Appendix A

Air Quality and Greenhouse Gas Emissions

StanCOG 2022 RTP/SCS Air Quality Emission Calculations

Scenario	VMT	ROG (tons/day)	NO_X (tons/day)	PM_{10} (tons/day)[1]	$PM_{2.5}$ (tons/day)[1]	Fugitive PM_{10} (tons/day)[2]	Fugitive $PM_{2.5}$ (tons/day)[2]	CO (tons/day)	SOx (tons/day)	CO2e (tons/day)	CO2e (metric tons/year)
2022 StanCOG Baseline											
On-Road Motor Vehicles	11,459,827.80	2.626	5.228	0.412	0.170	0.348	0.110	21.490	0.056	5,626	1,862,825
2046 Project (Scenario D)											
On-Road Motor Vehicles	14,922,100.00	1.288	2.918	0.477	0.174	0.437	0.136	12.053	0.049	5,025	1,663,974
Difference (2046 RTP/SCS - Baseline)	3,462,272.20	-1.338	-2.310	0.065	0.004	0.089	0.027	-9.436	-0.006	-600.54	-198,851.47
%	30%	-0.510	-0.442	0.158	0.024	0.257	0.244	-0.439	-0.111	-11%	-11%

Notes

Annual emissions - Total

1) Includes tire and break wear in the total PM

2) Includes only tire and break wear

Scenario	Diesel PM2.5 (tons/day)	Diesel PM10 (tons/day)1	Diesel NOX (tons/day)	Diesel SOX (tons/day)	Diesel CO (tons/day)
2022 StanCOG Baseline					
On-Road Motor Vehicles	0.04	0.04	3.43	0.02	0.81
2046 Project (Scenario D)					
On-Road Motor Vehicles	0.03	0.03	2.31	0.02	0.84
Difference (2046 RTP/SCS - Baseline)	-29%	-29%	-33%	3%	3%

Notes

Diesel annual emissions -Total Exhaust (TOTEX)

Group	Area	GAI	Sub-Area	Cal. Year	Season	Title	Veh_Tech	EMFAC2011 Category	Population	Total_VMT	cVMT	eVMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	All Vehicles	All Vehicles	304,892.1	11,459,827.8	11,249,525.0	210,302.8	1,609,672.1	0.5305	0.0500	0.8015	1.38	0.6967	0.2330	0.5476
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	All Other Buses-Dsl	All Other Buses - Dsl	78.5	4,233.93273	4,233.9	0	698.9	0.0010	0.0000		0.0010			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	All Other Buses-NG	All Other Buses - Oth	1.39	75.34444	75.3	0	12.4	0.0001	0.0000		0.0001			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDA-Dsl	LDA - Dsl	399.9	12,551.68849	12,551.7	0	1,710.1	0.0005			0.0005			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDA-Elec	LDA - Oth	2,919.6	132,575.46937	0	132,575.5	14,753.0				0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDA-Gas	LDA - Gas	133,322.2	5,142,795.56741	5,142,795.6	0	614,814.1	0.0926		0.2885	0.3811	0.2639	0.0727	0.1855
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDA-Phe	LDA - Gas	2,591.5	124,706.87645	65,108.6	59,598.2	10,715.9	0.0003		0.0022	0.0025	0.0015	0.0005	0.0004
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDT1-Dsl	LDT1 - Dsl	10.3	119.01314	119.0	0	30.7	0.0000			0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDT1-Elec	LDT1 - Oth	4.75	193.22522	0	193.2	23.0				0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDT1-Gas	LDT1 - Gas	13,881.7	426,678.60627	426,678.6	0	59,410.1	0.0334		0.0616	0.0950	0.0710	0.0176	0.0540
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDT1-Phe	LDT1 - Gas	4.12	208.64813	100.2	108.4	17.0	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDT2-Dsl	LDT2 - Dsl	146.5	6,040.66535	6,040.7	0	696.5	0.0001			0.0001			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDT2-Elec	LDT2 - Oth	100.4	3,737.60981	0	3,737.6	517.8				0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDT2-Gas	LDT2 - Gas	55,661.1	2,071,629.31239	2,071,629.3	0	256,497.2	0.0543		0.1539	0.2081	0.1193	0.0314	0.0855
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LDT2-Phe	LDT2 - Gas	215.8	10,609.38730	5,280.6	5,328.8	892.2	0.0000		0.0002	0.0002	0.0001	0.0000	0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LHD1-Dsl	LHD1 - Dsl	6,948.7	246,902.42897	246,902.4	0	87,406.3	0.0762	0.0010		0.0772			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LHD1-Elec	LHD1 - Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LHD1-Gas	LHD1 - Gas	6,811.3	238,595.17169	238,595.2	0	101,478.8	0.0236	0.0050	0.0231	0.0517	0.0266	0.0066	0.0353
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LHD2-Dsl	LHD2 - Dsl	2,365.4	89,243.30566	89,243.3	0	29,753.6	0.0228	0.0003		0.0231			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LHD2-Elec	LHD2 - Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	LHD2-Gas	LHD2 - Gas	1,156.1	43,753.76663	43,753.8	0	17,224.0	0.0021	0.0008	0.0034	0.0064	0.0031	0.0008	0.0039
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	MCY-Gas	MCY - Gas	7,664.7	41,308.88655	41,308.9	0	15,329.5	0.0731		0.0303	0.1034	0.0472	0.0612	0.0657
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	MDV-Dsl	MDV - Dsl	875.9	34,011.09709	34,011.1	0	4,105.7	0.0007			0.0007			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	MDV-Elec	MDV - Oth	106.9	3,957.68265	0	3,957.7	550.3				0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	MDV-Gas	MDV - Gas	59,303.0	2,010,525.91148	2,010,525.9	0	267,254.7	0.0774		0.2345	0.3119	0.1548	0.0399	0.1128
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	MDV-Phe	MDV - Gas	206.7	9,889.54421	5,158.8	4,730.7	854.8	0.0000		0.0002	0.0002	0.0001	0.0000	0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	MH-Dsl	MH - Dsl	410.4	3,615.48960	3,615.5	0	41.0	0.0007			0.0007			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	MH-Gas	MH - Gas	1,031.0	8,747.00614	8,747.0	0	103.1	0.0014		0.0000	0.0015	0.0066	0.0017	0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	Motor Coach-Dsl	Motor Coach - Dsl	17.2	2,460.22343	2,460.2	0	395.3	0.0001	0.0001		0.0002			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	OBUS-Elec	OBUS - Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	OBUS-Gas	OBUS - Gas	110.5	4,778.88897	4,778.9	0	2,211.7	0.0009	0.0001	0.0006	0.0016	0.0004	0.0001	0.0004
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	PTO-Dsl	PTO-Dsl	0	7,577.25748	7,577.3	0		0.0007			0.0007			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	PTO-Elec	PTO-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	SBUS-Dsl	SBUS - Dsl	347.2	8,078.09665	8,078.1	0	5,027.4	0.0007	0.0001		0.0007			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	SBUS-Elec	SBUS - Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	SBUS-Gas	SBUS - Gas	144.6	7,171.86987	7,171.9	0	578.3	0.0004	0.0025	0.0003	0.0031	0.0002	0.0001	0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	SBUS-NG	SBUS-Oth	66.7	1,716.67026	1,716.7	0	965.2	0.0062	0.0011		0.0073			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 CAIRP Class 4-Dsl	T6 CAIRP small-Dsl	5.37	355.73698	355.7	0	123.3	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 CAIRP Class 4-Elec	T6 CAIRP small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 CAIRP Class 5-Dsl	T6 CAIRP small-Dsl	7.23	488.00717	488.0	0	166.1	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 CAIRP Class 5-Elec	T6 CAIRP small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 CAIRP Class 6-Dsl	T6 CAIRP small-Dsl	21.8	1,275.17670	1,275.2	0	500.7	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 CAIRP Class 6-Elec	T6 CAIRP small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 CAIRP Class 7-Dsl	T6 CAIRP heavy-Dsl	38.7	7,998.55283	7,998.6	0	888.7	0.0001	0.0000		0.0001			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 CAIRP Class 7-Elec	T6 CAIRP heavy-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Delivery Class 4-Dsl	T6 instate small-Dsl	92.1	3,094.47839	3,094.5	0	1,314.3	0.0005	0.0000		0.0005			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Delivery Class 4-Elec	T6 instate small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Delivery Class 5-Dsl	T6 instate small-Dsl	96.5	3,315.80988	3,315.8	0	1,377.5	0.0003	0.0000		0.0003			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Delivery Class 5-Elec	T6 instate small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Delivery Class 6-Dsl	T6 instate small-Dsl	296.0	10,275.50510	10,275.5	0	4,224.4	0.0009	0.0001		0.0010			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Delivery Class 6-Elec	T6 instate small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Delivery Class 7-Dsl	T6 instate heavy-Dsl	103.0	5,634.50988	5,634.5	0	1,470.4	0.0002	0.0000		0.0003			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Delivery Class 7-Elec	T6 instate heavy-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Delivery Class 7-NG	T6 instate heavy-NG	0.8682	47.15363	47.2	0	12.4	0.0000	0.0000		0.0001			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Other Class 4-Dsl	T6 instate small-Dsl	361.8	14,622.47480	14,622.5	0	4,182.8	0.0017	0.0002		0.0018			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Other Class 4-Elec	T6 instate small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Other Class 5-Dsl	T6 instate small-Dsl	701.3	31,263.18571	31,263.2	0	8,106.9	0.0009	0.0002		0.0010			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Other Class 5-Elec	T6 instate small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Other Class 6-Dsl	T6 instate small-Dsl	466.9	19,785.39672	19,785.4	0	5,397.1	0.0017	0.0002		0.0020			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Other Class 6-Elec	T6 instate small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Other Class 7-Dsl	T6 instate heavy-Dsl	341.6	15,441.77138	15,441.8	0	3,948.7	0.0005	0.0001		0.0006			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Other Class 7-Elec	T6 instate heavy-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Other Class 7-NG	T6 instate heavy-NG	4.20	253.05364	253.1	0	48.6	0.0002	0.0001		0.0003			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Tractor Class 6-Dsl	T6 instate small-Dsl	9.41	490.94563	490.9	0	108.7	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Tractor Class 6-Elec	T6 instate small-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Tractor Class 7-Dsl	T6 instate heavy-Dsl	380.8	23,673.73574	23,673.7	0	4,402.4	0.0008	0.0001		0.0009			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Tractor Class 7-Elec	T6 instate heavy-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Instate Tractor Class 7-NG	T6 instate heavy-NG	2.97	228.83376	228.8	0	34.3	0.0002	0.0000		0.0002			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 OOS Class 4-Dsl	T6 OOS small-Dsl	3.09	203.15076	203.2	0	71.0	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 OOS Class 5-Dsl	T6 OOS small-Dsl	4.15	278.68631	278.7	0	95.3	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 OOS Class 6-Dsl	T6 OOS small-Dsl	12.5	728.21530	728.2	0	287.8	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 OOS Class 7-Dsl	T6 OOS heavy-Dsl	21.2	5,295.03077	5,295.0	0	487.3	0.0001	0.0000		0.0001			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 4-Dsl	T6 Public-Dsl	30.6	977.76916	977.8	0	157.2	0.0001	0.0000		0.0001			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 4-Elec	T6 Public-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 4-NG	T6 Public-NG	1.29	54.95876	55.0	0	6.61	0.0001	0.0000		0.0001			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 5-Dsl	T6 Public-Dsl	79.9	2,874.86345	2,874.9	0	409.8	0.0002	0.0000		0.0002			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 5-Elec	T6 Public-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 5-NG	T6 Public-NG	6.79	284.19356	284.2	0	34.8	0.0003	0.0002		0.0004			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 6-Dsl	T6 Public-Dsl	77.1	2,593.64704	2,593.6	0	395.3	0.0003	0.0000		0.0004			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 6-Elec	T6 Public-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 6-NG	T6 Public-NG	3.56	148.03687	148.0	0	18.3	0.0001	0.0001		0.0002			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 7-Dsl	T6 Public-Dsl	119.0	5,054.28116	5,054.3	0	610.5	0.0006	0.0001		0.0006			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 7-Elec	T6 Public-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Public Class 7-NG	T6 Public-NG	8.04	434.75196	434.8	0	41.2	0.0004	0.0002		0.0006			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Utility Class 5-Dsl	T6 Utility-Dsl	16.6	675.98401	676.0	0	212.4	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Utility Class 5-Elec	T6 Utility-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Utility Class 5-NG	T6 Utility-NG	0.0423	1.68374	1.68	0	0.5420	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Utility Class 6-Dsl	T6 Utility-Dsl	3.16	127.48138	127.5	0	40.5	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Utility Class 6-Elec	T6 Utility-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Utility Class 6-NG	T6 Utility-NG	0.0149	0.58410	0.5841	0	0.1905	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Utility Class 7-Dsl	T6 Utility-Dsl	3.61	177.70650	177.7	0	46.3	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Utility Class 7-Elec	T6 Utility-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6 Utility Class 7-NG	T6 Utility-NG	0.0104	0.47514	0.4751	0	0.1334	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6TS-Elec	T6TS - Gas	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T6TS-Gas	T6TS - Gas	426.6	19,621.40786	19,621.4	0	8,535.1	0.0040	0.0007	0.0029	0.0075	0.0018	0.0004	0.0035
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 CAIRP Class 8-Dsl	T7 CAIRP-Dsl	739.8	151,621.69302	151,621.7	0	17,001.3	0.0041	0.0097		0.0138			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 CAIRP Class 8-Elec	T7 CAIRP-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 NNOOS Class 8-Dsl	T7 NNOOS-Dsl	663.2	179,263.58599	179,263.6	0	15,241.2	0.0038	0.0108		0.0146			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 NOOS Class 8-Dsl	T7 NOOS-Dsl	276.5	65,123.27653	65,123.3	0	6,353.7	0.0019	0.0045		0.0064			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Other Port Class 8-Dsl	T7 Other Port-Dsl	15.3	2,640.28232	2,640.3	0	250.3	0.0002	0.0001		0.0003			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Other Port Class 8-Elec	T7 Other Port-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 POAK Class 8-Dsl	T7 POAK-Dsl	66.8	6,564.35547	6,564.4	0	1,093.3	0.0006	0.0003		0.0009			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 POAK Class 8-Elec	T7 POAK-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 POLA Class 8-Dsl	T7 POLA-Dsl	67.2	8,772.27406	8,772.3	0	1,099.1	0.0011	0.0003		0.0014			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 POLA Class 8-Elec	T7 POLA-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 POLA Class 8-NG	T7 POLA-NG	0.5497	71.88436	71.9	0	8.99	0.0001	0.0000		0.0001			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Public Class 8-Dsl	T7 Public-Dsl	261.0	10,948.17013	10,948.2	0	1,339.0	0.0018	0.0004		0.0022			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Public Class 8-Elec	T7 Public-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Public Class 8-NG	T7 Public-NG	15.7	777.60767	777.6	0	80.7	0.0016	0.0004		0.0020			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 SWCV Class 8-Dsl	T7 SWCV-Dsl	80.7	5,230.73043	5,230.7	0	371.2	0.0002	0.0001		0.0003			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 SWCV Class 8-Elec	T7 SWCV-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 SWCV Class 8-NG	T7 SWCV-NG	39.8	2,571.18237	2,571.2	0	182.9	0.0147	0.0008		0.0155			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Single Concrete/Transit Mix Class 8-Dsl	T7 Single-Dsl	74.3	5,205.42125	5,205.4	0	699.7	0.0001	0.0002		0.0002			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Single Concrete/Transit Mix Class 8-Elec	Single Concrete/Transit Mix	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Single Concrete/Transit Mix Class 8-NG	T7 Single-NG	2.32	158.72693	158.7	0	21.9	0.0002	0.0001		0.0003			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Single Dump Class 8-Dsl	T7 Single-Dsl	127.3	7,362.93467	7,362.9	0	1,199.1	0.0003	0.0003		0.0006			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Single Dump Class 8-Elec	T7 Single Dump-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Single Dump Class 8-NG	T7 Single-NG	4.48	261.24105	261.2	0	42.2	0.0003	0.0002		0.0005			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Single Other Class 8-Dsl	T7 Single-Dsl	427.0	24,265.42107	24,265.4	0	4,021.9	0.0009	0.0010		0.0020			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Single Other Class 8-Elec	T7 Single Other-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Single Other Class 8-NG	T7 Single-NG	15.7	906.83829	906.8	0	147.9	0.0011	0.0006		0.0017			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Tractor Class 8-Dsl	T7 Tractor-Dsl	1,221.0	99,995.48957	99,995.5	0	17,741.7	0.0043	0.0053		0.0095			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Tractor Class 8-Elec	T7 Tractor-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Tractor Class 8-NG	T7 Tractor-NG	21.2	1,757.03544	1,757.0	0	307.4	0.0020	0.0015		0.0035			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Utility Class 8-Dsl	T7 Utility-Dsl	11.4	535.09482	535.1	0	145.3	0.0000	0.0000		0.0000			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7 Utility Class 8-Elec	T7 Utility-Oth	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7IS-Elec	T7IS - Gas	0	0.00000							0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	T7IS-Gas	T7IS - Gas	3.83	73.78646	73.8	0	76.6	0.0005		0.0000	0.0005	0.0001	0.0000	0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	UBUS-Dsl	UBUS - Dsl	53.5	5,608.38535	5,608.4	0	214.2	0.0005			0.0005			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	UBUS-Elec	UBUS - Oth	3.62	72.64796	0	72.6	14.5				0			
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	UBUS-Gas	UBUS - Gas	13.3	743.49886	743.5	0	53.3	0.0000		0.0000	0.0001	0.0000	0.0000	0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-202	UBUS-NG	UBUS - NG	34.6	3,030.35633	3,030.4	0	138.5	0.0067			0.0067			

