

Eastern Bypass Study SUMMARY DATA

Purpose and Need Screening

January 2011

PURPOSE AND NEED COMPONENT	DEFINED AS ...	Magnitude of Benefit			CORRIDORS, with data sorted by magnitude of benefit																
		Low	Med	High																	
Improved Local and Regional Mobility	A reduction in vehicle-miles of travel or vehicle-hours of travel on various specified roadway links in the study area and regional network, OR, an increase in VMT coupled with a reduction in VHT on various links.	lowest	middle	highest	Average TIME savings (minutes) per vehicle/trip (average time per vehicle/trip for no-build = 27.2 minutes)																
					<2.8	2.8 - 3.1	>3.1	T-6 2.6	P-2 2.8	D-14 2.9	D-13 2.9	P-1 2.9	P-3 3.0	M-10 3.1	T-7 3.2	T-5 3.2	D-11 3.2	M-9 3.2	D-12 3.2	M-8 3.2	P-4 3.3
		lowest	middle	highest	Average TIME savings (hours) for all vehicles (base number of vehicle-hours for no-build = 81,847)																
					<12.9 k	12.9 k - 14.1 k	>14.1 k	T-6 11,685	P-2 12,697	P-1 13,109	T-5 13,266	D-13 13,367	P-3 13,523	D-14 13,548	M-10 13,960	D-11 14,023	D-12 14,035	M-9 14,215	M-8 14,218	T-7 14,701	P-4 15,365
		lowest	middle	highest	Average change in MILEAGE per vehicle/trip (average miles per vehicle/trip for no-build = 12.5 miles)																
					>-0.04	-0.04 to -0.25	<-0.25	P-2 0.17	T-6 0.13	P-1 -0.12	P-3 -0.12	D-14 -0.18	T-5 -0.19	M-10 -0.19	D-11 -0.20	M-9 -0.22	M-8 -0.26	D-13 -0.30	D-12 -0.31	T-7 -0.44	P-4 -0.46
		lowest	middle	highest	Average change in MILEAGE for all vehicles (base number of vehicle-miles for no-build = 54,158)																
					>11.8 K	11.8 k to 8.7 K	<8.7 k	D-14 14,995	D-12 14,159	D-11 13,619	D-13 11,752	P-2 9,991	T-5 9,886	P-1 9,494	T-7 9,039	T-6 8,371	M-8 8,075	M-9 7,693	M-10 6,551	P-3 5,750	P-4 5,550
		Supporting Land Use Plans and Economic Development Plans in the Tri-County Region	Compatibility with currently adopted comprehensive/land use plans, long range plans, or transportation plans prepared by the communities in the study area.	negative points	net zero points	positive points	Numerical index (-5 to +5), based on the proportion of each corridor's proximity to planned growth areas (+) relative to unplanned growth areas or predominantly residential areas (-) (Higher is better.)														
				-2 to -1	0	1 to 5	D-12 -2.0	P-4 -1.0	D-11 -1.0	P-1 0.0	T-5 0.0	M-8 0.0	M-9 1.0	D-13 1.0	P-2 2.0	T-7 2.0	D-14 2.0	T-6 3.0	P-3 5.0	M-10 5.0	
	Supporting recommendations of currently adopted economic development plans for the area.	lowest	middle	highest	Ranking, based on the Economic Development Council for Central Illinois Analysis (lower is better)																
		>4	4 to 2	<2	P-4 5	P-1 4	T-7 4	D-11 4	P-2 3	T-5 3	D-12 3	D-14 3	P-3 2	M-8 2	M-9 2	T-6 1	M-10 1	D-13 1			
Improved Travel Flow	A net reduction in the volume-to-capacity ratio on selected routes in the area.	lowest	middle	highest	Reduction in congestion as expressed by the sum of changes in the V/C ratios on 21 representative roads in the study area (weighted by traffic carried on each road)																
		<.019	.019 - .026	>.026	D-12 0.013	D-11 0.013	D-13 0.013	M-9 0.015	D-14 0.015	M-8 0.016	M-10 0.019	T-5 0.020	P-3 0.020	T-7 0.020	T-6 0.022	P-1 0.027	P-4 0.031	P-2 0.033			
Improved Multi-Modal Connections	A net reduction in travel time between major mode hubs and transfer points.	lowest	middle	highest	Reduction in travel time (minutes), on a per vehicle basis, between eleven multi-modal hubs (82 total trips) (no-build = 18.8 minutes)																
		<0.2	0.2 - 0.4	>0.4	T-6 0.1	T-5 0.2	D-13 0.2	D-12 0.3	D-11 0.3	M-10 0.3	M-8 0.3	T-7 0.3	D-14 0.3	M-9 0.3	P-2 0.4	P-4 0.4	P-1 0.5	P-3 0.5			
	An improvement in the ability to choose non-motorized modes to access common travel destinations in the study area.	lowest	middle	highest	Percentage of each corridor that would benefit non-motorized travel																
		<37	37 - 63	>63	M-9 11	D-11 11	D-12 12	D-13 15	M-8 16	T-5 27	M-10 27	P-3 31	P-1 36	T-6 44	P-2 53	D-14 53	T-7 68	P-4 89			