TABLE 5

Finalist System Alternatives Impact Analysis

	GROUP 2		GROUP 4				GROUP 5
	202	203	401	402	403	404	501
TRAVEL PERFORMANCE - IMPROVE LOCAL AND REGIONAL TRAVEL							
PERCENT INCREASE IN REGIONAL TRAVEL EFFICIENCY IN STUDY AREA[1]	13%	11%	11%	6%	4%	5%	7%
PERCENT DECREASE IN CONGESTED VEHICLE MILES OF TRAVEL ON SECONDARY ROADWAYS (PM PEAK PERIOD)[2]	20%	20%	19%	19%	20%	17%	16%
PERCENT INCREASE IN NETWORK SPEEDS ON PRINCIPAL ARTERIALS (PM PEAK PERIOD)[3]	8%	4%	8%	7%	8%	10%	13%
PERCENT SAVINGS IN ANNUAL WORK DAYS PER EMPLOYEE (ACTUAL NUMBER OF DAYS SAVED)[4]	10% (1)	10% (1)	10% (1)	0%	0%	0%	10% (1)
TRAVEL PERFORMANCE - IMPROVE O'HARE WEST ACCESS							
SELECTED TRIP PAIR TRAVEL TIME SAVINGS FROM NORTHWEST STUDY AREA TO O'HARE WEST (PM PEAK PERIOD)[5]	39%	40%	31%	37%	36%	35%	37%
SELECTED TRIP PAIR TRAVEL TIME SAVINGS FROM WEST STUDY AREA TO O'HARE WEST (PM PEAK PERIOD)[5]	38%	39%	38%	40%	41%	41%	34%
TRAVEL PERFORMANCE - IMPROVE TRAVEL EFFICIENCY							
AREA WITH TRAVELTIME SAVINGS OF GREATER THAN 5 PERCENT IN STUDY AREA (PM PEAK PERIOD)[6]	59 SQ MI	52 SQ MI	50 SQ MI	50 SQ MI	54 SQ MI	48 SQ MI	49 SQ MI
PERCENT INCREASE IN AREA WITH TRAVEL WITHIN 5 MINUTES TO INTERSTATE (PM PEAK PERIOD)	22%	24%	22%	21%	21%	19%	21%
PERCENT INCREASE IN TRIPS WITHIN 5 MINUTES TO INTERSTATE (PM PEAK PERIOD)	44%	53%	42%	40%	42%	39%	39%
INITIAL COST							
INITIAL CONSTRUCTION COSTS[7]	$2.67B	$2.93B	$2.24B	$2.15B	$2.61B	$2.81B	$1.80B
INITIAL ROW COSTS[8]	$616.1M	$660.4M	$409.6M	$391.9M	$426.7M	$399.3M	$322.7M
INITIAL TOTAL COSTS	$3.3B	$3.6B	$2.6B	$2.5B	$3.0B	$3.2B	$2.1B
ENVIRONMENTAL IMPACTS							
ACRES OF WETLANDS IMPACTED[9]	27.1	28.0	26.9	26.5	27.5	26.1	25.9
ACRES OF WATERS IMPACTED[10]	3.2	6.6	2.7	4.0	2.7	6.3	2.8
AC-FT OF STORMWATER DETENTION[11]	192.0	203.0	184.9	178.8	216.2	166.8	55.8
ACRES OF 100 YR FLOODPLAINS IMPACTED[12]	29.1	24.6	29.1	24.6	29.1	17.6	28.7
ACRES OF DESIGNATED/RECREATIONAL LANDS IMPACTED[13]	6.7	9.1	6.7	6.5	13.4	13.4	12.5
NUMBER OF PARKS IMPACTED BY IMPROVEMENT[14]	4	5	5	3	7	6	8
NUMBER OF STATE-LISTED SPECIES POTENTIALLY IMPACTED[15]	0	0	0	0	4	4	4
NUMBER OF HISTORICAL SITES IMPACTED	0	0	0	0	0	0	0
NUMBER OF ARCHAEOLOGICAL SITES IMPACTED[16]	25	28	23	21	28	32	29
SOCIOECONOMIC IMPACTS							
NUMBER OF COMMERCIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY FULLY DISPLACED BY IMPROVEMENT	45(50)	14(17)	16(12)	10(7)	16(15)	6(11)	10(8)
NUMBER OF INDUSTRIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY FULLY DISPLACED BY IMPROVEMENT	26(32)	23(21)	19(17)	19(17)	19(17)	10(7)	1(0)
NUMBER OF RESIDENTIAL STRUCTURES POTENTIALLY FULLY DISPLACED BY IMPROVEMENT	32	20	23	18	133	130	133
TOTAL STRUCTURES POTENTIALLY FULLY DISPLACED	103	57	58	47	168	146	144
NUMBER OF POTENTIAL NOISE SENSITIVE AREAS[17]	37	36	33	31	52	54	53
LOST TAX REVENUE (2007)[18]	$5.5M	$3.9M	$3.3M	$2.8M	$3.4M	$2.0M	$1.5M
EMPLOYEES DISPLACED[19]	1360	1065	820	760	945	490	85
NUMBER OF CEMETERIES AND HISTORIC CEMETERIES IMPACTED BY IMPROVEMENT[20]	0	0	0	0	0	0	1
TOTAL NUMBER OF COMMUNITY FACILITIES IMPACTED (CHURCHES[21], HOSPITALS, SCHOOLS[22], FIRE/POLICE STATIONS[23])	2	1	1	1	4	4	4

TABLE 5
Finalist System Alternatives Impact Analysis

Table Notes[a]

[1] A relationship between miles traveled (VMT) and delay (VHD).

[2] Congestion defined as LOS D, E, or F.

[3] A relationship between miles traveled (VMT) and hours traveled (VHT).

