	6	24
Billboards	44	27	27	39	28
Other ¹¹	8	10	6	10	10
Total	443	329	363	602	564
Notes					
<p>1. Travel times are based on the shortest path chosen by a typical driver, not necessarily using I-69.</p> <p>2. Congested travel is defined for a typical weekday as level of service (LOS) E or F.</p> <p>3. Cumulative additional wages earned over a 20 year period by the population of the 4 county study area.</p> <p>4. Cumulative additional regional gross domestic product created over a 20 year period within the 4 county study area.</p> <p>5. NWI = National Wetland Inventory</p> <p>6. Recreational facilities that are not publicly owned.</p> <p>7. An adverse effect and Section 4(f) use is anticipated. There is no apparent avoidance alternative or avoidance results in impacts to other resources.</p> <p>8. An apparent avoidance alternative has been identified, or a no adverse effect or a <i>de minimis</i> Section 4(f) finding is likely identified, or where no adverse effect or a <i>de minimis</i> Section 4(f) finding is likely.</p> <p>9. All alternatives impact 8 acres of Martinsville High School property but no school buildings are impacted.</p> <p>10. Relocations are quantified for impact assessment. Individual relocations will not be disclosed during Preliminary Alternative evaluation.</p> <p>11. Other includes school, church, cemetery, public facilities, etc.</p> <p>M - Included in mitigation area requirements calculation. The cost of mitigation is included in the cost estimate.</p> <p>4(f) - Potential Section 4(f) impact.</p>					