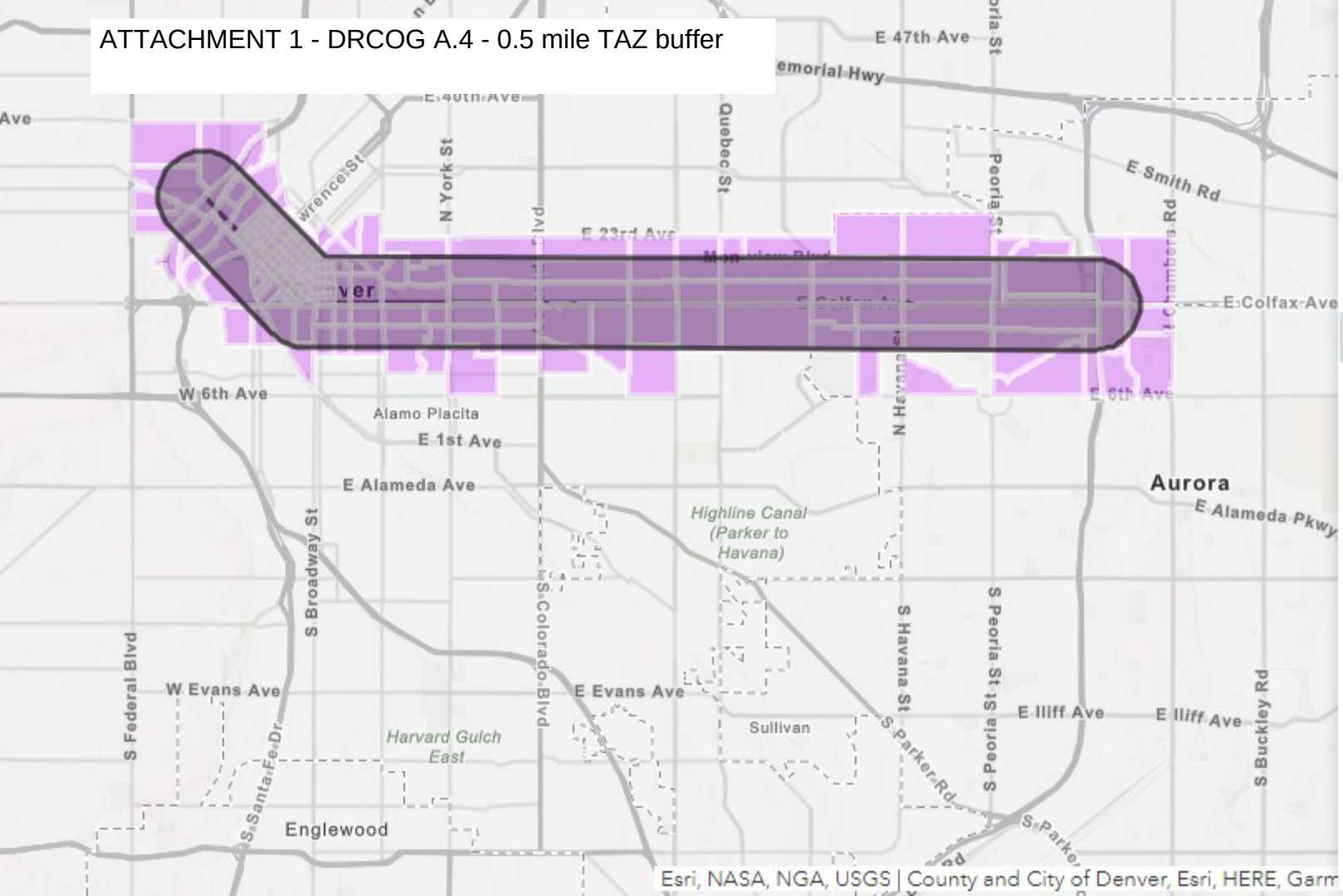
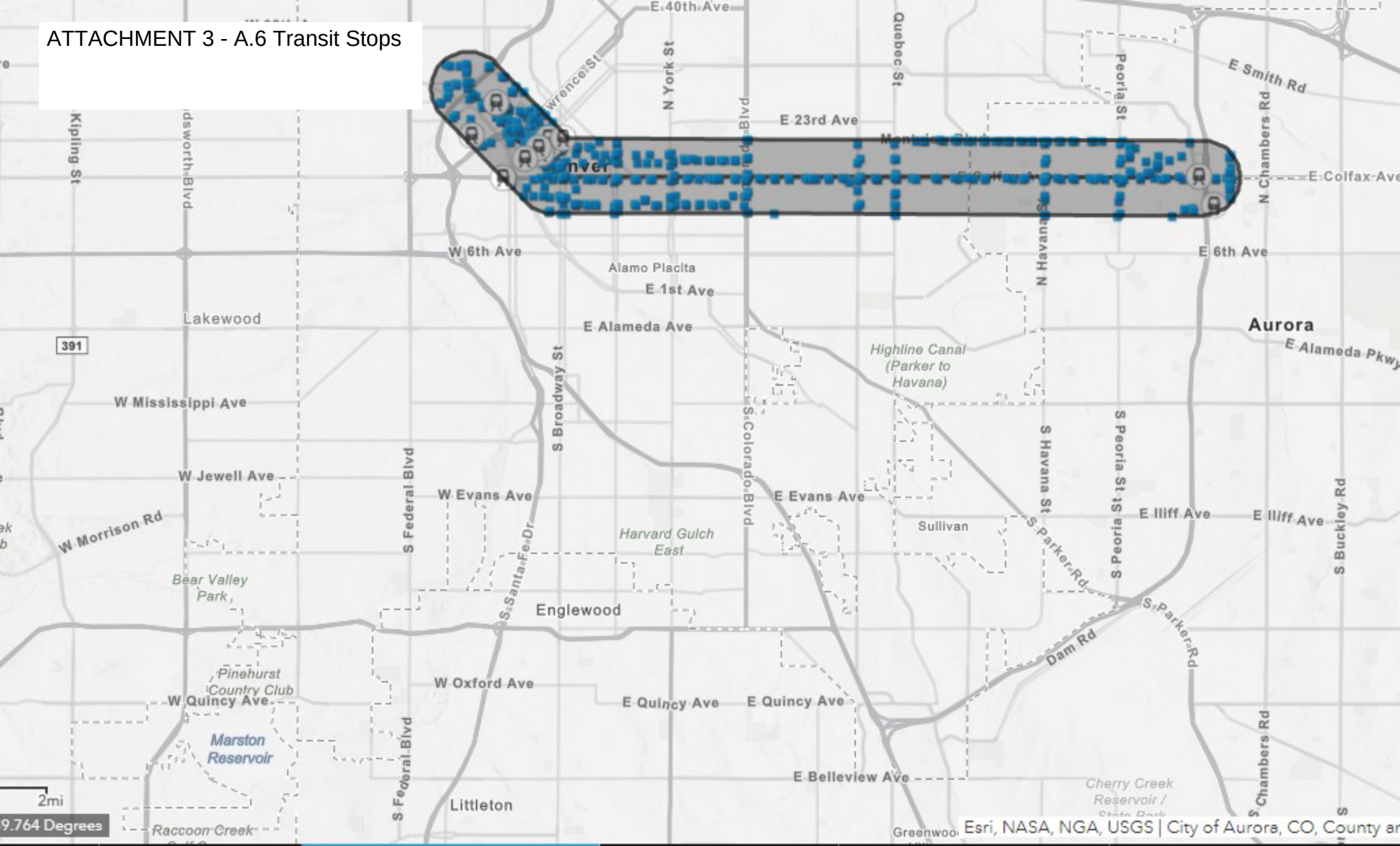
ATTACHMENT 1 - DRCOG A.4 - 0.5 mile TAZ buffer