[4] The Annual Productivity (workday/employee) = Daily Vehicle Hours of Delay * (Approximate Work Days per year) / (Total Work Hours in a day) * (Total Employment in the Study Area)
Work Days/Year = 250/yr Work Hours/Day = 8 hr/day Total Employment in Study Area = 680,500

[5] Time savings between two points comparing that System Alternative to Baseline performance.

[6] TAZ's (Traffic Analysis Zones) in the study area that would experience a > 5% improvement in travel time.

[7] Construction Costs reflect initial planning level estimate of representative Finalist Roadway System Alternative layouts, including engineering and 30% contingency (2009 $).

[8] ROW Cost reflect initial planning level estimate based on estimated footprint for Finalist Roadway System Alternative layouts, including 50% contingency (2009 $).

[9] All corridors impact 0.12 acre of Elgin-O'Hare Mitigation Sites. Corridors 202, 203, and 404 impact 0.04, 0.29, and 0.29 acre of mapped NWI wetland, respectively, and Corridors 403, 404, and 501 impacts 0.08 acre of mapped DuPage Regulatory wetland, both of which require field verification. Corridors 202, 203, 401, 402, 403, 404, 501 impact 0.02, 0.43, 0.02, 0.02, 0.02, 0.41, and 1.26 acres of wetlands, respectively, on OMP property, which are permitted to be filled.
Wetlands located adjacent to IL 83 south of Thorndale Ave may support State-listed species, may be considered High Quality Aquatic Resources (HQAR), and may require higher wetland compensation ratios.

[10] Corridor 202, 203, 401, 402, 403, 404 impacts 0.12, 0.49, 0.12, 0.12, 0.12, 0.31 acre of waters on OMP property, which are permitted to be filled.

[11] Stormwater Detention (AC-FT) = Volume of detention required based on planning level analysis of Finalist Roadway Sytem Alternative layouts.

[12] Notable Floodplain locations: corridor through Touhy Avenue Flood Control Reservoir. Notable Floodplain impact include those that would cause insurmountable design or permitting interference with a proposed alternative corridor. For Methodology, Assumptions and Approach refer to Drainage Methodology and Approach Tech Memo.

[13] Lands that are publicly owned (ie., parks, forest preserves, golf courses, nature preserves, etc.).

[14] Parks (inside footprint)
202 - Terrace Park, Hamilton Park, Park(Elk Grove Village), Bretman Park(OMP)
203 - Majewski Metro Park, Hamilton Park, Park(Elk Grove Village), Park in Industrial District(Elk Grove Village), Bretman Park(OMP)
401 - Hamilton Park, Park(Elk Grove Village), Bretman Park(OMP), Terrace Park, Kopp Park
402 - Hamilton Park, Park(Elk Grove Village), Bretman Park(OMP)
403- Addison Community Park East, Mohawk Park, Terrace Park, Hamilton Park, Park(Elk Grove Village), Bretman Park(OMP), Kopp Park
404 - Majewski Metro Park, Hamilton Park, Park(Elk Grove Village), Park in Industrial District(Elk Grove Village), Addison Community Park East, Mohawk Park
501 - Hamilton Park, Park(Elk Grove Village), Addison Community Park East, Mohawk Park, Terrace Park, Schuster Park, Bretman Park(OMP), Kopp Park

[15] Four state-listed plant species would be potentially impacted including the Dwarf Raspberry (*Rubus pubescens*), Sedge (*Carex bromoides*), Alkali Bulrush (*Bolboschoenus maritimus*), and Small Sundrops (*Oenothera perennis*). The Alkali Bulrush is proposed to be delisted in 2009 by the Illinois Endangered Species Protection Board.

[16] Data provided by ITARP. Includes sites previously surveyed, sites with high archaeological potential, and archaeological sites.

[17] Noise Sensitive Areas - cluster of noise receptors that have common attributes, excluding areas within the estimated footprint that will be displaced.

[18] Derived from Cook County and DuPage tax data.

[19] Number of employees assumes the median value of range provided by a data search.

[20] Corridor 501 impacts 0.26 acre of Edens Memorial Park Cemetery.

[21] St. Bede Episcopal Church Grace Gospel Fellowship and St. John Church are impacted by Corridors 403, 404 and 501.

[22] Medinah Intermediate School is impacted by all corridors.

[23] Elk Grove Village Fire Station #9 is impacted by Corridor 202.

[a]All System Alternatives with a south connection leg assume a representative South - Option D connection

TABLE 6

Scaled Ranking Impact Analysis Finalist System Alternatives [a]

