

River Bridge + Connections to North Loop Evaluation Matrix															
				Measures	Units	A1  Rehab Existing Bridge (No Build) (Existing Year Traffic)	A2			A3			A4		
							Western Alignment			Central Alignment			Adjacent Alignment		
							AB1: I-35 & Broadway Direct Crossing	AB3: I-35 & 4th Direct Crossing	AB4: I-35, 5th, & 6th Direct Crossing	AB1: I-35 & Broadway Direct	AB3: I-35 & 4th Direct Crossing	AB4: I-35, 5th, & 6th Direct Crossing	AB1: I-35 & Broadway Direct	AB2: Hybrid Interchange	
N E E D S	IMPROVE PHYSICAL CONDITIONS	INFRASTRUCTURE	POTENTIAL TO IMPROVE USEFUL LIFE OF FACILITY	Service Life of River Bridge	Years	35	100			100			100		
				Area of Existing Bridges being Removed	Area (SF)	0	215,000	234,000	242,000	215,000	234,000	242,000	215,000	162,000	
				Area of Existing Bridges Left in Place	Area (SF)	242,000	27,000	8,000	0	27,000	8,000	0	27,000	80,000	
				Maintenance Cost Existing Bridges Left in Place to 2040	Dollars	\$ 51,480,000	\$ 1,940,000	\$ 580,000	\$ -	\$ 1,940,000	\$ 580,000	\$ -	\$ 1,940,000	\$ 5,730,000	
				Area of New Bridges being Built	Area (SF)	0	360,000	363,000	377,000	360,000	359,000	383,000	367,000	262,000	
				Area of Existing Pavement Left in Place	Area (SF)	372000	329,000	227,000	0	329,000	227,000	0	314,000	264,000	
				Maintenance Cost for Existing Roadways Left in Place to 2040	Dollars	\$ 2,976,000	\$ 2,632,000	\$ 1,816,000	\$ -	\$ 2,632,000	\$ 1,816,000	\$ -	\$ 2,512,000	\$ 2,112,000	
				Area of Existing Pavement Being Removed or Replaced	Area (SF)	0	378,000	518,000	644,000	378,000	518,000	644,000	373,000	388,000	
		GEOMETRY	POTENTIAL TO IMPROVE SUB- STANDARD GEOMETRY	Number of Existing Substandard Geometric Features Replaced (Red)	Count	0	26	38	39	26	38	39	26	22	
				Number of Existing Substandard Geometric Features Replaced (Yellow)	Count	0	2	5	4	2	5	4	2	2	
	OPTIMIZE SYSTEM PERFORMANCE	US 169	MAINLINE TRAFFIC SPEED	Average Peak Period Travel Speed, SB at AM Peak Hour	MPH	14	28			28			28		
				Average Peak Period Travel Speed, NB at PM Peak Hour	MPH	43.4	43.4			43.4			43.4		
		TRAFFIC CONGESTION		Total Peak Hour Delay	Delay (Min.)	4:00	2:00	2:00	2:00	2:00	2:00	2:00	2:00	2:00	
		FREEWAY TRAVEL TIMES	US-169 (at Airport) TO I-35 (at 12th Street)	SB at AM Peak Hour	Travel Time (Min.)	4	1	1	1	1	1	1	1	2	
				NB at PM Peak Hour	Travel Time (Min.)	4	1	1	1	1	1	1	1	2	
			US-169 (at Airport) TO I-70 (at Stateline)	WB at AM Peak Hour	Travel Time (Min.)	2	2	2	3	2	2	3	2	2	
				NB at PM Peak Hour	Travel Time (Min.)	2	2	2	3	2	2	3	2	2	
				US-169 (at Airport) TO I-70 (at Broadway)	EB at AM Peak Hour	Travel Time (Min.)	2	2	3	3	2	3	3	2	2
					NB at PM Peak Hour	Travel Time (Min.)	2	2	3	3	2	3	3	2	2
		LOCAL CONNECTIVITY	DOWNTOWN	Origin: US-169 at Airport. Destination: Broadway/6th Street Intersection.	Travel Time (Min.)	2	2	3	3	2	3	3	2	2	
			RIVERMARKET	Origin: US-169 at Airport. Destination: Broadway/4th Street Intersection.	Travel Time (Min.)	3	3	2	2	3	2	2	3	3	
		IMPLEMENTATION OF <u>APPLICABLE</u> MARC CONGESTION MANAGEMENT TOOLBOX STRATEGIES	ACCESS MANAGEMENT STRATEGIES		Examples: Left Turn Restrictions, Minimum Intersection Spacing, Roundabouts, Frontage Roads, etc.	0-2 (Implementation)	0.3	1.1			1.1			1.1	
			ACTIVE TRANSPORTATION STRATEGIES		Examples: Designated Bike Lanes, Exclusive Non-Motorized ROW, etc.	0-2 (Implementation)	0.25	2			2			2	
			HIGHWAY STRATEGIES		Examples: Geometric Improvements, HOV Lanes, Acceleration/Deceleration Lanes, etc.	0-2 (Implementation)	0	1.12			1.12			1.12	
			TRANSIT STRATEGIES		Examples: Dedicated ROW for Transit	0-2 (Implementation)	0	0			0			0	
			TRANSPORTATION OPERATIONS & MGMT STRATEGIES		Examples: Reversible Traffic Lanes, Turn Restrictions, etc.	0-2 (Implementation)	0.33	0.33			0.33			0.33	
	IMPROVE SAFETY AND SECURITY	DRIVER SAFETY	CONFLICT POINTS AT BRIDGE TERMINALS	Number of conflict points	Count	75	99	113	91	99	113	91	99	73	
		RESILIENCE	INCIDENT ON BRIDGE	Increase in Delay due to Incident on Bridge	1-4 (Best to Worst)	4	2	1	1	2	1	1	2	3	
		BIKE/PEDESTRIAN	BICYCLE/PEDESTRIAN SAFETY	Potential for safety improvements to existing Bike/Ped Facilities	1-4 (Best to Worst)	4	1			1			1		
		IMPROVE EMERGENCY RESPONSE TIMES		Emergency Responder Access to Bridge and ramps.	1-4 (Best to Worst)	4	1			1			1		