ATTACHMENT 2 - A.4_A.6_TAZ Demographics

zone_id	poptotal	all5to17	all65over	hlminority	langchall	wpdisabled	hhpoverty	hhnov	hhcostburd	2020_emp	2020_hh	2050_emp	2050_hh	2020_empd	2020_hhd	2050_empd	2050_hhd
TOTAL	168898	19316	15438	75117	10572	10175	11864	12502	29650	256702	93280	313171	130956	32334.134	2916.378	39317.329	4209.419

ATTACHMENT 3 - A.6 Transit Stops



ocation | Urban Centers | RTD Stops & Stations (502) | TAZ Demographics | Pedestrian Focus Areas | Short Trip Opportunity Z...

Bus	Rail
491	11

ATTACHMENT 4 - A.6 Urban Centers

ct Location | Urban Centers | RTD Stops & Stations (502) | TAZ Demographics | Pedestrian Focus Areas | Short Trip Opportunity Z... | Crashes 2015-2019 (2

1	2	3	4	5	6
East Colfax Main Street	Colorado Blvd Health Care Dist	Colfax Avenue	Central Business District	Fitzsimons	13th Avenue

ATTACHMENT 5 - STOPS Model Data Export for Air Quality Calculations

SMALL STARTS TRAVEL FORECASTS TEMPLATE

PROJECT NAME:

Trips on the Project

Line	Transit market	Trips made by:	Daily linked trips: Current Year (2015)	Daily linked trips: Horizon (20 Years)	Annualization factor	Annual linked trips (daily trips * annualization factor): Current Year (2015)	Annual linked trips (daily trips * annualization factor): Horizon (20 Years)	Brief description of the process used to develop travel forecasts (e.g., local model, FTA simplified national model, incremental data-driven method, direct demand model)
1a	Modeled trips: home-based work (HBW)	Non-transit dependents	9,482	9,910	300	2,844,600	2,973,000	FTA Simplified Trips on Projects (STOPS) model
1b		Transit dependents	3,156	3,523		946,800	1,056,900	
2a	Modeled trips: all other trip purposes	Non-transit dependents	11,490	11,099	300	3,447,000	3,329,700	FTA Simplified Trips on Projects (STOPS) model
2b		Transit dependents	5,833	6,296		1,749,900	1,888,800	
3a	Special market 1 (specify)	Non-transit dependents				0	0	30117 - 2015 ridership, 31743 - 2040 ridership based on these STOPS runs
3b		Transit dependents				0	0	
4a	Special market 2 (specify)	Non-transit dependents				0	0	
4b		Transit dependents				0	0	
5a	Special market 3 (specify)	Non-transit dependents				0	0	
5b		Transit dependents				0	0	
6a	Special market 4 (specify)	Non-transit dependents				0	0	
6b		Transit dependents				0	0	
7a	Subtotal (lines 1 through 6)	Non-transit dependents				6,291,600	6,302,700	
7b		Transit dependents				2,696,700	2,945,700	
8a	**Total annual linked trips with special markets (lines 7a through 7b)**					**8,988,300**	**9,248,400**	
8b	**Total daily linked trips without special markets (lines 1a through 2b)**		**29,961**	**30,828**				
9	New transit trips		4,189	4,629				

Vehicle-Miles of Travel (VMT)

Line	Mode / Technology	Daily VMT: Current Year (2015) No-build	Daily VMT: Current Year (2015) Build	Daily VMT: Horizon (20 Years) No-build	Daily VMT: Horizon (20 Years) Build	Annualization factor	Annual VMT (for automobile, calculation is daily VMT * annualization factor; for transit, source is service plans for each mode/technology): Current Year (2015) No-build	Annual VMT: Current Year (2015) Build	Annual VMT: Horizon (20 Years) No-build	Annual VMT: Horizon (20 Years) Build	VMT change (Build minus No-build VMT): Current Year (2015)	VMT change: Horizon (20 Years)
10	Automobile		-26,825		-29,582	300	0	-8,047,385	0	-8,874,462	-8,047,385	-8,874,462
11	Diesel bus										0	0
12	Hybrid bus										0	0
13	CNG bus										0	0
14	Electric bus										0	0
15	Heavy rail [1]										0	0
16	Light rail / streetcar [1]										0	0
17	Commuter rail (new diesel locomotive or DMU) [1]										0	0
18	Commuter rail (used diesel locomotive) [1]										0	0
19	Commuter rail (electric or EMU) [1]										0	0

[1] For rail transit modes, report VMT in terms of total rail passenger car mileage, not train mileage. (As an illustration of the difference, the rail passenger car mileage for a commuter rail or heavy rail train with six passenger cars would be six times the train mileage.)

SMALL STARTS MOBILITY, COST-EFFECTIVENESS, AND CONGESTION RELIEF TEMPLATE

PROJECT NAME:	

Mobility Improvements

Line	Item	Values		Source/Calculation
		Current Year (2015)	Horizon (20 Years)	
1	Annual linked trips on the project with double weight for trips by transit-dependent persons	11,685,000	12,194,100	Travel Forecasts Template, Line 7a + 2 * Line 7b
2	Value used in rating	11,939,550		If a 10- or 20-year horizon is used: 50 percent * Line 1 current year value + 50 percent * Line 1 horizon year value If no horizon year is used: Line 1 current year value
		MEDIUM		

Cost Effectiveness

Line	Item	Values		Source/Calculation
		Current Year (2015)	Horizon (20 Years)	
3	Annualized Federal share of project capital cost (constant 2021 dollars)		$0	Source: SCC Build Annualized worksheet
4	Annual linked trips on the project	8,988,300	9,248,400	Travel Forecasts Template, Line 8a
5	Annualized Federal share of the project per annual linked trip on the project	$0.00	$0.00	Line 6 / Line 5
6	Value used in rating	$0.00		If a 10- or 20-year horizon is used: 50 percent * Line 7 current year value + 50 percent * Line 7 horizon year value If no horizon year is used: Line 7 current year value

Congestion Relief

Line	Item	Values		Source/Calculation
		Current Year (2015)	Horizon (20 Years)	
7	New Weekday Linked Transit Trips	4,189	4,629	Travel Forecasts Template, Line 9
8	Value used in rating	4,409		If a 10- or 20-year horizon is used: 50 percent * Line 7 current year value + 50 percent * Line 7 horizon year value If no horizon year is used: Line 7 current year value
		MEDIUM		