Veh_Tech	TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX	ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_TOTAL	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX	NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX	CO2_STREX
All Vehicles	2.86	0.3787	0.0376	0.7323	1.15	0.6967	0.2330	0.5476	2.63	14.5	0.5069	6.48	21.5	3.87	0.4654	0.8961	5.23	5,431.2	84.9	109.7
All Other Buses-Dsl	0.0010	0.0009	0.0000		0.0009				0.0009	0.0024	0.0002		0.0026	0.0129	0.0004	0.0009	0.0142	5.38	0.0559	
All Other Buses-NG	0.0001	0.0000	0.0000		0.0000				0.0000	0.0003	0.0000		0.0003	0.0000	0.0000		0.0000	0.0820	0.0018	
LDA-Dsl	0.0005	0.0004			0.0004				0.0004	0.0046			0.0046	0.0037			0.0037	3.10		
LDA-Elec	0				0				0				0				0			
LDA-Gas	0.9032	0.0635		0.2635	0.3270	0.2639	0.0727	0.1855	0.8491	5.44		2.50	7.95	0.3026		0.1994	0.5020	1,586.2		44.8
LDA-Phe	0.0050	0.0002		0.0020	0.0022	0.0015	0.0005	0.0004	0.0047	0.0347		0.0153	0.0500	0.0005		0.0013	0.0018	20.6		0.7542
LDT1-Dsl	0.0000	0.0000			0.0000				0.0000	0.0002			0.0002	0.0002			0.0002	0.0506		
LDT1-Elec	0				0				0				0				0			
LDT1-Gas	0.2375	0.0229		0.0562	0.0791	0.0710	0.0176	0.0540	0.2217	1.16		0.5293	1.69	0.1025		0.0366	0.1391	156.8		5.23
LDT1-Phe	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001		0.0000	0.0001	0.0000		0.0000	0.0000	0.0318		0.0013
LDT2-Dsl	0.0001	0.0001			0.0001				0.0001	0.0009			0.0009	0.0004			0.0004	2.00		
LDT2-Elec	0				0				0				0				0			
LDT2-Gas	0.4443	0.0372		0.1405	0.1777	0.1193	0.0314	0.0855	0.4139	2.79		1.29	4.08	0.2448		0.1262	0.3711	802.9		24.0
LDT2-Phe	0.0003	0.0000		0.0002	0.0002	0.0001	0.0000	0.0000	0.0003	0.0028		0.0013	0.0041	0.0000		0.0001	0.0002	1.67		0.0740
LHD1-Dsl	0.0772	0.0670	0.0008		0.0678				0.0678	0.1989	0.0070		0.2058	0.7275	0.0181		0.7456	172.7	1.05	
LHD1-Elec	0				0				0				0				0			
LHD1-Gas	0.1202	0.0162	0.0034	0.0211	0.0407	0.0266	0.0066	0.0353	0.1092	0.3698	0.0281	0.3234	0.7213	0.0699	0.0003	0.0787	0.1489	242.4	0.8527	2.25
LHD2-Dsl	0.0231	0.0200	0.0003		0.0203				0.0203	0.0549	0.0024		0.0573	0.1872	0.0059		0.1931	76.2	0.5665	
LHD2-Elec	0				0				0				0				0			
LHD2-Gas	0.0141	0.0015	0.0006	0.0031	0.0051	0.0031	0.0008	0.0039	0.0129	0.0437	0.0048	0.0578	0.1063	0.0079	0.0000	0.0122	0.0201	47.9	0.1665	0.3821
MCY-Gas	0.2775	0.0622		0.0279	0.0901	0.0472	0.0612	0.0657	0.2642	0.7252		0.1443	0.8695	0.0319		0.0031	0.0349	7.04		0.6379
MDV-Dsl	0.0007	0.0006			0.0006				0.0006	0.0091			0.0091	0.0045			0.0045	15.1		
MDV-Elec	0				0				0				0				0			
MDV-Gas	0.6194	0.0531		0.2142	0.2673	0.1548	0.0399	0.1128	0.5748	3.23		1.54	4.77	0.3454		0.1832	0.5285	952.3		31.0
MDV-Phe	0.0004	0.0000		0.0002	0.0002	0.0001	0.0000	0.0000	0.0003	0.0028		0.0012	0.0040	0.0000		0.0001	0.0001	1.63		0.0911
MH-Dsl	0.0007	0.0006			0.0006				0.0006	0.0022			0.0022	0.0227			0.0227	4.27		
MH-Gas	0.0099	0.0010		0.0000	0.0010	0.0066	0.0017	0.0000	0.0094	0.0255		0.0004	0.0259	0.0058		0.0000	0.0058	18.6		0.0029
Motor Coach-Dsl	0.0002	0.0001	0.0001		0.0001				0.0001	0.0003	0.0010		0.0013	0.0058	0.0010	0.0008	0.0076	4.78	0.2026	
OBUS-Elec	0				0				0				0				0			
OBUS-Gas	0.0025	0.0006	0.0001	0.0005	0.0012	0.0004	0.0001	0.0004	0.0021	0.0132	0.0007	0.0115	0.0253	0.0042	0.0000	0.0011	0.0053	9.46	0.0451	0.0605
PTO-Dsl	0.0007	0.0006			0.0006				0.0006	0.0035			0.0035	0.0313			0.0313	17.8		
PTO-Elec	0				0				0				0				0			
SBUS-Dsl	0.0007	0.0006	0.0001		0.0007				0.0007	0.0017	0.0016		0.0034	0.0380	0.0088	0.0025	0.0493	10.2	0.8670	
SBUS-Elec	0				0				0				0				0			
SBUS-Gas	0.0035	0.0003	0.0017	0.0002	0.0022	0.0002	0.0001	0.0001	0.0026	0.0066	0.0131	0.0059	0.0256	0.0026	0.0001	0.0005	0.0032	6.48	0.3899	0.0260
SBUS-NG	0.0073	0.0001	0.0000		0.0001				0.0001	0.0201	0.0017		0.0218	0.0009	0.0004		0.0013	2.21	0.2883	
T6 CAIRP Class 4-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0003	0.0000	0.0001	0.0004	0.4447	0.0036	
T6 CAIRP Class 4-Elec	0				0				0				0				0			
T6 CAIRP Class 5-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0003	0.0000	0.0001	0.0005	0.6085	0.0049	
T6 CAIRP Class 5-Elec	0				0				0				0				0			
T6 CAIRP Class 6-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0000		0.0001	0.0008	0.0001	0.0003	0.0012	1.57	0.0143	
T6 CAIRP Class 6-Elec	0				0				0				0				0			
T6 CAIRP Class 7-Dsl	0.0001	0.0001	0.0000		0.0001				0.0001	0.0003	0.0001		0.0004	0.0057	0.0001	0.0006	0.0064	9.29	0.0258	
T6 CAIRP Class 7-Elec	0				0				0				0				0			
T6 Instate Delivery Class 4-Dsl	0.0005	0.0004	0.0000		0.0005				0.0005	0.0013	0.0007		0.0020	0.0079	0.0015	0.0019	0.0112	4.05	0.2163	
T6 Instate Delivery Class 4-Elec	0				0				0				0				0			
T6 Instate Delivery Class 5-Dsl	0.0003	0.0002	0.0000		0.0003				0.0003	0.0008	0.0007		0.0015	0.0057	0.0013	0.0021	0.0091	4.33	0.2252	
T6 Instate Delivery Class 5-Elec	0				0				0				0				0			
T6 Instate Delivery Class 6-Dsl	0.0010	0.0008	0.0001		0.0008				0.0008	0.0025	0.0023		0.0048	0.0182	0.0040	0.0066	0.0288	13.4	0.6869	
T6 Instate Delivery Class 6-Elec	0				0				0				0				0			
T6 Instate Delivery Class 7-Dsl	0.0003	0.0002	0.0000		0.0002				0.0002	0.0009	0.0007		0.0016	0.0094	0.0013	0.0022	0.0130	7.28	0.2428	
T6 Instate Delivery Class 7-Elec	0				0				0				0				0			
T6 Instate Delivery Class 7-NG	0.0001	0.0000	0.0000		0.0000				0.0000	0.0002	0.0000		0.0002	0.0000	0.0000		0.0000	0.0533	0.0041	
T6 Instate Other Class 4-Dsl	0.0018	0.0015	0.0002		0.0016				0.0016	0.0043	0.0029		0.0072	0.0388	0.0072	0.0059	0.0519	18.3	0.9506	
T6 Instate Other Class 4-Elec	0				0				0				0				0			
T6 Instate Other Class 5-Dsl	0.0010	0.0008	0.0002		0.0009				0.0009	0.0030	0.0057		0.0087	0.0319	0.0096	0.0152	0.0567	39.3	1.74	
T6 Instate Other Class 5-Elec	0				0				0				0				0			
T6 Instate Other Class 6-Dsl	0.0020	0.0015	0.0002		0.0017				0.0017	0.0047	0.0042		0.0089	0.0367	0.0076	0.0090	0.0533	24.7	1.17	
T6 Instate Other Class 6-Elec	0				0				0				0				0			
T6 Instate Other Class 7-Dsl	0.0006	0.0004	0.0001		0.0006				0.0006	0.0019	0.0028		0.0047	0.0247	0.0049	0.0073	0.0369	18.8	0.8800	
T6 Instate Other Class 7-Elec	0				0				0				0				0			
T6 Instate Other Class 7-NG	0.0003	0.0000	0.0000		0.0000				0.0000	0.0007	0.0002		0.0009	0.0000	0.0000		0.0000	0.2538	0.0220	
T6 Instate Tractor Class 6-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0001		0.0001	0.0006	0.0001	0.0002	0.0010	0.5752	0.0238	
T6 Instate Tractor Class 6-Elec	0				0				0				0				0			
T6 Instate Tractor Class 7-Dsl	0.0009	0.0007	0.0001		0.0008				0.0008	0.0028	0.0029		0.0057	0.0363	0.0054	0.0076	0.0493	28.1	0.9809	
T6 Instate Tractor Class 7-Elec	0				0				0				0				0			
T6 Instate Tractor Class 7-NG	0.0002	0.0000	0.0000		0.0000				0.0000	0.0007	0.0001		0.0008	0.0000	0.0000		0.0000	0.2264	0.0153	
T6 OOS Class 4-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0002	0.0000	0.0000	0.0002	0.2538	0.0021	
T6 OOS Class 5-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0002	0.0000	0.0001	0.0003	0.3474	0.0028	
T6 OOS Class 6-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0001	0.0005	0.0000	0.0002	0.0007	0.8982	0.0082	
T6 OOS Class 7-Dsl	0.0001	0.0001	0.0000		0.0001				0.0001	0.0002	0.0000		0.0003	0.0039	0.0001	0.0003	0.0043	6.14	0.0142	
T6 Public Class 4-Dsl	0.0001	0.0001	0.0000		0.0001				0.0001	0.0002	0.0001		0.0004	0.0092	0.0018	0.0001	0.0110	1.35	0.1172	
T6 Public Class 4-Elec	0				0				0				0				0			
T6 Public Class 4-NG	0.0001	0.0000	0.0000		0.0000				0.0000	0.0002	0.0001		0.0003	0.0000	0.0000		0.0000	0.0579	0.0086	
T6 Public Class 5-Dsl	0.0002	0.0002	0.0000		0.0002				0.0002	0.0005	0.0006		0.0011	0.0118	0.0035	0.0005	0.0157	3.89	0.3133	
T6 Public Class 5-Elec	0				0				0				0				0			
T6 Public Class 5-NG	0.0004	0.0000	0.0000		0.0000				0.0000	0.0010	0.0003		0.0013	0.0001	0.0001		0.0001	0.3053	0.0451	
T6 Public Class 6-Dsl	0.0004	0.0003	0.0000		0.0003				0.0003	0.0006	0.0005		0.0011	0.0179	0.0038	0.0003	0.0220	3.57	0.2962	
T6 Public Class 6-Elec	0				0				0				0				0			
T6 Public Class 6-NG	0.0002	0.0000	0.0000		0.0000				0.0000	0.0005	0.0002		0.0007	0.0000	0.0000		0.0001	0.1575	0.0240	
T6 Public Class 7-Dsl	0.0006	0.0005	0.0001		0.0006				0.0006	0.0012	0.0009		0.0021	0.0326	0.0048	0.0006	0.0380	6.87	0.4397	
T6 Public Class 7-Elec	0				0				0				0				0			
T6 Public Class 7-NG	0.0006	0.0000	0.0000		0.0000				0.0000	0.0015	0.0003		0.0018	0.0001	0.0001		0.0001	0.4639	0.0531	
T6 Utility Class 5-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0001		0.0002	0.0006	0.0002	0.0003	0.0011	0.8339	0.0310	
T6 Utility Class 5-Elec	0				0				0				0				0			
T6 Utility Class 5-NG	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0017	0.0001	
T6 Utility Class 6-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0002	0.1578	0.0060	
T6 Utility Class 6-Elec	0				0				0				0				0			
T6 Utility Class 6-NG	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0006	0.0001	
T6 Utility Class 7-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0002	0.2189	0.0067	
T6 Utility Class 7-Elec	0				0				0				0				0			
T6 Utility Class 7-NG	0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000	0.0005	0.0000	
T6TS-Elec	0				0				0				0				0			
T6TS-Gas	0.0133	0.0027	0.0005	0.0026	0.0058	0.0018	0.0004	0.0035	0.0116	0.0586	0.0071	0.0569	0.1226	0.0146	0.0000	0.0041	0.0188	39.7	0.2425	0.3481
T7 CAIRP Class 8-Dsl	0.0138	0.0036	0.0085		0.0121				0.0121	0.0149	0.1215		0.1364	0.3329	0.1052	0.0389	0.4770	261.3	20.6	
T7 CAIRP Class 8-Elec	0				0				0				0				0			
T7 NNOOS Class 8-Dsl	0.0146	0.0034	0.0095		0.0128				0.0128	0.0136	0.1375		0.1511	0.3407	0.1147	0.0370	0.4924	310.9	22.5	
T7 NOOS Class 8-Dsl	0.0064	0.0016	0.0039		0.0056				0.0056	0.0066	0.0564		0.0630	0.1472	0.0488	0.0146	0.2106	112.3	9.56	
T7 Other Port Class 8-Dsl	0.0003	0.0002	0.0001		0.0002				0.0002	0.0007	0.0007		0.0014	0.0091	0.0009	0.0005	0.0105	4.86	0.1556	
T7 Other Port Class 8-Elec	0				0				0				0				0			
T7 POAK Class 8-Dsl	0.0009	0.0006	0.0003		0.0008				0.0008	0.0020	0.0031		0.0052	0.0250	0.0038	0.0021	0.0309	12.1	0.6713	
T7 POAK Class 8-Elec	0				0				0				0				0			
T7 POLA Class 8-Dsl	0.0014	0.0010	0.0003		0.0012				0.0012	0.0033	0.0029		0.0062	0.0403	0.0041	0.0018	0.0462	16.3	0.7000	
T7 POLA Class 8-Elec	0				0				0				0				0			
T7 POLA Class 8-NG	0.0001	0.0000	0.0000		0.0000				0.0000	0.0009	0.0000		0.0009	0.0001	0.0000		0.0001	0.1106	0.0098	
T7 Public Class 8-Dsl	0.0022	0.0016	0.0003		0.0019				0.0019	0.0051	0.0027		0.0078	0.1140	0.0104	0.0040	0.1284	22.9	0.9559	
T7 Public Class 8-Elec	0				0				0				0				0			
T7 Public Class 8-NG	0.0020	0.0000	0.0000		0.0000				0.0000	0.0089	0.0006		0.0095	0.0006	0.0001		0.0007	1.31	0.0957	
T7 SWCV Class 8-Dsl	0.0003	0.0001	0.0001		0.0002				0.0002	0.0004	0.0010		0.0014	0.0396	0.0035	0.0012	0.0444	22.6	0.3267	
T7 SWCV Class 8-Elec	0				0				0				0				0			
T7 SWCV Class 8-NG	0.0155	0.0005	0.0000		0.0006				0.0006	0.0616	0.0030		0.0646	0.0093	0.0004		0.0097	4.58	0.2783	
T7 Single Concrete/Transit Mix Class 8-Dsl	0.0002	0.0001	0.0002		0.0002				0.0002	0.0004	0.0022		0.0026	0.0068	0.0019	0.0026	0.0113	9.56	0.3692	
T7 Single Concrete/Transit Mix Class 8-Elec	0				0				0				0				0			
T7 Single Concrete/Transit Mix Class 8-NG	0.0003	0.0000	0.0000		0.0000				0.0000	0.0014	0.0001		0.0015	0.0001	0.0000		0.0001	0.2115	0.0216	
T7 Single Dump Class 8-Dsl	0.0006	0.0003	0.0003		0.0006				0.0006	0.0012	0.0034		0.0046	0.0186	0.0039	0.0032	0.0257	13.5	0.6834	
T7 Single Dump Class 8-Elec	0				0				0				0				0			
T7 Single Dump Class 8-NG	0.0005	0.0000	0.0000		0.0000				0.0000	0.0026	0.0002		0.0029	0.0002	0.0001		0.0002	0.3676	0.0431	
T7 Single Other Class 8-Dsl	0.0020	0.0008	0.0009		0.0017				0.0017	0.0037	0.0116		0.0153	0.0556	0.0117	0.0113	0.0787	44.0	2.24	
T7 Single Other Class 8-Elec	0				0				0				0				0			
T7 Single Other Class 8-NG	0.0017	0.0000	0.0000		0.0000				0.0000	0.0090	0.0008		0.0098	0.0005	0.0002		0.0007	1.26	0.1502	
T7 Tractor Class 8-Dsl	0.0095	0.0037	0.0046		0.0084				0.0084	0.0149	0.0622		0.0771	0.2543	0.0625	0.0656	0.3824	172.4	11.9	
T7 Tractor Class 8-Elec	0				0				0				0				0			
T7 Tractor Class 8-NG	0.0035	0.0000	0.0000		0.0000				0.0000	0.0148	0.0023		0.0171	0.0008	0.0005		0.0013	2.31	0.3708	
T7 Utility Class 8-Dsl	0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0001		0.0002	0.0011	0.0001	0.0007	0.0019	1.02	0.0205	
T7 Utility Class 8-Elec	0				0				0				0				0			
T7IS-Elec	0				0				0				0				0			
T7IS-Gas	0.0007	0.0003		0.0000	0.0003	0.0001	0.0000	0.0001	0.0005	0.0176		0.0002	0.0178	0.0016		0.0001	0.0016	0.1964		0.0041
UBUS-Dsl	0.0005	0.0005			0.0005				0.0005	0.0005			0.0005	0.0051			0.0051	7.43		
UBUS-Elec	0				0				0				0				0			
UBUS-Gas	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0001	0.0003		0.0006	0.0008	0.0002		0.0001	0.0002	1.39		0.0053
UBUS-NG	0.0067	0.0001			0.0001				0.0001	0.0821			0.0821	0.0009			0.0009	3.99		

CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX	PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW	PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX	Fuel_GAS	Fuel_DSL	Fuel_NG
5,625.8	0.0598	0.0006	0.0033	0.0638	0.1211	0.2268	0.4115	0.0567	0.0006	0.0031	0.0603	0.0303	0.0793	0.1699	0.0536	0.0008	0.0012	0.0556	430.4	144.0	2.38
5.44	0.0003	0.0000		0.0003	0.0001	0.0002	0.0006	0.0003	0.0000		0.0003	0.0000	0.0001	0.0004	0.0001	0.0000		0.0001		0.4896	
0.0838	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0103
3.10	0.0002			0.0002	0.0001	0.0001	0.0005	0.0002			0.0002	0.0000	0.0000	0.0003	0.0000			0.0000		0.2786	
0				0	0.0012	0.0006	0.0018				0	0.0003	0.0002	0.0005				0			
1,631.0	0.0074		0.0015	0.0089	0.0454	0.0532	0.1074	0.0068		0.0014	0.0082	0.0113	0.0186	0.0381	0.0159		0.0005	0.0164	175.1		
21.4	0.0001		0.0000	0.0001	0.0011	0.0006	0.0018	0.0001		0.0000	0.0001	0.0003	0.0002	0.0006	0.0002		0.0000	0.0002	2.28		
0.0096	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000		0.0046	
0				0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000				0			
162.1	0.0011		0.0003	0.0014	0.0038	0.0052	0.0103	0.0010		0.0002	0.0013	0.0009	0.0018	0.0040	0.0016		0.0001	0.0016	17.6		
0.0331	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0035		
2.00	0.0001			0.0001	0.0001	0.0001	0.0002	0.0001			0.0001	0.0000	0.0000	0.0001	0.0000			0.0000		0.1706	
0				0	0.0000	0.0000	0.0001				0	0.0000	0.0000	0.0000				0			
826.9	0.0031		0.0007	0.0038	0.0183	0.0241	0.0462	0.0029		0.0008	0.0035	0.0046	0.0084	0.0165	0.0081		0.0003	0.0083	88.8		
1.75	0.0000		0.0000	0.0000	0.0001	0.0000	0.0002	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.1869		
173.8	0.0153	0.0002		0.0155	0.0033	0.0212	0.0400	0.0147	0.0002		0.0149	0.0038	0.0074	0.0231	0.0016	0.0000		0.0017		15.6	
0				0			0				0			0				0			
245.5	0.0005		0.0000	0.0005	0.0021	0.0205	0.0232	0.0005		0.0000	0.0005	0.0005	0.0072	0.0082	0.0024	0.0000	0.0000	0.0025	26.3		
76.8	0.0045	0.0001		0.0045	0.0012	0.0090	0.0147	0.0043	0.0001		0.0043	0.0003	0.0031	0.0078	0.0007	0.0000		0.0007		6.91	
0				0			0				0			0				0			
48.4	0.0001		0.0000	0.0001	0.0004	0.0044	0.0049	0.0001		0.0000	0.0001	0.0001	0.0015	0.0017	0.0005	0.0000	0.0000	0.0005	5.18		
7.68	0.0001		0.0001	0.0001	0.0002	0.0005	0.0009	0.0001		0.0001	0.0001	0.0000	0.0002	0.0004	0.0001		0.0000	0.0001	0.9955		
15.1	0.0003			0.0003	0.0003	0.0004	0.0010	0.0003			0.0003	0.0001	0.0001	0.0005	0.0001			0.0001		1.36	
0				0	0.0000	0.0000	0.0001				0	0.0000	0.0000	0.0000				0			
983.3	0.0031		0.0007	0.0039	0.0177	0.0243	0.0459	0.0029		0.0007	0.0036	0.0044	0.0085	0.0165	0.0096		0.0003	0.0099	105.8		
1.72	0.0000		0.0000	0.0000	0.0001	0.0000	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.1844		
4.27	0.0006			0.0006	0.0001	0.0002	0.0008	0.0006			0.0006	0.0000	0.0001	0.0007	0.0000			0.0000		0.3840	
18.6	0.0000		0.0000	0.0000	0.0001	0.0004	0.0006	0.0000		0.0000	0.0000	0.0000	0.0002	0.0002	0.0002		0.0000	0.0002	1.98		
4.98	0.0001	0.0000		0.0001	0.0000	0.0002	0.0003	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000		0.4482	
0				0			0				0			0				0			
9.57	0.0000		0.0000	0.0000	0.0001	0.0002	0.0003	0.0000		0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0001	1.02		
17.8	0.0001			0.0001			0.0001	0.0001			0.0001			0.0001	0.0002			0.0002		1.60	
0				0			0				0			0				0			
11.1	0.0002	0.0000		0.0002	0.0001	0.0004	0.0007	0.0002	0.0000		0.0002	0.0000	0.0001	0.0004	0.0001	0.0000		0.0001		0.9976	
0				0			0				0			0				0			
6.90	0.0000		0.0000	0.0000	0.0001	0.0004	0.0004	0.0000		0.0000	0.0000	0.0000	0.0001	0.0001	0.0001	0.0000	0.0000	0.0001	0.7984		
2.50	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.3079
0.4483	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0404	
0				0			0				0			0				0			
0.6133	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0552	
0				0			0				0			0				0			
1.59	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.1429	
0				0			0				0			0				0			
9.32	0.0001	0.0000		0.0001	0.0001	0.0004	0.0006	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.8367	
0				0			0				0			0				0			
4.27	0.0002	0.0000		0.0002	0.0000	0.0002	0.0004	0.0001	0.0000		0.0002	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000		0.3840	
0				0			0				0			0				0			
4.56	0.0001	0.0000		0.0001	0.0000	0.0002	0.0003	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000		0.4103	
0				0			0				0			0				0			
14.1	0.0003	0.0000		0.0003	0.0001	0.0005	0.0010	0.0003	0.0000		0.0003	0.0000	0.0002	0.0005	0.0001	0.0000		0.0001		1.27	
0				0			0				0			0				0			
7.52	0.0000	0.0000		0.0000	0.0001	0.0003	0.0004	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.6768	
0				0			0				0			0				0			
0.0075	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0071
19.3	0.0006	0.0000		0.0006	0.0002	0.0007	0.0015	0.0005	0.0000		0.0006	0.0000	0.0003	0.0009	0.0002	0.0000		0.0002		1.73	
0				0			0				0			0				0			
41.1	0.0003	0.0000		0.0003	0.0004	0.0015	0.0023	0.0003	0.0000		0.0003	0.0001	0.0005	0.0009	0.0004	0.0000		0.0004		3.70	
0				0			0				0			0				0			
25.9	0.0007	0.0000		0.0008	0.0003	0.0010	0.0020	0.0007	0.0000		0.0007	0.0001	0.0003	0.0011	0.0002	0.0000		0.0002		2.33	
0				0			0				0			0				0			
19.7	0.0002	0.0000		0.0002	0.0002	0.0008	0.0011	0.0001	0.0000		0.0002	0.0001	0.0003	0.0005	0.0002	0.0000		0.0002		1.77	
0				0			0				0			0				0			
0.2758	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0330
0.5960	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0539	
0				0			0				0			0				0			
29.1	0.0002	0.0000		0.0002	0.0003	0.0012	0.0017	0.0002	0.0000		0.0002	0.0001	0.0004	0.0007	0.0003	0.0000		0.0003		2.62	
0				0			0				0			0				0			
0.2417	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0297
0.2559	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0230	
0.3502	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0315	
0.9064	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0816	
6.16	0.0000	0.0000		0.0000	0.0001	0.0002	0.0004	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0001	0.0000		0.0001		0.5543	
1.46	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000		0.1318	
0				0			0				0			0				0			
0.0865	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0082
4.21	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000		0.3787	
0				0			0				0			0				0			
0.3503	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0431
3.87	0.0001	0.0000		0.0001	0.0000	0.0001	0.0003	0.0001	0.0000		0.0001	0.0000	0.0000	0.0002	0.0000	0.0000		0.0000		0.3484	
0				0			0				0			0				0			
0.1815	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0223
7.31	0.0002	0.0000		0.0002	0.0001	0.0003	0.0006	0.0002	0.0000		0.0002	0.0000	0.0001	0.0003	0.0001	0.0000		0.0001		0.6582	
0				0			0				0			0				0			
0.5170	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0636
0.8649	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0778	
0				0			0				0			0				0			
0.0019	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0002
0.1638	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0147	
0				0			0				0			0				0			
0.0007	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0001
0.2257	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0203	
0				0			0				0			0				0			
0.0005	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0001
0				0			0				0			0				0			
40.3	0.0000		0.0000	0.0000	0.0003	0.0010	0.0013	0.0000		0.0000	0.0000	0.0001	0.0003	0.0004	0.0004	0.0000	0.0000	0.0004	4.31		
281.9	0.0057	0.0000		0.0058	0.0060	0.0125	0.0243	0.0055	0.0000		0.0055	0.0015	0.0044	0.0114	0.0025	0.0002		0.0027		25.4	
0				0			0				0			0				0			
333.3	0.0063	0.0000		0.0063	0.0071	0.0147	0.0282	0.0060	0.0000		0.0061	0.0018	0.0051	0.0130	0.0030	0.0002		0.0032		30.0	
121.8	0.0025	0.0000		0.0025	0.0026	0.0054	0.0105	0.0024	0.0000		0.0024	0.0006	0.0019	0.0050	0.0011	0.0001		0.0012		11.0	
5.01	0.0001	0.0000		0.0001	0.0001	0.0003	0.0004	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000		0.4513	
0				0			0				0			0				0			
12.7	0.0002	0.0000		0.0002	0.0003	0.0007	0.0011	0.0002	0.0000		0.0002	0.0001	0.0002	0.0005	0.0001	0.0000		0.0001		1.15	
0				0			0				0			0				0			
17.0	0.0003	0.0000		0.0003	0.0003	0.0009	0.0015	0.0003	0.0000		0.0003	0.0001	0.0003	0.0007	0.0002	0.0000		0.0002		1.53	
0				0			0				0			0				0			
0.1204	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0148
23.8	0.0007	0.0000		0.0007	0.0004	0.0014	0.0025	0.0006	0.0000		0.0007	0.0001	0.0005	0.0013	0.0002	0.0000		0.0002		2.14	
0				0			0				0			0				0			
1.40	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.1723
22.9	0.0001	0.0000		0.0001	0.0002	0.0012	0.0015	0.0001	0.0000		0.0001	0.0001	0.0004	0.0006	0.0002	0.0000		0.0002		2.06	
0				0			0				0			0				0			
4.86	0.0000	0.0000		0.0000	0.0001	0.0006	0.0007	0.0000	0.0000		0.0000	0.0000	0.0002	0.0002	0.0002			0			0.5973
9.92	0.0001	0.0000		0.0001	0.0002	0.0005	0.0008	0.0001	0.0000		0.0001	0.0001	0.0002	0.0003	0.0001	0.0000		0.0001		0.8932	
0				0			0				0			0				0			
0.2331	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0287
14.2	0.0002	0.0000		0.0002	0.0003	0.0007	0.0011	0.0002	0.0000		0.0002	0.0001	0.0002	0.0005	0.0001	0.0000		0.0001		1.28	
0				0			0				0			0				0			
0.4107	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0505
46.2	0.0005	0.0000		0.0005	0.0010	0.0022	0.0037	0.0005	0.0000		0.0005	0.0002	0.0008	0.0015	0.0004	0.0000		0.0004		4.16	
0				0			0				0			0				0			
1.41	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.1736
184.2	0.0027	0.0000		0.0027	0.0040	0.0088	0.0156	0.0026	0.0000		0.0026	0.0010	0.0031	0.0067	0.0016	0.0001		0.0018		16.6	
0				0			0				0			0				0			
2.68	0.0000	0.0000		0.0000	0.0001	0.0002	0.0002	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001				0			0.3292
1.05	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0941	
0				0			0				0			0				0			
0				0			0				0			0				0			
0.2005	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0245		
7.43	0.0000			0.0000	0.0002	0.0007	0.0009	0.0000			0.0000	0.0000	0.0002	0.0003	0.0001			0.0001		0.6683	
0				0	0.0000	0.0000	0.0000				0	0.0000	0.0000	0.0000				0			
1.40	0.0000		0.0000	0.0000	0.0000	0.0001	0.0001	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.1492		
3.99	0.0000			0.0000	0.0001	0.0004	0.0005	0.0000			0.0000	0.0000	0.0001	0.0002				0			0.4906

