

Appendix C  
Facility Type Alternate Evaluation and Screening

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TABLE C-1  
Facility Type Alternate Evaluation










Facility Type Alternate	Systemwide Travel Patterns Changes in % Vehicle Miles Traveled <sup>1</sup>			Implementation Costs by Facility Type <sup>2</sup>		Potential Toll Generated Bonding Level <sup>3</sup>	Toll Road Cost to Bonding Ratio <sup>4</sup>	Federal/State Funding Level <sup>5</sup>	System Continuity and Operations	Findings
	Arterials <sup>a</sup>	Existing Freeway/Toll Road <sup>b</sup>	New & Modified Freeway/Toll Road <sup>c</sup>	Freeway Sections	Toll Road Sections					
		-	-	-	\$3.6 B					
	+3%	+2%	-5%	\$0	\$3.6 B	\$1.4 B	39%	Low	- <i>Maintenance and Operations</i> : Consistent jurisdictional responsibilities along Elgin O'Hare and West Bypass optimize system maintenance and operations. - <i>System Utilization</i> : Toll rates between parallel existing and proposed toll facilities (Elgin O'Hare corridor and I-90, West Bypass corridor and I-294) would need to be comparable to optimize travel distribution.	Preferred Alternate
	+2%	+1%	-3%	\$1.1 B	\$2.5 B	\$1.2 B	48%	Medium	- <i>Maintenance and Operations</i> : Potential system maintenance and operational issues related to isolated freeway section (West Bypass south leg). - <i>System Utilization</i> : Toll rates between parallel existing and proposed toll facilities (Elgin O'Hare corridor and I-90, West Bypass north leg and I-294) would need to be comparable to optimize travel distribution.	Dismissed from further review: -Long distance travel continuity impaired. -Concern with maintenance and operations of isolated freeway segment. -Potential concerns with viability of required federal/state funding level (\$1.1 B).
	+1%	0	-1%	\$0.9 B	\$2.7 B	\$1.3 B	48%	Medium	- <i>Maintenance and Operations</i> : Potential system maintenance and operational issues related to isolated freeway section (West Bypass north leg). - <i>System Utilization</i> : Toll rates between parallel existing and proposed toll facilities (Elgin O'Hare corridor and I-90, West Bypass south leg and I-294) would need to be comparable to optimize travel distribution.	Dismissed from further review: -Long distance travel continuity impaired. -Concern with maintenance and operations of isolated freeway segment. -Potential concerns with viability of required federal/state funding level (\$0.9 B).
	+2%	+2%	-4%	\$0.4 B	\$3.2 B	\$0.8 B	25%	Low	- <i>Maintenance and Operations</i> : Consistent jurisdictional responsibilities along the extension of the Elgin-O'Hare Expressway and West Bypass corridor optimize system maintenance and operations. - <i>System Utilization</i> : Toll rates between parallel existing and proposed toll facilities (extension of the Elgin-O'Hare Expressway and I-90, West Bypass Corridor and I-294) would need to be comparable to optimize travel distribution.	Dismissed from further review: -Significant gap between costs (\$3.2 B) and approximated bonding capacity (\$0.8 B) of tolled facilities.
	+2%	+2%	-4%	\$1.7 B	\$1.9 B	\$0.5 B	26%	Medium	- <i>Maintenance and Operations</i> : Contiguous jurisdictional responsibilities (West Bypass corridor and I-294) accommodate system maintenance and operations. - <i>System Utilization</i> : Toll rates between parallel toll facilities (West Bypass corridor and I-294) would need to be comparable to optimize travel distribution.	Dismissed from further review: -Significant gap between costs (\$1.9 B) and approximated bonding capacity (\$0.5 B) of tolled facilities. -Potential concerns with viability of required federal/state funding level (\$1.7 B).
	+2%	+2%	-4%	\$1.9 B	\$1.7 B	\$1.1 B	64%	Medium	- <i>Maintenance and Operations</i> : Potential system maintenance and operational issues related to isolated freeway (West Bypass corridor) and toll road (Elgin O'Hare corridor) sections. - <i>System Utilization</i> : Toll rates between parallel toll facilities (Elgin O'Hare corridor and I-90) would need to be comparable to optimize travel distribution. Competing freeway (West Bypass corridor) may divert trips from parallel toll road (I-294).	Dismissed from further review: -Concern with procuring long-term maintenance cost. -Potential concerns with viability of required federal/state funding level (\$1.9 B). -Long distance travel continuity impaired.

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Facility Type Alternate	Systemwide Travel Patterns			Implementation Costs by Facility Type <sup>2</sup>		Potential Toll Generated Bonding Level <sup>3</sup>	Toll Road Cost to Bonding Ratio <sup>4</sup>	Federal/State Funding Level <sup>5</sup>	System Continuity and Operations	Findings
	Changes in % Vehicle Miles Traveled <sup>1</sup>			Freeway Sections	Toll Road Sections					
	Arterials <sup>a</sup>	Existing Freeway/Toll Road <sup>b</sup>	New & Modified Freeway/Toll Road <sup>c</sup>							
8 	+2%	+1%	-3%	\$2.7 B	\$0.9 B	\$0.2 B	22%	High	- <i>Maintenance and Operations</i> : Contiguous jurisdictional responsibilities accommodate system maintenance and operations. - <i>System Utilization</i> : Competing freeway sections (West Bypass south leg and Elgin O'Hare corridor) may divert trips from parallel toll roads (I-294 and I-90).	Dismissed from further review: -Potential concerns with viability of required federal/state funding level (\$2.7 B). -Significant gap between costs (\$0.9 B) and approximated bonding capacity (\$0.2 B) of tolled facility. -Lack of continuity for new toll road facility (West Bypass north leg only).
9 	+1%	+1%	-2%	\$2.5 B	\$1.1 B	\$0.3 B	27%	High	- <i>Maintenance and Operations</i> : Contiguous jurisdictional responsibilities accommodate system maintenance and operations. - <i>System Utilization</i> : Competing freeway sections (West Bypass north leg and Elgin O'Hare corridor) may divert trips from parallel toll roads (I-294 and I-90).	Dismissed from further review: -Potential concerns with viability of required federal/state funding level (\$2.5 B). -Significant gap between costs (\$1.1 B) and approximated bonding capacity (\$0.3 B) of tolled facility. -Lack of continuity for new toll road facility (West Bypass south leg only).

Legend:  Freeway  Toll Road  Dedicated Transitway

<sup>1</sup> Estimated changes in VMT distribution based on 2030 Travel Demand Model data provided by Illinois Tollway for the facility type alternates. <sup>a</sup> Arterials include principal arterials, minor arterials and collector roadways; <sup>b</sup> Existing freeway/toll road includes all access-controlled facilities within the study area except existing Elgin-O'Hare Expressway; <sup>c</sup> New and modified freeway/toll road includes the Elgin O'Hare and West Bypass corridors.

<sup>2</sup> Proportionate amount of Tier One Preferred Alternative estimated cost of \$3.6 B (2010 \$) by freeway versus toll road section.

<sup>3</sup> Estimated bonding capacity generated by planning level estimates of new systemwide toll revenues using representative pricing assumptions. Estimates assume closed-toll collection system on newly-tolled corridors, with no changes to tolling structure or rates along existing Illinois Tollway system. Bonding capacity estimates assume 20-year bonding term.

<sup>4</sup> Proportion of approximate potential bonding level (from EO-WB tolling) versus costs of toll road sections.

<sup>5</sup> Estimated non-toll road (federal/state/local) funding requirements: high (>\$2 B); medium (\$0.9 B to \$2 B); low (<\$0.9 B).