River Bridge + Connections to North Loop Evaluation Matrix														
				Measures	Units	A1 Rehab Existing Bridge (No Build) (Existing Year Traffic)	A2 Western Alignment			A3 Central Alignment			A4 Adjacent Alignment	
							AB1: I-35 & Broadway Direct Crossing	AB3: I-35 & 4th Direct Crossing	AB4: I-35, 5th, & 6th Direct Crossing	AB1: I-35 & Broadway Direct	AB3: I-35 & 4th Direct Crossing	AB4: I-35, 5th, & 6th Direct Crossing	AB1: I-35 & Broadway Direct	AB2: Hybrid Interchange
GOALS	IMPROVE TRANSPORTATION CHOICES	CONTRIBUTE TO/COMPLEMENT GREATER KC REGIONAL BIKEWAY PLAN		Potential for expansion of existing Bike/Ped Facilities	1-4 (Best to Worst)	3	1	2	2	1	2	2	1	1
		BIKE/ PEDESTRIAN RIVER CROSSING		Width of Bike/Ped accommodation on bridge	Width (Feet)	6	10			10			10	
	IMPROVE ECONOMIC VITALITY AND PLACEMAKING	ENHANCE REGIONAL FREIGHT HUBS	PORT OF KC/WEST BOTTOMS	Connectivity to Highway System	1-4 (Best to Worst)	2	3	3	3	3	3	3	3	2
			FAIRFAX	Connectivity to Highway System	1-4 (Best to Worst)	2	2	2	2	2	2	2	2	2
			DOWNTOWN AIRPORT	Connectivity to Highway System	1-4 (Best to Worst)	4	1	1	1	1	1	1	1	1
		PROMOTE QUALITY PLACES		Visual Character and Aesthetics	1-4 (Best to Worst)	1	3			3			2	
	IMPROVE SUSTAINABILITY	COMMUNITY IMPACTS	ROW IMPACTS	Residential	Area (Acres)	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0
				Commercial	Area (Acres)	0.0	3.1	0.7	0.7	3.6	2.9	1.4	2.9	0.0
				Number of tracts with anticipated ROW acquisition	Count	0	5	3	2	7	6	4	6	0
				Anticipated complexity of right-of-way acquisition	1-4 (Best to Worst)	1	3	2	3	3	4	3	2	1
				Billboards	Count	0	2	0	1	3	1	1	2	0
				Residential	Number of Residences	0	0			0			0	
		EJ/LEP POPULATIONS DISPLACED		Commercial	Number of Businesses	0	0			0			0	
				NHRP Resources (or Potentially Eligible) Impacted	Count	1	2	2	2	2	2	2	2	1
				Documented Archeology Sites	Count	0	0			0			0	
		PROTECT CULTURAL/NATURAL RESOURCES	CULTURAL RESOURCES	Hazmat Sites Impacted	Count	0	1			1			1	
				Improvement Opportunities Water Quality and Stormwater	1-4 (Best to Worst)	4	3			3			3	
				Parks/Trails Impacted	Count	0	1	2	2	1	1	2	1	0
				Wetlands Impacted	Area (Acres)	0	2.2			2.2			2.0	
				Floodplains Impacted	Linear Feet Crossed	0	1650			1600			1500	
				General Conformity Analysis of Required Pollutants	Tons per Year	See North Loop	See North Loop	See North Loop	See North Loop	See North Loop	See North Loop	See North Loop	See North Loop	See North Loop
				RAILROAD ISSUES	Difficulty of RR Easement Acquisition & Construction	1-4 (Best to Worst)	1	4	4	4	3	3	4	3
	AIRPORT ISSUES			Aviation Impacts during Construction	1-4 (Best to Worst)	1	4	4	4	3	3	4	2	2
	TOTAL COST	Planning Level Construction Cost Estimate	Dollars	\$ -	\$ 175,400,000	\$ 176,300,000	\$ 191,600,000	\$ 175,200,000	\$ 174,800,000	\$ 193,000,000	\$ 176,300,000	\$ 130,900,000		
	OPPORTUNITY FOR PHASED IMPLEMENTATION		1-4 (Best to Worst)	4	1	2	2	1	2	2	2	3		