Group	Area	GAI	Sub-Area	Cal_Year	Season	Title	Veh_Tech	EMFAC2011 Category	Population	Total_VMT	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX	NOx_IDLEX	NOx_STREX	NOx_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX	PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW	PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	All Other Buses-Dsl	All Other Buses - Dsl	78.5	4,233.9	0.0024	0.0002		0.0026	0.0129	0.0004	0.0009	0.0142	0.0003	0.0000		0.0003	0.0001	0.0002	0.0006	0.0003	0.0000		0.0003	0.0000	0.0001	0.0004	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	LDA-Dsl	LDA - Dsl	399.9	12,551.7	0.0046			0.0046	0.0037			0.0037	0.0002			0.0002	0.0001	0.0001	0.0005	0.0002			0.0002	0.0000	0.0000	0.0003	0.0000			0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	LDT1-Dsl	LDT1 - Dsl	10.3	119.0	0.0002			0.0002	0.0002			0.0002	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	LDT2-Dsl	LDT2 - Dsl	146.5	6,040.7	0.0009			0.0009	0.0004			0.0004	0.0001			0.0001	0.0001	0.0001	0.0002	0.0001			0.0001	0.0000	0.0000	0.0001	0.0000			0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	LHD1-Dsl	LHD1 - Dsl	6,948.7	246,992.4	0.1989	0.0070		0.2058	0.7275	0.0181		0.7456	0.0153	0.0002		0.0155	0.0033	0.0212	0.0400	0.0147	0.0002		0.0149	0.0008	0.0074	0.0231	0.0016	0.0000		0.0017
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	LHD2-Dsl	LHD2 - Dsl	2,365.4	89,243.3	0.0549	0.0024		0.0573	0.1872	0.0059		0.1931	0.0045	0.0001		0.0046	0.0012	0.0090	0.0147	0.0043	0.0001		0.0043	0.0003	0.0031	0.0078	0.0007	0.0000		0.0007
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	MDV-Dsl	MDV - Dsl	875.9	34,011.1	0.0091			0.0091	0.0045			0.0045	0.0003			0.0003	0.0003	0.0004	0.0010	0.0003			0.0003	0.0001	0.0001	0.0005	0.0001			0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	MH-Dsl	MH - Dsl	410.4	3,615.5	0.0022			0.0022	0.0227			0.0227	0.0006			0.0006	0.0001	0.0002	0.0008	0.0006			0.0006	0.0000	0.0001	0.0007	0.0000			0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	Motor Coach-Dsl	Motor Coach - Dsl	17.2	2,460.2	0.0003	0.0010		0.0013	0.0008	0.0010	0.0008	0.0026	0.0001	0.0000		0.0001	0.0000	0.0002	0.0003	0.0001	0.0000		0.0002	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	PTO-Dsl	PTO-Dsl	0	7,577.3	0.0035			0.0035	0.0313			0.0313	0.0001			0.0001			0.0001	0.0001			0.0001			0.0001	0.0002			0.0002
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	SBUS-Dsl	SBUS - Dsl	347.2	8,078.1	0.0017	0.0016		0.0034	0.0380	0.0088	0.0025	0.0493	0.0002	0.0000		0.0002	0.0001	0.0004	0.0007	0.0002	0.0000		0.0002	0.0000	0.0001	0.0004	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 CAIRP Class 4-Dsl	T6 CAIRP small-Dsl	5.37	355.7	0.0000	0.0000		0.0000	0.0003	0.0000	0.0001	0.0004	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 CAIRP Class 5-Dsl	T6 CAIRP small-Dsl	7.23	488.0	0.0000	0.0000		0.0000	0.0003	0.0000	0.0001	0.0005	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 CAIRP Class 6-Dsl	T6 CAIRP small-Dsl	21.8	1,275.2	0.0001	0.0000		0.0001	0.0008	0.0001	0.0003	0.0012	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 CAIRP Class 7-Dsl	T6 CAIRP heavy-Dsl	38.7	7,998.6	0.0003	0.0001		0.0004	0.0057	0.0001	0.0006	0.0064	0.0001	0.0000		0.0001	0.0001	0.0004	0.0006	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Delivery Class 4-Dsl	T6 instate small-Dsl	92.1	3,094.5	0.0013	0.0007		0.0020	0.0079	0.0015	0.0019	0.0112	0.0002	0.0000		0.0002	0.0000	0.0002	0.0004	0.0001	0.0000		0.0002	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Delivery Class 5-Dsl	T6 instate small-Dsl	96.5	3,315.8	0.0008	0.0007		0.0015	0.0057	0.0013	0.0021	0.0091	0.0001	0.0000		0.0001	0.0000	0.0002	0.0003	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Delivery Class 6-Dsl	T6 instate small-Dsl	296.0	10,275.5	0.0025	0.0023		0.0048	0.0182	0.0040	0.0066	0.0288	0.0003	0.0000		0.0003	0.0001	0.0005	0.0010	0.0003	0.0000		0.0003	0.0000	0.0002	0.0005	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Delivery Class 7-Dsl	T6 instate heavy-Dsl	103.0	5,634.5	0.0009	0.0007		0.0016	0.0094	0.0013	0.0022	0.0130	0.0000	0.0000		0.0000	0.0001	0.0003	0.0004	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Other Class 4-Dsl	T6 instate small-Dsl	361.8	14,622.5	0.0043	0.0029		0.0072	0.0388	0.0072	0.0059	0.0519	0.0006	0.0000		0.0006	0.0002	0.0007	0.0015	0.0005	0.0000		0.0006	0.0000	0.0003	0.0009	0.0002	0.0000		0.0002
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Other Class 5-Dsl	T6 instate small-Dsl	701.3	31,263.2	0.0030	0.0007		0.0037	0.0319	0.0096	0.0152	0.0567	0.0003	0.0000		0.0003	0.0004	0.0015	0.0023	0.0003	0.0000		0.0003	0.0001	0.0005	0.0009	0.0004	0.0000		0.0004
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Other Class 6-Dsl	T6 instate small-Dsl	466.9	19,785.4	0.0047	0.0042		0.0089	0.0367	0.0076	0.0090	0.0533	0.0007	0.0000		0.0008	0.0003	0.0010	0.0020	0.0007	0.0000		0.0007	0.0001	0.0003	0.0011	0.0002	0.0000		0.0002
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Other Class 7-Dsl	T6 instate heavy-Dsl	341.6	15,441.8	0.0019	0.0028		0.0047	0.0247	0.0049	0.0073	0.0369	0.0002	0.0000		0.0002	0.0002	0.0008	0.0011	0.0001	0.0000		0.0002	0.0000	0.0001	0.0003	0.0005	0.0002	0.0000		0.0002
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Tractor Class 6-Dsl	T6 instate small-Dsl	9.41	490.9	0.0000	0.0001		0.0001	0.0006	0.0001	0.0002	0.0010	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Instate Tractor Class 7-Dsl	T6 instate heavy-Dsl	380.8	23,673.7	0.0028	0.0029		0.0057	0.0363	0.0054	0.0076	0.0493	0.0002	0.0000		0.0002	0.0003	0.0012	0.0017	0.0002	0.0000		0.0002	0.0001	0.0004	0.0007	0.0003	0.0000		0.0003
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 OOS Class 4-Dsl	T6 OOS small-Dsl	3.09	203.2	0.0000	0.0000		0.0000	0.0002	0.0000	0.0000	0.0002	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 OOS Class 5-Dsl	T6 OOS small-Dsl	4.15	278.7	0.0000	0.0000		0.0000	0.0002	0.0000	0.0001	0.0003	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 OOS Class 6-Dsl	T6 OOS small-Dsl	12.5	728.2	0.0000	0.0000		0.0001	0.0005	0.0000	0.0002	0.0007	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 OOS Class 7-Dsl	T6 OOS heavy-Dsl	21.2	5,295.0	0.0002	0.0000		0.0003	0.0039	0.0001	0.0003	0.0043	0.0000	0.0000		0.0000	0.0001	0.0002	0.0004	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Public Class 4-Dsl	T6 Public-Dsl	30.6	977.8	0.0002	0.0001		0.0004	0.0092	0.0018	0.0001	0.0110	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Public Class 5-Dsl	T6 Public-Dsl	79.9	2,874.9	0.0005	0.0006		0.0011	0.0118	0.0035	0.0005	0.0157	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Public Class 6-Dsl	T6 Public-Dsl	77.1	2,593.6	0.0006	0.0005		0.0011	0.0179	0.0038	0.0003	0.0220	0.0001	0.0000		0.0001	0.0000	0.0001	0.0003	0.0001	0.0000		0.0001	0.0000	0.0000	0.0002	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Public Class 7-Dsl	T6 Public-Dsl	119.0	5,064.3	0.0012	0.0009		0.0021	0.0326	0.0048	0.0006	0.0380	0.0002	0.0000		0.0002	0.0001	0.0003	0.0006	0.0002	0.0000		0.0002	0.0000	0.0001	0.0003	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Utility Class 5-Dsl	T6 Utility-Dsl	16.6	676.0	0.0001	0.0001		0.0002	0.0006	0.0002	0.0003	0.0011	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Utility Class 6-Dsl	T6 Utility-Dsl	3.16	127.5	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T6 Utility Class 7-Dsl	T6 Utility-Dsl	3.61	177.7	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 CAIRP Class 8-Dsl	T7 CAIRP-Dsl	739.8	151,621.7	0.0149	0.1215		0.1364	0.3329	0.1052	0.0389	0.4770	0.0057	0.0000		0.0058	0.0060	0.0125	0.0243	0.0055	0.0000		0.0055	0.0015	0.0044	0.0114	0.0025	0.0002		0.0027
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 NNOS Class 8-Dsl	T7 NNOS-Dsl	663.2	179,263.6	0.0136	0.1375		0.1511	0.3407	0.1147	0.0370	0.4924	0.0063	0.0000		0.0063	0.0071	0.0147	0.0282	0.0060	0.0000		0.0061	0.0018	0.0051	0.0130	0.0030	0.0002		0.0032
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 NOOS Class 8-Dsl	T7 NOOS-Dsl	276.5	65,123.3	0.0066	0.0564		0.0630	0.1472	0.0488	0.0146	0.2106	0.0025	0.0000		0.0025	0.0026	0.0054	0.0105	0.0024	0.0000		0.0024	0.0006	0.0019	0.0050	0.0011	0.0001		0.0012
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 Other Port Class 8-Dsl	T7 Other Port-Dsl	15.3	2,640.3	0.0007	0.0007		0.0014	0.0091	0.0009	0.0005	0.0105	0.0001	0.0000		0.0001	0.0001	0.0003	0.0004	0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 POAK Class 8-Dsl	T7 POAK-Dsl	66.8	6,564.4	0.0020	0.0031		0.0052	0.0250	0.0038	0.0021	0.0309	0.0002	0.0000		0.0002	0.0003	0.0007	0.0011	0.0002	0.0000		0.0002	0.0001	0.0002	0.0005	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 POLA Class 8-Dsl	T7 POLA-Dsl	67.2	8,772.3	0.0033	0.0029		0.0062	0.0403	0.0041	0.0018	0.0462	0.0003	0.0000		0.0003	0.0003	0.0009	0.0015	0.0003	0.0000		0.0003	0.0001	0.0003	0.0007	0.0002	0.0000		0.0002
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 Public Class 8-Dsl	T7 Public-Dsl	261.0	10,948.2	0.0051	0.0027		0.0078	0.1140	0.0104	0.0040	0.1284	0.0007	0.0000		0.0007	0.0004	0.0014	0.0025	0.0006	0.0000		0.0007	0.0001	0.0005	0.0013	0.0002	0.0000		0.0002
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 SWCV Class 8-Dsl	T7 SWCV-Dsl	80.7	5,230.7	0.0004	0.0010		0.0014	0.0396	0.0035	0.0012	0.0444	0.0001	0.0000		0.0001	0.0002	0.0012	0.0015	0.0001	0.0000		0.0001	0.0001	0.0004	0.0006	0.0002	0.0000		0.0002
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 Single Concrete/Transit Mix Class 8-Dsl	T7 Single-Dsl	74.3	5,206.4	0.0004	0.0022		0.0026	0.0068	0.0019	0.0026	0.0113	0.0001	0.0000		0.0001	0.0002	0.0005	0.0008	0.0001	0.0000		0.0001	0.0001	0.0002	0.0003	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 Single Dump Class 8-Dsl	T7 Single-Dsl	127.3	7,362.9	0.0012	0.0034		0.0046	0.0186	0.0039	0.0032	0.0257	0.0002	0.0000		0.0002	0.0003	0.0007	0.0011	0.0002	0.0000		0.0002	0.0001	0.0002	0.0005	0.0001	0.0000		0.0001
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 Single Other Class 8-Dsl	T7 Single-Dsl	427.0	24,265.4	0.0037	0.0116		0.0153	0.0556	0.0117	0.0113	0.0787	0.0005	0.0000		0.0005	0.0010	0.0022	0.0037	0.0005	0.0000		0.0005	0.0002	0.0008	0.0015	0.0004	0.0000		0.0004
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 Tractor Class 8-Dsl	T7 Tractor-Dsl	1,221.0	99,995.5	0.0149	0.0622		0.0771	0.2543	0.0625	0.0656	0.3824	0.0027	0.0000		0.0027	0.0040	0.0088	0.0156	0.0026	0.0000		0.0026	0.0010	0.0031	0.0067	0.0016	0.0001		0.0018
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	T7 Utility Class 8-Dsl	T7 Utility-Dsl	11.4	535.1	0.0001	0.0001		0.0002	0.0011	0.0001	0.0007	0.0019	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
1	STANCOG		All Sub-Areas	2022	Annual	Areas-2022	UBUS-Dsl	UBUS - Dsl	53.5	5,608.4	0.0005			0.0005	0.0051			0.0051	0.0000			0.0000	0.0002	0.0007	0.0009	0.0000			0.0000	0.0000	0.0002	0.0003	0.0001			0.0001
								TOTALs	18,978.6	1,144,672.4	0.4	0.4	0.0	0.8	2.7	0.5	0.2	3.4	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