SMALL STARTS ENVIRONMENTAL BENEFITS TEMPLATE

PROJECT NAME:	

Attainment Status

Line	Item	Values	Source/Calculation
1	Regional air quality attainment status, carbon monoxide (CO)	Maintenance	Source: EPA Green Book
2	Regional air quality attainment status, nitrogen dioxide (NO_2)	Maintenance	
3	Regional air quality attainment status, ozone (O_3) (2008 8-hour standard)	Maintenance	
4	Regional air quality attainment status, particulate matter ($PM_{2.5}$) (2006 standard)	Maintenance	

ADDITIONAL ENVIRONMENTAL BENEFITS INPUTS REQUIRED FOR WARRANTED SMALL STARTS PROJECTS ONLY

Line		Values	Source/Calculation
A	Existing Annual Transit Ridership in the Corridor Today		Input by project sponsor
B	Percentage Change in Corridor Annual Transit Vehicle Hours That Would Result from Implementation of the Proposed Project		Input by project sponsor
C	Elasticity Factor		TCRP Report 95, Traveler Response to Transportation System Changes: Tra and Frequency (2004)
D	Estimated Increase in Annual Project Ridership		Line A * Line B * Line C
E	Average share of transit users that previously drove		Factor based on data from past projects in the CIG program
F	Estimated new transit ridership coming from autos		Line D * Line E
G	Average auto occupany factor		Nation-wide average for work trips from the 2009 National Household Trav
H	Estimated decrease (increase) in auto trips		Line F / Line G
I	Project Length		From Project Description Template
J	Average trip length factor		Factor based on data from past projects in the CIG program
K	Estimated decrease (increase) in Annual Auto Vehicle Miles Travelled		Line H * Line I * Line J

Summary Results

		Current Year (2015)	Horizon (20 Years)	
5	Value of environmental benefits	$2,207,072	$2,271,209	Sum of lines 19, 30, 41, 52, 63, 74, 85 and 96 for current and applicable (if a
6	Annualized Federal share of project	$0	$0	Mobility and Cost Effectiveness Template, Line 3
7	Ratio of environmental benefits to annualized Federal share of project	0.0%	0.0%	Line 5 / Line 6
8	Value used in rating	0.0%		If a 10- or 20-year horizon is being used: 50 percent * Line 7 current year va percent * Line 7 horizon year value If no horizon year is being used: Line 7 current year value

SMALL STARTS ENVIRONMENTAL BENEFITS TEMPLATE (page 2)

VALUE OF BENEFITS BY FACTOR

Air Quality: Carbon Monoxide (CO)

		Current Year					Horizon - 10 Years					Horizon - 20 Years			
Line	Mode	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)
9	Automobile	8,047,385	0.01677	134,954.64	$0.10	**$13,495.46**	---	0.01146	---	$0.10	---	8,874,462	0.01026	91,051.98	$0.10
10	Diesel Bus	0	0.00583	0.00	$0.10	**$0.00**	---	0.00326	---	$0.10	---	0	0.00289	0.00	$0.10
11	Hybrid Bus	0	0.00583	0.00	$0.10	**$0.00**	---	0.00326	---	$0.10	---	0	0.00289	0.00	$0.10
12	CNG Bus	0	0.03962	0.00	$0.10	**$0.00**	---	0.02030	---	$0.10	---	0	0.01716	0.00	$0.10
13	Electric Bus	0	0.00645	0.00	$0.10	**$0.00**	---	0.00539	---	$0.10	---	0	0.00504	0.00	$0.10
14	Heavy Rail	0	0.00706	0.00	$0.10	**$0.00**	---	0.00685	---	$0.10	---	0	0.00673	0.00	$0.10
15	Light Rail / Streetcar	0	0.01051	0.00	$0.10	**$0.00**	---	0.01020	---	$0.10	---	0	0.01001	0.00	$0.10
16	Commuter Rail - New diesel locomotive or DMU	0	0.01680	0.00	$0.10	**$0.00**	---	0.01680	---	$0.10	---	0	0.01680	0.00	$0.10
17	Commuter Rail - Used diesel locomotive	0	0.01680	0.00	$0.10	**$0.00**	---	0.01680	---	$0.10	---	0	0.01680	0.00	$0.10
18	Commuter Rail - Electric or EMU	0	0.01281	0.00	$0.10	**$0.00**	---	0.01243	---	$0.10	---	0	0.01219	0.00	$0.10
19	**TOTAL CHANGE**	**8,047,385**	---	**134,954.64**	---	**$13,495.46**	---	---	---	---	---	**8,874,462**	---	**91,051.98**	---

Air Quality: Mono-Nitrogen Oxides (NO_x)

		Current Year					Horizon - 10 Years					Horizon - 20 Years			
Line	Mode	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)
20	Automobile	8,047,385	0.00091	7,323.12	$16.20	**$118,634.54**	---	0.00028	---	$19.58	---	8,874,462	0.00020	1,774.89	$20.25
21	Diesel Bus	0	0.00867	0.00	$16.20	**$0.00**	---	0.00208	---	$19.58	---	0	0.00114	0.00	$20.25
22	Hybrid Bus	0	0.00867	0.00	$16.20	**$0.00**	---	0.00208	---	$19.58	---	0	0.00114	0.00	$20.25
23	CNG Bus	0	0.00384	0.00	$16.20	**$0.00**	---	0.00341	---	$19.58	---	0	0.00335	0.00	$20.25
24	Electric Bus	0	0.00583	0.00	$22.95	**$0.00**	---	0.00439	---	$28.69	---	0	0.00398	0.00	$29.70
25	Heavy Rail	0	0.00638	0.00	$22.95	**$0.00**	---	0.00558	---	$28.69	---	0	0.00532	0.00	$29.70
26	Light Rail / Streetcar	0	0.00950	0.00	$22.95	**$0.00**	---	0.00831	---	$28.69	---	0	0.00791	0.00	$29.70
27	Commuter Rail - New diesel locomotive or DMU	0	0.01320	0.00	$16.20	**$0.00**	---	0.01320	---	$19.58	---	0	0.01320	0.00	$20.25
28	Commuter Rail - Used diesel locomotive	0	0.09300	0.00	$16.20	**$0.00**	---	0.04300	---	$19.58	---	0	0.02090	0.00	$20.25
29	Commuter Rail - Electric or EMU	0	0.01157	0.00	$22.95	**$0.00**	---	0.01012	---	$28.69	---	0	0.00964	0.00	$29.70
30	**TOTAL CHANGE**	**8,047,385**	---	**7,323.12**	---	**$118,634.54**	---	---	---	---	---	**8,874,462**	---	**1,774.89**	---

SMALL STARTS ENVIRONMENTAL BENEFITS TEMPLATE (page 3)

Air Quality: Volatile Organic Compounds (VOCs)