	GROUP 2		GROUP 4				GROUP 5
	202	203	401	402	403	404	501
TRAVEL PERFORMANCE							
PERCENT INCREASE IN REGIONAL THROUGHPUT DUE TO TRAVEL EFFICIENCY IN STUDY AREA	1.0	2.3	2.3	5.7	7.0	6.3	5.0
PERCENT IMPROVEMENT IN CONGESTED VEHICLE MILES OF TRAVEL ON SECONDARY ROADWAYS (PM PEAK PERIOD)	1.0	1.0	2.5	2.5	1.0	5.5	7.0
PERCENT INCREASE IN NETWORK SPEEDS ON PRINCIPAL ARTERIALS (PM PEAK PERIOD)	4.3	7.0	4.3	5.0	4.3	3.0	1.0
PERCENT SAVINGS IN ANNUAL WORK DAYS PER EMPLOYEE	1.0	1.0	1.0	7.0	7.0	7.0	1.0
SELECTED TRIP PAIR TRAVEL TIME SAVINGS FROM NORTHWEST STUDY AREA TO O'HARE WEST (PM PEAK PERIOD)	1.7	1.0	7.0	3.0	3.7	4.3	3.0
SELECTED TRIP PAIR TRAVEL TIME SAVINGS FROM WEST STUDY AREA TO O'HARE WEST (PM PEAK PERIOD)	3.6	2.7	3.6	1.9	1.0	1.0	7.0
AREA WITH TRAVELTIME SAVINGS OF GREATER THAN 5 PERCENT IN STUDY AREA (PM PEAK PERIOD)	1.0	4.8	5.9	5.9	3.7	7.0	6.5
PERCENT INCREASE IN AREA WITH TRAVEL WITHIN 5 MINUTES TO INTERSTATE (PM PEAK PERIOD)	3.4	1.0	3.4	4.6	4.6	7.0	4.6
PERCENT INCREASE IN TRIPS WITHIN 5 MINUTES TO INTERSTATE (PM PEAK PERIOD)	4.9	1.0	5.7	6.6	5.7	7.0	7.0
SUBTOTAL - TRAVEL PERFORMANCE	21.8	21.9	35.8	42.1	38.0	48.2	42.1
INITIAL COST							
INITIAL TOTAL COSTS	5.8	7.0	3.0	2.6	4.6	5.4	1.0
SUBTOTAL - INITIAL COST	5.8	7.0	3.0	2.6	4.6	5.4	1.0
ENVIRONMENTAL IMPACTS							
ACRES OF WETLANDS IMPACTED	4.4	7.0	3.9	2.7	5.6	1.6	1.0
ACRES OF WATERS IMPACTED	1.9	7.0	1.0	3.0	1.0	6.6	1.1
AC-FT OF STORMWATER DETENTION	6.1	6.5	5.8	5.6	7.0	5.2	1.0
ACRES OF 100 YR FLOODPLAINS IMPACTED	7.0	4.7	7.0	4.7	7.0	1.0	6.8
ACRES OF DESIGNATED/RECREATIONAL LANDS IMPACTED	1.1	3.2	1.1	1.0	7.0	7.0	6.1
NUMBER OF PARKS IMPACTED BY IMPROVEMENT	2.2	2.2	3.4	1.0	5.8	4.6	7.0
POTENTIAL NUMBER OF STATE-LISTED THREATENED/ENDANGERED SPECIES SITES IMPACTED	1.0	1.0	1.0	1.0	7.0	7.0	7.0
NUMBER OF ARCHAEOLOGICAL SITES IMPACTED	3.2	4.8	2.1	1.0	4.8	7.0	5.4
SUBTOTAL - ENVIRONMENTAL IMPACTS	26.9	36.4	25.3	20.0	45.2	39.9	35.4
SOCIOECONOMIC IMPACTS							
TOTAL STRUCTURES POTENTIALLY FULLY DISPLACED	3.8	1.5	1.5	1.0	7.0	5.9	5.8
NUMBER OF POTENTIAL NOISE SENSITIVE AREAS	2.6	2.3	1.5	1.0	6.5	7.0	6.7
LOST TAX REVENUE (2007)	7.0	4.6	3.7	3.0	3.9	1.8	1.0
EMPLOYEES DISPLACED	7.0	5.6	4.5	4.2	5.0	2.9	1.0
NUMBER OF HISTORIC CEMETERIES IMPACTED BY IMPROVEMENT	1.0	1.0	1.0	1.0	1.0	1.0	7.0
TOTAL NUMBER OF COMMUNITY FACILITIES IMPACTED (CHURCHES, HOSPITALS, SCHOOLS, FIRE/POLICE STATIONS)	3.0	1.0	1.0	1.0	7.0	7.0	7.0
SUBTOTAL - SOCIOECONOMIC IMPACTS	24.3	16.0	13.2	11.1	30.4	25.6	28.5
SCALED TOTAL	79	81	77	76	118	119	107

[a] In the scoring system, the score of 1 represents the best and the score of 7 represents the worst.

TABLE 9
Qualitative Comparative Analysis of Alternatives Performance

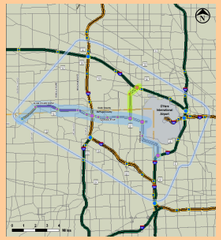
	System Alternative	Travel Performance	Design Issues	Initial Costs	Environmental Impacts	Socioeconomic Impacts
System Expansion Alternatives	 **202**	Comparable overall systemwide travel performance	No design viability issues identified	Lower initial costs ($3.3B)	Comparable potential impacts to regulated water resources, designated lands and archaeological resources Comparable amount of stormwater detention required	Substantially higher structure displacements (103 structures) Substantially higher business displacements (50 commercial and 32 industrial) Substantially higher lost tax revenue ($5.5M) Substantially higher employee displacements (1360 employees) Comparable impacts to community facilities Comparable impacts to noise sensitive areas
	 **203**	Comparable overall systemwide travel performance	No design viability issues identified	Higher initial costs ($3.6B)	Comparable potential impacts to regulated water resources, designated lands and archaeological resources Comparable amount of stormwater detention required	Lower structure displacements (57 structures) Lower business displacements (17 commercial and 21 industrial) Lower lost tax revenue ($3.9M) Lower employee displacements (1065 employees) Comparable impacts to community facilities Comparable impacts to noise sensitive areas
Combined System Improvements and Expansion	 **401**	Comparable overall systemwide travel performance	No design viability issues identified	Comparatively lower initial costs ($2.6B)	Comparatively low impacts to designated lands and parks (6.7ac; 5 parks impacted) Comparatively low impacts to archaeological sites (23 sites) Highest floodplain impacts (29.1 ac), and comparatively high stormwater detention required (184.9 ac-ft) No potential impacts to state listed species Comparable impacts to wetlands	Comparably low structure displacements (58 structures) Relatively high business displacements (12 commercial and 17 industrial) Comparatively high lost tax revenue ($3.3M) Comparatively high employee displacements (820 employees) Lowest impacts to community facilities (1 site) Comparatively low impacts to noise sensitive areas (33 areas)
	 **402**	Comparable overall systemwide travel performance	No design viability issues identified	Comparatively lower initial costs ($2.5B)	Lowest impacts to designated lands and parks (6.5ac; 3 parks impacted) Lowest impacts to archaeological sites (21 sites) Comparatively low floodplain impacts (24.6 ac), and comparatively high stormwater detention required (178.8 ac-ft) No potential impacts to state listed species Comparable impacts to wetlands	Lowest structure displacements (47 structures) Relatively lower business displacements (7 commercial and 17 industrial) Relatively lower lost tax revenue ($2.8M) Comparatively high employee displacements (760 employees) Lowest impacts to community facilities (1 site) Lowest impacts to noise sensitive areas (31 areas)