EMFAC2011 Category	Population	Total_VMT	cVMT	eVMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS	TOG_TOTAL
All Vehicles	364,485.9	14,922,100.0	13,117,192.3	1,804,907.7	1,898,440.5	0.1458	0.0644	0.2623	0.4724	0.4269	0.1208	0.3491	1.37
All Other Buses - Dsl	113.0	5,014.0	5,014.0	0	1,005.4	0.0003	0.0000		0.0003				0.0003
All Other Buses - Oth	8.27	340.6	340.6	0	73.6	0.0003	0.0000		0.0004				0.0004
LDA - Dsl	98.7	3,698.9	3,698.9	0	440.8	0.0000			0.0000				0.0000
LDA - Oth	21,185.8	881,113.8	0	881,113.8	98,852.4				0				0
LDA - Gas	155,343.3	6,343,646.7	6,343,646.7	0	716,920.1	0.0279		0.1042	0.1321	0.1733	0.0311	0.1284	0.4650
LDA - Gas	7,299.9	301,636.6	123,095.4	178,541.2	30,185.1	0.0006		0.0061	0.0067	0.0077	0.0014	0.0030	0.0187
LDT1 - Dsl	0.1055	4.11	4.11	0	0.4861	0.0000			0.0000				0.0000
LDT1 - Oth	269.9	11,338.4	0	11,338.4	1,263.8				0				0
LDT1 - Gas	9,535.7	349,897.7	349,897.7	0	42,738.9	0.0017		0.0069	0.0086	0.0162	0.0027	0.0118	0.0393
LDT1 - Gas	207.5	8,383.9	3,413.2	4,970.8	858.1	0.0000		0.0002	0.0002	0.0002	0.0000	0.0001	0.0005
LDT2 - Dsl	300.2	11,679.2	11,679.2	0	1,380.5	0.0002			0.0002				0.0002
LDT2 - Oth	3,071.6	89,164.2	0	89,164.2	14,374.0				0				0
LDT2 - Gas	79,399.9	3,057,584.6	3,057,584.6	0	363,157.2	0.0189		0.0715	0.0904	0.1039	0.0178	0.0764	0.2884
LDT2 - Gas	2,117.8	83,859.7	34,204.9	49,654.8	8,757.0	0.0002		0.0018	0.0019	0.0021	0.0004	0.0008	0.0052
LHD1 - Dsl	2,291.4	75,896.5	75,896.5	0	28,822.4	0.0095	0.0003		0.0098				0.0098
LHD1 - Oth	3,156.9	146,215.5	0	146,215.5	44,394.8				0				0
LHD1 - Gas	3,193.6	115,052.0	115,052.0	0	47,580.3	0.0008	0.0015	0.0052	0.0075	0.0089	0.0013	0.0119	0.0296
LHD2 - Dsl	1,172.4	36,854.2	36,854.2	0	14,746.9	0.0060	0.0002		0.0061				0.0061
LHD2 - Oth	742.3	33,543.7	0	33,543.7	9,823.6				0				0
LHD2 - Gas	412.6	13,731.4	13,731.4	0	6,147.0	0.0001	0.0002	0.0007	0.0009	0.0015	0.0002	0.0019	0.0045
MCY - Gas	6,614.6	36,463.6	36,463.6	0	13,229.3	0.0378		0.0153	0.0532	0.0323	0.0524	0.0578	0.1956
MDV - Dsl	543.9	19,292.5	19,292.5	0	2,422.4	0.0001			0.0001				0.0001
MDV - Oth	2,848.7	81,700.7	0	81,700.7	13,274.0				0				0
MDV - Gas	47,970.3	1,753,732.3	1,753,732.3	0	215,795.3	0.0118		0.0482	0.0599	0.0774	0.0131	0.0552	0.2057
MDV - Gas	1,356.9	52,458.1	21,406.1	31,052.1	5,610.8	0.0001		0.0011	0.0012	0.0014	0.0003	0.0005	0.0035
MH - Dsl	252.0	2,428.3	2,428.3	0	25.2	0.0003			0.0003				0.0003
MH - Gas	368.7	4,146.9	4,146.9	0	36.9	0.0001		0.0000	0.0001	0.0009	0.0001	0.0000	0.0011
Motor Coach - Dsl	23.2	2,939.9	2,939.9	0	532.4	0.0000	0.0001		0.0002				0.0002
OBUS - Oth	25.3	1,690.1	0	1,690.1	505.5				0				0
OBUS - Gas	45.3	1,471.7	1,471.7	0	906.8	0.0001	0.0001	0.0002	0.0003	0.0002	0.0000	0.0002	0.0008
PTO-Dsl	0	6,330.5	6,330.5	0		0.0001			0.0001				0.0001
PTO-Oth	0	6,158.3	0	6,158.3					0				0
SBUS - Dsl	203.2	4,190.2	4,190.2	0	2,942.7	0.0000	0.0000		0.0001				0.0001
SBUS - Oth	16.7	5,526.8	0	5,526.8	2,774.9				0				0
SBUS - Gas	61.8	3,206.8	3,206.8	0	247.0	0.0000	0.0011	0.0001	0.0012	0.0004	0.0001	0.0003	0.0019
SBUS-Oth	69.7	1,400.2	1,400.2	0	1,009.9	0.0039	0.0010		0.0049				0.0049
T6 CAIRP small-Dsl	3.67	264.9	264.9	0	84.4	0.0000	0.0000		0.0000				0.0000
T6 CAIRP small-Oth	5.03	383.4	0	383.4	115.5				0				0
T6 CAIRP small-Dsl	4.52	363.8	363.8	0	103.8	0.0000	0.0000		0.0000				0.0000
T6 CAIRP small-Oth	6.16	525.4	0	525.4	141.5				0				0
T6 CAIRP small-Dsl	20.5	947.1	947.1	0	471.1	0.0000	0.0000		0.0000				0.0000
T6 CAIRP small-Oth	28.2	1,376.6	0	1,376.6	648.5				0				0
T6 CAIRP heavy-Dsl	54.5	11,043.6	11,043.6	0	1,251.7	0.0001	0.0000		0.0001				0.0001
T6 CAIRP heavy-Oth	16.8	3,531.7	0	3,531.7	385.6				0				0
T6 instate small-Dsl	80.0	2,640.4	2,640.4	0	1,142.2	0.0000	0.0000		0.0000				0.0000
T6 instate small-Oth	84.9	2,998.5	0	2,998.5	1,212.2				0				0
T6 instate small-Dsl	85.6	2,825.9	2,825.9	0	1,222.0	0.0000	0.0000		0.0000				0.0000
T6 instate small-Oth	91.1	3,216.3	0	3,216.3	1,299.8				0				0
T6 instate small-Dsl	266.0	8,772.6	8,772.6	0	3,795.3	0.0001	0.0001		0.0001				0.0001
T6 instate small-Oth	282.1	9,951.8	0	9,951.8	4,026.0				0				0
T6 instate heavy-Dsl	122.8	6,220.8	6,220.8	0	1,753.0	0.0001	0.0000		0.0001				0.0001
T6 instate heavy-Oth	74.5	4,000.7	0	4,000.7	1,063.5				0				0
T6 instate heavy-NG	2.57	131.8	131.8	0	36.7	0.0001	0.0000		0.0002				0.0002
T6 instate small-Dsl	312.9	12,130.2	12,130.2	0	3,616.5	0.0001	0.0001		0.0002				0.0002
T6 instate small-Oth	331.0	14,515.5	0	14,515.5	3,826.9				0				0
T6 instate small-Dsl	668.1	25,918.2	25,918.2	0	7,723.5	0.0002	0.0001		0.0003				0.0003
T6 instate small-Oth	707.4	31,050.8	0	31,050.8	8,177.2				0				0
T6 instate small-Dsl	423.8	16,422.8	16,422.8	0	4,899.0	0.0001	0.0001		0.0002				0.0002
T6 instate small-Oth	447.9	19,630.9	0	19,630.9	5,177.5				0				0
T6 instate heavy-Dsl	395.9	15,762.0	15,762.0	0	4,576.7	0.0001	0.0001		0.0002				0.0002
T6 instate heavy-Oth	232.4	12,468.2	0	12,468.2	2,686.0				0				0
T6 instate heavy-NG	9.11	369.5	369.5	0	105.3	0.0003	0.0001		0.0004				0.0004
T6 instate small-Dsl	8.91	400.0	400.0	0	103.0	0.0000	0.0000		0.0000				0.0000
T6 instate small-Oth	9.39	494.6	0	494.6	108.6				0				0
T6 instate heavy-Dsl	596.5	34,455.7	34,455.7	0	6,895.2	0.0003	0.0001		0.0004				0.0004
T6 instate heavy-Oth	120.0	8,318.0	0	8,318.0	1,387.6				0				0
T6 instate heavy-NG	13.2	782.5	782.5	0	152.8	0.0006	0.0002		0.0008				0.0008
T6 OOS small-Dsl	5.05	370.2	370.2	0	116.1	0.0000	0.0000		0.0000				0.0000
T6 OOS small-Dsl	6.21	507.8	507.8	0	142.7	0.0000	0.0000		0.0000				0.0000
T6 OOS small-Dsl	28.2	1,327.0	1,327.0	0	647.1	0.0000	0.0000		0.0000				0.0000
T6 OOS heavy-Dsl	34.7	9,648.8	9,648.8	0	796.9	0.0001	0.0000		0.0001				0.0001
T6 Public-Dsl	16.9	582.6	582.6	0	86.8	0.0000	0.0000		0.0000				0.0000
T6 Public-Oth	15.7	618.4	0	618.4	80.6				0				0
T6 Public-NG	2.39	82.2	82.2	0	12.3	0.0001	0.0000		0.0001				0.0001
T6 Public-Dsl	52.7	1,805.0	1,805.0	0	270.6	0.0000	0.0000		0.0000				0.0000
T6 Public-Oth	47.5	1,864.4	0	1,864.4	243.6				0				0
T6 Public-NG	7.49	255.9	255.9	0	38.4	0.0003	0.0002		0.0004				0.0004
T6 Public-Dsl	46.3	1,579.4	1,579.4	0	237.3	0.0000	0.0000		0.0000				0.0000
T6 Public-Oth	41.3	1,611.8	0	1,611.8	211.6				0				0
T6 Public-NG	6.28	215.6	215.6	0	32.2	0.0002	0.0001		0.0003				0.0003
T6 Public-Dsl	82.7	3,459.1	3,459.1	0	424.1	0.0000	0.0000		0.0001				0.0001
T6 Public-Oth	59.9	2,872.3	0	2,872.3	307.1				0				0
T6 Public-NG	11.7	489.1	489.1	0	60.0	0.0005	0.0002		0.0007				0.0007
T6 Utility-Dsl	8.57	340.9	340.9	0	109.6	0.0000	0.0000		0.0000				0.0000
T6 Utility-Oth	12.2	500.4	0	500.4	155.7				0				0
T6 Utility-NG	0.0193	0.7695	0.7695	0	0.2475	0.0000	0.0000		0.0000				0.0000
T6 Utility-Dsl	1.62	64.4	64.4	0	20.7	0.0000	0.0000		0.0000				0.0000
T6 Utility-Oth	2.30	94.6	0	94.6	29.4				0				0
T6 Utility-NG	0.0037	0.1454	0.1454	0	0.0468	0.0000	0.0000		0.0000				0.0000
T6 Utility-Dsl	1.80	88.4	88.4	0	23.0	0.0000	0.0000		0.0000				0.0000
T6 Utility-Oth	2.56	132.8	0	132.8	32.7				0				0
T6 Utility-NG	0.0041	0.1996	0.1996	0	0.0520	0.0000	0.0000		0.0000				0.0000
T6TS - Gas	144.9	9,583.0	0	9,583.0	2,899.1				0				0
T6TS - Gas	172.0	8,125.3	8,125.3	0	3,440.4	0.0001	0.0003	0.0008	0.0012	0.0005	0.0001	0.0008	0.0026
T7 CAIRP-Dsl	1,069.5	222,564.2	222,564.2	0	24,576.7	0.0032	0.0140		0.0172				0.0172
T7 CAIRP-Oth	297.4	64,162.3	0	64,162.3	6,833.9				0				0
T7 NNOOS-Dsl	1,184.7	338,999.1	338,999.1	0	27,224.2	0.0047	0.0193		0.0240				0.0240
T7 NOOS-Dsl	510.0	123,152.4	123,152.4	0	11,719.6	0.0018	0.0083		0.0101				0.0101
T7 Other Port-Dsl	15.3	3,672.7	3,672.7	0	249.8	0.0000	0.0001		0.0001				0.0001
T7 Other Port-Oth	3.53	929.6	0	929.6	57.7				0				0
T7 POAK-Dsl	78.4	9,089.4	9,089.4	0	1,282.4	0.0001	0.0003		0.0005				0.0005
T7 POAK-Oth	18.3	2,092.8	0	2,092.8	298.6				0				0
T7 POLA-Dsl	70.4	13,050.3	13,050.3	0	1,151.2	0.0002	0.0003		0.0005				0.0005
T7 POLA-Oth	12.8	2,345.6	0	2,345.6	209.3				0				0
T7 POLA-NG	0.3303	61.2	61.2	0	5.40	0.0001	0.0000		0.0001				0.0001
T7 Public-Dsl	189.7	7,617.1	7,617.1	0	973.4	0.0003	0.0003		0.0006				0.0006
T7 Public-Oth	127.5	6,012.7	0	6,012.7	654.3				0				0
T7 Public-NG	23.3	940.3	940.3	0	119.3	0.0018	0.0005		0.0023				0.0023
T7 SWCV-Dsl	24.5	1,588.4	1,588.4	0	112.6	0.0001	0.0000		0.0001				0.0001
T7 SWCV-Oth	62.3	4,026.9	0	4,026.9	286.4				0				0
T7 SWCV-NG	63.0	4,079.1	4,079.1	0	289.6	0.0027	0.0003		0.0030				0.0030
T7 Single-Dsl	39.5	2,606.2	2,606.2	0	371.9	0.0000	0.0001		0.0001				0.0001
Single Concrete/Transit Mix	50.7	3,615.1	0	3,615.1	477.4				0				0
T7 Single-NG	1.44	94.9	94.9	0	13.5	0.0001	0.0000		0.0002				0.0002
T7 Single-Dsl	94.5	4,590.7	4,590.7	0	889.9	0.0001	0.0002		0.0003				0.0003
T7 Single Dump-Oth	66.8	4,222.5	0	4,222.5	628.8				0				0
T7 Single-NG	3.35	164.1	164.1	0	31.5	0.0002	0.0001		0.0003				0.0003
T7 Single-Dsl	421.9	23,573.4	23,573.4	0	3,974.7	0.0003	0.0010		0.0013				0.0013
T7 Single Other-Oth	322.2	23,176.6	0	23,176.6	3,035.3				0				0
T7 Single-NG	15.2	852.3	852.3	0	143.1	0.0010	0.0005		0.0015				0.0015
T7 Tractor-Dsl	2,449.8	157,999.2	157,999.2	0	35,594.9	0.0020	0.0106		0.0127				0.0127
T7 Tractor-Oth	447.9	31,943.7	0	31,943.7	6,508.0				0				0
T7 Tractor-NG	38.5	2,477.7	2,477.7	0	559.1	0.0028	0.0021		0.0050				0.0050
T7 Utility-Dsl	8.96	368.4	368.4	0	114.6	0.0000	0.0000		0.0000				0.0000
T7 Utility-Oth	6.25	296.5	0	296.5	80.0				0				0
T7IS - Gas	0.1936	30.7	0	30.7	3.87				0				0
T7IS - Gas	0.2263	27.6	27.6	0	4.53	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
UBUS - Dsl	0.0001	0.0046	0.0046	0	0.0003	0.0000			0.0000				0.0000
UBUS - Oth	127.9	11,642.2	0	11,642.2	511.5				0				0
UBUS - Gas	2.76	106.2	106.2	0	11.0	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
UBUS - NG	0.0000	0.0023	0.0023	0	0.0001	0.0000			0.0000				0.0000

EMFAC2011 Category	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX	ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_TOTAL	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX
All Vehicles	0.1002	0.0513	0.2396	0.3911	0.4269	0.1208	0.3491	1.29	8.17	0.7827	3.10	12.1
All Other Buses - Dsl	0.0002	0.0000		0.0002				0.0002	0.0009	0.0003		0.0012
All Other Buses - Oth	0.0000	0.0000		0.0000				0.0000	0.0013	0.0001		0.0014
LDA - Dsl	0.0000			0.0000				0.0000	0.0006			0.0006
LDA - Oth				0				0				0
LDA - Gas	0.0191		0.0951	0.1143	0.1733	0.0311	0.1284	0.4471	3.75		1.28	5.03
LDA - Gas	0.0004		0.0056	0.0060	0.0077	0.0014	0.0030	0.0180	0.0656		0.0430	0.1086
LDT1 - Dsl	0.0000			0.0000				0.0000	0.0000			0.0000
LDT1 - Oth				0				0				0
LDT1 - Gas	0.0012		0.0063	0.0075	0.0162	0.0027	0.0118	0.0382	0.2215		0.0812	0.3026
LDT1 - Gas	0.0000		0.0002	0.0002	0.0002	0.0000	0.0001	0.0005	0.0018		0.0012	0.0030
LDT2 - Dsl	0.0002			0.0002				0.0002	0.0017			0.0017
LDT2 - Oth				0				0				0
LDT2 - Gas	0.0129		0.0653	0.0782	0.1039	0.0178	0.0764	0.2763	2.13		0.8348	2.96
LDT2 - Gas	0.0001		0.0016	0.0017	0.0021	0.0004	0.0008	0.0050	0.0182		0.0125	0.0307
LHD1 - Dsl	0.0083	0.0003		0.0086				0.0086	0.0222	0.0023		0.0245
LHD1 - Oth				0				0				0
LHD1 - Gas	0.0005	0.0010	0.0048	0.0063	0.0089	0.0013	0.0119	0.0284	0.0757	0.0133	0.1692	0.2581
LHD2 - Dsl	0.0052	0.0001		0.0054				0.0054	0.0141	0.0012		0.0153
LHD2 - Oth				0				0				0
LHD2 - Gas	0.0001	0.0001	0.0006	0.0008	0.0015	0.0002	0.0019	0.0044	0.0093	0.0017	0.0223	0.0333
MCY - Gas	0.0304		0.0141	0.0444	0.0323	0.0524	0.0578	0.1869	0.4171		0.1133	0.5304
MDV - Dsl	0.0001			0.0001				0.0001	0.0031			0.0031
MDV - Oth				0				0				0
MDV - Gas	0.0081		0.0440	0.0520	0.0774	0.0131	0.0552	0.1978	1.27		0.5211	1.79
MDV - Gas	0.0001		0.0010	0.0011	0.0014	0.0003	0.0005	0.0033	0.0114		0.0080	0.0194
MH - Dsl	0.0002			0.0002				0.0002	0.0007			0.0007
MH - Gas	0.0001		0.0000	0.0001	0.0009	0.0001	0.0000	0.0011	0.0007		0.0001	0.0008
Motor Coach - Dsl	0.0000	0.0001		0.0001				0.0001	0.0001	0.0015		0.0016
OBUS - Oth				0				0				0
OBUS - Gas	0.0000	0.0000	0.0002	0.0002	0.0002	0.0000	0.0002	0.0007	0.0009	0.0003	0.0033	0.0044
PTO-Dsl	0.0001			0.0001				0.0001	0.0013			0.0013
PTO-Oth				0				0				0
SBUS - Dsl	0.0000	0.0000		0.0001				0.0001	0.0002	0.0016		0.0018
SBUS - Oth				0				0				0
SBUS - Gas	0.0000	0.0007	0.0001	0.0009	0.0004	0.0001	0.0003	0.0015	0.0007	0.0056	0.0023	0.0086
SBUS-Oth	0.0001	0.0000		0.0001				0.0001	0.0110	0.0025		0.0135
T6 CAIRP small-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000
T6 CAIRP small-Oth				0				0				0
T6 CAIRP small-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000
T6 CAIRP small-Oth				0				0				0
T6 CAIRP small-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0001
T6 CAIRP small-Oth				0				0				0
T6 CAIRP heavy-Dsl	0.0001	0.0000		0.0001				0.0001	0.0004	0.0001		0.0005
T6 CAIRP heavy-Oth				0				0				0
T6 instate small-Dsl	0.0000	0.0000		0.0000				0.0000	0.0002	0.0006		0.0008
T6 instate small-Oth				0				0				0
T6 instate small-Dsl	0.0000	0.0000		0.0000				0.0000	0.0002	0.0007		0.0008
T6 instate small-Oth				0				0				0
T6 instate small-Dsl	0.0001	0.0000		0.0001				0.0001	0.0005	0.0021		0.0026
T6 instate small-Oth				0				0				0
T6 instate heavy-Dsl	0.0001	0.0000		0.0001				0.0001	0.0005	0.0010		0.0014
T6 instate heavy-Oth				0				0				0
T6 instate heavy-NG	0.0000	0.0000		0.0000				0.0000	0.0006	0.0001		0.0007
T6 instate small-Dsl	0.0001	0.0001		0.0001				0.0001	0.0006	0.0026		0.0032
T6 instate small-Oth				0				0				0
T6 instate small-Dsl	0.0002	0.0001		0.0003				0.0003	0.0012	0.0056		0.0068
T6 instate small-Oth				0				0				0
T6 instate small-Dsl	0.0001	0.0001		0.0002				0.0002	0.0008	0.0035		0.0043
T6 instate small-Oth				0				0				0
T6 instate heavy-Dsl	0.0001	0.0001		0.0002				0.0002	0.0009	0.0033		0.0042
T6 instate heavy-Oth				0				0				0
T6 instate heavy-NG	0.0000	0.0000		0.0000				0.0000	0.0011	0.0004		0.0015
T6 instate small-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0001		0.0001
T6 instate small-Oth				0				0				0
T6 instate heavy-Dsl	0.0003	0.0001		0.0004				0.0004	0.0019	0.0050		0.0068
T6 instate heavy-Oth				0				0				0
T6 instate heavy-NG	0.0000	0.0000		0.0000				0.0000	0.0023	0.0006		0.0029
T6 OOS small-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000
T6 OOS small-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000
T6 OOS small-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0001		0.0001
T6 OOS heavy-Dsl	0.0001	0.0000		0.0001				0.0001	0.0003	0.0001		0.0004
T6 Public-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0002		0.0002
T6 Public-Oth				0				0				0
T6 Public-NG	0.0000	0.0000		0.0000				0.0000	0.0003	0.0001		0.0004
T6 Public-Dsl	0.0000	0.0000		0.0000				0.0000	0.0001	0.0006		0.0007
T6 Public-Oth				0				0				0
T6 Public-NG	0.0000	0.0000		0.0000				0.0000	0.0009	0.0005		0.0013
T6 Public-Dsl	0.0000	0.0000		0.0000				0.0000	0.0001	0.0005		0.0006
T6 Public-Oth				0				0				0
T6 Public-NG	0.0000	0.0000		0.0000				0.0000	0.0007	0.0004		0.0011
T6 Public-Dsl	0.0000	0.0000		0.0001				0.0001	0.0002	0.0010		0.0012
T6 Public-Oth				0				0				0
T6 Public-NG	0.0000	0.0000		0.0000				0.0000	0.0016	0.0007		0.0024
T6 Utility-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0001		0.0001
T6 Utility-Oth				0				0				0
T6 Utility-NG	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000
T6 Utility-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000
T6 Utility-Oth				0				0				0
T6 Utility-NG	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000
T6 Utility-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000
T6 Utility-Oth				0				0				0
T6 Utility-NG	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000
T6TS - Gas				0				0				0
T6TS - Gas	0.0001	0.0002	0.0007	0.0010	0.0005	0.0001	0.0008	0.0023	0.0016	0.0029	0.0129	0.0174
T7 CAIRP-Dsl	0.0028	0.0123		0.0151				0.0151	0.0095	0.1818		0.1912
T7 CAIRP-Oth				0				0				0
T7 NNOOS-Dsl	0.0041	0.0169		0.0211				0.0211	0.0140	0.2499		0.2639
T7 NOOS-Dsl	0.0016	0.0073		0.0088				0.0088	0.0053	0.1076		0.1128
T7 Other Port-Dsl	0.0000	0.0001		0.0001				0.0001	0.0003	0.0009		0.0011
T7 Other Port-Oth				0				0				0
T7 POAK-Dsl	0.0001	0.0003		0.0004				0.0004	0.0006	0.0044		0.0050
T7 POAK-Oth				0				0				0
T7 POLA-Dsl	0.0002	0.0003		0.0004				0.0004	0.0010	0.0039		0.0049
T7 POLA-Oth				0				0				0
T7 POLA-NG	0.0000	0.0000		0.0000				0.0000	0.0003	0.0001		0.0004
T7 Public-Dsl	0.0003	0.0002		0.0005				0.0005	0.0013	0.0035		0.0048
T7 Public-Oth				0				0				0
T7 Public-NG	0.0000	0.0000		0.0000				0.0000	0.0085	0.0013		0.0099
T7 SWCV-Dsl	0.0000	0.0000		0.0001				0.0001	0.0001	0.0005		0.0006
T7 SWCV-Oth				0				0				0
T7 SWCV-NG	0.0001	0.0000		0.0001				0.0001	0.0469	0.0026		0.0495
T7 Single-Dsl	0.0000	0.0001		0.0001				0.0001	0.0001	0.0012		0.0013
Single Concrete/Transit Mix				0				0				0
T7 Single-NG	0.0000	0.0000		0.0000				0.0000	0.0004	0.0001		0.0006
T7 Single-Dsl	0.0001	0.0002		0.0002				0.0002	0.0003	0.0029		0.0031
T7 Single Dump-Oth				0				0				0
T7 Single-NG	0.0000	0.0000		0.0000				0.0000	0.0008	0.0003		0.0011
T7 Single-Dsl	0.0003	0.0009		0.0011				0.0011	0.0014	0.0128		0.0142
T7 Single Other-Oth				0				0				0
T7 Single-NG	0.0000	0.0000		0.0000				0.0000	0.0042	0.0013		0.0056
T7 Tractor-Dsl	0.0018	0.0093		0.0111				0.0111	0.0083	0.1379		0.1462
T7 Tractor-Oth				0				0				0
T7 Tractor-NG	0.0000	0.0000		0.0001				0.0001	0.0103	0.0067		0.0169
T7 Utility-Dsl	0.0000	0.0000		0.0000				0.0000	0.0000	0.0001		0.0001
T7 Utility-Oth				0				0				0
T7IS - Gas				0				0				0
T7IS - Gas	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0009		0.0000	0.0009
UBUS - Dsl	0.0000			0.0000				0.0000	0.0000			0.0000
UBUS - Oth				0				0				0
UBUS - Gas	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0001		0.0001	0.0001
UBUS - NG	0.0000			0.0000				0.0000	0.0000			0.0000