		Current Year					Horizon - 10 Years					Horizon - 20 Years			
Line	Mode	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)
31	Automobile	8,047,385	0.00060	4,828.43	$3.78	**$18,251.47**	---	0.00027	---	$4.69	---	8,874,462	0.00021	1,863.64	$4.86
32	Diesel Bus	0	0.00073	0.00	$3.78	**$0.00**	---	0.00024	---	$4.69	---	0	0.00016	0.00	$4.86
33	Hybrid Bus	0	0.00073	0.00	$3.78	**$0.00**	---	0.00024	---	$4.69	---	0	0.00016	0.00	$4.86
34	CNG Bus	0	0.00146	0.00	$3.78	**$0.00**	---	0.00115	---	$4.69	---	0	0.00111	0.00	$4.86
35	Electric Bus	0	0.00012	0.00	$3.78	**$0.00**	---	0.00010	---	$4.69	---	0	0.00010	0.00	$4.86
36	Heavy Rail	0	0.00013	0.00	$3.78	**$0.00**	---	0.00013	---	$4.69	---	0	0.00013	0.00	$4.86
37	Light Rail / Streetcar	0	0.00019	0.00	$3.78	**$0.00**	---	0.00019	---	$4.69	---	0	0.00020	0.00	$4.86
38	Commuter Rail - New diesel locomotive or DMU	0	0.00055	0.00	$3.78	**$0.00**	---	0.00055	---	$4.69	---	0	0.00055	0.00	$4.86
39	Commuter Rail - Used diesel locomotive	0	0.00436	0.00	$3.78	**$0.00**	---	0.00126	---	$4.69	---	0	0.00044	0.00	$4.86
40	Commuter Rail - Electric or EMU	0	0.00024	0.00	$3.78	**$0.00**	---	0.00023	---	$4.69	---	0	0.00024	0.00	$4.86
41	**TOTAL CHANGE**	**8,047,385**	---	**4,828.43**	---	**$18,251.47**	---	---	---	---	---	**8,874,462**	---	**1,863.64**	---

Air Quality: Particulate Matter ($PM_{2.5}$)

		Current Year					Horizon - 10 Years					Horizon - 20 Years			
Line	Mode	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (kg) / VMT	Emissions Decrease (Increase) (kg)	Monetization Factor ($ / kg)
42	Automobile	8,047,385	0.000010	80.47	$850.50	**$68,443.01**	---	0.000010	---	$1,076.63	---	8,874,462	0.000010	88.74	$1,120.50
43	Diesel Bus	0	0.000480	0.00	$850.50	**$0.00**	---	0.000090	---	$1,076.63	---	0	0.000030	0.00	$1,120.50
44	Hybrid Bus	0	0.000480	0.00	$850.50	**$0.00**	---	0.000090	---	$1,076.63	---	0	0.000030	0.00	$1,120.50
45	CNG Bus	0	0.000010	0.00	$850.50	**$0.00**	---	0.000010	---	$1,076.63	---	0	0.000010	0.00	$1,120.50
46	Electric Bus	0	0.000378	0.00	$702.00	**$0.00**	---	0.000313	---	$860.63	---	0	0.000299	0.00	$891.00
47	Heavy Rail	0	0.000413	0.00	$702.00	**$0.00**	---	0.000398	---	$860.63	---	0	0.000399	0.00	$891.00
48	Light Rail / Streetcar	0	0.000615	0.00	$702.00	**$0.00**	---	0.000593	---	$860.63	---	0	0.000593	0.00	$891.00
49	Commuter Rail - New diesel locomotive or DMU	0	0.000190	0.00	$850.50	**$0.00**	---	0.000190	---	$1,076.63	---	0	0.000190	0.00	$1,120.50
50	Commuter Rail - Used diesel locomotive	0	0.004600	0.00	$850.50	**$0.00**	---	0.001330	---	$1,076.63	---	0	0.000470	0.00	$1,120.50
51	Commuter Rail - Electric or EMU	0	0.000750	0.00	$702.00	**$0.00**	---	0.000722	---	$860.63	---	0	0.000723	0.00	$891.00
52	**TOTAL CHANGE**	**8,047,385**	---	**80.47**	---	**$68,443.01**	---	---	---	---	---	**8,874,462**	---	**88.74**	---

SMALL STARTS ENVIRONMENTAL BENEFITS TEMPLATE (page 4)

Greenhouse Gases (Carbon Dioxide Equivalent [CO_2e])

		Current Year					Horizon - 10 Years					Horizon - 20 Years			
Line	Mode	VMT Decrease (Increase)	Conversion Factor: Emissions (ton) / VMT	Emissions Decrease (Increase) (tons)	Monetization Factor ($ / ton)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (ton) / VMT	Emissions Decrease (Increase) (tons)	Monetization Factor ($ / ton)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Emissions (ton) / VMT	Emissions Decrease (Increase) (tons)	Monetization Factor ($ / ton)
53	Automobile	8,047,385	0.000532	4,281.21	$38.00	**$162,685.93**	---	0.000434	---	$38.00	---	8,874,462	0.000397	3,523.16	$38.00
54	Diesel Bus	0	0.003319	0.00	$38.00	**$0.00**	---	0.002854	---	$38.00	---	0	0.002721	0.00	$38.00
55	Hybrid Bus	0	0.002655	0.00	$38.00	**$0.00**	---	0.002283	---	$38.00	---	0	0.002177	0.00	$38.00
56	CNG Bus	0	0.002935	0.00	$38.00	**$0.00**	---	0.002524	---	$38.00	---	0	0.002406	0.00	$38.00
57	Electric Bus	0	0.002934	0.00	$38.00	**$0.00**	---	0.002441	---	$38.00	---	0	0.002303	0.00	$38.00
58	Heavy Rail	0	0.003211	0.00	$38.00	**$0.00**	---	0.003106	---	$38.00	---	0	0.003073	0.00	$38.00
59	Light Rail / Streetcar	0	0.004779	0.00	$38.00	**$0.00**	---	0.004623	---	$38.00	---	0	0.004574	0.00	$38.00
60	Commuter Rail - New diesel locomotive or DMU	0	0.007970	0.00	$38.00	**$0.00**	---	0.007970	---	$38.00	---	0	0.007970	0.00	$38.00
61	Commuter Rail - Used diesel locomotive	0	0.007970	0.00	$38.00	**$0.00**	---	0.007970	---	$38.00	---	0	0.007970	0.00	$38.00
62	Commuter Rail - Electric or EMU	0	0.005821	0.00	$38.00	**$0.00**	---	0.005632	---	$38.00	---	0	0.005572	0.00	$38.00
63	**TOTAL CHANGE**	**8,047,385**	---	**4,281.21**	---	**$162,685.93**	---	---	---	---	---	**8,874,462**	---	**3,523.16**	---

Energy Use (British Thermal Units [Btu])