TABLE 9
Qualitative Comparative Analysis of Alternatives Performance

	System Alternative	Travel Performance	Design Issues	Initial Costs	Environmental Impacts	Socioeconomic Impacts
	 403	Comparable overall systemwide travel performance	No design viability issues identified	Comparatively high initial costs ($3.0B)	Highest impacts to designated lands and parks (13.4ac; 7 parks impacted) Comparatively high impacts to archaeological sites (28 sites) Highest impacts to floodplains (29.1 ac.) and stormwater detention required (216.2 ac-ft) Comparatively high impacts to state listed species (4 species) Comparable impacts to wetlands	Highest structure displacements (168 structures), including highest residential displacements (133 structures) Highest business displacements (15 commercial and 17 industrial) Highest lost tax revenue ($3.4M) Highest employee displacements (945 employees) Highest impacts to community facilities (4 sites) Highest impacts to noise sensitive areas (52 areas)
	 404	Comparable overall systemwide travel performance	Potential design viability issues related to system interchange at Elgin O'Hare/West Bypass north leg (two-level tunneling)	Highest initial costs ($3.2B, or up to 52% higher)	Comparatively high impacts to designated lands (13.4 ac, 6 parks impacted) Highest impacts to archaeological sites (32 sites) Lowest impacts to floodplains (17.6 ac), and comparatively high stormwater detention required (166.8 ac-ft) Comparatively high impacts to state listed species (4 species) Comparable potential impacts to wetlands	Relatively high structure displacements (146 structures), including high residential displacements (130 structures) Relatively low business displacements (11 commercial and 7 industrial) Relatively low lost tax revenue ($2.0M) Relatively low employee displacements (490 employees) Highest impacts to community facilities (4 sites) Highest impacts to noise sensitive areas (54 areas)
	 501	Comparable overall systemwide travel performance	Potential design viability issues related to freeway terminating at arterial	Lowest initial costs ($2.1B)	Comparatively high impacts to designated lands (12.5 ac, 8 parks impacted) Comparatively high impacts to archaeological sites (29 sites) Comparatively high impacts to floodplains (28.7 ac.), but lowest stormwater detention required (55.8 ac-ft) Comparatively high impacts to state listed species (4 species) Comparable impacts to wetlands	Relatively high structure displacements (144 structures), including highest residential displacements (133 structures) Lowest business displacements (8 commercial and 0 industrial) Lowest lost tax revenue ($1.5M) Lowest employee displacements (85 employees) Highest impacts to community facilities (4 sites) Highest impacts to noise sensitive areas (53 areas)

= **Drop from consideration**

TABLE 18		
Public Meeting #3 Comment Summary		
Bensenville Form Letters (197 total)		
197	Form letters from Bensenville	82 included additional comment on why prefer D
General Comments (75 total)		
1	Proclamation of Elk Grove Twp Dist 59	Support of 203 D
2	Emails	Sent to Beth Hibner support D
2	Comment Form	Add to ML
37	Comment Form	Support of 203 D
1	Letter	Village of Bensenville - south Connection D
1	Letter	Village of Itasca Police Department supports 203
5	Comment Form	No contact info
2	Comment Form	Noise impacts
6	Comment Form	Support of 203
2	Comment Form	Request for Info
2	Comment Form	Issues with Chicago/Mayor Daley
1	Comment Form	Project is an embarrassment
1	Comment Form	General support of the project
2	Comment Form	Options 203 or 402
1	Comment Form	Options 203 or 402 or 404
1	Comment Form	Specific property impact concern (701 Thorndale)
1	Comment Form	Option 203 or 404, south connection B
1	Comment Form	South Connection C
1	Comment Form	South Connection A
2	Comment Form	South Connection A with variations
2	Comment Form	South Connection D
4	Comment Form	Minimize Business Impacts
1	Comment Form	Impacts to Bensenville
1	Comment Form	Notify school districts re: tax losses
Form Letters Supporting Alternative 203 (36,666 total – 685 with extended comment)		
10	Form letters	Workers at Alexian Brothers
109	Form letters	"Friends of Old Chicago Pizza and Holiday Inn Elk Grove Village"
59	Form letters	State that they own/patronize/work at specific affected property
9	Form letters	State that they own/patronize/work at unnamed affected property
179	Form letters	Reference to impact to schools/school districts[1]
10	Form letters	Extend IL 53 North
42	Form letters	Don't understand what makes up full Alt 203
12	Form letters	Environmental/social issues - noise, pollution, etc.
19	Form letters	Traffic flow concerns
9	Form letters	Support other modes
11	Form letters	Why do anything/do nothing
13	Form letters	$ or timing issues
8	Form letters	Weigh impact v. benefits
10	Form letters	Fix existing roads instead
58	Form letters	Issues with Airport, OMP, Noise
61	Form letters	Concerns about impacts to business/industrial park
49	Form letters	Comments about Mayor Daley, Cook County, City of Chicago
3	Form letters	Comments about Obama
14	Form letters	Comments about politics in general
Schools/Districts names: Forest View Alternative School, Hersey HS, Elk Grove HS, Conant HS, Buffalo Grove HS, Prospect HS, Wheeling HS, Ridge Family Center for Learning, Rolling Meadows HS, District 214, District 59, District 57		