EMFAC2011 Category	NOx_RUNEX	NOx_IDLEX	NOx_STREX	NOx_TOTEX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL
All Vehicles	1.73	0.5151	0.6693	2.92	4,835.0	100.6	89.6	5,025.3	0.0379	0.0003	0.0014	0.0396	0.1662	0.2708	0.4767
All Other Buses - Dsl	0.0063	0.0002	0.0010	0.0076	5.71	0.0672		5.78	0.0001	0.0000		0.0001	0.0001	0.0003	0.0004
All Other Buses - Oth	0.0000	0.0000		0.0000	0.3165	0.0098		0.3263	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
LDA - Dsl	0.0001			0.0001	0.6854			0.6854	0.0000			0.0000	0.0000	0.0000	0.0001
LDA - Oth				0				0				0	0.0078	0.0043	0.0120
LDA - Gas	0.1371		0.1303	0.2673	1,503.1		39.6	1,542.7	0.0033		0.0007	0.0039	0.0559	0.0660	0.1259
LDA - Gas	0.0009		0.0038	0.0047	39.0		1.74	40.8	0.0001		0.0000	0.0001	0.0027	0.0014	0.0042
LDT1 - Dsl	0.0000			0.0000	0.0014			0.0014	0.0000			0.0000	0.0000	0.0000	0.0000
LDT1 - Oth				0				0				0	0.0001	0.0001	0.0002
LDT1 - Gas	0.0083		0.0085	0.0168	96.0		2.78	98.7	0.0002		0.0000	0.0002	0.0031	0.0042	0.0075
LDT1 - Gas	0.0000		0.0001	0.0001	1.08		0.0571	1.14	0.0000		0.0000	0.0000	0.0001	0.0000	0.0001
LDT2 - Dsl	0.0004			0.0004	3.00			3.00	0.0001			0.0001	0.0001	0.0001	0.0003
LDT2 - Oth				0				0				0	0.0008	0.0004	0.0012
LDT2 - Gas	0.0765		0.0829	0.1593	868.4		24.6	893.0	0.0016		0.0003	0.0020	0.0270	0.0361	0.0650
LDT2 - Gas	0.0003		0.0011	0.0013	10.8		0.6140	11.5	0.0000		0.0000	0.0000	0.0007	0.0004	0.0012
LHD1 - Dsl	0.0345	0.0032		0.0376	50.5	0.3004		50.8	0.0019	0.0001		0.0019	0.0010	0.0065	0.0095
LHD1 - Oth				0				0				0	0.0013	0.0063	0.0076
LHD1 - Gas	0.0028	0.0001	0.0224	0.0252	94.4	0.3522	0.9554	95.7	0.0002		0.0000	0.0002	0.0010	0.0099	0.0111
LHD2 - Dsl	0.0246	0.0018		0.0264	28.8	0.2522		29.1	0.0012	0.0000		0.0012	0.0005	0.0037	0.0054
LHD2 - Oth				0				0				0	0.0003	0.0017	0.0020
LHD2 - Gas	0.0004	0.0000	0.0028	0.0032	12.8	0.0538	0.1217	13.0	0.0000		0.0000	0.0000	0.0001	0.0014	0.0015
MCY - Gas	0.0189		0.0011	0.0200	6.34		0.3312	6.67	0.0001		0.0000	0.0001	0.0002	0.0005	0.0008
MDV - Dsl	0.0003			0.0003	6.49			6.49	0.0000			0.0000	0.0002	0.0002	0.0004
MDV - Oth				0				0				0	0.0007	0.0004	0.0011
MDV - Gas	0.0482		0.0546	0.1028	604.4		18.2	622.5	0.0010		0.0002	0.0012	0.0155	0.0210	0.0376
MDV - Gas	0.0002		0.0007	0.0009	6.79		0.4829	7.27	0.0000		0.0000	0.0000	0.0005	0.0002	0.0007
MH - Dsl	0.0071			0.0071	2.89			2.89	0.0001			0.0001	0.0000	0.0001	0.0002
MH - Gas	0.0010		0.0000	0.0010	8.82		0.0010	8.82	0.0000		0.0000	0.0000	0.0001	0.0002	0.0003
Motor Coach - Dsl	0.0030	0.0005	0.0006	0.0041	4.92	0.2112		5.13	0.0001	0.0000		0.0001	0.0000	0.0003	0.0004
OBUS - Oth				0				0				0	0.0000	0.0000	0.0001
OBUS - Gas	0.0005	0.0000	0.0004	0.0009	2.48	0.0167	0.0225	2.52	0.0000		0.0000	0.0000	0.0000	0.0001	0.0001
PTO-Dsl	0.0180			0.0180	12.1			12.1	0.0000			0.0000			0.0000
PTO-Oth				0				0				0			0
SBUS - Dsl	0.0016	0.0015	0.0020	0.0051	4.80	0.4173		5.21	0.0000	0.0000		0.0000	0.0001	0.0002	0.0003
SBUS - Oth				0				0				0	0.0001	0.0001	0.0002
SBUS - Gas	0.0007	0.0001	0.0003	0.0010	2.68	0.1542	0.0103	2.85	0.0000		0.0000	0.0000	0.0000	0.0002	0.0002
SBUS-Oth	0.0003	0.0004		0.0007	1.59	0.3082		1.90	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001
T6 CAIRP small-Dsl	0.0001	0.0000	0.0000	0.0001	0.2938	0.0021		0.2959	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 CAIRP small-Oth				0				0				0	0.0000	0.0000	0.0000
T6 CAIRP small-Dsl	0.0001	0.0000	0.0000	0.0001	0.4038	0.0025		0.4063	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 CAIRP small-Oth				0				0				0	0.0000	0.0000	0.0000
T6 CAIRP small-Dsl	0.0002	0.0000	0.0002	0.0004	1.0499	0.0115		1.06	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001
T6 CAIRP small-Oth				0				0				0	0.0000	0.0000	0.0001
T6 CAIRP heavy-Dsl	0.0024	0.0001	0.0005	0.0030	10.8	0.0299		10.8	0.0001	0.0000		0.0001	0.0001	0.0005	0.0007
T6 CAIRP heavy-Oth				0				0				0	0.0000	0.0001	0.0001
T6 instate small-Dsl	0.0010	0.0005	0.0013	0.0028	3.01	0.1534		3.17	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002
T6 instate small-Oth				0				0				0	0.0000	0.0001	0.0001
T6 instate small-Dsl	0.0011	0.0005	0.0014	0.0030	3.23	0.1643		3.39	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002
T6 instate small-Oth				0				0				0	0.0000	0.0001	0.0001
T6 instate small-Dsl	0.0034	0.0017	0.0043	0.0094	10.03	0.5105		10.54	0.0000	0.0000		0.0000	0.0001	0.0005	0.0006
T6 instate small-Oth				0				0				0	0.0001	0.0003	0.0004
T6 instate heavy-Dsl	0.0039	0.0010	0.0025	0.0074	7.26	0.2458		7.50	0.0000	0.0000		0.0000	0.0001	0.0003	0.0004
T6 instate heavy-Oth				0				0				0	0.0001	0.0001	0.0002
T6 instate heavy-NG	0.0000	0.0000		0.0000	0.1396	0.0116		0.1512	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 instate small-Dsl	0.0036	0.0021	0.0046	0.0103	13.4	0.6454		14.1	0.0000	0.0000		0.0000	0.0002	0.0006	0.0008
T6 instate small-Oth				0				0				0	0.0002	0.0004	0.0006
T6 instate small-Dsl	0.0076	0.0045	0.0100	0.0220	28.7	1.38		30.1	0.0001	0.0000		0.0001	0.0003	0.0013	0.0017
T6 instate small-Oth				0				0				0	0.0004	0.0008	0.0012
T6 instate small-Dsl	0.0049	0.0028	0.0063	0.0141	18.2	0.8739		19.0	0.0001	0.0000		0.0001	0.0002	0.0008	0.0011
T6 instate small-Oth				0				0				0	0.0003	0.0005	0.0007
T6 instate heavy-Dsl	0.0081	0.0035	0.0074	0.0190	17.5	0.8571		18.4	0.0001	0.0000		0.0001	0.0002	0.0008	0.0011
T6 instate heavy-Oth				0				0				0	0.0002	0.0003	0.0005
T6 instate heavy-NG	0.0000	0.0001		0.0001	0.3420	0.0445		0.3865	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 instate small-Dsl	0.0001	0.0001	0.0001	0.0003	0.4413	0.0184		0.4597	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 instate small-Oth				0				0				0	0.0000	0.0000	0.0000
T6 instate heavy-Dsl	0.0148	0.0050	0.0105	0.0303	34.9	1.25		36.1	0.0001	0.0000		0.0001	0.0005	0.0017	0.0023
T6 instate heavy-Oth				0				0				0	0.0001	0.0002	0.0003
T6 instate heavy-NG	0.0000	0.0001		0.0001	0.7028	0.0625		0.7653	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001
T6 OOS small-Dsl	0.0001	0.0000	0.0001	0.0002	0.3856	0.0027		0.3883	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 OOS small-Dsl	0.0001	0.0000	0.0001	0.0002	0.5293	0.0033		0.5326	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 OOS small-Dsl	0.0003	0.0001	0.0004	0.0008	1.38	0.0148		1.39	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001
T6 OOS heavy-Dsl	0.0025	0.0001	0.0005	0.0031	9.04	0.0182		9.06	0.0001	0.0000		0.0001	0.0001	0.0005	0.0006
T6 Public-Dsl	0.0003	0.0002	0.0001	0.0006	0.6903	0.0510		0.7413	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 Public-Oth				0				0				0	0.0000	0.0000	0.0000
T6 Public-NG	0.0000	0.0000		0.0000	0.0833	0.0163		0.0997	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 Public-Dsl	0.0011	0.0007	0.0004	0.0022	2.16	0.1622		2.32	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001
T6 Public-Oth				0				0				0	0.0000	0.0000	0.0001
T6 Public-NG	0.0000	0.0001		0.0001	0.2608	0.0511		0.3119	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 Public-Dsl	0.0010	0.0006	0.0003	0.0019	1.88	0.1413		2.02	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001
T6 Public-Oth				0				0				0	0.0000	0.0000	0.0001
T6 Public-NG	0.0000	0.0001		0.0001	0.2188	0.0430		0.2618	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 Public-Dsl	0.0018	0.0011	0.0007	0.0035	4.05	0.2478		4.30	0.0000	0.0000		0.0000	0.0000	0.0002	0.0002
T6 Public-Oth				0				0				0	0.0000	0.0001	0.0001
T6 Public-NG	0.0000	0.0001		0.0001	0.4971	0.0799		0.5770	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 Utility-Dsl	0.0001	0.0000	0.0001	0.0002	0.3790	0.0132		0.3922	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 Utility-Oth				0				0				0	0.0000	0.0000	0.0000
T6 Utility-NG	0.0000	0.0000		0.0000	0.0007	0.0001		0.0008	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 Utility-Dsl	0.0000	0.0000	0.0000	0.0000	0.0716	0.0025		0.0741	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 Utility-Oth				0				0				0	0.0000	0.0000	0.0000
T6 Utility-NG	0.0000	0.0000		0.0000	0.0001	0.0000		0.0002	0.0000	0		0.0000	0.0000	0.0000	0.0000
T6 Utility-Dsl	0.0000	0.0000	0.0000	0.0000	0.0984	0.0028		0.1012	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T6 Utility-Oth				0				0				0	0.0000	0.0000	0.0000
T6 Utility-NG	0.0000	0.0000		0.0000	0.0002	0.0000		0.0002	0.0000	0		0.0000	0.0000	0.0000	0.0000
T6TS - Gas				0				0				0	0.0001	0.0002	0.0004
T6TS - Gas	0.0006	0.0000	0.0014	0.0020	13.7	0.0821	0.1179	13.9	0.0000		0.0000	0.0000	0.0001	0.0004	0.0005
T7 CAIRP-Dsl	0.2959	0.0943	0.0426	0.4328	311.2	23.5		334.7	0.0073	0.0001		0.0073	0.0088	0.0201	0.0362
T7 CAIRP-Oth				0				0				0	0.0025	0.0029	0.0054
T7 NNOOS-Dsl	0.4981	0.1998	0.0713	0.7692	453.9	31.0		484.8	0.0109	0.0001		0.0110	0.0135	0.0306	0.0550
T7 NOOS-Dsl	0.1861	0.0860	0.0307	0.3029	164.8	13.3		178.1	0.0042	0.0000		0.0042	0.0049	0.0111	0.0202
T7 Other Port-Dsl	0.0050	0.0005	0.0005	0.0060	5.51	0.1090		5.62	0.0001	0.0000		0.0001	0.0001	0.0004	0.0006
T7 Other Port-Oth				0				0				0	0.0000	0.0000	0.0001
T7 POAK-Dsl	0.0129	0.0025	0.0026	0.0180	13.6	0.5598		14.2	0.0002	0.0000		0.0002	0.0004	0.0009	0.0015
T7 POAK-Oth				0				0				0	0.0001	0.0001	0.0002
T7 POLA-Dsl	0.0201	0.0024	0.0025	0.0249	19.7	0.5093		20.3	0.0003	0.0000		0.0003	0.0005	0.0013	0.0021
T7 POLA-Oth				0				0				0	0.0001	0.0001	0.0002
T7 POLA-NG	0.0000	0.0000		0.0000	0.0731	0.0054		0.0785	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T7 Public-Dsl	0.0166	0.0028	0.0055	0.0248	13.5	0.5405		14.0	0.0001	0.0000		0.0001	0.0003	0.0009	0.0013
T7 Public-Oth				0				0				0	0.0002	0.0004	0.0006
T7 Public-NG	0.0003	0.0002		0.0005	1.42	0.1383		1.56	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002
T7 SWCV-Dsl	0.0033	0.0005	0.0006	0.0044	5.94	0.0830		6.03	0.0000	0.0000		0.0000	0.0001	0.0004	0.0005
T7 SWCV-Oth				0				0				0	0.0002	0.0005	0.0006
T7 SWCV-NG	0.0017	0.0001		0.0017	5.62	0.4118		6.03	0.0000	0.0000		0.0000	0.0002	0.0009	0.0011
T7 Single-Dsl	0.0023	0.0006	0.0009	0.0038	4.13	0.1583		4.28	0.0000	0.0000		0.0000	0.0001	0.0003	0.0004
Single Concrete/Transit Mix				0				0				0	0.0001	0.0002	0.0003
T7 Single-NG	0.0000	0.0000		0.0000	0.1106	0.0131		0.1237	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T7 Single-Dsl	0.0056	0.0015	0.0025	0.0096	7.46	0.4036		7.87	0.0001	0.0000		0.0001	0.0002	0.0004	0.0007
T7 Single Dump-Oth				0				0				0	0.0002	0.0002	0.0004
T7 Single-NG	0.0000	0.0000		0.0001	0.1955	0.0308		0.2263	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
T7 Single-Dsl	0.0278	0.0070	0.0114	0.0462	38.1	1.79		39.9	0.0004	0.0000		0.0004	0.0009	0.0023	0.0036
T7 Single Other-Oth				0				0				0	0.0009	0.0011	0.0021
T7 Single-NG	0.0002	0.0002		0.0004	1.0112	0.1395		1.15	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001
T7 Tractor-Dsl	0.2059	0.0829	0.1317	0.4205	220.3	17.9		238.2	0.0038	0.0000		0.0038	0.0063	0.0150	0.0251
T7 Tractor-Oth				0				0				0	0.0013	0.0015	0.0028
T7 Tractor-NG	0.0005	0.0009		0.0014	2.76	0.6364		3.40	0.0000	0.0000		0.0000	0.0001	0.0002	0.0003
T7 Utility-Dsl	0.0004	0.0001	0.0005	0.0010	0.6219	0.0131		0.6350	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001
T7 Utility-Oth				0				0				0	0.0000	0.0000	0.0000
T7IS - Gas				0				0				0	0.0000	0.0000	0.0000
T7IS - Gas	0.0001		0.0000	0.0001	0.0529		0.0002	0.0531	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
UBUS - Dsl	0.0000			0.0000	0.0000			0.0000	0			0	0	0.0000	0.0000
UBUS - Oth				0				0				0	0.0003	0.0007	0.0010
UBUS - Gas	0.0000		0.0000	0.0000	0.0974		0.0003	0.0977	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
UBUS - NG	0.0000			0.0000	0.0000			0.0000	0			0	0	0.0000	0.0000

PM2_5_RUNEX	PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX	PM2_5_PMTW	PM2_5_PMBW	PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX	Fuel_GAS	Fuel_DSL	Fuel_NG
0.0360	0.0003	0.0012	0.0376	0.0416	0.0048	0.1739	0.0476	0.0009	0.0010	0.0494	359.9	148.2	2.13
0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.5198	
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0401
0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000		0.0617	
			0	0.0019	0.0015	0.0034				0			
0.0030		0.0008	0.0038	0.0140	0.0231	0.0407	0.0151		0.0004	0.0155	185.1		
0.0001		0.0000	0.0001	0.0007	0.0005	0.0013	0.0004		0.0000	0.0004	4.36		
0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000		0.0001	
			0	0.0000	0.0000	0.0000				0			
0.0002		0.0000	0.0002	0.0008	0.0015	0.0025	0.0010		0.0000	0.0010	10.57		
0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.1218		
0.0001			0.0001	0.0000	0.0000	0.0001	0.0000			0.0000		0.2696	
			0	0.0002	0.0002	0.0003				0			
0.0015		0.0003	0.0018	0.0067	0.0126	0.0212	0.0087		0.0003	0.0090	95.6		
0.0000		0.0000	0.0000	0.0002	0.0001	0.0003	0.0001		0.0000	0.0001	1.23		
0.0018	0.0001		0.0019	0.0003	0.0023	0.0044	0.0005	0.0000		0.0005		4.57	
			0	0.0003	0.0022	0.0025				0			
0.0001		0.0000	0.0002	0.0003	0.0035	0.0039	0.0009	0.0000	0.0000	0.0010	10.24		
0.0012	0.0000		0.0012	0.0001	0.0013	0.0026	0.0003	0.0000		0.0003		2.62	
			0	0.0001	0.0006	0.0007				0			
0.0000		0.0000	0.0000	0.0000	0.0005	0.0005	0.0001	0.0000	0.0000	0.0001	1.39		
0.0001		0.0000	0.0001	0.0000	0.0002	0.0003	0.0001		0.0000	0.0001	0.8160		
0.0000			0.0000	0.0000	0.0001	0.0001	0.0001			0.0001		0.5839	
			0	0.0002	0.0001	0.0003				0			
0.0009		0.0002	0.0011	0.0039	0.0073	0.0123	0.0061		0.0002	0.0062	66.6		
0.0000		0.0000	0.0000	0.0001	0.0001	0.0002	0.0001		0.0000	0.0001	0.7775		
0.0001			0.0001	0.0000	0.0000	0.0001	0.0000			0.0000		0.2604	
0.0000		0.0000	0.0000	0.0000	0.0000	0.0001	0.0001		0.0000	0.0001	0.9369		
0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000		0.4616	
			0	0.0000	0.0000	0.0000				0			
0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.2690		
0.0000			0.0000			0.0000	0.0001			0.0001		1.09	
			0			0				0			
0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000		0.4692	
			0	0.0000	0.0000	0.0001				0			
0.0000		0.0000	0.0000	0.0000	0.0001	0.0001	0.0000	0.0000	0.0000	0.0000	0.3048		
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.2337
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0286	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0366	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0955	
			0	0.0000	0.0000	0.0000				0			
0.0001	0.0000		0.0001	0.0000	0.0002	0.0003	0.0001	0.0000		0.0001		0.2763	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000		0.2851	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000		0.3055	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0002	0.0002	0.0001	0.0000		0.0001		0.9487	
			0	0.0000	0.0001	0.0001				0			
0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.6754	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0186
0.0000	0.0000		0.0000	0.0000	0.0002	0.0003	0.0001	0.0000		0.0001		1.27	
			0	0.0000	0.0001	0.0002				0			
0.0001	0.0000		0.0001	0.0001	0.0004	0.0006	0.0003	0.0000		0.0003		2.71	
			0	0.0001	0.0003	0.0004				0			
0.0001	0.0000		0.0001	0.0001	0.0003	0.0004	0.0002	0.0000		0.0002		1.71	
			0	0.0001	0.0002	0.0002				0			
0.0001	0.0000		0.0001	0.0001	0.0003	0.0004	0.0002	0.0000		0.0002		1.66	
			0	0.0000	0.0001	0.0001				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0475
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0414	
			0	0.0000	0.0000	0.0000				0			
0.0001	0.0000		0.0001	0.0001	0.0006	0.0008	0.0003	0.0000		0.0003		3.25	
			0	0.0000	0.0001	0.0001				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0941
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0349	
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0479	
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.1255	
0.0001	0.0000		0.0001	0.0000	0.0002	0.0002	0.0001	0.0000		0.0001		0.8152	
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0667	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0123
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.2086	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0384
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.1820	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0322
0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000		0.3871	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0710
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0353	
			0	0.0000	0.0000	0.0000				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0001
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0067	
			0	0.0000	0.0000	0.0000				0			
0.0000	0		0.0000	0.0000	0.0000	0.0000				0			0.0000
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0091	
			0	0.0000	0.0000	0.0000				0			
0.0000	0		0.0000	0.0000	0.0000	0.0000				0			0.0000
			0	0.0000	0.0001	0.0001				0			
0.0000		0.0000	0.0000	0.0000	0.0001	0.0002	0.0001	0.0000	0.0000	0.0001	1.48		
0.0070	0.0001		0.0070	0.0022	0.0070	0.0162	0.0030	0.0002		0.0032		30.1	
			0	0.0006	0.0010	0.0017				0			
0.0105	0.0001		0.0106	0.0034	0.0107	0.0246	0.0043	0.0003		0.0046		43.6	
0.0040	0.0000		0.0041	0.0012	0.0039	0.0092	0.0016	0.0001		0.0017		16.0	
0.0001	0.0000		0.0001	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.5057	
			0	0.0000	0.0000	0.0000				0			
0.0002	0.0000		0.0002	0.0001	0.0003	0.0006	0.0001	0.0000		0.0001		1.27	
			0	0.0000	0.0000	0.0001				0			
0.0003	0.0000		0.0003	0.0001	0.0005	0.0009	0.0002	0.0000		0.0002		1.82	
			0	0.0000	0.0000	0.0001				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0097
0.0001	0.0000		0.0001	0.0001	0.0003	0.0005	0.0001	0.0000		0.0001		1.26	
			0	0.0001	0.0001	0.0002				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0001				0			0.1920
0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.5425	
			0	0.0000	0.0002	0.0002				0			
0.0000	0.0000		0.0000	0.0000	0.0003	0.0004				0			0.7418
0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000		0.3855	
			0	0.0000	0.0001	0.0001				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0152
0.0001	0.0000		0.0001	0.0000	0.0002	0.0003	0.0001	0.0000		0.0001		0.7081	
			0	0.0000	0.0001	0.0001				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.0278
0.0004	0.0000		0.0004	0.0002	0.0008	0.0015	0.0004	0.0000		0.0004		3.59	
			0	0.0002	0.0004	0.0006				0			
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000				0			0.1415
0.0036	0.0000		0.0037	0.0016	0.0052	0.0105	0.0021	0.0002		0.0023		21.4	
			0	0.0003	0.0005	0.0009				0			
0.0000	0.0000		0.0000	0.0000	0.0001	0.0001				0			0.4183
0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0572	
			0	0.0000	0.0000	0.0000				0			
			0	0.0000	0.0000	0.0000				0			
0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0058		
0			0	0	0.0000	0.0000	0			0		0.0000	
			0	0.0001	0.0002	0.0003				0			
0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0104		
0			0	0	0	0.0000				0			0.0000