Differentiating metrics which are being considered for presentation to the public

Planning Level Construction Cost Estimate includes:

Structures - new bridges, new walls and existing bridge removals

Roadway Items - new pavement, earthwork, drainage, signing, marking and existing removals

Project Management for Design-Build Project - mobilization, quality management, design, environmental, maintenance of traffic and contingency

Not Included: right-of-way acquisition, utility relocations, EA Phase efforts, DB stipends, Design/Construction Phase oversight



I-70 PEL North Loop Strategy Evaluation Matrix												
							B1	B3-6a	B3-6b	B3-7	B7-1	
				Measures	Units	No-Build	Access Consolidation	Compressed Footprint (South)	Compressed Footprint (North)	Compressed Footprint (Existing)	Reclassify I-70 (Independence Ave. Parkway)	
GOALS	IMPROVE TRANSPORTATION CHOICES	CONTRIBUTE TO/COMPLEMENT GREATER KC REGIONAL BIKEWAY PLAN		Potential for expansion of existing Bike/Ped Facilities	1-4 (Best to Worst)	4	3	2		1		
		ACCOMMODATE EXISTING AND FUTURE TRANSIT		Potential for Independence BRT Integration	1-4 (Best to Worst)	4	3	1		1		
				Potential for Streetcar Integration	1-4 (Best to Worst)	4	3	1		1		
	IMPROVE ECONOMIC VITALITY AND PLACEMAKING	REVITALIZATION AREAS		Potential to Make Space Available for Commercial/Recreational Development	Area (Acres)	0.0	0.0	11.3	7.2	6.8	26.9	
				Potential to Make Space Available for Commercial/Recreational Development	Land Value (\$)	\$0	\$0	\$33,500,000	\$21,800,000	\$20,500,000	\$80,400,000	
				Clear title of existing right-of-way to be released	1-4 (Best to Worst)	N/A	N/A	2	1	4	2	
		ENHANCE REGIONAL FREIGHT HUBS	PORT OF KC/WEST BOTTOMS		Connectivity to Highway System	1-4 (Best to Worst)	3	2	2		4	
			FAIRFAX		Connectivity to Highway System	1-4 (Best to Worst)	3	2	2		4	
			DOWNTOWN AIRPORT		Connectivity to Highway System	1-4 (Best to Worst)	4	1	2		3	
		PROMOTE QUALITY PLACES		Visual Character and Aesthetics	1-4 (Best to Worst)	4	3	2		1		
		IMPROVE SUSTAINABILITY	COMMUNITY IMPACTS	ROW IMPACTS	Residential	Area (Acres)	0	0	0		0	
	Commercial				Area (Acres)	0	0	0		0		
	EJ/LEP POPULATIONS DISPLACED			Residential	Number of Residences	0	0	0		0		
				Commercial	Number of Businesses	0	0	0		0		
	PROTECT CULTURAL/NATURAL RESOURCES		CULTURAL RESOURCES	NRHP Sites Impacted	Count	0	0	0		0		
				NRHP Districts Impacted	Count	0	0	0		0		
				Documented Archeology Sites	Count	0	0	0		0		
				Hazmat Sites Impacted	Count	0	0	0		0		
				NATURAL RESOURCES	Improvement Opportunities Water Quality and Stormwater	1-4 (Best to Worst)	4	3	2	1	2	1
			Parks Impacted		Area (Acres)	0	0	0		0		
			Wetlands Impacted		Area (Acres)	0	0	0		0		
	PUBLIC HEALTH		AIR QUALITY	General Conformity Analysis of Required Pollutants	Tons per year	2	1	3	3	3	4	
	FEASIBILITY	ROW ISSUES		Number of tracts with anticipated right-of-way acquisition challenges	Count	0	0	0	0	0	0	
		TOTAL COST		Planning Level Construction Cost Estimate	Dollars	\$0	\$53,800,000	\$113,200,000	\$117,700,000	\$117,700,000	\$61,600,000	