TABLE 20

Impact Analysis South Connection Options (West Bypass)

	A	B	C	D	E	F	G
DESIGN/TRAVEL PERFORMANCE							
DESCRIPTION OF ACCESS LOCATIONS	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE SOUTH TO MAJOR ARTERIALS VIA NEW RAMPS AT OBP/COUNTY LINE RD	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE SOUTH TO MINOR ARTERIALS VIA NEW RAMPS AT OBP/FRANKLIN AVE NEAR TAFT AVE	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE SOUTH TO MINOR ARTERIALS VIA NEW RAMPS AT OBP/FRANKLIN AVE NEAR TAFT AVE	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE SOUTH TO MINOR ARTERIALS VIA NEW RAMPS AT OBP/FRANKLIN AVE NEAR TAFT AVE	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE SOUTH TO MINOR ARTERIALS VIA NEW RAMPS AT OBP/FRANKLIN AVE NEAR TAFT AVE	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE DOES NOT PROVIDE ADDITIONAL LOCAL ACCESS SOUTH OF OBP/IL RT 19 INTERCHANGE	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE DOES NOT PROVIDE ADDITIONAL LOCAL ACCESS SOUTH OF OBP/IL RT 19 INTERCHANGE
DESIGN AND CONSTRUCTABILITY ISSUES							CONFLICT WITH EXISTING RUNWAY OPERATIONS (FAA DESIGN CRITERIA NEAR EXISTING 4R/22L)
FREIGHT RAIL ISSUES	LEAST OVERALL IMPACTS (OF SOUTH OPTIONS) TO RAIL OPERATIONS DISPLACES WESTERN PORTION OF BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP	DISPLACES WESTERN PORTION OF BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP DISPLACES MAJOR RAIL CUSTOMERS MINOR TRACK AND SIGNAL MODIFICATIONS REQUIRED	DISPLACES WESTERN PORTION OF BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP DISRUPTS UP RR OPERATIONS DURING CONSTRUCTION OF 3,500' BRIDGE OVER RAIL LINE, IMPAIRING OVERALL FREIGHT MOVEMENT IN	DISPLACES WESTERN PORTION OF BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP DISPLACES MAJOR RAIL CUSTOMERS; IMPAIRS ACCESS TO SPUR TRACKS	DISPLACES WESTERN PORTION OF BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP RENDERS BENSENVILLE YARD INOPERABLE DUE TO DIRECT IMPACTS TO HUMP YARD / CONTROL CENTER AND TWO CROSSING MAJOR IMPACTS TO REGIONAL FREIGHT TRAFFIC FLOW REDUCES INTERMODAL OPERATIONS AND DISPLACES MAJOR RAIL CUSTOMERS	DISPLACES WESTERN PORTION OF BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP SEVERELY REDUCES BENSENVILLE YARD CAPACITY DUE TO NUMEROUS TRACK AND SIGNAL MODIFICATIONS AT YARD CROSSINGS (THREE SOUTHBOUND RAMP OVER EAST SIDE OF BENSENVILLE YARD NOT CONSTRUCTIBLE DUE TO CONFLICTS WITH TRAIN TRAFFIC (12 PER HOUR) MAJOR IMPACTS TO REGIONAL FREIGHT TRAFFIC FLOW IMPACTS METRA SERVICE LINE OPERATIONS CONFLICTS WITH PLANNED BENSENVILLE YARD EXPANSION	DISPLACES WESTERN PORTION OF BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP SEVERELY REDUCES BENSENVILLE YARD CAPACITY DUE TO NUMEROUS TRACK AND SIGNAL MODIFICATIONS AT YARD CROSSINGS MAJOR IMPACTS TO REGIONAL FREIGHT TRAFFIC FLOW IMPACTS METRA SERVICE LINE OPERATIONS CONFLICTS WITH PLANNED BENSENVILLE YARD EXPANSION
FINANCIAL PERFORMANCE							
INITIAL CONSTRUCTION COSTS	$540M	$545M	$585M	$530M	$670M	$570M	$565M
INITIAL TOTAL COSTS RANGE	$560M-660M	$660M-760M	$660M-760M	$610M-710M	$750M-830M	$690M-790M	$690M-790M
ENVIRONMENTAL IMPACTS							
ACRES OF WETLANDS IMPACTED	0.1	0.2	0.2	0.3	0.2	1.1	0.5
ACRES OF WATERS IMPACTED	0.2	0.2	0.2	0.2	0.2	1.1	1.7
ACRES OF 100 YR FLOODPLAINS IMPACTED	1.5	1.5	2.6	2.6	3.2	20.9[a]	36.6[a]
ACRES OF DESIGNATED/RECREATIONAL LANDS IMPACTED	1.30[b]	0.26[b]	0.25[b]	0.25[b]	0.25[b]	0.0	0.0
NUMBER OF PARKS IMPACTED BY IMPROVEMENT	2[b]	1[b]	1[b]	1[b]	1[b]	0	0
NUMBER OF POTENTIAL ENDANGERED SPECIES SITES IMPACTED	0	0	0	0	0	0	0
NUMBER OF HISTORICAL SITES IMPACTED	0	0	0	0	0	0	0
NUMBER OF ARCHAEOLOGICAL SITES IMPACTED	1 previously studied archaeology site	1 previously studied archaeology site	1 previously studied archaeology site	1 previously studied archaeology site	1 previously studied archaeology site	4 previously studied archaeology sites	3 previously studied archaeology sites
SOCIOECONOMIC IMPACTS							
NUMBER OF COMMERCIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY DISPLACED BY IMPROVEMENT	0 (0)	3 (3)	4 (4)	8 (8)	1 (1)	2 (2)	2 (2)
NUMBER OF INDUSTRIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY DISPLACED BY IMPROVEMENT	26 (35)	12 (14)	13 (16)	14 (17)	23 (23)	13 (19)	11 (17)
NUMBER OF RESIDENTIAL STRUCTURES POTENTIALLY DISPLACED BY IMPROVEMENT	7	0	0	0	0	0	41
TOTAL STRUCTURES POTENTIALLY DISPLACED	33	15	17	22	24	15	54
LOST TAX REVENUE (2007)	$1,715,000	$2,580,000	$1,705,000	$2,053,000	$2,082,000	$2,695,000	$2,615,000
LOST TAX REVENUE (2007)	$1,715,160	$2,579,790	$1,704,705	$2,053,150	$2,082,402	$2,694,770	$2,614,725
NUMBER OF CEMETERIES IMPACTED BY IMPROVEMENT	0	0	0	0	0	1[c]	1[c]
TOTAL NUMBER OF COMMUNITY FACILTIES IMPACTED (CHURCHES, HOSPITALS, SCHOOLS, FIRE STATIONS)	0	0	0	0	0	1[d]	1[d]

