

**I-70 Truck-Only Lanes Project
Greenhouse Gas Emissions Methodology, Assumptions and Calculations**

	No-Build Alternative Annual VMT				Build Alternative Annual VMT		
	2000 VMT	2020 VMT	2030 VMT	2050 VMT	2020 VMT	2030 VMT	2050 VMT
200-Mile I-70 Corridor	2,652,893,000	4,963,963,500	5,840,328,500	8,084,527,963	5,116,894,120	6,063,680,030	8,515,221,858
30-Mile Section	333,099,000	728,649,500	858,151,500	1,190,294,852	744,311,650	882,723,300	1,241,549,780

VMT Savings (Increases) NB-Build		
2020	2030	2050
(55,819,676,300)	(81,523,308,450)	(157,203,271,720)
(5,716,684,750)	(8,968,707,000)	(18,708,048,632)

Annual Growth Rates, 2020-2030

200	0.016391138
30	0.016493321
<input type="checkbox"/> 200	0.017121851
30	0.017201466

Fuel Economy Estimates from MOBILE 6	MPG
Passenger vehicles (cars and light duty trucks combined)	20.3
Heavy vehicles	6

Greenhouse Gas Emissions	lbs	KG
CO ₂ emissions from a gallon of gasoline	19.4	8.8
CO ₂ emissions from a gallon of diesel fuel	22.2	10.1

	Passenger Vehicles						
	No-Build Alternative - Annual Metric Tons of CO ₂ e				Build Alternative - Annual Metric Tons of CO ₂ e		
	2000	2020	2030	2050	2020	2030	2050
200-Mile I-70 Corridor	847,385	1,585,585	1,865,513	2,582,354	1,634,434	1,936,856	2,719,926
30-Mile Section	106,398	232,745	274,110	380,203	237,747	281,959	396,575

Annual Metric Tons CO ₂ e (Increases) NB-Build		
2020	2030	2050
(48,849)	(71,343)	(137,572)
(5,003)	(7,849)	(16,372)

	Heavy Vehicles						
	No-Build Alternative - Annual Metric Tons of CO ₂ e				Build Alternative - Annual Metric Tons of CO ₂ e		
	2000	2020	2030	2050	2020	2030	2050
200-Mile I-70 Corridor	1,410,222	2,638,738	3,104,596	4,297,565	2,720,033	3,223,325	4,526,513
30-Mile Section	177,068	387,335	456,175	632,736	395,660	469,237	659,982

Annual Metric Tons CO ₂ e (Increases) NB-Build		
2020	2030	2050
(81,295)	(118,729)	(228,948)
(8,326)	(13,062)	(27,246)

	Passenger Vehicles						
	No-Build Alternative - Costs of GHG Emissions				Build Alternative - Costs of GHG Emissions		
	2000	2020	2030	2050	2020	2030	2050
200-Mile I-70 Corridor	\$27,963,707	\$52,324,319	\$61,561,938	\$85,217,674	\$53,936,336	\$63,916,250	\$89,757,547
30-Mile Section	\$3,511,142	\$7,680,574	\$9,045,633	\$12,546,701	\$7,845,666	\$9,304,641	\$13,086,971

GHG Emissions Costs (Increases) NB-Build		
2020	2030	2050
\$ (1,612,016)	\$ (2,354,312)	\$ (4,539,873)
\$ (165,092)	\$ (259,007)	\$ (540,270)

	Heavy Vehicles						
	No-Build Alternative - Costs of GHG Emissions				Build Alternative - Costs of GHG Emissions		
	2000	2020	2030	2050	2020	2030	2050
200-Mile I-70 Corridor	\$46,537,328	\$87,078,370	\$102,451,657	\$141,819,641	\$89,761,095	\$106,369,713	\$149,374,918
30-Mile Section	\$5,843,258	\$12,782,046	\$15,053,784	\$20,880,278	\$13,056,793	\$15,484,825	\$21,779,397

GHG Emissions Costs (Increases) NB-Build		
2020	2030	2050
\$ (2,682,725)	\$ (3,918,056)	\$ (7,555,278)
\$ (274,747)	\$ (431,041)	\$ (899,119)