		Current Year					Horizon - 10 Years					Horizon - 20 Years			
Line	Mode	VMT Decrease (Increase)	Conversion Factor: Energy Use (million Btu) / VMT	Energy Use Decrease (Increase) (million Btu)	Monetization Factor ($ / million Btu)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Energy Use (million Btu) / VMT	Energy Use Decrease (Increase) (million Btu)	Monetization Factor ($ / million Btu)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Energy Use (million Btu) / VMT	Energy Use Decrease (Increase) (million Btu)	Monetization Factor ($ / million Btu)
64	Automobile	8,047,385	0.007559	60,830.18	$1.72	**$104,627.91**	---	0.006167	---	$1.72	---	8,874,462	0.005633	49,989.84	$1.72
65	Diesel Bus	0	0.041436	0.00	$1.56	**$0.00**	---	0.035635	---	$1.56	---	0	0.033978	0.00	$1.56
66	Hybrid Bus	0	0.033149	0.00	$1.56	**$0.00**	---	0.028508	---	$1.56	---	0	0.027182	0.00	$1.56
67	CNG Bus														
68	Electric Bus														
69	Heavy Rail														
70	Light Rail / Streetcar														
71	Commuter Rail - New diesel locomotive or DMU	0	0.096138	0.00	$1.56	**$0.00**	---	0.096138	---	$1.56	---	0	0.096138	0.00	$1.56
72	Commuter Rail - Used diesel locomotive	0	0.096138	0.00	$1.56	**$0.00**	---	0.096138	---	$1.56	---	0	0.096138	0.00	$1.56
73	Commuter Rail - Electric or EMU														
74	**TOTAL CHANGE**	**8,047,385**	---	**60,830.18**	---	**$104,627.91**	---	---	---	---	---	**8,874,462**	---	**49,989.84**	---

SMALL STARTS ENVIRONMENTAL BENEFITS TEMPLATE (page 5)

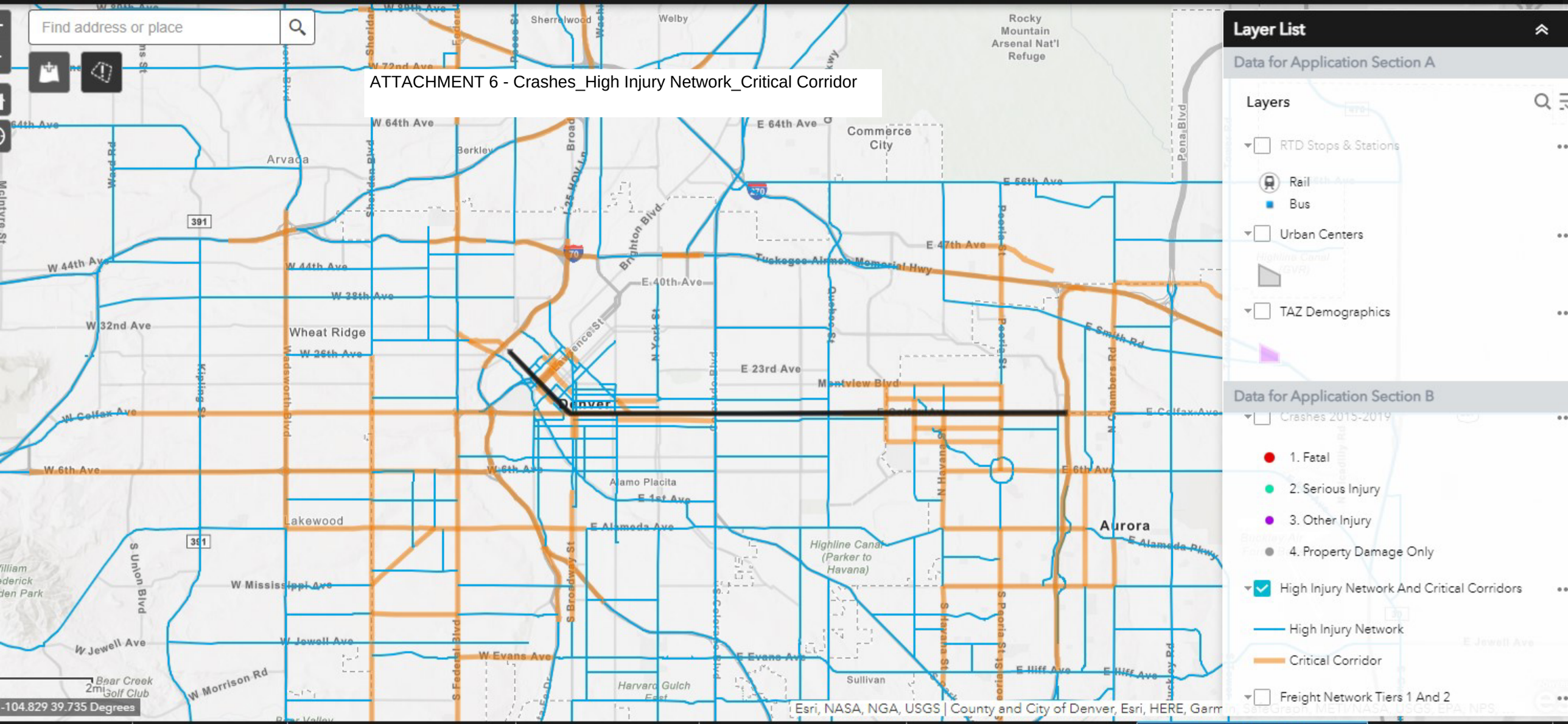
Safety: Fatalities

Line	Mode	Current Year					Horizon - 10 Years					Horizon - 20 Years			
		VMT Decrease (Increase)	Conversion Factor: Fatalities / VMT	Fatality Decrease (Increase)	Monetization Factor ($ / fatality)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Fatalities / VMT	Fatality Decrease (Increase)	Monetization Factor ($ / fatality)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Fatalities / VMT	Fatality Decrease (Increase)	Monetization Factor ($ / fatality)
75	Automobile	8,047,385	0.000000013	0.10	$9,100,000	**$952,005.60**	---	0.000000013	---	$9,100,000	---	8,874,462	0.000000013	0.12	$9,100,000
76	Diesel Bus	0	0.000000004	0.00	$9,100,000	**$0.00**	---	0.000000004	---	$9,100,000	---	0	0.000000004	0.00	$9,100,000
77	Hybrid Bus	0	0.000000004	0.00	$9,100,000	**$0.00**	---	0.000000004	---	$9,100,000	---	0	0.000000004	0.00	$9,100,000
78	CNG Bus	0	0.000000004	0.00	$9,100,000	**$0.00**	---	0.000000004	---	$9,100,000	---	0	0.000000004	0.00	$9,100,000
79	Electric Bus	0	0.000000004	0.00	$9,100,000	**$0.00**	---	0.000000004	---	$9,100,000	---	0	0.000000004	0.00	$9,100,000
80	Heavy Rail	0	0.000000007	0.00	$9,100,000	**$0.00**	---	0.000000007	---	$9,100,000	---	0	0.000000007	0.00	$9,100,000
81	Light Rail / Streetcar	0	0.000000009	0.00	$9,100,000	**$0.00**	---	0.000000009	---	$9,100,000	---	0	0.000000009	0.00	$9,100,000
82	Commuter Rail - New diesel locomotive or DMU	0	0.000000012	0.00	$9,100,000	**$0.00**	---	0.000000012	---	$9,100,000	---	0	0.000000012	0.00	$9,100,000
83	Commuter Rail - Used diesel locomotive	0	0.000000012	0.00	$9,100,000	**$0.00**	---	0.000000012	---	$9,100,000	---	0	0.000000012	0.00	$9,100,000
84	Commuter Rail - Electric or EMU	0	0.000000012	0.00	$9,100,000	**$0.00**	---	0.000000012	---	$9,100,000	---	0	0.000000012	0.00	$9,100,000
85	**TOTAL CHANGE**	**8,047,385**	---	**0.10**	---	**$952,005.60**	---	---	---	---	---	**8,874,462**	---	**0.12**	---