[a]Reservoirs are not included in the impact calculations because they will not be impacted.

[b]Option A impacts 1.22 acre of Legends of Bensenville Golf Course (Bensenville Park District), Option B impacts 0.26 acre of Legends of Bensenville Golf Course, Options C, D and E impact 0.25 acre of Legends of Bensenville Golf Course; 0.08 acre of Edge Ice Arena (Bensenville Park District) is impacted by

[c]0.8 acre of a Eden Memorial Cemetery is impacted.

[d]0.25 acre of Saint Beatrice School (including buildings) is impacted.

TABLE 20

Impact Analysis North Connection Options (West Bypass)

	A	B	C	D	E
DESIGN/TRAVEL PERFORMANCE					
DESCRIPTION OF ACCESS LOCATIONS	DOES NOT ACCOMMODATE FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE NORTH AND SOUTH ONLY, VIA RAMPS AT OBP/DEVON/LUNT/ELMHURST	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE NORTH AND SOUTH ONLY, VIA NEW RAMPS AT OBP/DEVON/LUNT/ELMHURST	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE NORTH AND SOUTH VIA NEW RAMPS AT OBP/DEVON/PRATT/ELMHURST PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE EAST AND WEST VIA ADDITIONAL RAMPS AT I-90/ELMHURST	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE NORTH AND SOUTH VIA NEW RAMPS AT OBP/DEVON/PRATT/ELMHURST PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE EAST AND WEST VIA ADDITIONAL RAMPS AT I-90/ELMHURST	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM THE NORTH AND SOUTH ONLY VIA NEW RAMPS AT OBP/DEVON/PRATT/IL 72/ELMHURST
DESIGN AND CONSTRUCTABILITY ISSUES					
FREIGHT RAIL ISSUES	NO MAJOR ISUES IDENTIFIED; MINOR TRACK AND SIGNAL MODIFICATIONS WILL BE REQUIRED	NO MAJOR ISUES IDENTIFIED; MINOR TRACK AND SIGNAL MODIFICATIONS WILL BE REQUIRED	NO MAJOR ISUES IDENTIFIED; MINOR TRACK AND SIGNAL MODIFICATIONS WILL BE REQUIRED	NO MAJOR ISUES IDENTIFIED; MINOR TRACK AND SIGNAL MODIFICATIONS WILL BE REQUIRED	NO MAJOR ISUES IDENTIFIED; MINOR TRACK AND SIGNAL MODIFICATIONS WILL BE REQUIRED
FINANCIAL PERFORMANCE					
INITIAL CONSTRUCTION COSTS RANGE	$360M-450M	$390M-475M	$490M-600M	$480M-585M	$465M-570M
ENVIRONMENTAL IMPACTS					
ACRES OF WETLANDS IMPACTED	6.2	6.6	2.2	1.9	1.9
ACRES OF WATERS IMPACTED	0.0	0.1	2.6	4.2	3.1
ACRES OF 100 YR FLOODPLAINS IMPACTED	1.6	7.9	26.0	15.3[a]	12.2[a]
ACRES OF DESIGNATED/RECREATIONAL LANDS IMPACTED	0.0	0.0	0.33[b]	2.0[b]	2.0[b]
NUMBER OF PARKS IMPACTED BY IMPROVEMENT	0	0	1[b]	1[b]	1[b]
NUMBER OF POTENTIAL ENDANGERED SPECIES SITES IMPACTED	0	0	0	0	0
NUMBER OF HISTORICAL SITES IMPACTED	0	0	0	0	0
NUMBER OF ARCHAEOLOGICAL SITES IMPACTED	4 previously studied archaeology sites	4 previously studied archaeology sites	4 previously studied archaeology sites	5 previously studied archaeology sites	5 previously studied archaeology sites
SOCIOECONOMIC IMPACTS					
NUMBER OF COMMERCIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY DISPLACED BY IMPROVEMENT	21 (32)	30 (44)	14 (22)	4 (10)	4 (10)
NUMBER OF INDUSTRIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY DISPLACED BY IMPROVEMENT	8 (32)	9 (33)	8 (32)	4 (4)	4 (4)
NUMBER OF RESIDENTIAL STRUCTURES POTENTIALLY DISPLACED BY IMPROVEMENT	3	3	0	0	0
TOTAL STRUCTURES POTENTIALLY DISPLACED	32	42	22	8	8
LOST TAX REVENUE (2007)	$2,147,000	$2,452,000	$2,137,000	$1,771,000	$1,743,000
NUMBER OF EMPLOYEES	712	803	611	246	246
NUMBER OF CEMETERIES IMPACTED BY IMPROVEMENT	0	0	0	0	0
TOTAL NUMBER OF COMMUNITY FACILTIES IMPACTED (CHURCHES, HOSPITALS, SCHOOLS, FIRE STATIONS)	1[c]	1[c]	1[c]	1[c]	1[c]

[a]Reservoirs are not included in the impact calculations because they will not be impacted.