All Traffic Modeling Includes new Broadway Bridge  
Differentiating metrics which are being considered for presentation to the public

Planning Level Construction Cost Estimate includes:  
Structures - new bridges, new walls and existing bridge removals  
Roadway Items - new pavement, earthwork, drainage, signing, marking and existing removals  
Project Management for Design-Build Project - mobilization, quality management, design, environmental, maintenance of traffic and contingency  
Not Included: right-of-way acquisition, utility relocations, EA Phase efforts, DB stipends, Design/Construction Phase oversight

Downtown Airport Strategy Evaluation Matrix										
							C1	C4	C5	
				Measures	Units	No-Build	Half Diamond Intrchg w/ Existing Harlem Access	Half Diamond Intrchg w/ Split Lou Holland Undercrossing	Half Diamond Intrchg w/ New Harlem Single Harlem Railroad Xing	
N E E D S	IMPROVE PHYSICAL CONDITIONS	INFRASTRUCTURE	POTENTIAL TO IMPROVE USEFUL LIFE OF FACILITIES	Area of Existing Bridges being Removed	Area (SF)	0	97,000	97,000	100,000	
				Area of Existing Bridges Left in Place	Area (SF)	97,000	0	0	0	
				Maintenance Cost of Existing Bridges Left in Place to 2040	Dollars	\$ 6,510,000	0	0	0	
				Area of New Bridges being Built	Area (SF)	0	107,000	107,000	115,000	
				Area of Existing Pavement Left in Place	Area (SF)	232,000	48,000	47,000	6,000	
				Maintenance Cost of Existing Pavement Left in Place to 2040	Dollars	\$ 1,856,000	\$ 384,000	\$ 376,000	\$ 48,000	
				Area of Existing Pavement Being Replaced	Area (SF)	0	142,640	126,518	134,025	
		GEOMETRY	POTENTIAL TO IMPROVE SUB- STANDARD GEOMETRY	Number of Existing Substandard Geometric Features Replaced (Red)	Count	0	10	10	10	
				Number of Existing Substandard Geometric Features Replaced (Yellow)	Count	0	1	1	1	
		LOCAL ACCESS	HARLEM	Connectivity between US-169 and Harlem	1-4 (Best to Worst)	3	1	1	1	
		US 169	EXIT AND ENTRANCE RAMP PERFORMANCE	US 169 TRAVEL SPEED	Average Peak Hour Travel Speed (AM / PM)	MPH	31.6 / 44.9	31.6 / 44.9	31.6 / 44.9	31.6 / 44.9
				NB Off-Ramp, South of Harlem Rd.	2040 AM / PM LOS	C / E	B / E	B / E	B / E	
				NB On-Ramp, North of Harlem Rd.	2040 AM / PM LOS	B / E	B / E	B / E	B / E	
				SB Off-Ramp, Right-in, Right-out	2040 AM / PM LOS	C / B	C / B	C / B	C / B	
				SB On-Ramp, Right-in, Right-out	2040 AM / PM LOS	C / B	C / C	C / C	C / C	
				NB On-Ramp at North Interchange	2040 AM / PM LOS	B / D	B / D	B / D	B / D	
				SB Off-Ramp at North Interchange	2040 AM / PM LOS	D / C	D / C	D / C	D / C	
				SB On-Ramp at North Interchange	2040 AM / PM LOS	D / C	C / B	C / B	C / B	
		IMPLEMENTATION OF <u>APPLICABLE</u> MARC CONGESTION MANAGEMENT TOOLBOX STRATEGIES	ACCESS MANAGEMENT STRATEGIES	Examples: Left Turn Restrictions, Minimum Intersection Spacing, etc.	0-2 (Implementation)	0	1.1	1.1	1.1	
			ACTIVE TRANSPORTATION STRATEGIES	Examples: Designated Bike Lanes, Exclusive Non-Motorized ROW, etc.	0-2 (Implementation)	0	2	2	2	