Veh_Tech	EMFAC2011 Category	Population	Total_VMT	cVMT	eVMT	Trips	TOG_RUNEX	TOG_IDLEX	TOG_STREX	TOG_TOTEX	TOG_DIURN	TOG_HTSK	TOG_RUNLS
All Other Buses-Dsl	All Other Buses - Dsl	113.0	5,014.0	5,014.0	0	1,005.4	0.0003	0.0000		0.0003			
LDA-Dsl	LDA - Dsl	98.7	3,698.9	3,698.9	0	440.8	0.0000			0.0000			
LDT1-Dsl	LDT1 - Dsl	0.1055	4.11	4.11	0	0.4861	0.0000			0.0000			
LDT2-Dsl	LDT2 - Dsl	300.2	11,679.2	11,679.2	0	1,380.5	0.0002			0.0002			
LHD1-Dsl	LHD1 - Dsl	2,291.4	75,896.5	75,896.5	0	28,822.4	0.0095	0.0003		0.0098			
LHD2-Dsl	LHD2 - Dsl	1,172.4	36,854.2	36,854.2	0	14,746.9	0.0060	0.0002		0.0061			
MDV-Dsl	MDV - Dsl	543.9	19,292.5	19,292.5	0	2,422.4	0.0001			0.0001			
MH-Dsl	MH - Dsl	252.0	2,428.3	2,428.3	0	25.2	0.0003			0.0003			
Motor Coach-Dsl	Motor Coach - Dsl	23.2	2,939.9	2,939.9	0	532.4	0.0000	0.0001		0.0002			
PTO-Dsl	PTO-Dsl	0	6,330.5	6,330.5	0		0.0001			0.0001			
SBUS-Dsl	SBUS - Dsl	203.2	4,190.2	4,190.2	0	2,942.7	0.0000	0.0000		0.0001			
T6 CAIRP Class 4-Dsl	T6 CAIRP small-Dsl	3.67	264.9	264.9	0	84.4	0.0000	0.0000		0.0000			
T6 CAIRP Class 5-Dsl	T6 CAIRP small-Dsl	4.52	363.8	363.8	0	103.8	0.0000	0.0000		0.0000			
T6 CAIRP Class 6-Dsl	T6 CAIRP small-Dsl	20.5	947.1	947.1	0	471.1	0.0000	0.0000		0.0000			
T6 CAIRP Class 7-Dsl	T6 CAIRP heavy-Dsl	54.5	11,043.6	11,043.6	0	1,251.7	0.0001	0.0000		0.0001			
T6 Instate Delivery Class 4-Dsl	T6 instate small-Dsl	80.0	2,640.4	2,640.4	0	1,142.2	0.0000	0.0000		0.0000			
T6 Instate Delivery Class 5-Dsl	T6 instate small-Dsl	85.6	2,825.9	2,825.9	0	1,222.0	0.0000	0.0000		0.0000			
T6 Instate Delivery Class 6-Dsl	T6 instate small-Dsl	266.0	8,772.6	8,772.6	0	3,795.3	0.0001	0.0001		0.0001			
T6 Instate Delivery Class 7-Dsl	T6 instate heavy-Dsl	122.8	6,220.8	6,220.8	0	1,753.0	0.0001	0.0000		0.0001			
T6 Instate Other Class 4-Dsl	T6 instate small-Dsl	312.9	12,130.2	12,130.2	0	3,616.5	0.0001	0.0001		0.0002			
T6 Instate Other Class 5-Dsl	T6 instate small-Dsl	668.1	25,918.2	25,918.2	0	7,723.5	0.0002	0.0001		0.0003			
T6 Instate Other Class 6-Dsl	T6 instate small-Dsl	423.8	16,422.8	16,422.8	0	4,899.0	0.0001	0.0001		0.0002			
T6 Instate Other Class 7-Dsl	T6 instate heavy-Dsl	395.9	15,762.0	15,762.0	0	4,576.7	0.0001	0.0001		0.0002			
T6 Instate Tractor Class 6-Dsl	T6 instate small-Dsl	8.91	400.0	400.0	0	103.0	0.0000	0.0000		0.0000			
T6 Instate Tractor Class 7-Dsl	T6 instate heavy-Dsl	596.5	34,455.7	34,455.7	0	6,895.2	0.0003	0.0001		0.0004			
T6 OOS Class 4-Dsl	T6 OOS small-Dsl	5.05	370.2	370.2	0	116.1	0.0000	0.0000		0.0000			
T6 OOS Class 5-Dsl	T6 OOS small-Dsl	6.21	507.8	507.8	0	142.7	0.0000	0.0000		0.0000			
T6 OOS Class 6-Dsl	T6 OOS small-Dsl	28.2	1,327.0	1,327.0	0	647.1	0.0000	0.0000		0.0000			
T6 OOS Class 7-Dsl	T6 OOS heavy-Dsl	34.7	9,648.8	9,648.8	0	796.9	0.0001	0.0000		0.0001			
T6 Public Class 4-Dsl	T6 Public-Dsl	16.9	582.6	582.6	0	86.8	0.0000	0.0000		0.0000			
T6 Public Class 5-Dsl	T6 Public-Dsl	52.7	1,805.0	1,805.0	0	270.6	0.0000	0.0000		0.0000			
T6 Public Class 6-Dsl	T6 Public-Dsl	46.3	1,579.4	1,579.4	0	237.3	0.0000	0.0000		0.0000			
T6 Public Class 7-Dsl	T6 Public-Dsl	82.7	3,459.1	3,459.1	0	424.1	0.0000	0.0000		0.0001			
T6 Utility Class 5-Dsl	T6 Utility-Dsl	8.57	340.9	340.9	0	109.6	0.0000	0.0000		0.0000			
T6 Utility Class 6-Dsl	T6 Utility-Dsl	1.62	64.4	64.4	0	20.7	0.0000	0.0000		0.0000			
T6 Utility Class 7-Dsl	T6 Utility-Dsl	1.80	88.4	88.4	0	23.0	0.0000	0.0000		0.0000			
T7 CAIRP Class 8-Dsl	T7 CAIRP-Dsl	1,069.5	222,564.2	222,564.2	0	24,576.7	0.0032	0.0140		0.0172			
T7 NNOOS Class 8-Dsl	T7 NNOOS-Dsl	1,184.7	338,999.1	338,999.1	0	27,224.2	0.0047	0.0193		0.0240			
T7 NOOS Class 8-Dsl	T7 NOOS-Dsl	510.0	123,152.4	123,152.4	0	11,719.6	0.0018	0.0083		0.0101			
T7 Other Port Class 8-Dsl	T7 Other Port-Dsl	15.3	3,672.7	3,672.7	0	249.8	0.0000	0.0001		0.0001			
T7 POAK Class 8-Dsl	T7 POAK-Dsl	78.4	9,089.4	9,089.4	0	1,282.4	0.0001	0.0003		0.0005			
T7 POLA Class 8-Dsl	T7 POLA-Dsl	70.4	13,050.3	13,050.3	0	1,151.2	0.0002	0.0003		0.0005			
T7 Public Class 8-Dsl	T7 Public-Dsl	189.7	7,617.1	7,617.1	0	973.4	0.0003	0.0003		0.0006			
T7 SWCV Class 8-Dsl	T7 SWCV-Dsl	24.5	1,588.4	1,588.4	0	112.6	0.0001	0.0000		0.0001			
T7 Single Concrete/Transit Mix Class 8-Dsl	T7 Single-Dsl	39.5	2,606.2	2,606.2	0	371.9	0.0000	0.0001		0.0001			
T7 Single Dump Class 8-Dsl	T7 Single-Dsl	94.5	4,590.7	4,590.7	0	889.9	0.0001	0.0002		0.0003			
T7 Single Other Class 8-Dsl	T7 Single-Dsl	421.9	23,573.4	23,573.4	0	3,974.7	0.0003	0.0010		0.0013			
T7 Tractor Class 8-Dsl	T7 Tractor-Dsl	2,449.8	157,999.2	157,999.2	0	35,594.9	0.0020	0.0106		0.0127			
T7 Utility Class 8-Dsl	T7 Utility-Dsl	8.96	368.4	368.4	0	114.6	0.0000	0.0000		0.0000			
UBUS-Dsl	UBUS - Dsl	0.0001	0.0046	0.0046	0	0.0003	0.0000			0.0000			
	TOTALs	14,483.3	1,235,141.6	1,235,141.6	0.0	201,067.5	0.0	0.1	0.0	0.1	0.0	0.0	0.0

TOG_TOTAL	ROG_RUNEX	ROG_IDLEX	ROG_STREX	ROG_TOTEX	ROG_DIURN	ROG_HTSK	ROG_RUNLS	ROG_TOTAL	CO_RUNEX	CO_IDLEX	CO_STREX	CO_TOTEX	NOx_RUNEX	NOx_IDLEX	NOx_STREX
0.0003	0.0002	0.0000		0.0002				0.0002	0.0009	0.0003		0.0012	0.0063	0.0002	0.0010
0.0000	0.0000			0.0000				0.0000	0.0006			0.0006	0.0001		
0.0000	0.0000			0.0000				0.0000	0.0000			0.0000	0.0000		
0.0002	0.0002			0.0002				0.0002	0.0017			0.0017	0.0004		
0.0098	0.0083	0.0003		0.0086				0.0086	0.0222	0.0023		0.0245	0.0345	0.0032	
0.0061	0.0052	0.0001		0.0054				0.0054	0.0141	0.0012		0.0153	0.0246	0.0018	
0.0001	0.0001			0.0001				0.0001	0.0031			0.0031	0.0003		
0.0003	0.0002			0.0002				0.0002	0.0007			0.0007	0.0071		
0.0002	0.0000	0.0001		0.0001				0.0001	0.0001	0.0015		0.0016	0.0030	0.0005	0.0006
0.0001	0.0001			0.0001				0.0001	0.0013			0.0013	0.0180		
0.0001	0.0000	0.0000		0.0001				0.0001	0.0002	0.0016		0.0018	0.0016	0.0015	0.0020
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0001	0.0000	0.0000
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0001	0.0000	0.0000
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0001	0.0002	0.0000	0.0002
0.0001	0.0001	0.0000		0.0001				0.0001	0.0004	0.0001		0.0005	0.0024	0.0001	0.0005
0.0000	0.0000	0.0000		0.0000				0.0000	0.0002	0.0006		0.0008	0.0010	0.0005	0.0013
0.0000	0.0000	0.0000		0.0000				0.0000	0.0002	0.0007		0.0008	0.0011	0.0005	0.0014
0.0001	0.0001	0.0000		0.0001				0.0001	0.0005	0.0021		0.0026	0.0034	0.0017	0.0043
0.0001	0.0001	0.0000		0.0001				0.0001	0.0005	0.0010		0.0014	0.0039	0.0010	0.0025
0.0002	0.0001	0.0001		0.0001				0.0001	0.0006	0.0026		0.0032	0.0036	0.0021	0.0046
0.0003	0.0002	0.0001		0.0003				0.0003	0.0012	0.0056		0.0068	0.0076	0.0045	0.0100
0.0002	0.0001	0.0001		0.0002				0.0002	0.0008	0.0035		0.0043	0.0049	0.0028	0.0063
0.0002	0.0001	0.0001		0.0002				0.0002	0.0009	0.0033		0.0042	0.0081	0.0035	0.0074
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0001		0.0001	0.0001	0.0001	0.0001
0.0004	0.0003	0.0001		0.0004				0.0004	0.0019	0.0050		0.0068	0.0148	0.0050	0.0105
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0001	0.0000	0.0001
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0001		0.0001	0.0003	0.0001	0.0004
0.0001	0.0001	0.0000		0.0001				0.0001	0.0003	0.0001		0.0004	0.0025	0.0001	0.0005
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0002		0.0002	0.0003	0.0002	0.0001
0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0006		0.0007	0.0011	0.0007	0.0004
0.0000	0.0000	0.0000		0.0000				0.0000	0.0001	0.0005		0.0006	0.0010	0.0006	0.0003
0.0001	0.0000	0.0000		0.0001				0.0001	0.0002	0.0010		0.0012	0.0018	0.0011	0.0007
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0001		0.0001	0.0001	0.0000	0.0001
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000
0.0172	0.0028	0.0123		0.0151				0.0151	0.0095	0.1818		0.1912	0.2959	0.0943	0.0426
0.0240	0.0041	0.0169		0.0211				0.0211	0.0140	0.2499		0.2639	0.4981	0.1998	0.0713
0.0101	0.0016	0.0073		0.0088				0.0088	0.0053	0.1076		0.1128	0.1861	0.0860	0.0307
0.0001	0.0000	0.0001		0.0001				0.0001	0.0003	0.0009		0.0011	0.0050	0.0005	0.0005
0.0005	0.0001	0.0003		0.0004				0.0004	0.0006	0.0044		0.0050	0.0129	0.0025	0.0026
0.0005	0.0002	0.0003		0.0004				0.0004	0.0010	0.0039		0.0049	0.0201	0.0024	0.0025
0.0006	0.0003	0.0002		0.0005				0.0005	0.0013	0.0035		0.0048	0.0166	0.0028	0.0055
0.0001	0.0000	0.0000		0.0001				0.0001	0.0001	0.0005		0.0006	0.0033	0.0005	0.0006
0.0001	0.0000	0.0001		0.0001				0.0001	0.0001	0.0012		0.0013	0.0023	0.0006	0.0009
0.0003	0.0001	0.0002		0.0002				0.0002	0.0003	0.0029		0.0031	0.0056	0.0015	0.0025
0.0013	0.0003	0.0009		0.0011				0.0011	0.0014	0.0128		0.0142	0.0278	0.0070	0.0114
0.0127	0.0018	0.0093		0.0111				0.0111	0.0083	0.1379		0.1462	0.2059	0.0829	0.1317
0.0000	0.0000	0.0000		0.0000				0.0000	0.0000	0.0001		0.0001	0.0004	0.0001	0.0005
0.0000	0.0000			0.0000				0.0000	0.0000			0.0000	0.0000		
0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.1	0.7	0.0	0.8	1.4	0.5	0.4

NOx_TOTEX	CO2_RUNEX	CO2_IDLEX	CO2_STREX	CO2_TOTEX	PM10_RUNEX	PM10_IDLEX	PM10_STREX	PM10_TOTEX	PM10_PMTW	PM10_PMBW	PM10_TOTAL	PM2_5_RUNEX	PM2_5_IDLEX	PM2_5_STREX	PM2_5_TOTEX
0.0076	5.71	0.0672		5.78	0.0001	0.0000		0.0001	0.0001	0.0003	0.0004	0.0001	0.0000		0.0001
0.0001	0.6854			0.6854	0.0000			0.0000	0.0000	0.0000	0.0001	0.0000			0.0000
0.0000	0.0014			0.0014	0.0000			0.0000	0.0000	0.0000	0.0000	0.0000			0.0000
0.0004	3.00			3.00	0.0001			0.0001	0.0001	0.0001	0.0003	0.0001			0.0001
0.0376	50.5	0.3004		50.8	0.0019	0.0001		0.0019	0.0010	0.0065	0.0095	0.0018	0.0001		0.0019
0.0264	28.8	0.2522		29.1	0.0012	0.0000		0.0012	0.0005	0.0037	0.0054	0.0012	0.0000		0.0012
0.0003	6.49			6.49	0.0000			0.0000	0.0002	0.0002	0.0004	0.0000			0.0000
0.0071	2.89			2.89	0.0001			0.0001	0.0000	0.0001	0.0002	0.0001			0.0001
0.0041	4.92	0.2112		5.13	0.0001	0.0000		0.0001	0.0000	0.0003	0.0004	0.0001	0.0000		0.0001
0.0180	12.1			12.1	0.0000			0.0000			0.0000	0.0000			0.0000
0.0051	4.80	0.4173		5.21	0.0000	0.0000		0.0000	0.0001	0.0002	0.0003	0.0000	0.0000		0.0000
0.0001	0.2938	0.0021		0.2959	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
0.0001	0.4038	0.0025		0.4063	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
0.0004	1.0499	0.0115		1.06	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000
0.0030	10.8	0.0299		10.8	0.0001	0.0000		0.0001	0.0001	0.0005	0.0007	0.0001	0.0000		0.0001
0.0028	3.01	0.1534		3.17	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000
0.0030	3.23	0.1643		3.39	0.0000	0.0000		0.0000	0.0000	0.0001	0.0002	0.0000	0.0000		0.0000
0.0094	10.03	0.5105		10.54	0.0000	0.0000		0.0000	0.0001	0.0005	0.0006	0.0000	0.0000		0.0000
0.0074	7.26	0.2458		7.50	0.0000	0.0000		0.0000	0.0001	0.0003	0.0004	0.0000	0.0000		0.0000
0.0103	13.4	0.6454		14.1	0.0000	0.0000		0.0000	0.0002	0.0006	0.0008	0.0000	0.0000		0.0000
0.0220	28.7	1.38		30.1	0.0001	0.0000		0.0001	0.0003	0.0013	0.0017	0.0001	0.0000		0.0001
0.0141	18.2	0.8739		19.0	0.0001	0.0000		0.0001	0.0002	0.0008	0.0011	0.0001	0.0000		0.0001
0.0190	17.5	0.8571		18.4	0.0001	0.0000		0.0001	0.0002	0.0008	0.0011	0.0001	0.0000		0.0001
0.0003	0.4413	0.0184		0.4597	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
0.0303	34.9	1.25		36.1	0.0001	0.0000		0.0001	0.0005	0.0017	0.0023	0.0001	0.0000		0.0001
0.0002	0.3856	0.0027		0.3883	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
0.0002	0.5293	0.0033		0.5326	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
0.0008	1.38	0.0148		1.39	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000
0.0031	9.04	0.0182		9.06	0.0001	0.0000		0.0001	0.0001	0.0005	0.0006	0.0001	0.0000		0.0001
0.0006	0.6903	0.0510		0.7413	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
0.0022	2.16	0.1622		2.32	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000
0.0019	1.88	0.1413		2.02	0.0000	0.0000		0.0000	0.0000	0.0001	0.0001	0.0000	0.0000		0.0000
0.0035	4.05	0.2478		4.30	0.0000	0.0000		0.0000	0.0000	0.0002	0.0002	0.0000	0.0000		0.0000
0.0002	0.3790	0.0132		0.3922	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
0.0000	0.0716	0.0025		0.0741	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
0.0000	0.0984	0.0028		0.1012	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000
0.4328	311.2	23.5		334.7	0.0073	0.0001		0.0073	0.0088	0.0201	0.0362	0.0070	0.0001		0.0070
0.7692	453.9	31.0		484.8	0.0109	0.0001		0.0110	0.0135	0.0306	0.0550	0.0105	0.0001		0.0105
0.3029	164.8	13.3		178.1	0.0042	0.0000		0.0042	0.0049	0.0111	0.0202	0.0040	0.0000		0.0041
0.0060	5.51	0.1090		5.62	0.0001	0.0000		0.0001	0.0001	0.0004	0.0006	0.0001	0.0000		0.0001
0.0180	13.6	0.5598		14.2	0.0002	0.0000		0.0002	0.0004	0.0009	0.0015	0.0002	0.0000		0.0002
0.0249	19.7	0.5093		20.3	0.0003	0.0000		0.0003	0.0005	0.0013	0.0021	0.0003	0.0000		0.0003
0.0248	13.5	0.5405		14.0	0.0001	0.0000		0.0001	0.0003	0.0009	0.0013	0.0001	0.0000		0.0001
0.0044	5.94	0.0830		6.03	0.0000	0.0000		0.0000	0.0001	0.0004	0.0005	0.0000	0.0000		0.0000
0.0038	4.13	0.1583		4.28	0.0000	0.0000		0.0000	0.0001	0.0003	0.0004	0.0000	0.0000		0.0000
0.0096	7.46	0.4036		7.87	0.0001	0.0000		0.0001	0.0002	0.0004	0.0007	0.0001	0.0000		0.0001
0.0462	38.1	1.79		39.9	0.0004	0.0000		0.0004	0.0009	0.0023	0.0036	0.0004	0.0000		0.0004
0.4205	220.3	17.9		238.2	0.0038	0.0000		0.0038	0.0063	0.0150	0.0251	0.0036	0.0000		0.0037
0.0010	0.6219	0.0131		0.6350	0.0000	0.0000		0.0000	0.0000	0.0000	0.0001	0.0000	0.0000		0.0000
0.0000	0.0000			0.0000	0			0	0	0.0000	0.0000	0			0
2.3	1,548.6	97.9	0.0	1,646.6	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0

PM2_5_PMTW	PM2_5_PMBW	PM2_5_TOTAL	SOx_RUNEX	SOx_IDLEX	SOx_STREX	SOx_TOTEX	Fuel_GAS	Fuel_DSL	Fuel_NG
0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.5198	
0.0000	0.0000	0.0000	0.0000			0.0000		0.0617	
0.0000	0.0000	0.0000	0.0000			0.0000		0.0001	
0.0000	0.0000	0.0001	0.0000			0.0000		0.2696	
0.0003	0.0023	0.0044	0.0005	0.0000		0.0005		4.57	
0.0001	0.0013	0.0026	0.0003	0.0000		0.0003		2.62	
0.0000	0.0001	0.0001	0.0001			0.0001		0.5839	
0.0000	0.0000	0.0001	0.0000			0.0000		0.2604	
0.0000	0.0001	0.0002	0.0000	0.0000		0.0000		0.4616	
		0.0000	0.0001			0.0001		1.09	
0.0000	0.0001	0.0001	0.0000	0.0000		0.0000		0.4692	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0266	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0366	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0955	
0.0000	0.0002	0.0003	0.0001	0.0000		0.0001		0.9763	
0.0000	0.0000	0.0001	0.0000	0.0000		0.0000		0.2851	
0.0000	0.0001	0.0001	0.0000	0.0000		0.0000		0.3055	
0.0000	0.0002	0.0002	0.0001	0.0000		0.0001		0.9487	
0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.6754	
0.0000	0.0002	0.0003	0.0001	0.0000		0.0001		1.27	
0.0001	0.0004	0.0006	0.0003	0.0000		0.0003		2.71	
0.0001	0.0003	0.0004	0.0002	0.0000		0.0002		1.71	
0.0001	0.0003	0.0004	0.0002	0.0000		0.0002		1.66	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0414	
0.0001	0.0006	0.0008	0.0003	0.0000		0.0003		3.25	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0349	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0479	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.1255	
0.0000	0.0002	0.0002	0.0001	0.0000		0.0001		0.8152	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0667	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.2086	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.1820	
0.0000	0.0001	0.0001	0.0000	0.0000		0.0000		0.3871	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0353	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0067	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0091	
0.0022	0.0070	0.0162	0.0030	0.0002		0.0032		30.1	
0.0034	0.0107	0.0246	0.0043	0.0003		0.0046		43.6	
0.0012	0.0039	0.0092	0.0016	0.0001		0.0017		16.0	
0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.5057	
0.0001	0.0003	0.0006	0.0001	0.0000		0.0001		1.27	
0.0001	0.0005	0.0009	0.0002	0.0000		0.0002		1.82	
0.0001	0.0003	0.0005	0.0001	0.0000		0.0001		1.26	
0.0000	0.0001	0.0002	0.0001	0.0000		0.0001		0.5425	
0.0000	0.0001	0.0002	0.0000	0.0000		0.0000		0.3855	
0.0000	0.0002	0.0003	0.0001	0.0000		0.0001		0.7081	
0.0002	0.0008	0.0015	0.0004	0.0000		0.0004		3.59	
0.0016	0.0052	0.0105	0.0021	0.0002		0.0023		21.4	
0.0000	0.0000	0.0000	0.0000	0.0000		0.0000		0.0572	
0	0.0000	0.0000	0			0		0.0000	
0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	148.2	0.0

	PM2_5_RU	PM2_5_IDI	PM2_5_STI	PM2_5_TO	PM2_5_PMTW	PM2_5_PMBW	PM2_5_TO
2022	0.05665	0.000613	0.003073	0.060337	0.03028369	0.079305072	0.169925
2046	0.036043	0.000314	0.001248	0.037606	0.041553673	0.094789375	0.173949
	-0.02061	-0.0003	-0.00182	-0.02273	0.011269983	0.015484304	0.004023

	PM10_RUN	PM10_IDLE	PM10_STR	PM10_TOT	PM10_PMTW	PM10_PMBW	PM10_TOT
2022	0.059818	0.000641	0.003341	0.063799	0.121134759	0.226585919	0.41152
2046	0.037923	0.000329	0.001357	0.039609	0.166214692	0.270826786	0.476651
	-0.02189	-0.00031	-0.00198	-0.02419	0.045079933	0.044240867	0.06513

Emissions Estimates						
Annual Emissions (metric tons per year)					Per Capita Emissions (metric tons per person per year)	Per Capita Emissions (pounds per person per day)
	StanCOG					
Year	CO_2	CH_4	N_2O	CO_2e	CO_2e	CO_2e
Existing (2022)	1,891,990	82	135	1,934,271	3.41	20.60
2046 Project	1,685,400	34	118	1,721,316	2.57	15.51
Net Change (2022 to 2046 Project)	(206,590)	(48)	(17)	(212,955)	(0.84)	(5.08)
% Change (2022 to 2046 Project)	-10.92%	-58.27%	-12.85%	-11.01%	-24.68%	-24.68%

2022 Population	567,329
2046 Population	670,338

**GWPs of 25 for CH_4 and 298 for N_2O were utilized to calculate CO_2e (consistent with CARB's 2017 Scoping Plan, which relied on IPCC AR4 estimates).*

	StanCOG	
	Existing (2022)	2046 RTP/SCS
Daily VMT	11,459,828	14,922,100
Daily Trips	1,609,672	1,898,441
Daily Vehicles	304,892	364,486

- Daily VMT provided by StanCOG. Daily Trips and Daily Vehicles based on EMFAC2021 Planning Inventory outputs for the respective year.