[b]0.33 acre of Majewski Metro Park (Des Plaines Park District) is impacted by Options C, D and E; 1.63 acres of an Elk Grove Park District facility is impacted by Options D and E.

[c]Higgins School is displaced by Options A and B; 0.14 acre of Higgins School is impacted by Option C; Moderate impacts to Higgins School (<100 sq.ft) by Options D and E (86 sq. ft.).

TABLE 20
Impact Analysis North Connection Options (IL 83 Bypass)

	A	B
DESIGN/TRAVEL PERFORMANCE		
DESCRIPTION OF ACCESS LOCATIONS	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM WEST, EAST, AND SOUTH VIA NEW RAMPS AT I-90/ELMHURST/BUSSE, AND IL 83 FREEWAY/OAKTON/BUSSE	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES IMPROVED DIRECT LOCAL ACCESS FROM WEST, EAST, AND SOUTH VIA NEW RAMPS AT I-90/ELMHURST/BUSSE, AND IL 83 FREEWAY/OAKTON/BUSSE
DESIGN AND CONSTRUCTABILITY ISSUES		
FREIGHT RAIL ISSUES	NO MAJOR ISUES IDENTIFIED; MINOR TRACK AND SIGNAL MODIFICATIONS WILL BE REQUIRED	NO MAJOR ISUES IDENTIFIED; MINOR TRACK AND SIGNAL MODIFICATIONS WILL BE REQUIRED
FINANCIAL PERFORMANCE		
INITIAL CONSTRUCTION COSTS RANGE	$430M-525M	$390M-475M
ACRES OF WETLANDS IMPACTED	1.0	1.7
ACRES OF WATERS IMPACTED	0.6	0.8
ACRES OF 100 YR FLOODPLAINS IMPACTED	6.3	12.8
ACRES OF DESIGNATED/RECREATIONAL LANDS IMPACTED	0.33[a]	0.33[a]
NUMBER OF PARKS IMPACTED BY IMPROVEMENT	1[a]	1[a]
NUMBER OF POTENTIAL ENDANGERED SPECIES SITES IMPACTED	0	0
NUMBER OF HISTORICAL SITES IMPACTED	0	0
NUMBER OF ARCHAEOLOGICAL SITES IMPACTED	4 previously studied archaeology sites	4 previously studied archaeology sites
SOCIOECONOMIC IMPACTS		
NUMBER OF COMMERCIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY DISPLACED BY IMPROVEMENT	29 (33)	32 (44)
NUMBER OF INDUSTRIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY DISPLACED BY IMPROVEMENT	8 (14)	5 (14)
NUMBER OF RESIDENTIAL STRUCTURES POTENTIALLY DISPLACED BY IMPROVEMENT	14	14
TOTAL STRUCTURES POTENTIALLY DISPLACED	51	51
LOST TAX REVENUE (2007)	$4,152,000	$3,879,000
NUMBER OF EMPLOYEES	980	690
NUMBER OF CEMETERIES IMPACTED BY IMPROVEMENT	0	0
TOTAL NUMBER OF COMMUNITY FACILTIES IMPACTED (CHURCHES, HOSPITALS, SCHOOLS, FIRE STATIONS)	1[b]	1[b]

[a]Options A and B impact 0.33 acre of Terrace Park (Bensenville Park District).