			HIGHWAY STRATEGIES	Examples: Geometric Improvements, HOV Lanes, Acceleration/Deceleration Lanes, etc.	0-2 (Implementation)	0	1	1	1	
			TRANSIT STRATEGIES	Examples: Dedicated ROW for Transit	0-2 (Implementation)	0	1	1	1	
			TRANSPORTATION OPERATIONS & MGMT STRATEGIES	Examples: Reversible Traffic Lanes, Turn Restrictions, etc.	0-2 (Implementation)	0.3	0.67	0.67	0.67	
		IMPROVE SAFETY AND SECURITY	DRIVER SAFETY	CONFLICT POINTS	Total Number of Conflict Points	Count	25	20	13	19
			BICYCLE/ PEDESTRIAN	BICYCLE/PEDESTRIAN SAFETY	Potential for safety improvements to existing Bike/Ped Facilities	1-4 (Best to Worst)	4	1	1	1
			IMPROVE EMERGENCY RESPONSE TIMES		Improvement in KCFD Access between Downtown Airport Station and Harlem	1-4 (Best to Worst)	3	2	2	2
G O A L S	IMPROVE TRANSPORTATION CHOICES	CONTRIBUTE TO/COMPLEMENT BIKE KC PLAN		Potential for expansion of existing Bike/Ped Facilities	1-4 (Best to Worst)	4	2	3	1	
		ACCOMMODATE EXISTING AND FUTURE TRANSIT		Potential for Bus/Streetcar Integration	1-4 (Best to Worst)	4	3	3	3	
	IMPROVE ECONOMIC VITALITY AND PLACEMAKING	REVITALIZATION AREAS		Potential to Make Space Available for Commercial/Recreational Development	Area (Acres)	0	0	0	0	
		ENHANCE REGIONAL FREIGHT HUBS	DOWNTOWN AIRPORT	Connectivity to Highway System	1-4 (Best to Worst)	4	2	1	2	
		PROMOTE QUALITY PLACES		Visual Character and Aesthetics	1-4 (Best to Worst)	4	1	1	1	
	IMPROVE SUSTAINABILITY	COMMUNITY IMPACTS	ROW IMPACTS	Residential	Area (Acres)	0	0	0	0	
				Commercial	Area (Acres)	0.0	0.6	0.2	0.5	
			EJ/LEP POPULATIONS DISPLACED	Residential	Number of Residences	0	0	0	0	
				Commercial	Number of Businesses	0	0	0	0	
		PROTECT CULTURAL/NATURAL RESOURCES	CULTURAL RESOURCES	NRHP Sites Impacted	Count	0	0	0	0	
				NRHP Districts Impacted	Count	0	2	2	2	
				Documented Archeology Sites	Count	0	0	0	0	
				Hazmat Sites Impacted	Count	0	0	0	0	
			NATURAL RESOURCES	Parks Impacted	Area (Acres)	0	0	0	0	
				Wetlands Impacted	Area (Acres)	0	0	0	0	
				Floodplains Impacted	Linear Feet Crossed	0	0	0	0	
		PUBLIC HEALTH	AIR QUALITY	General Conformity Analysis of required pollutants	Tons per year	See North Loop	See North Loop	See North Loop	See North Loop	
		FEASIBILITY	ROW ISSUES	Difficulty of RR Easement Acquisition & Construction	1-4 (Best to Worst)	1	2	3	4	
	TOTAL COST	Planning Level Construction Cost Estimate	Dollars	0	\$ 32,300,000	\$ 32,300,000	\$ 39,400,000			

Differentiating metrics which are being considered for presentation to the public

Planning Level Construction Cost Estimate includes:  
Structures - new bridges, new walls and existing bridge removals  
Roadway Items - new pavement, earthwork, drainage, signing, marking and existing removals  
Project Management for Design-Build Project - mobilization, quality management, design, environmental, maintenance of traffic and contingency  
**Not Included:** right-of-way acquisition, utility relocations, EA Phase efforts, DB stipends, Design/Construction Phase oversight