Safety: Injuries

Line	Mode	Current Year					Horizon - 10 Years					Horizon - 20 Years			
		VMT Decrease (Increase)	Conversion Factor: Injuries / VMT	Injury Decrease (Increase)	Monetization Factor ($ / injury)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Injuries / VMT	Injury Decrease (Increase)	Monetization Factor ($ / injury)	Value of Improvement [1]	VMT Decrease (Increase)	Conversion Factor: Injuries / VMT	Injury Decrease (Increase)	Monetization Factor ($ / injury)
86	Automobile	8,047,385	0.000000195	1.57	$490,000	**$768,927.60**	---	0.000000195	---	$490,000	---	8,874,462	0.000000195	1.73	$490,000
87	Diesel Bus	0	0.000001824	0.00	$490,000	**$0.00**	---	0.000001824	---	$490,000	---	0	0.000001824	0.00	$490,000
88	Hybrid Bus	0	0.000001824	0.00	$490,000	**$0.00**	---	0.000001824	---	$490,000	---	0	0.000001824	0.00	$490,000
89	CNG Bus	0	0.000001824	0.00	$490,000	**$0.00**	---	0.000001824	---	$490,000	---	0	0.000001824	0.00	$490,000
90	Electric Bus	0	0.000001458	0.00	$490,000	**$0.00**	---	0.000001458	---	$490,000	---	0	0.000001458	0.00	$490,000
91	Heavy Rail	0	0.000000155	0.00	$490,000	**$0.00**	---	0.000000155	---	$490,000	---	0	0.000000155	0.00	$490,000
92	Light Rail / Streetcar	0	0.000001696	0.00	$490,000	**$0.00**	---	0.000001696	---	$490,000	---	0	0.000001696	0.00	$490,000
93	Commuter Rail - New diesel locomotive or DMU	0	0.000001746	0.00	$490,000	**$0.00**	---	0.000001746	---	$490,000	---	0	0.000001746	0.00	$490,000
94	Commuter Rail - Used diesel locomotive	0	0.000001746	0.00	$490,000	**$0.00**	---	0.000001746	---	$490,000	---	0	0.000001746	0.00	$490,000
95	Commuter Rail - Electric or EMU	0	0.000001746	0.00	$490,000	**$0.00**	---	0.000001746	---	$490,000	---	0	0.000001746	0.00	$490,000
96	**TOTAL CHANGE**	**8,047,385**	---	**1.57**	---	**$768,927.60**	---	---	---	---	---	**8,874,462**	---	**1.73**	---

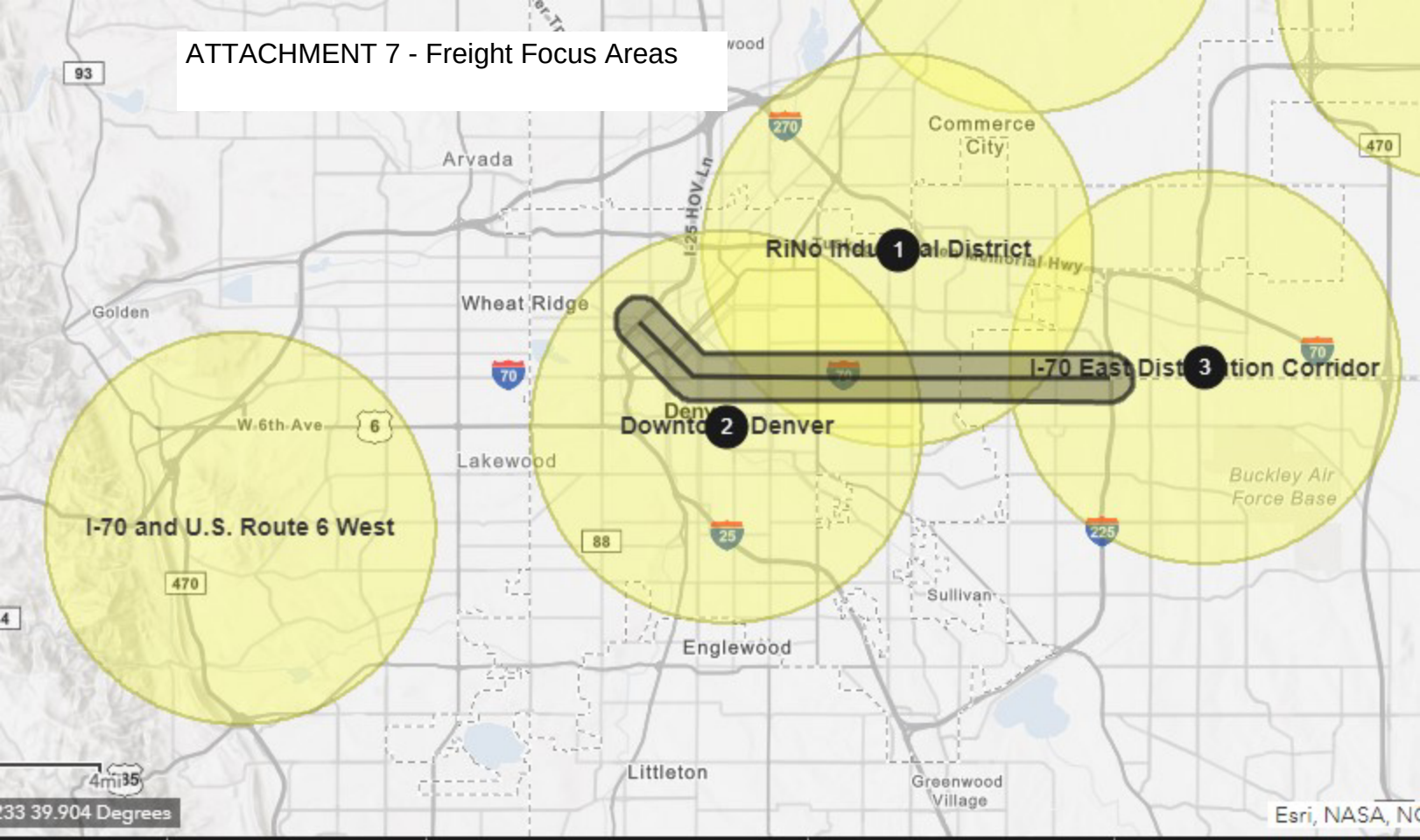
[1] Value will be positive for decreases and negative for increases.