[b]Impacts 0.01 acre of Elk Grove Village Fire Station

TABLE 21
Impact Analysis South Connection Options

	A	B	C	D
DESIGN FEASIBILITY				
DESCRIPTION OF ACCESS LOCATIONS	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES DIRECT LOCAL ACCESS TO AND FROM THE SOUTH TO MAJOR ARTERIALS VIA NEW RAMPS TO COUNTY LINE RD	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES DIRECT LOCAL ACCESS TO AND FROM THE SOUTH TO MINOR ARTERIALS VIA NEW RAMPS AT FRANKLIN AVE NEAR TAFT AVE	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES DIRECT LOCAL ACCESS TO AMD FROM THE SOUTH TO MINOR ARTERIALS VIA NEW RAMPS AT FRANKLIN AVE NEAR TAFT AVE	PROVIDES FULL DIRECTIONAL MOVEMENTS AT SYSTEM INTERCHANGE PROVIDES DIRECT LOCAL ACCESS TO AND FROM THE SOUTH TO MINOR ARTERIALS VIA NEW RAMPS AT FRANKLIN AVE NEAR TAFT AVE
CONSTRUCTABILITY ISSUES	POTENTIAL CONSTRUCTABILITY ISSUES (INCLUDING TEMPORARY PROPERTY IMPACTS AND ACCESSIBILITY ISSUES) ASSOCIATED WITH CONSTRUCTION OF NB I-294 RAMP TO WB WEST BYPASS AT GRAND AVE.	POTENTIAL CONSTRUCTABILITY ISSUES (INCLUDING TEMPORARY PROPERTY IMPACTS AND ACCESSIBILITY ISSUES ON FRANKLIN AVENUE) ASSOCIATED WITH CONSTRUCTION OF EB/WB WEST BYPASS RAMPS TO I-294 OVER FRANKLIN AVENUE.	SEVERELY CONSTRAINED CONSTRUCTION PERIODS ALONG UP RAIL CORRIDOR DUE TO NEED TO MAINTAIN CURRENT LEVEL OF FREIGHT RAIL OPERATIONS. SEVERELY CONSTRAINED AREA FOR CONSTRUCTION ACCESS AND FORMWORK DUE TO RAIL AND BUILDING OFFSETS. CONSTRUCTION STAGING WOULD RESULT IN EXTENDED DURATION OF CONSTRUCTION AND INCREASED COSTS. CONSTRUCTION STAGING IN VERTICAL SECTIONS RATHER IN HORIZONTAL SECTIONS WILL EXTEND CONSTRUCTION DURATION DUE TO CONSTRUCTION REMOBILIZATION ISSUES.	NO MAJOR CONSTRUCTABILITY ISSUED IDENTIFIED
FREIGHT RAIL ISSUES	DISPLACES A PORTION OF THE WESTERN SECTION OF THE BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP LEAST OVERALL IMPACTS (OF SOUTH OPTIONS) TO RAIL OPERATIONS	DISPLACES A PORTION OF THE WESTERN SECTION OF THE BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP MINOR TRACK AND SIGNAL MODIFICATIONS REQUIRED DISPLACES MAJOR RAIL CUSTOMERS WEST OF UP RR	DISPLACES A PORTION OF THE WESTERN SECTION OF THE BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP THE UP RR REQUIRES UNINTERRUPTED SERVICE OF THE MAINLINE TRACK, A SHOEFLY DURING CONSTRUCTION WOULD BE UNACCEPTABLE. NO IMPACT ON THE NUMBER OF TRAINS PER DAY (50) OR SPEED WOULD BE TOLERATED. THEREFORE, CONSTRUCTION WOULD BE LIMITED TO LESS THAN 4 HOURS PER DAY FOR AERIAL WORK NEAR OR OVER THE RR. THUS, CONSTRUCTION WOULD BE LENGTHY AND COSTS WOULD BE SIGNIFICANTLY INCREASED. REQUIRES EXTENSIVE SPUR TRACK MODIFICATIONS TO PROVIDE CONTINUED SERVICE TO RR CUSTOMERS	DISPLACES A PORTION OF THE WESTERN SECTION OF THE BENSENVILLE YARD INCLUDING RR TURNTABLE AND MACHINE SHOP IMPAIRS ACCESS TO SPUR TRACKS EAST OF UPRR DISPLACES RAIL CUSTOMERS EAST OF UP RR
FINANCIAL PERFORMANCE				
INITIAL CONSTRUCTION COSTS[A]	$540M	$545M	$585M	$530M
INITIAL ROW COSTS[B]	$95.1M	$259.4M	$164.4M	$161.7M
INITIAL TOTAL COSTS	$635.1M	$804.4M	$749.4M	$691.7M

TABLE 21
Impact Analysis South Connection Options

	A	B	C	D
ENVIRONMENTAL IMPACTS				
ACRES OF WETLANDS IMPACTED	0.1	0.2	0.2	0.3
ACRES OF WATERS IMPACTED	0.2	0.2	0.2	0.2
ACRES OF 100 YR FLOODPLAINS IMPACTED[C]	1.5	1.5	2.6	2.6
ACRES OF DESIGNATED/RECREATIONAL LANDS IMPACTEDD	1.2	0.3	0.3	0.3
NUMBER OF PARKS IMPACTED BY IMPROVEMENT[E]	0	0	0	0
POTENTIAL NUMBER OF ENDANGERED SPECIES SITES IMPACT	0	0	0	0
NUMBER OF HISTORICAL SITES IMPACTED	0	0	0	0
NUMBER OF ARCHAEOLOGICAL SITES IMPACTED[F]	1	1	1	1
SOCIOECONOMIC IMPACTS				
NUMBER OF COMMERCIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY DISPLACED BY IMPROVEMENT	0 (0)	6 (3)	5 (4)	8 (6)
NUMBER OF INDUSTRIAL STRUCTURES (NUMBER OF BUSINESSES) POTENTIALLY DISPLACED BY IMPROVEMENT	21 (34)	17 (13)	16 (14)	15 (13)
NUMBER OF RESIDENTIAL STRUCTURES POTENTIALLY DISPLACED BY IMPROVEMENT	7	0	0	0
TOTAL STRUCTURES POTENTIALLY DISPLACED	28	23	21	23
NUMBER OF POTENTIAL NOISE SENSITIVE AREASG	4	1	1	1
LOST TAX REVENUE (2007)[H]	$1.7M	$4.0M	$2.7M	$2.0M
NUMBER OF EMPLOYEES DISPLACED[I]	615	1,285	705	710
NUMBER OF CEMETERIES IMPACTED BY IMPROVEMENT	0	0	0	0
TOTAL NUMBER OF COMMUNITY FACILTIES IMPACTED (CHURCHES, HOSPITALS, SCHOOLS, FIRE STATIONS)	0	0	0	0

[A]Construction Costs reflect initial planning level estimate of representative layouts for South Connection Corridor Options, including engineering and 30% contingency (2009 $).

[B]ROW Costs reflect initial planning level estimate based on estimated footprint for South Connection Corridor Option layouts, including 50% contingency (2009 $).

[C]Reservoirs are not included in the impact calculations because they will not be impacted.

[D]Lands that are publicly owned (ie., forest preserves, nature preserves, etc.).

[E]Options A and B impact 1.22 and 0.26 acre of Legends of Bensenville Golf Course respectively; Options C and D impact 0.25 acre of Legends of Bensenville Golf Course.

[F]Data provided by ITARP. Includes sites previously surveyed, sites with high archaeological potential, and archaeological sites.
[G]Noise sensitive areas exclude areas within the estimated footprint that will be displaced.

[H]Derived from Cook County and DuPage tax data.

[I]Number of employees assumed the median value of range provided by a data search.