Days per Year	365

	StanCOG		
	2005**	Existing (2022)*	2046 RTP/SCS*
Population	494,144	567,329	670,338
VMT	9,129,097	11,459,828	14,922,100
Per Capita VMT	18.5	20.2	22.3

*VMT from "StanCOG EMFAC Results ScenD" Input templates

** CA DOF E-4 estimate

	Project VMT	Induced Demand VMT	Total VMT
2035	10,299,766	234,325	10,534,091
2046	14,102,894	819,206	14,922,100

*Total VMT refers to the project VMT plus induced demand. Induced demand is consertvatively assumed to be attributable to the project

Source: StanCOG/Kimley Horn

SB 32 Analysis - CO_2 Emissions Estimates						
		StanCOG				
Year	VMT	CO_2 (tons/day)	CO_2 (lbs/day)	Population	Per Capita CO_2 (lbs/person/day)	% change from 1990 Baseline
1990*	n/a	n/a	n/a	n/a	18.2	n/a
2005**	9,129,097	5,292.5	10,585,000.00	494,144	21.4	n/a
Existing (2022)	11,459,828	5,625.8	11,251,600.00	567,329	19.8	9%
2030 with 2022 RTP/SCS***	12,613,919	5,058.4	10,116,800.00	625,213	16.2	-11%
2046 with 2022 RTP/SCS	14,922,100	5,025.3	10,050,600.00	670,338	15.0	-18%

*1990 per capita levels assumed to be 15% below 2005 levels

** From Kimley-Horn

***2030 VMT calculated via linear interpolation using 2022 and 2046 values. Population from StanCOG Demographic Forecast

SCENARIO	StanCOG 2022 - RUNEX

Source	EMFAC2021 (v1.0.2) Emission Rates
Region Type	MPO
Region	StanCOG
Calendar Year	2022
Season	Annual
Vehicle Classification	EMFAC202x Categories
Emissions Rate and Vehicle Activity Units	Units: miles/day for VMT, g/mile for RUNEX

Daily VMT	11,459,828

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	CO_2 RUNEX	CH_4 RUNEX	N_2O RUNEX	Fleet Mix (by VMT)	VMT per Day	CO_2 RUNEX Emissions (MT/day)	CH_4 RUNEX Emissions (MT/day)	N_2O RUNEX Emissions (MT/day)
StanCOG	2022	All Other Buses	Aggregate	Aggregate	Diesel	1162.296167	0.00865116	0.183120234	0.04%	4,233.93	4.92E+00	3.66E-05	7.75E-04
StanCOG	2022	All Other Buses	Aggregate	Aggregate	Natural Gas	1050.502024	0.773646644	0.21415171	0.00%	75.34	7.91E-02	5.83E-05	1.61E-05
StanCOG	2022	LDA	Aggregate	Aggregate	Gasoline	284.0868307	0.00283985	0.005430056	44.88%	5,142,795.57	1.46E+03	1.46E-02	2.79E-02
StanCOG	2022	LDA	Aggregate	Aggregate	Diesel	225.4110085	0.001350305	0.035513596	0.11%	12,551.69	2.83E+00	1.69E-05	4.46E-04
StanCOG	2022	LDA	Aggregate	Aggregate	Electricity	0	0	0	1.16%	132,575.47	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	LDA	Aggregate	Aggregate	Plug-in Hybrid	151.799875	0.00049253	0.000649843	1.09%	124,706.88	1.89E+01	6.14E-05	8.10E-05
StanCOG	2022	LDT1	Aggregate	Aggregate	Gasoline	340.7871246	0.010610718	0.01476459	3.72%	426,678.61	1.45E+02	4.53E-03	6.30E-03
StanCOG	2022	LDT1	Aggregate	Aggregate	Diesel	388.9433927	0.012947464	0.06127819	0.00%	119.01	4.63E-02	1.54E-06	7.29E-06
StanCOG	2022	LDT1	Aggregate	Aggregate	Electricity	0	0	0	0.00%	193.22	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	LDT1	Aggregate	Aggregate	Plug-in Hybrid	139.9554308	0.000451379	0.000593465	0.00%	208.65	2.92E-02	9.42E-08	1.24E-07
StanCOG	2022	LDT2	Aggregate	Aggregate	Gasoline	356.9957408	0.00393848	0.008057755	18.08%	2,071,629.32	7.40E+02	8.16E-03	1.67E-02
StanCOG	2022	LDT2	Aggregate	Aggregate	Diesel	301.9123239	0.00083305	0.04756641	0.05%	6,040.67	1.82E+00	5.03E-06	2.87E-04
StanCOG	2022	LDT2	Aggregate	Aggregate	Electricity	0	0	0	0.03%	3,737.61	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	LDT2	Aggregate	Aggregate	Plug-in Hybrid	144.9260314	0.000467921	0.000615532	0.09%	10,609.39	1.54E+00	4.96E-06	6.53E-06
StanCOG	2022	LHD1	Aggregate	Aggregate	Gasoline	933.0782028	0.012193982	0.014795486	2.08%	238,595.17	2.23E+02	2.91E-03	3.53E-03
StanCOG	2022	LHD1	Aggregate	Aggregate	Diesel	639.4855898	0.011429628	0.100751215	2.15%	246,902.43	1.58E+02	2.82E-03	2.49E-02
StanCOG	2022	LHD2	Aggregate	Aggregate	Gasoline	1003.839723	0.006530905	0.009980439	0.38%	43,753.77	4.39E+01	2.86E-04	4.37E-04
StanCOG	2022	LHD2	Aggregate	Aggregate	Diesel	780.44774	0.009442762	0.122959859	0.78%	89,243.31	6.96E+01	8.43E-04	1.10E-02
StanCOG	2022	MCY	Aggregate	Aggregate	Gasoline	186.1315487	0.197479511	0.045177582	0.36%	41,308.89	7.69E+00	8.16E-03	1.87E-03
StanCOG	2022	MDV	Aggregate	Aggregate	Gasoline	436.2935015	0.005467333	0.010620349	17.54%	2,010,525.91	8.77E+02	1.10E-02	2.14E-02
StanCOG	2022	MDV	Aggregate	Aggregate	Diesel	405.2650171	0.000718535	0.063849668	0.30%	34,011.10	1.38E+01	2.44E-05	2.17E-03
StanCOG	2022	MDV	Aggregate	Aggregate	Electricity	0	0	0	0.03%	3,957.68	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	MDV	Aggregate	Aggregate	Plug-in Hybrid	151.724206	0.00049157	0.000647974	0.09%	9,889.54	1.50E+00	4.86E-06	6.41E-06
StanCOG	2022	MH	Aggregate	Aggregate	Gasoline	1951.805643	0.022360344	0.033176498	0.08%	8,747.01	1.71E+01	1.96E-04	2.90E-04
StanCOG	2022	MH	Aggregate	Aggregate	Diesel	1078.627662	0.007278113	0.169938227	0.03%	3,615.49	3.90E+00	2.63E-05	6.14E-04
StanCOG	2022	Motor Coach	Aggregate	Aggregate	Diesel	1774.853672	0.001121411	0.279628919	0.02%	2,460.22	4.37E+00	2.76E-06	6.88E-04
StanCOG	2022	OBUS	Aggregate	Aggregate	Gasoline	1818.163972	0.022746549	0.036029513	0.04%	4,778.89	8.69E+00	1.09E-04	1.72E-04
StanCOG	2022	PTO	Aggregate	Aggregate	Diesel	2149.993151	0.003450343	0.338732296	0.07%	7,577.26	1.63E+01	2.61E-05	2.57E-03
StanCOG	2022	SBUS	Aggregate	Aggregate	Gasoline	828.9913192	0.007259313	0.020555986	0.06%	7,171.87	5.95E+00	5.21E-05	1.47E-04
StanCOG	2022	SBUS	Aggregate	Aggregate	Diesel	1156.100623	0.003041224	0.182144124	0.07%	8,078.10	9.34E+00	2.46E-05	1.47E-03
StanCOG	2022	SBUS	Aggregate	Aggregate	Natural Gas	1245.383332	3.217736473	0.253879539	0.01%	1,716.67	2.14E+00	5.52E-03	4.36E-04
StanCOG	2022	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	1142.623012	0.00070619	0.180020721	0.00%	355.74	4.06E-01	2.51E-07	6.40E-05
StanCOG	2022	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	1139.598153	0.000457899	0.179544153	0.00%	488.01	5.56E-01	2.23E-07	8.76E-05
StanCOG	2022	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	1127.528122	0.000574065	0.177642515	0.01%	1,275.18	1.44E+00	7.32E-07	2.27E-04
StanCOG	2022	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	1061.899361	0.000416095	0.167302677	0.07%	7,998.55	8.49E+00	3.33E-06	1.34E-03
StanCOG	2022	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	1196.307096	0.005755798	0.18847867	0.03%	3,094.48	3.70E+00	1.78E-05	5.83E-04
StanCOG	2022	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	1194.622031	0.002922883	0.188213187	0.03%	3,315.81	3.96E+00	9.69E-06	6.24E-04
StanCOG	2022	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	1191.910123	0.003112393	0.187785925	0.09%	10,275.51	1.22E+01	3.20E-05	1.93E-03
StanCOG	2022	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	1180.436625	0.001617346	0.185978271	0.05%	5,634.51	6.65E+00	9.11E-06	1.05E-03
StanCOG	2022	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	1091.2685	0.869217699	0.222462223	0.00%	47.15	5.15E-02	4.10E-05	1.05E-05
StanCOG	2022	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	1144.740281	0.004220307	0.180354297	0.13%	14,622.47	1.67E+01	6.17E-05	2.64E-03
StanCOG	2022	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	1150.033317	0.001016952	0.181188217	0.27%	31,263.19	3.60E+01	3.18E-05	5.66E-03
StanCOG	2022	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	1140.096008	0.003199641	0.17962259	0.17%	19,785.40	2.26E+01	6.33E-05	3.55E-03
StanCOG	2022	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	1112.863495	0.001210991	0.175332097	0.13%	15,441.77	1.72E+01	1.87E-05	2.71E-03
StanCOG	2022	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	968.3116215	0.695560272	0.197396658	0.00%	253.05	2.45E-01	1.76E-04	5.00E-05
StanCOG	2022	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	1070.844346	0.000457269	0.168711963	0.00%	490.95	5.26E-01	2.24E-07	8.28E-05
StanCOG	2022	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	1084.044237	0.001310871	0.170791611	0.21%	23,673.74	2.57E+01	3.10E-05	4.04E-03
StanCOG	2022	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	954.9263356	0.69384166	0.19466798	0.00%	228.83	2.19E-01	1.59E-04	4.45E-05
StanCOG	2022	T6 OOS Class 4	Aggregate	Aggregate	Diesel	1142.078566	0.000837819	0.179934943	0.00%	203.15	2.32E-01	1.70E-07	3.66E-05
StanCOG	2022	T6 OOS Class 5	Aggregate	Aggregate	Diesel	1139.431371	0.000487843	0.179517876	0.00%	278.69	3.18E-01	1.36E-07	5.00E-05
StanCOG	2022	T6 OOS Class 6	Aggregate	Aggregate	Diesel	1127.353251	0.000679821	0.177614964	0.01%	728.22	8.21E-01	4.95E-07	1.29E-04
StanCOG	2022	T6 OOS Class 7	Aggregate	Aggregate	Diesel	1060.657462	0.000427584	0.167107015	0.05%	5,295.03	5.62E+00	2.26E-06	8.85E-04
StanCOG	2022	T6 Public Class 4	Aggregate	Aggregate	Diesel	1259.175004	0.004331196	0.198383535	0.01%	977.77	1.23E+00	4.23E-06	1.94E-04
StanCOG	2022	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	1017.364555	0.860964616	0.20739642	0.00%	54.96	5.59E-02	4.73E-05	1.14E-05
StanCOG	2022	T6 Public Class 5	Aggregate	Aggregate	Diesel	1238.062731	0.002806382	0.195057287	0.03%	2,874.86	3.56E+00	8.07E-06	5.61E-04
StanCOG	2022	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	1036.923229	0.83712775	0.211383583	0.00%	284.19	2.95E-01	2.38E-04	6.01E-05
StanCOG	2022	T6 Public Class 6	Aggregate	Aggregate	Diesel	1259.812907	0.004498468	0.198484036	0.02%	2,593.65	3.27E+00	1.17E-05	5.15E-04
StanCOG	2022	T6 Public Class 6	Aggregate	Aggregate	Natural Gas	1026.861133	0.851464918	0.209332359	0.00%	148.04	1.52E-01	1.26E-04	3.10E-05

StanCOG	2022	T6 Public Class 7	Aggregate	Aggregate	Diesel	1242.986734	0.004256681	0.195833066	0.04%	5,054.28	6.28E+00	2.15E-05	9.90E-04
StanCOG	2022	T6 Public Class 7	Aggregate	Aggregate	Natural Gas	1030.076352	0.842885096	0.209987803	0.00%	434.75	4.48E-01	3.66E-04	9.13E-05
StanCOG	2022	T6 Utility Class 5	Aggregate	Aggregate	Diesel	1127.461595	0.00072934	0.177632034	0.01%	675.98	7.62E-01	4.93E-07	1.20E-04
StanCOG	2022	T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	994.7873033	0.689664899	0.202793899	0.00%	1.68	1.67E-03	1.16E-06	3.41E-07
StanCOG	2022	T6 Utility Class 6	Aggregate	Aggregate	Diesel	1131.522246	0.000874608	0.178271791	0.00%	127.48	1.44E-01	1.11E-07	2.27E-05
StanCOG	2022	T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	1002.773555	0.675605539	0.204421949	0.00%	0.58	5.86E-04	3.95E-07	1.19E-07
StanCOG	2022	T6 Utility Class 7	Aggregate	Aggregate	Diesel	1126.066167	0.000558833	0.177412183	0.00%	177.71	2.00E-01	9.93E-08	3.15E-05
StanCOG	2022	T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	994.2178395	0.694415916	0.202677811	0.00%	0.48	4.72E-04	3.30E-07	9.63E-08
StanCOG	2022	T6TS	Aggregate	Aggregate	Gasoline	1856.429004	0.023979577	0.030266756	0.17%	19,621.41	3.64E+01	4.71E-04	5.94E-04
StanCOG	2022	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	1574.869702	0.001009289	0.248121363	1.32%	151,621.69	2.39E+02	1.53E-04	3.76E-02
StanCOG	2022	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	1584.952494	0.00078775	0.249709911	1.56%	179,263.59	2.84E+02	1.41E-04	4.48E-02
StanCOG	2022	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	1575.697266	0.001063275	0.248251746	0.57%	65,123.28	1.03E+02	6.92E-05	1.62E-02
StanCOG	2022	T7 Other Port Class 8	Aggregate	Aggregate	Diesel	1681.892573	0.002994407	0.26498286	0.02%	2,640.28	4.44E+00	7.91E-06	7.00E-04
StanCOG	2022	T7 POAK Class 8	Aggregate	Aggregate	Diesel	1681.55668	0.003562089	0.26492994	0.06%	6,564.36	1.10E+01	2.34E-05	1.74E-03
StanCOG	2022	T7 POLA Class 8	Aggregate	Aggregate	Diesel	1702.957587	0.004762761	0.268301661	0.08%	8,772.27	1.49E+01	4.18E-05	2.35E-03
StanCOG	2022	T7 POLA Class 8	Aggregate	Aggregate	Natural Gas	1485.375012	1.186413414	0.302803413	0.00%	71.88	1.07E-01	8.53E-05	2.18E-05
StanCOG	2022	T7 Public Class 8	Aggregate	Aggregate	Diesel	1909.568937	0.006026891	0.300853364	0.10%	10,948.17	2.09E+01	6.60E-05	3.29E-03
StanCOG	2022	T7 Public Class 8	Aggregate	Aggregate	Natural Gas	1620.34713	1.813538359	0.330318362	0.01%	777.61	1.26E+00	1.41E-03	2.57E-04
StanCOG	2022	T7 Single Concrete/Transit Mix Clas	Aggregate	Aggregate	Diesel	1677.7218	0.000530207	0.264325753	0.05%	5,205.42	8.73E+00	2.76E-06	1.38E-03
StanCOG	2022	T7 Single Concrete/Transit Mix Clas	Aggregate	Aggregate	Natural Gas	1286.114176	1.058385781	0.262182788	0.00%	158.73	2.04E-01	1.68E-04	4.16E-05
StanCOG	2022	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	1677.762733	0.001620968	0.264332202	0.06%	7,362.93	1.24E+01	1.19E-05	1.95E-03
StanCOG	2022	T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	1358.347904	1.055512429	0.276908106	0.00%	261.24	3.55E-01	2.76E-04	7.23E-05
StanCOG	2022	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	1656.825491	0.001431689	0.261033531	0.21%	24,265.42	4.02E+01	3.47E-05	6.33E-03
StanCOG	2022	T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	1342.425773	1.056021831	0.273662276	0.01%	906.84	1.22E+00	9.58E-04	2.48E-04
StanCOG	2022	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	3949.932247	0.001160381	0.622313434	0.05%	5,230.73	2.07E+01	6.07E-06	3.26E-03
StanCOG	2022	T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	1718.899998	4.948671725	0.350409009	0.02%	2,571.18	4.42E+00	1.27E-02	9.01E-04
StanCOG	2022	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	1575.404551	0.001574591	0.248205629	0.87%	99,995.49	1.58E+02	1.57E-04	2.48E-02
StanCOG	2022	T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	1266.970199	1.004448771	0.258280163	0.02%	1,757.04	2.23E+00	1.76E-03	4.54E-04
StanCOG	2022	T7 Utility Class 8	Aggregate	Aggregate	Diesel	1750.093158	0.001477481	0.27572789	0.00%	535.09	9.36E-01	7.91E-07	1.48E-04
StanCOG	2022	T7IS	Aggregate	Aggregate	Gasoline	2800.200154	0.637768259	0.427347153	0.00%	73.78	2.07E-01	4.71E-05	3.15E-05
StanCOG	2022	UBUS	Aggregate	Aggregate	Gasoline	1719.100172	0.003584627	0.019920439	0.01%	743.50	1.28E+00	2.67E-06	1.48E-05
StanCOG	2022	UBUS	Aggregate	Aggregate	Diesel	1210.159535	0.003501424	0.190661128	0.05%	5,608.39	6.79E+00	1.96E-05	1.07E-03
StanCOG	2022	UBUS	Aggregate	Aggregate	Electricity	0	0	0	0.00%	72.65	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	UBUS	Aggregate	Aggregate	Natural Gas	1270.750881	1.953734594	0.25905088	0.03%	3,030.35	3.85E+00	5.92E-03	7.85E-04

SCENARIO	StanCOG 2022 - STREX and IDLEX

Source	EMFAC2021 (v1.0.2) Emission Rates
Region Type	MPO
Region	StanCOG
Calendar Year	2022
Season	Annual
Vehicle Classification	EMFAC202x Categories
Emissions Rate and Vehicle Activity Units	Units: miles/day for VMT, g/mile for RUNEX