West Bottoms Strategy Evaluation Matrix									
				Measures	Units	No-Build	D6 Mulberry St. to Forrester Rd.	D7 Wyoming St. to Forrester Rd.	D8 4th St. to Woodswether Bridge
N E E D S	IMPROVE PHYSICAL CONDITIONS	INFRASTRUCTURE	POTENTIAL TO IMPROVE USEFUL LIFE OF FACILITIES	Area of Existing Bridges being Removed	Area (SF)	0	25,000**	25,000**	25,000
				Area of Existing Bridges Left in Place	Area (SF)	25,000	0	0	0
				Maintenance Cost of Existing Bridges Left in Place to 2040	Dollars	\$ 1,800,000	\$ -	\$ -	\$ -
				Area of New Bridges being Built	Area (SF)	0	0	0	15,000
				Area of Existing Pavement Left in Place	Area (SF)	281000	186,000	147,000	228,000
				Maintenance Cost of Existing Roadway Left in Place to 2040	Dollars	\$ 2,248,000	\$ 1,488,000	\$ 1,176,000	\$ 1,824,000
				Area of Existing Pavement Being Removed or Replaced	Area (SF)	0	167,000	197,000	35,000
	OPTIMIZE SYSTEM PERFORMANCE	GEOMETRY	POTENTIAL TO IMPROVE SUB- STANDARD GEOMETRY	Number of Existing Substandard Geometric Features Replaced (Red)	Count	0	1	1	1
				Number of Existing Substandard Geometric Features Replaced (Yellow)	Count	0	0	0	0
		LOCAL ACCESS	CONNECTION FROM WOODSWETHER BUSINESSES TO HIGHWAY ACCESS	Improvement of Highway Access for Woodswether businesses. Origin: Woodswether/Madison Intersection. Destination: Broadway/5th Street Intersection.	1-4 (Best to Worst)	4	3	3	1
				Examples: Left Turn Restrictions, Minimum Intersection Spacing, Roundabouts, Frontage Roads, etc.	0-2 (Implementation)	0.2	0.4	0.4	0.4
				Examples: Designated Bike Lanes, Exclusive Non- Motorized ROW, etc.	0-2 (Implementation)	0	0.5	0.5	0.5
				Examples: Geometric Improvements, HOV Lanes, Acceleration/Deceleration Lanes, etc.	0-2 (Implementation)	0.12	0.25	0.25	0.25
				Examples: Dedicated ROW for Transit	0-2 (Implementation)	0	0	0	0
	IMPROVE SAFETY AND SECURITY	DRIVER SAFETY BIKE/ PEDESTRIAN	NUMBER OF CONFLICT POINTS BICYCLE/PEDESTRIAN SAFETY	Number of conflict points	Count	116	116	106	140
				Potential for safety improvement to existing Bike/Ped Facilities	1-4 (Best to Worst)	4	3	3	2
				Access to Woodswether businesses from KCFD Station 25 (401 E. Missouri Ave.)	1-4 (Best to Worst)	2	3	3	2
	G O A L S	IMPROVE TRANSPORTATION CHOICES	CONTRIBUTE TO/COMPLEMENT GREATER KC REGIONAL BIKEWAY PLAN		Potential for expansion of existing Bike/Ped facilities	1-4 (Best to Worst)	3	2	2
ACCOMMODATE EXISTING AND FUTURE TRANSIT			Potential for Bus/Streetcar Integration	1-4 (Best to Worst)	4	4	4	2	
IMPROVE ECONOMIC VITALITY AND PLACEMAKING		REVITALIZATION AREAS		Potential to Make Space Available for Commercial/Recreational Development	Area (Acres)	4	3	3	2
		ENHANCE REGIONAL FREIGHT HUBS	PORT OF KC	Improvement of Woodswether Terminal to 5th & Broadway	1-4 (Best to Worst)	4	3	3	2
IMPROVE SUSTAINABILITY		PROMOTE QUALITY PLACES		Visual Character and Aesthetics	1-4 (Best to Worst)	3	1	1	2
		COMMUNITY IMPACTS	ROW IMPACTS	Residential	Area (SF)	0	0	0	0
				Commercial	Area (SF)	0	0	0	76,412
			EJ/LEP POPULATIONS DISPLACED	Residential	Number of Residences	0	0	0	0
				Commercial	Number of Businesses	0	0	0	3
		PROTECT CULTURAL/NATURAL RESOURCES	CULTURAL RESOURCES	NRHP Sites Impacted	Count	0	0	0	0
				NRHP Districts Impacted	Count	0	2	2	2
				Documented Archeology Sites	Count	0	0	0	0
				Hazmat Sites Impacted	Count	0	0	0	0
				NATURAL RESOURCES	Parks Impacted	Area (Acres)	0	0	0
		FEASIBILITY	RAILROAD ISSUES		Difficulty of RR Easement Acquisition & Construction	1-4 (Best to Worst)	1	2	2
ROW ISSUES			Number of tracts with anticipated right-of-way acquisition issues	Count	0	0	0	1	
TOTAL COST			Planning Level Construction Cost Estimate	Dollars	\$0	\$900,000	\$1,100,000	\$6,900,000	

