

City of Vincennes Railroad Study Evaluation Matrix

ENGINEERING & TRAFFIC CONSIDERATIONS

Why are these important criteria?

Since the purpose of this study is to improve safety, improve community access, increase connectivity, and relieve traffic congestion, projecting the potential effect of each alternative on safety and traffic are critical to evaluating each concept. Also important to everyone is the cost for any improvements. Various factors, such as the amount of earthwork, number of overpasses or underpasses and miles of new track have significant impacts on the estimated financial cost of the project.

EVALUATION FACTORS	UNITS	No-Build	Western Corridor	Spot Improvements	Limited Spot Improvements	U.S. 41 Corridor	Near East Corridor	Far East Corridor
ENGINEERING & TRAFFIC CONSIDERATIONS								
SAFETY								
Predicted Accident Rates (2030)	Number of accidents per year (2030)	5.2	0.3	0.9	1.4	0.4	0.1	0.0
TRAFFIC SYSTEM MEASURES								
Total Number of Vehicles Delayed (2030)	Vehicles per Day	10,964	597	10,516	10,714	2,486	2,482	2,996
Total Number of Hours Vehicles Delayed (2030)	Hours per Day	305	12	104	157	30	36	41
Total Hours Crossings Blocked by Trains (2030)	Hours per Day	113	2	11	24	8	3	<1
Reduction in Number of Hours Vehicles Delayed (2030)	Vehicles per Day	0	-10,367	-448	-250	-8,478	-8,482	-7,968
Reduction in Number of Hours Vehicles Delayed (2030)	Hours per Day	0	-293	-201	-148	-275	-269	-264
Reduction in Hours Crossings Blocked by Train (2030)	Hours per Day	0	-111	-102	-89	-105	-110	-113
POTENTIAL NEW GRADE SEPARATIONS								
	Number	0	12	6	3	9	14	13
POTENTIAL REMAINING AT-GRADE CROSSINGS								
	Number	48	6	17	21	10	6	4
POTENTIAL ROAD CLOSURES								
	Number	0	7	22	21	1	2	8
SYSTEM MILES								
	Miles	3	13	3	3	7	10	16
PROJECT COST								
Construction Cost Estimate	\$ (Million)	\$0.0	\$229.3	\$68.8	\$49.6	\$197.5	\$176.5	\$193.7
Right-of-Way and Relocation Cost	\$ (Million)	\$0.0	\$5.0	\$17.5	\$7.2	\$11.5	\$10.4	\$11.6
Environmental Mitigation	\$ (Million)	\$0.0	\$10.0	\$2.0	\$1.0	\$7.0	\$3.0	\$5.0
TOTAL PROJECT COST	\$ (Million)	\$0.0	\$244.3	\$88.3	\$57.8	\$216.0	\$189.9	\$210.3

SOCIAL & ECONOMIC CONSIDERATIONS

Why are these important criteria?

Not all the costs of a major construction project can be measured in terms of dollars. That is why it is important to consider the impacts on the community in terms of how many homes, businesses, and public facilities will be affected. There may also be positive or negative impacts from the project on the community's economic development efforts and quality of life. The federal government requires that a determination be made as to "Environmental Justice," which means whether one racial or socioeconomic group is significantly impacted more than others.

EVALUATION FACTORS	UNITS	No-Build	Western Corridor	Spot Improvements	Limited Spot Improvements	U.S. 41 Corridor	Near East Corridor	Far East Corridor
SOCIAL AND ECONOMIC CONSIDERATIONS								
ENVIRONMENTAL JUSTICE								
IMPACTS TO LOW INCOME OR MINORITY HOUSING	Rating	○	⊖	⊕	⊕	⊖	⊖	⊖
ACQUISITIONS								
Residential	Dwelling Units	0	10	122	70	54	67	77
Business	Establishments	0	1	110	52	13	20	21
Public/Semi-Public Facilities	Buildings	0	0	6	0	0	0	0
TOTAL ACQUISITIONS	Number	0	11	238	122	67	87	98

ENVIRONMENTAL CONSIDERATIONS

Why are these important criteria?

"We do not inherit the earth from our ancestors, we borrow it from our children." This ancient proverb reminds us that there are many biological, geological and historical assets that we are obliged to pass along to future generations. The National Environmental Policy Act of 1969 established procedures for state and federal agencies to consider how a project impacts the natural and man made environment and the importance of protecting these resources for present and future generations.

EVALUATION FACTORS	UNITS	No-Build	Western Corridor	Spot Improvements	Limited Spot Improvements	U.S. 41 Corridor	Near East Corridor	Far East Corridor
ENVIRONMENTAL CONSIDERATIONS								
AGRICULTURAL LAND (Indirect and Direct impacts)								
81-Pasture/Hay (Direct impacts only)	Acres	0	5	0	0	2	15	9
82-Cultivated Crops (Direct impacts only)	Acres	0	365	0	0	170	465	571
PARKLAND / MANAGED LANDS								
	Number	0	1	0	0	1	1	1
	Acres	0	0	0	0	22	14	22
CEMETERIES								
	Number	0	0	0	0	0	0	0
NOISE								
	Rating	○	⊖	⊕	⊕	⊖	⊖	⊖
HAZARDOUS WASTE SITES								
	Number	0	6	23	16	6	11	11
VISUAL QUALITY / AESTHETICS								
	Rating	○	⊖	⊕	⊕	⊖	⊖	⊖
SEISMIC RISK AND EARTHQUAKE AREAS								
	Rating	○	○	○	○	○	○	○
WATER RESOURCES								
Stream Crossings (USGS)	Number		11	0	0	9	7	11
Stream Crossings (USGS)	Linear Feet	0	2200	0	0	1800	1400	2200
Wetlands	Total Acres	0	30	0	0	21	5	16
FLOODPLAINS	Acres	0	383	47	21	319	283	341
NATURAL COMMUNITIES (from Land Cover USGS Codes)								
	Total Acres	0	15	0	0	89	48	60
THREATENED/DANGEROUS SPECIES (COUNTY)**								
State Listed (County Level)								
IN	Probability of Habitat	○	⊖	○	○	○	⊖	⊖
IL	Probability of Habitat	○	⊖	○	○	○	⊖	⊖
Federal Listed (County Level)								
IN	Probability of Habitat	○	⊖	○	○	○	⊖	⊖
IL	Probability of Habitat	○	⊖	○	○	○	⊖	⊖
CULTURAL RESOURCES								
NRHP Listed Historic Properties	Number	0	0	0	0	0	0	0
NRHP Listed Historic Districts	Number	1	0	1	0	0	0	0

Rating Symbols

○ Project impacts are equal to current conditions ⊖ Project results in low impacts ⊕ Project results in medium impacts ⊕ Project results in high impacts.