Project Location | Urban Centers | RTD Stops & Stations (106) | TAZ Demographics | Pedestrian Focus Areas | Short Trip Opportunity Z... | Crashes 2015-2019 (6,4... | Freight Focus Areas

1. Fatal	2. Serious Injury	3. Other Injury	4. Property Damage Only
22	211	1,571	4,636

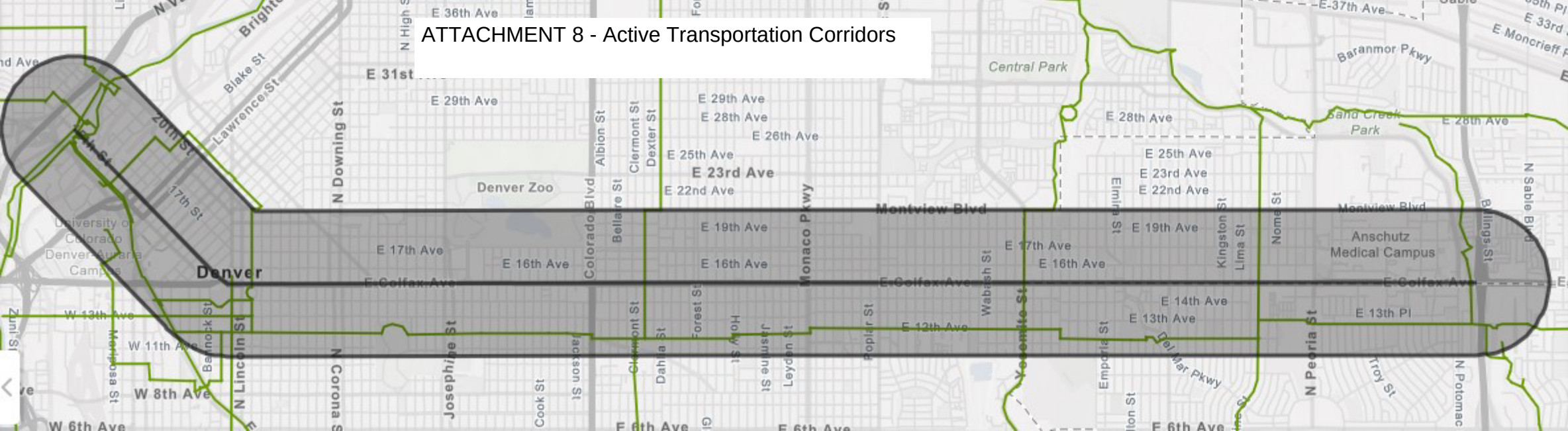
ATTACHMENT 7 - Freight Focus Areas

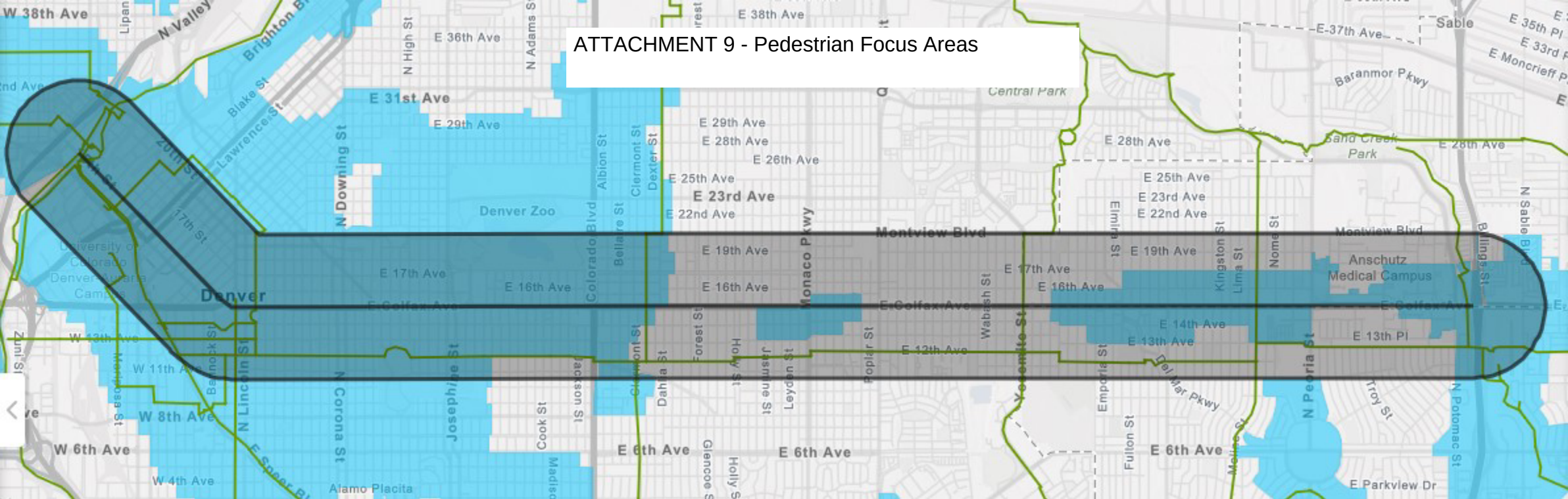


ct Location | Urban Centers | RTD Stops & Stations (502) | TAZ Demographics | Pedestrian Focus Areas

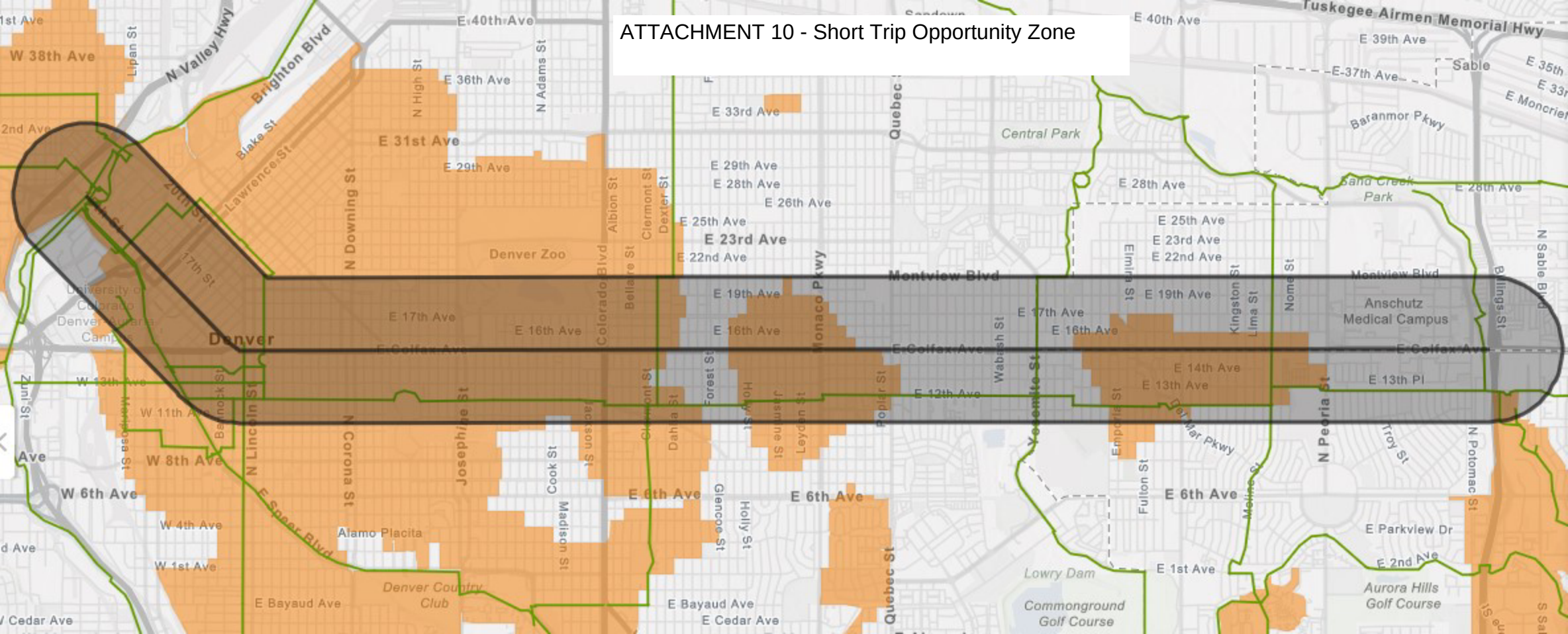
1	2	3
RiNo Industrial District	Downtown Denver	I-70 East Distribution Corridor