Differentiating metrics which are being considered for presentation to the public

**Planning Level Construction Cost Estimate includes:**

Structures - new bridges, new walls and existing bridge removals, \*\* Portions of the Woodswether Road Bridge may be considered for use as bicycle and pedestrian accommodations.

Roadway Items - Pavement Overlays, signing, marking and existing removals

Project Management for Design-Build Project - mobilization, quality management, design, environmental, maintenance of traffic and contingency

**Not Included:** right-of-way acquisition, utility relocations, EA Phase efforts, DB stipends, Design/Construction Phase oversight



	I-70 MO-9 Strategy Evaluation Matrix									
				Measures	Units	E1 No-Build	E2a All At-Grade Crossings, Existing Alignment	E2b All At-Grade Crossings, Western Alignment	E3 South At-Grade Connections	E4 South At-Grade Connections/ Split Lanes
N E E D S	IMPROVE PHYSICAL CONDITIONS	INFRASTRUCTURE	POTENTIAL TO IMPROVE USEFUL LIFE OF FACILITY	Area of Existing Bridges being Removed	Area (SF)	0	148,500	177,500	56,300	56,300
				Area of Existing Bridges Left in Place	Area (SF)	177,500	29000**	0	121,200	121,200
				Maintenance Cost for Existing Bridges Left in Place to 2040	Dollars	\$800,000	\$50,000	\$0	\$200,000	\$200,000
				Area of New Bridge being Built	Area (SF)	0	45,400	52,500	19,200	23,600
				Area of Existing Pavement Left in Place	Area (SF)	449,000	0	0	147,000	147,000
				Maintenance Cost for Existing Roadways Left In Place to 2040	Dollars	\$3,592,000	\$0	\$0	\$1,176,000	\$1,176,000
				Area of Existing Pavement Being Removed or Replaced	Area (SF)	0	490,000	490,000	330,000	330,000
		GEOMETRY	POTENTIAL TO IMPROVE SUB- STANDARD GEOMETRY	Number of Existing Substandard Geometric Features Replaced (Red)	Count	0	16	16	16	16
				Number of Existing Substandard Geometric Features Replaced (Yellow)	Count	0	5	5	5	5
	OPTIMIZE SYSTEM PERFORMANCE	LOCAL/REGIONAL CONNECTIONS	NORTHLAND	Origin: SB MO-9 at HOA Bridge. Destination: SB US-71 at 8th Street.	Travel Time (Min.)	1	4	5	3	2
				Origin: SB MO-9 at HOA Bridge. Destination: WB I-70 at Broadway	Travel Time (Min.)	1	4	5	3	2
			COLUMBUS PARK	Access to/from MO-9	1-4 (Best to Worst)	3	1	1	2	2
			RIVER MARKET	Access to/from MO-9	1-4 (Best to Worst)	3	1	1	2	2
			OAK/LOCUST CONNECTION	Improved intersection at Oak Trafficway and Oak/Locust	1-4 (Best to Worst)	3	2	2	2	1
		IMPLEMENTATION OF <u>APPLICABLE</u> MARC CONGESTION MANAGEMENT TOOLBOX STRATEGIES	ACCESS MANAGEMENT STRATEGIES	Examples: Left Turn Restrictions, Minimum Intersection Spacing, Roundabouts, Frontage Roads, etc.	0-2 (Implementation)	0.3	1	1	1	1
			ACTIVE TRANSPORTATION STRATEGIES	Examples: Designated Bike Lanes, Exclusive Non-Motorized ROW, etc.	0-2 (Implementation)	0	2	2	2	2
			HIGHWAY STRATEGIES	Examples: Geometric Improvements, HOV Lanes, Acceleration/Deceleration Lanes, etc.	0-2 (Implementation)	0	0.75	0.75	0.75	0.75
			TRANSIT STRATEGIES	Examples: Dedicated ROW for Transit	0-2 (Implementation)	0	2	2	2	2
			TRANSPORTATION OPERATIONS & MGMT STRATEGIES	Examples: Reversible Traffic Lanes, Turn Restrictions, etc.	0-2 (Implementation)	0	0.67	0.67	0.67	0.67
	IMPROVE SAFETY AND SECURITY	DRIVER SAFETY	NUMBER OF CONFLICT POINTS	Number of Conflict Points	Count	56	180	180	64	60
		BIKE/ PEDESTRIAN	BICYCLE/PEDESTRIAN SAFETY	Potential for safety improvements to existing Bike/Ped Facilities	1-4 (Best to Worst)	4	2	1	2	3
		IMPROVE EMERGENCY RESPONSE TIMES		Highway Access from KCFD Station 25 (401 E. Missouri Ave)	1-4 (Best to Worst)	4	1	1	3	3

