

**Table B.1: Summary of Impacts for U.S. 31 EIS Plymouth to South Bend Alternatives A – K
(Determined for “Working Alignment” Unless Otherwise Noted)
Alternatives Recommended for Further Analysis Shaded in Green
Alternatives That Did Not Meet Purpose and Need Shaded in Gray**

Impact	Alternative																
	Western								Central				Eastern				
	A	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	J	G	H	I	K	
ENGINEERING																	
Length (miles)	21.3	21.2	21.2	19.5	19.5	20.9	20.9	20.6	20.6	20.4	20.4	20.2	21.2	20.9	24.3	20.5	
Length (miles) on Existing US 31 Alignment	5.5	6.5	4.8	6.5	4.8	7.7	6.0	8.9	7.2	11.0	9.3	11.3	6.7	4.3	4.3	4.3	
New/ Reconstructed Interchanges	7	8	8	8	8	9	9	9	9	8	8	7	9	7	8	7	
Railroad Crossings (Active)	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
Constructability Issues	Muck/Peat Soils	H	M	M	M	M	H	H	M	M	M	M	M	H	H	H	
	Traffic Maintenance	L	M	M	L	L	M	M	M	H	H	H	M	M	M	M	
Average Construction Costs (millions of \$)	165	168	169	183	184	164	166	180	181	200	201	208	189	176	208	186	
Average Right-of-Way Costs (millions of \$)	39	47	37	49	41	75	66	73	61	94	82	101	69	41	38	58	
Average Relocation Costs (millions of \$)	20	20	19	21	20	24	23	25	24	31	30	37	25	22	26	24	
Average TOTAL Costs (millions of \$)	224	235	225	253	245	263	255	278	266	325	313	346	283	239	272	268	
SOCIO-ECONOMIC ISSUES																	
Relocations:	Residences	62	103	73	78	48	155	125	146	116	202	172	235	113	55	40	122
	Residences w/ Farm	13	8	4	8	4	8	4	8	4	10	6	10	8	14	12	14
	Apartment Units	0	0	0	0	0	0	0	0	0	0	0	48	0	0	0	0
	Businesses	7	7	4	11	8	46	43	84	81	94	91	86	80	4	4	16
	Churches	1	0	0	0	0	0	0	0	0	1	1	3	2	2	1	3
Cemeteries	1	0	0	0	0	0	0	2	2	4	4	4	2	1	1	2	
Schools	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
Emergency Services (Fire Department)	0	0	0	0	0	0	0	1	1	1	1	1	1	0	0	0	
Environmental Justice Issues (YES/NO)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
% Low Income Population (Poverty)	6.2	6.3	5.8	3.1	2.9	5.2	5.1	6.3	6.1	6.4	6.3	6.3	6.0	4.1	2.0	5.0	
% Minority Population	2.5	1.6	1.6	6.2	6.1	4.4	4.4	5.3	5.3	5.2	4.9	6.9	4.8	2.3	2.7	3.4	
ECOLOGICAL IMPACTS																	
Total Area (acres)	1152	1242	1241	1214	1213	1290	1289	1155	1153	1105	1104	1045	1183	1243	1395	1170	
Area on Existing US 31/ US 20 (acres)	101	122	100	164	142	160	137	170	145	188	143	188	140	99	100	87	
Total Area of New Right-of-Way (acres)	1051	1120	1141	1050	1071	1130	1152	985	1008	917	961	857	1043	1144	1295	1083	
Forested Land	178	222	256	162	196	146	178	114	148	75	111	55	117	111	84	82	
Wetlands (acres)	TOTAL	38.9	54.6	62.7	76.8	84.8	73.8	81.3	73.5	48.0	57.3	28.1	42.9	29.9	37.6	28.8	
	Forested	28.8	34.5	38.3	45.3	49.0	45.0	48.3	44.9	48.6	29.3	33.1	5.6	34.3	20.9	19.2	
	Scrub/Shrub	1.0	2.0	2.0	3.3	3.3	3.7	3.6	2.0	1.9	7.0	7.0	0.3	0.3	0.3	9.8	
	Emergent	6.8	17.4	20.9	27.5	31.0	24.6	28.2	25.3	28.9	11.4	16.1	20.9	7.4	8.3	7.7	
	Lakes/Ponds	2.3	0.7	1.5	0.7	1.5	0.5	1.2	1.3	2.1	0.3	1.1	1.3	0.9	0.4	0.4	
Hydric Soils (acres)	285	219	244	282	308	280	306	242	268	220	241	207	244	313	448	251	
Muck Soils (acres)	134	61	63	68	70	65	66	61	62	55	56	44	69	68	148	75	

Impact		Alternative															
		Western					Central				Eastern						
		A	B1	B2	C1	C2	D1	D2	E1	E2	F1	F2	J	G	H	I	K
Archaeological Sites (Previously Surveyed)	2000 ft Corridor	4	4	2	6	4	4	2	5	3	4	2	4	2	18	17	4
	Working Alignment	3	4	2	4	2	4	2	4	2	4	2	3	2	18	9	4
	# for Additional Investigation	0	1	0	1	0	1	0	2	1	1	0	0	0	3	3	1
POTENTIAL 4(f) PROPERTY IMPACTS																	
	TOTAL	3	6	4	2	0	3	1	5	3	5	3	5	4	3	2	3
	Public Lands	0	0	0	0	0	1	1	1	1	1	1	2	1	0	0	0
	Historic	3	6	4	2	0	2	0	4	2	4	2	3	3	3	2	2
	Archaeological	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINERAL/PEAT RESOURCES																	
	Gravel Pits	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
	Gas/Oil Well	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Gas/ Oil Field (acres)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
POTENTIAL NOISE IMPACTS																	
	# Residences Impacted	47	38	24	69	54	115	101	82	66	105	88	146	66	30	41	75
	Estimated Number of Noise Barriers	1	0	0	1	1	5	5	3	3	3	3	5	3	0	1	3
HAZARDOUS MATERIAL IMPACTS																	
	Underground Storage Tank Sites	0	0	0	0	0	2	2	6	6	7	7	8	6	0	0	1
	Leaking Underground Storage Tank Sites	0	0	0	0	0	1	1	1	1	1	1	2	1	0	0	0
	CERCLIS/Superfund Sites	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	RCRA Sites	1	0	0	0	0	3	3	3	3	3	3	3	3	0	1	0
	TOTAL POTENTIAL HAZ MAT SITES	1	0	0	0	0	6	6	10	10	11	11	13	10	0	1	1

* Post 1980 and within 1-mile either side of working centerline, includes "Candidate" species

**Numbers for those alternatives recommended for further analysis may be more accurate than for those eliminated, as additional work has since been done on them.