ATTACHMENT 8 - Active Transportation Corridors



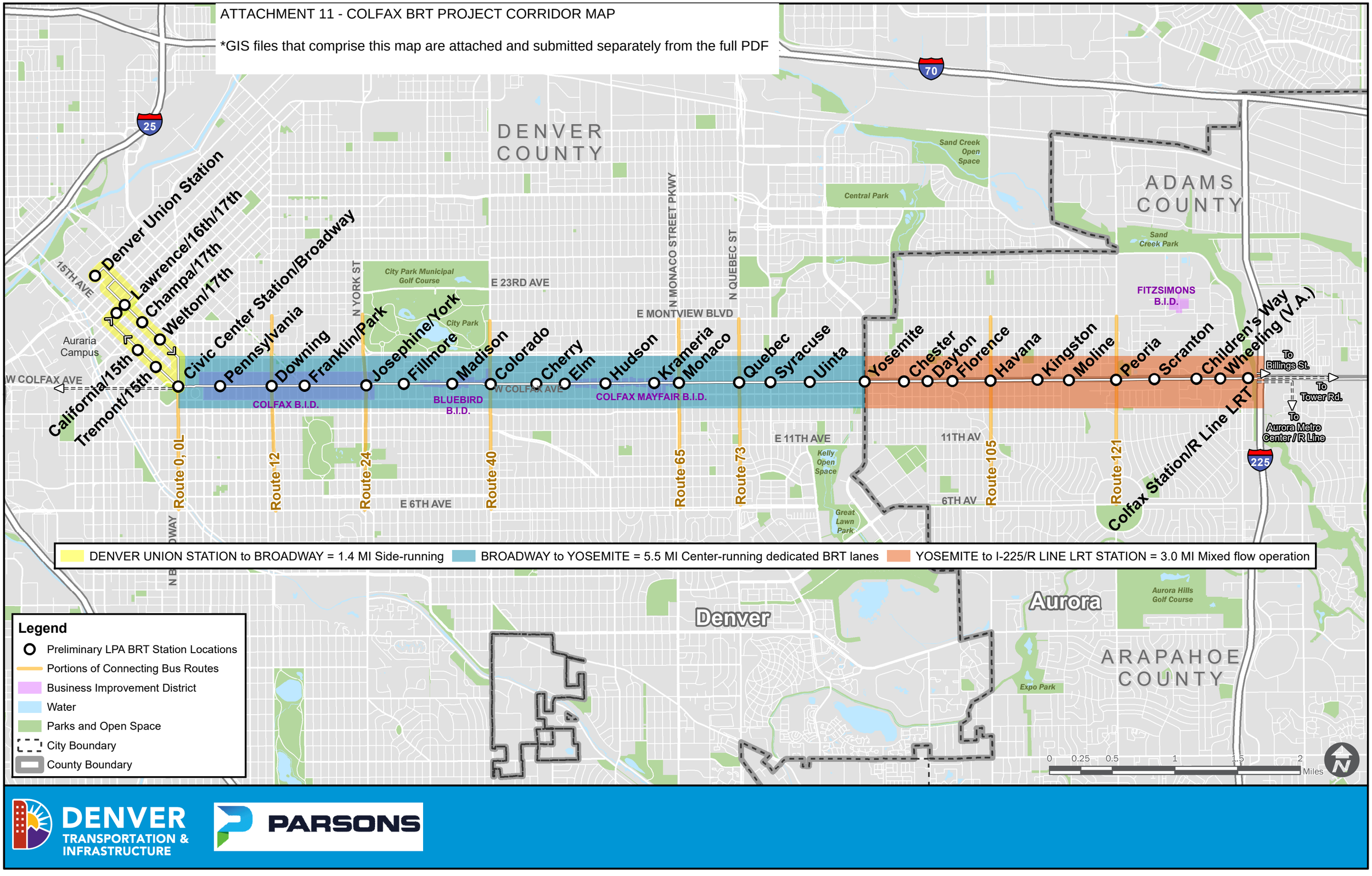

ATTACHMENT 9 - Pedestrian Focus Areas
W 38th Ave
E 38th Ave
E 36th Ave
E 31st Ave
E 29th Ave
E 28th Ave
E 26th Ave
E 25th Ave
E 23rd Ave
E 22nd Ave
E 19th Ave
E 17th Ave
E 16th Ave
E Colfax Ave
W 13th Ave
W 11th Ave
W 8th Ave
W 6th Ave
W 4th Ave
E 6th Ave
E 14th Ave
E 13th Ave
E 13th Pl
E-37th Ave
E Parkview Dr
Denver
Denver Zoo
Central Park
Montview Blvd
Anschutz Medical Campus
Alamo Placita
Sable
Baranmor Pkwy
Del Mar Pkwy
Monaco Pkwy
Colorado Blvd
Albion St
Clermont St
Dexter St
Bellaire St
Forest St
Holly St
Jasmine St
Leyden St
Poplar St
Wabash St
Yosemite St
Emporia St
Fulton St
Kingston St
Lima St
Nome St
Elmira St
N Downing St
N Lincoln St
N Corona St
N Peoria St
N Potomac St
Josephine St
Cook St
Jackson St
Dahlia St
Glencoe St
Holly St
Troy St
Blake St
Lawrence St
N Valley
Brighton Blvd
N High St
N Adams St
Bannock St
Zuni St
Lipan
Band Creek Park
University of Colorado Denver | Anschutz Medical Campus

ATTACHMENT 10 - Short Trip Opportunity Zone



ATTACHMENT 11 - COLFAX BRT PROJECT CORRIDOR MAP

*GIS files that comprise this map are attached and submitted separately from the full PDF



DENVER TRANSPORTATION & INFRASTRUCTURE

PARSONS