	I-70 MO-9 Strategy Evaluation Matrix								
			Measures	Units	E1  No-Build	E2a All At-Grade Crossings, Existing Alignment	E2b All At-Grade Crossings, Western Alignment	E3  South At-Grade Connections	E4  South At-Grade Connections/ Split Lanes
GOALS	IMPROVE TRANSPORTATION CHOICES	CONTRIBUTE TO/COMPLEMENT GREATER KC REGIONAL BIKEWAY PLAN		Potential for expansion of existing Bike/Ped Facilities	1-4 (Best to Worst)	4	2	1	2
		ACCOMMODATE EXISTING AND FUTURE TRANSIT		Potential for Bus/Streetcar Integration	1-4 (Best to Worst)	4	1	1	3
	IMPROVE ECONOMIC VITALITY AND PLACEMAKING	REVITALIZATION AREAS		Potential to Make Space Available for Commercial/Recreational Development	Area (Acres)	0.0	9.4	9.4	8.1
				Potential to Make Space Available for Commercial/Recreational Development	Land Value (\$)	\$0	\$16,500,000	\$15,800,000	\$14,400,000
		PROMOTE QUALITY PLACES		Visual Character and Aesthetics	1-4 (Best to Worst)	4	1	1	3
	IMPROVE SUSTAINABILITY	COMMUNITY IMPACTS	ROW IMPACTS	Residential	Area (Acres)	0	0	0	0
				Commercial	Area (Acres)	0	0	0	0
			EJ/LEP POPULATIONS DISPLACED	Residential	Number of Residences	0	0	0	0
				Commercial	Number of Businesses	0	0	0	0
		PROTECT CULTURAL/NATURAL RESOURCES	CULTURAL RESOURCES	NRHP Resources Impacted	Count	0	0	0	0
				NRHP Districts Impacted	Count	0	0	0	0
				Documented Archeology Sites	Count	0	0	0	0
				Hazmat Sites Impacted	Count	0	0	0	0
			NATURAL RESOURCES	Improvement Opportunities Water Quality and Stormwater	1-4 (Best to Worst)	4	2	2	2
				Parks Impacted	Area (Acres)	0	0	0	0
				Wetlands Impacted	Area (Acres)	0	0	0	0
		PUBLIC HEALTH	AIR QUALITY	General Conformity Analysis of Required Pollutants	Tons per year	See North Loop	See North Loop	See North Loop	See North Loop
	FEASIBILITY	CONSTRUCTABILITY		Impacts to Heart of America Bridge	1-4 (Best to Worst)	1	3	4	1
		ROW ISSUES		Number of tracts with anticipated right-of-way acquisition challenges	Count	0	0	0	0
		TOTAL COST		Planning Level Construction Cost Estimate	Dollars	\$0	\$40,900,000	\$44,000,000	\$20,300,000

Differentiating metrics which are being considered for presentation to the public

Planning Level Construction Cost Estimate includes:  
Structures - new bridges, new walls and existing bridge removals, \*\*NB and SB Ramp Bridges at 3rd St to remain for Optoin E2a  
Roadway Items - new pavement, earthwork, drainage, signing, marking and existing removals  
Project Management for Design-Build Project - mobilization, quality management, design, environmental, maintenance of traffic and contingency  
**Not Included:** right-of-way acquisition, utility relocations, EA Phase efforts, DB stipends, Design/Construction Phase oversight