Daily Trips	1,609,672
Daily Vehicles	304,892

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	CO_2 IDLEX	CO_2 STREX	CH_4 IDLEX	CH_4 STREX	N_2O IDLEX	N_2O STREX	Fleet Mix (by Vehicle Trips)	Vehicle Trips per Day	Fleet Mix (by Vehicle Population)	Vehicles per Day	CO_2 STREX Emissions (tons/day)	CO_2 IDLEX Emissions (MT/day)	CH_4 STREX Emissions (MT/day)	CH_4 IDLEX Emissions (MT/day)	N_2O STREX Emissions (MT/day)	N_2O IDLEX Emissions (MT/day)
StanCOG	2022	All Other Buses	Aggregate	Aggregate	Diesel	650.3672881	0	0.005520716	0	0.102465631	0	0.04%	698.92	0.03%	78.53	0.00E+00	5.11E-02	0.00E+00	4.34E-07	0.00E+00	8.05E-06
StanCOG	2022	All Other Buses	Aggregate	Aggregate	Natural Gas	1267.56443	0	4.137613839	0	0.258401301	0	0.00%	1.39	0.00%	1.39	0.00E+00	1.77E-03	0.00E+00	5.76E-06	0.00E+00	3.60E-07
StanCOG	2022	LDA	Aggregate	Aggregate	Gasoline	0	73.91128951	0	0.082582729	0	0.035580898	38.19%	614,814.05	43.73%	133,322.24	4.54E+01	0.00E+00	5.08E-02	0.00E+00	2.19E-02	0.00E+00
StanCOG	2022	LDA	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.11%	1,710.05	0.13%	399.89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	LDA	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.92%	14,752.95	0.96%	2,919.58	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	LDA	Aggregate	Aggregate	Plug-in Hybrid	0	67.08285605	0	0.042083924	0	0.021104041	0.67%	10,715.89	0.85%	2,591.51	7.19E-01	0.00E+00	4.51E-04	0.00E+00	2.26E-04	0.00E+00
StanCOG	2022	LDT1	Aggregate	Aggregate	Gasoline	0	96.34439823	0	0.155721707	0	0.046904404	3.69%	59,410.08	4.55%	13,881.71	5.72E+00	0.00E+00	9.25E-03	0.00E+00	2.79E-03	0.00E+00
StanCOG	2022	LDT1	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.00%	30.71	0.00%	10.33	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	LDT1	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.00%	22.98	0.00%	4.75	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	LDT1	Aggregate	Aggregate	Plug-in Hybrid	0	72.4643738	0	0.041941139	0	0.020970647	0.00%	17.02	0.00%	4.12	1.23E-03	0.00E+00	7.14E-07	0.00E+00	3.57E-07	0.00E+00
StanCOG	2022	LDT2	Aggregate	Aggregate	Gasoline	0	94.71646052	0	0.102281772	0	0.043050834	15.93%	256,497.23	18.26%	55,661.09	2.43E+01	0.00E+00	2.62E-02	0.00E+00	1.10E-02	0.00E+00
StanCOG	2022	LDT2	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.04%	696.49	0.05%	146.54	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	LDT2	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.03%	517.81	0.03%	100.40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	LDT2	Aggregate	Aggregate	Plug-in Hybrid	0	78.61699599	0	0.041966414	0	0.020994365	0.06%	892.16	0.07%	215.76	7.01E-02	0.00E+00	3.74E-05	0.00E+00	1.87E-05	0.00E+00
StanCOG	2022	LHD1	Aggregate	Aggregate	Gasoline	122.5887125	25.57151046	0.12133702	0.037369776	0.00307279	0.053068424	6.30%	101,478.82	2.23%	6,811.34	2.59E+00	8.35E-01	3.79E-03	8.26E-04	5.39E-03	2.09E-05
StanCOG	2022	LHD1	Aggregate	Aggregate	Diesel	137.8223686	0	0.005098128	0	0.02171397	0	5.43%	87,406.27	2.28%	6,948.73	0.00E+00	9.58E-01	0.00E+00	3.54E-05	0.00E+00	1.51E-04
StanCOG	2022	LHD2	Aggregate	Aggregate	Gasoline	139.8415447	25.69456422	0.122327393	0.033481092	0.003234786	0.052043845	1.07%	17,224.01	0.38%	1,156.09	4.43E-01	1.62E-01	5.77E-04	1.41E-04	8.96E-04	3.74E-06
StanCOG	2022	LHD2	Aggregate	Aggregate	Diesel	218.9122472	0	0.005098128	0	0.034489714	0	1.85%	29,753.60	0.78%	2,365.39	0.00E+00	5.18E-01	0.00E+00	1.21E-05	0.00E+00	8.16E-05
StanCOG	2022	MCY	Aggregate	Aggregate	Gasoline	0	57.13930554	0	0.217946545	0	0.010371396	0.95%	15,329.46	2.51%	7,664.73	8.76E-01	0.00E+00	3.34E-03	0.00E+00	1.59E-04	0.00E+00
StanCOG	2022	MDV	Aggregate	Aggregate	Gasoline	0	116.9173365	0	0.137077125	0	0.05020359	16.60%	267,254.70	19.45%	59,303.01	3.12E+01	0.00E+00	3.66E-02	0.00E+00	1.34E-02	0.00E+00
StanCOG	2022	MDV	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.26%	4,105.72	0.29%	875.85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	MDV	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.03%	550.25	0.04%	106.87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	MDV	Aggregate	Aggregate	Plug-in Hybrid	0	100.220804	0	0.042062657	0	0.021084541	0.05%	854.80	0.07%	206.72	8.57E-02	0.00E+00	3.60E-05	0.00E+00	1.80E-05	0.00E+00
StanCOG	2022	MH	Aggregate	Aggregate	Gasoline	0	32.17202771	0	0.038851134	0	0.040561897	0.01%	103.14	0.34%	1,030.96	3.32E-03	0.00E+00	4.01E-06	0.00E+00	4.18E-06	0.00E+00
StanCOG	2022	MH	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.00%	41.04	0.13%	410.38	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	Motor Coach	Aggregate	Aggregate	Diesel	10766.51885	0	0.185688061	0	1.69626943	0	0.02%	395.29	0.01%	17.20	0.00E+00	1.85E-01	0.00E+00	3.19E-06	0.00E+00	2.92E-05
StanCOG	2022	OBUS	Aggregate	Aggregate	Gasoline	385.7485111	33.24037621	0.189483118	0.039588009	0.00487714	0.03038057	0.14%	2,211.71	0.04%	110.54	7.35E-02	4.26E-02	8.76E-05	2.09E-05	6.72E-05	5.39E-07
StanCOG	2022	PTO	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.00%	-	0.00%	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	SBUS	Aggregate	Aggregate	Gasoline	2646.775831	57.1644808	2.479344495	0.064826542	0.088683836	0.068007403	0.04%	578.26	0.05%	144.57	3.31E-02	3.83E-01	3.75E-05	3.58E-04	3.93E-05	1.28E-05
StanCOG	2022	SBUS	Aggregate	Aggregate	Diesel	2282.492993	0	0.008233783	0	0.359607701	0	0.31%	5,027.41	0.11%	347.20	0.00E+00	7.92E-01	0.00E+00	2.86E-06	0.00E+00	1.25E-04
StanCOG	2022	SBUS	Aggregate	Aggregate	Natural Gas	4176.190817	0	14.72519157	0	0.851343818	0	0.06%	965.17	0.02%	66.66	0.00E+00	2.78E-01	0.00E+00	9.82E-04	0.00E+00	5.67E-05
StanCOG	2022	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	615.132523	0	0.00273631	0	0.096911143	0	0.01%	123.34	0.00%	5.37	0.00E+00	3.30E-03	0.00E+00	1.47E-08	0.00E+00	5.20E-07
StanCOG	2022	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	616.8362327	0	0.002399272	0	0.0971828	0	0.01%	166.10	0.00%	7.23	0.00E+00	4.46E-03	0.00E+00	1.73E-08	0.00E+00	7.02E-07
StanCOG	2022	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	600.3053022	0	0.002569999	0	0.094578345	0	0.03%	500.74	0.01%	21.79	0.00E+00	1.31E-02	0.00E+00	5.60E-08	0.00E+00	2.06E-06
StanCOG	2022	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	610.1824122	0	0.002342295	0	0.096134488	0	0.06%	888.72	0.01%	38.67	0.00E+00	2.36E-02	0.00E+00	9.06E-08	0.00E+00	3.72E-06
StanCOG	2022	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	2146.072113	0	0.014384347	0	0.338114535	0	0.08%	1,314.26	0.03%	92.10	0.00E+00	1.98E-01	0.00E+00	1.32E-06	0.00E+00	3.11E-05
StanCOG	2022	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	2132.001182	0	0.011325705	0	0.335897654	0	0.09%	1,377.45	0.03%	96.53	0.00E+00	2.06E-01	0.00E+00	1.09E-06	0.00E+00	3.24E-05
StanCOG	2022	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	2120.906022	0	0.012157627	0	0.334149608	0	0.26%	4,224.41	0.10%	296.03	0.00E+00	6.28E-01	0.00E+00	3.60E-06	0.00E+00	9.89E-05
StanCOG	2022	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	2154.000863	0	0.009630367	0	0.339363713	0	0.09%	1,470.36	0.03%	103.04	0.00E+00	2.22E-01	0.00E+00	9.92E-07	0.00E+00	3.50E-05
StanCOG	2022	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	4612.373037	0	11.5146573	0	0.940262417	0	0.00%	12.39	0.00%	0.87	0.00E+00	4.00E-03	0.00E+00	1.00E-05	0.00E+00	8.16E-07
StanCOG	2022	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	2401.186841	0	0.017234231	0	0.378307965	0	0.26%	4,182.77	0.12%	361.83	0.00E+00	8.69E-01	0.00E+00	6.42E-06	0.00E+00	1.37E-04
StanCOG	2022	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	2272.093591	0	0.009598723	0	0.357969271	0	0.50%	8,106.91	0.23%	701.29	0.00E+00	1.59E+00	0.00E+00	6.73E-06	0.00E+00	2.51E-04
StanCOG	2022	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	2291.375038	0	0.019352737	0	0.36100707	0	0.34%	5,397.09	0.15%	466.88	0.00E+00	1.07E+00	0.00E+00	9.04E-06	0.00E+00	1.69E-04
StanCOG	2022	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	2354.592925	0	0.014796185	0	0.370967074	0	0.25%	3,948.71	0.11%	341.58	0.00E+00	8.04E-01	0.00E+00	5.05E-06	0.00E+00	1.27E-04
StanCOG	2022	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	5058.371368	0	12.33046726	0	1.031182094	0	0.00%	48.58	0.00%	4.20	0.00E+00	2.13E-02	0.00E+00	5.18E-05	0.00E+00	4.33E-06
StanCOG	2022	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	2315.518675	0	0.008639375	0	0.36481091	0	0.01%	108.73	0.00%	9.41	0.00E+00	2.18E-02	0.00E+00	8.13E-08	0.00E+00	3.43E-06
StanCOG	2022	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	2354.080953	0	0.010446625	0	0.370886413	0	0.27%	4,402.35	0.12%	380.83	0.00E+00	8.96E-01	0.00E+00	3.98E-06	0.00E+00	1.41E-04
StanCOG	2022	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	4981.362443	0	12.40138158	0	1.015483321	0	0.00%	34.31	0.00%	2.97	0.00E+00	1.48E-02	0.00E+00	3.68E-05	0.00E+00	3.01E-06
StanCOG	2022	T6 OOS Class 4	Aggregate	Aggregate	Diesel	616.0781855	0	0.002885535	0	0.097063369	0	0.00%	71.02	0.00%	3.09	0.00E+00	1.90E-03	0.00E+00	8.92E-09	0.00E+00	3.00E-07
StanCOG	2022	T6 OOS Class 5	Aggregate	Aggregate	Diesel	617.4859982	0	0.002417958	0	0.09728517	0	0.01%	95.26	0.00%	4.15	0.00E+00	2.56E-03	0.00E+00	1.00E-08	0.00E+00	4.03E-07
StanCOG	2022	T6 OOS Class 6	Aggregate	Aggregate	Diesel	601.1174866	0	0.002664844	0	0.094706305	0	0.02%	287.84	0.00%	12.53	0.00E+00	7.53E-03	0.00E+00	3.34E-08	0.00E+00	1.19E-06
StanCOG	2022	T6 OOS Class 7	Aggregate	Aggregate	Diesel	610.5505712	0	0.00234577	0	0.096192491	0	0.03%	487.34	0.01%	21.21	0.00E+00	1.29E-02	0.00E+00	4.97E-08	0.00E+00	2.04E-06
StanCOG	2022	T6 Public Class 4	Aggregate	Aggregate	Diesel	3496.514916	0	0.012677922	0	0.550877349	0	0.01%	157.23	0.01%	30.65	0.00E+00	1.07E-01	0.00E+00	3.89E-07	0.00E+00	1.69E-05
StanCOG	2022	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	6466.808847	0	20.43220897	0	1.318301288	0	0.00%	6.61	0.00%	1.29	0.00E+00	8.33E-03	0.00E+00	2.63E-05	0.00E+00	1.70E-06
StanCOG	2022	T6 Public Class 5	Aggregate	Aggregate	Diesel	3584.35294	0	0.011865136	0	0.564716265	0	0.03%	409.83	0.03%	79.89	0.00E+00	2.86E-01	0.00E+00	9.48E-07	0.00E+00	4.51E-05
StanCOG	2022	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	6410.567557	0	21.98083904	0	1.306836133	0	0.00%	34.82	0.00%	6.79	0.00E+00	4.35E-02	0.00E+00	1.49E-04	0.00E+00	8.87E-06
StanCOG	2022	T6 Public Class 6	Aggregate	Aggregate	Diesel	3512.734885	0	0.018021492	0	0.553432812	0	0.02%	395.32	0.03%	77.06	0.00E+00	2.71E-01	0.00E+00	1.39E-06	0.00E+00	4.26E-05
StanCOG	2022	T6 Public Class 6	Aggregate	Aggregate	Natural Gas	6510.625614	0	20.73459318	0	1.327233622	0	0.00%	18.27	0.00%	3.56	0.00E+00	2.32E-02	0.00E+00	7.38E-05	0.00E+00	4.73E-06
StanCOG	2022	T6 Public Class 7	Aggregate	Aggregate	Diesel	3377.276371	0	0.020995346	0	0.532091268	0	0.04%	610.51	0.04%	119.01	0.00E+00	4.02E-01	0.00E+00	2.50E-06	0.00E+00	6.33E-05
StanCOG	2022	T6 Public Class 7	Aggregate	Aggregate	Natural Gas	6384.372565	0	21.9212139	0	1.301496112	0	0.00%	41.22	0.00%	8.04	0.00E+00	5.13E-02	0.00E+00	1.76E-04	0.00E+00	1.05E-05
StanCOG	2022	T6 Utility Class 5	Aggregate	Aggregate	Diesel	1708.109063	0	0.006563879	0	0.269113279	0	0.01%	212.38	0.01%	16.59	0.00E+00	2.83E-02	0.00E+00	1.09E-07	0.00E+00	4.47E-06
StanCOG	2022	T6 Utility Class 5	Aggregate	Aggregate	Natural Gas	3411.658958	0	12.17587302	0	0.695488997	0	0.00%	0.54	0.00%	0.04	0.00E+00	1.44E-04	0.00E+00	5.16E-07	0.00E+00	2.95E-08
StanCOG	2022	T6 Utility Class 6	Aggregate	Aggregate	Diesel	1722.250224	0	0.006679043	0	0.271341224	0	0.00%	40.47	0.00%	3.16	0.00E+00	5.45E-03	0.00E+00	2.11E-08	0.00E+00	8.58E-07
StanCOG	2022	T6 Utility Class 6	Aggregate	Aggregate	Natural Gas	3387.016967	0	12.58626571	0	0.690465566	0	0.00%	0.19	0.00%	0.01	0.00E+00	5.04E-05	0.00E+00	1.87E-07	0.00E+00	1.03E-08
StanCOG	2022	T6 Utility Class 7	Aggregate	Aggregate	Diesel	1704.628675	0	0.006503581	0	0.268564942	0	0.00%	46.26	0.00%	3.61	0.00E+00	6.16E-03	0.00E+00	2.35E-08	0.00E+00	9.71E-07
StanCOG	2022	T6 Utility Class 7	Aggregate	Aggregate	Natural Gas	3411.233002	0	12.27251951	0	0.695402163	0	0.00%	0.13	0.00%	0.01	0.00E+00	3.55E-05	0.00E+00	1.28E-07	0.00E+00	7.24E-09
StanCOG	2022	T6TS	Aggregate	Aggregate	Gasoline	548.9306299	47.89595581	0.248474881	0.048633941	0.006814204	0.030902178	0.53%	8,535.12	0.14%	426.59	4.09E-01	2.34E-01	4.15E-04	1.06E-04	2.64E-04	2.91E-06
StanCOG	2022	T7 CAIRP Class 8	Aggregate	Aggregate	Diesel	25486.01374	0	0.484529345	0	4.015331843	0	1.06%	17,005.26	0.24%	739.83	0.00E+00	1.89E+01	0.00E+00	3.58E-04	0.00E+00	2.97E-03
StanCOG	2022	T7 NNOOS Class 8	Aggregate	Aggregate	Diesel	30942.61133	0	0.601465159	0	4.875021016	0	0.95%	15,241.18	0.22%	663.24	0.00E+00	2.05E+01	0.00E+00	3.99E-04	0.00E+00	3.23E-03
StanCOG	2022	T7 NOOS Class 8	Aggregate	Aggregate	Diesel	31594.42349	0	0.601368438	0	4.977714287	0	0.39%	6,353.72	0.09%	276.49	0.00E+00	8.74E+00	0.00E+00	1.66E-04	0.00E+00	1.38E-03
StanCOG	2022	T7 Other Port Class 8	Aggregate	Aggregate	Diesel	9296.190038	0	0.159099761	0	1.464618526	0	0.02%	250.26	0.01%	15.30	0.00E+00	1.42E-01	0.00E+00	2.43E-06	0.00E+00	2.24E-05
StanCOG	2022	T7 POAK Class 8	Aggregate	Aggregate	Diesel	9180.656344	0	0.159782031	0	1.446416146	0	0.07%	1,093.32	0.02%	66.83	0.00E+00	6.14E-01	0.00E+00	1.07E-05	0.00E+00	9.67E-05
StanCOG	2022	T7 POLA Class 8	Aggregate	Aggregate	Diesel	9523.041421	0	0.15935634	0	1.500359054	0	0.07%	1,099.07	0.02%	67.18	0.00E+00	6.40E-01	0.00E+00	1.07E-05	0.00E+00	1.01E-04
StanCOG	2022	T7 POLA Class 8	Aggregate	Aggregate	Natural Gas	17231.61231	0	67.37320955	0	3.512776894	0	0.00%	8.99	0.00%	0.55	0.00E+00	9.47E-03	0.00E+00	3.70E-05	0.00E+00	1.93E-06
StanCOG	2022	T7 Public Class 8	Aggregate	Aggregate	Diesel	3347.138815	0	0.05311958	0	0.527343083	0	0.08%	1,339.03	0.09%	261.02	0.00E+00	8.74E-01	0.00E+00	1.39E-05	0.00E+00	1.38E-04
StanCOG	2022	T7 Public Class 8	Aggregate	Aggregate	Natural Gas	5872.09781	0	21.50108127	0	1.197065552	0	0.01%	80.72	0.01%	15.74	0.00E+00	9.24E-02	0.00E+00	3.38E-04	0.00E+00	1.88E-05
StanCOG	2022	T7 Single Concrete/Transit Mix Class	Aggregate	Aggregate	Diesel	4543.478663	0	0.087189521	0	0.715826914	0	0.04%	699.71	0.02%	74.28	0.00E+00	3.37E-01	0.00E+00	6.48E-06	0.00E+00	5.32E-05
StanCOG	2022	T7 Single Concrete/Transit Mix Class	Aggregate	Aggregate	Natural Gas	8977.3549	0	34.06746123	0	1.830092524	0	0.00%	21.89	0.00%	2.32	0.00E+00	2.09E-02	0.00E+00	7.92E-05	0.00E+00	4.25E-06
StanCOG	2022	T7 Single Dump Class 8	Aggregate	Aggregate	Diesel	4906.946665	0	0.089130038	0	0.773091445	0	0.07%	1,199.10	0.04%	127.29	0.00E+00	6.25E-01	0.00E+00	1.13E-05	0.00E+00	9.84E-05
StanCOG	2022	T7 Single Dump Class 8	Aggregate	Aggregate	Natural Gas	9287.099415	0	35.51442663	0	1.89323597	0	0.00%	42.21	0.00%	4.48	0.00E+00	4.16E-02	0.00E+00	1.59E-04	0.00E+00	8.48E-06
StanCOG	2022	T7 Single Other Class 8	Aggregate	Aggregate	Diesel	4802.284112	0	0.090804051	0	0.756601818	0	0.25%	4,021.93	0.14%	426.96	0.00E+00	2.05E+00	0.00E+00	3.88E-05	0.00E+00	3.23E-04
StanCOG	2022	T7 Single Other Class 8	Aggregate	Aggregate	Natural Gas	9233.57976	0	35.20637982	0	1.882325638	0	0.01%	147.95	0.01%	15.71	0.00E+00	1.45E-01	0.00E+00	5.53E-04	0.00E+00	2.96E-05
StanCOG	2022	T7 SWCV Class 8	Aggregate	Aggregate	Diesel	3699.752317	0	0.051689022	0	0.582897484	0	0.02%	371.24	0.03%	80.70	0.00E+00	2.99E-01	0.00E+00	4.17E-06	0.00E+00	4.70E-05
StanCOG	2022	T7 SWCV Class 8	Aggregate	Aggregate	Natural Gas	6758.487352	0	17.69480306	0	1.377761859	0	0.01%	182.88	0.01%	39.76	0.00E+00	2.69E-01	0.00E+00	7.03E-04	0.00E+00	5.48E-05
StanCOG	2022	T7 Tractor Class 8	Aggregate	Aggregate	Diesel	8873.053494	0	0.160438468	0	1.397953192	0	1.10%	17,741.71	0.40%	1,221.04	0.00E+00	1.08E+01	0.00E+00	1.96E-04	0.00E+00	1.71E-03
StanCOG	2022	T7 Tractor Class 8	Aggregate	Aggregate	Natural Gas	16921.21644	0	62.11917243	0	3.449500665	0	0.02%	307.40	0.01%	21.16	0.00E+00	3.58E-01	0.00E+00	1.31E-03	0.00E+00	7.30E-05
StanCOG	2022	T7 Utility Class 8	Aggregate	Aggregate	Diesel	1651.759172	0	0.029550325	0	0.26023533	0	0.01%	145.34	0.00%	11.35	0.00E+00	1.88E-02	0.00E+00	3.36E-07	0.00E+00	2.95E-06
StanCOG	2022	T7IS	Aggregate	Aggregate	Gasoline	0	52.20160866	0	2.60625E-05	0	0.016585052	0.00%	76.60	0.00%	3.83	4.00E-03	0.00E+00	2.00E-09	0.00E+00	1.27E-06	0.00E+00
StanCOG	2022	UBUS	Aggregate	Aggregate	Gasoline	0	108.9899364	0	0.128942345	0	0.085257419	0.00%	53.30	0.00%	13.33	5.81E-03	0.00E+00	6.87E-06	0.00E+00	4.54E-06	0.00E+00
StanCOG	2022	UBUS	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.01%	214.18	0.02%	53.54	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	UBUS	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.00%	14.49	0.00%	3.62	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2022	UBUS	Aggregate	Aggregate	Natural Gas	0	0	0	0	0	0	0.01%	138.54	0.01%	34.63	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Source: EMFAC2021 (v1.0.2) Emission Rates
Region Type: MPO
Region: StanCOG
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC202x Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Fleet Mix (Population)	VMT	Fleet Mix (VMT)	Trips	Fleet Mix (Trips)
StanCOG	2022	All Other Buses	Aggregate	Aggregate	Diesel	109.4388114	0.03%	5900.320802	0.04%	974.0054219	0.04%
StanCOG	2022	All Other Buses	Aggregate	Aggregate	Natural Gas	1.940981874	0.00%	104.9984509	0.00%	17.27473868	0.00%
StanCOG	2022	LDA	Aggregate	Aggregate	Gasoline	185795.1124	43.73%	7166893.486	44.88%	856792.1618	38.19%
StanCOG	2022	LDA	Aggregate	Aggregate	Diesel	557.2731511	0.13%	17491.77323	0.11%	2383.092557	0.11%
StanCOG	2022	LDA	Aggregate	Aggregate	Electricity	4068.660554	0.96%	184754.4305	1.16%	20559.41272	0.92%
StanCOG	2022	LDA	Aggregate	Aggregate	Plug-in Hybrid	3611.472192	0.85%	173788.9225	1.09%	14933.43751	0.67%
StanCOG	2022	LDT1	Aggregate	Aggregate	Gasoline	19345.26372	4.55%	594610.4767	3.72%	82792.66091	3.69%
StanCOG	2022	LDT1	Aggregate	Aggregate	Diesel	14.39674689	0.00%	165.8533582	0.00%	42.79816683	0.00%
StanCOG	2022	LDT1	Aggregate	Aggregate	Electricity	6.615460989	0.00%	269.2738534	0.00%	32.02448345	0.00%
StanCOG	2022	LDT1	Aggregate	Aggregate	Plug-in Hybrid	5.736058129	0.00%	290.767714	0.00%	23.71860036	0.00%
StanCOG	2022	LDT2	Aggregate	Aggregate	Gasoline	77568.14787	18.26%	2886979.743	18.08%	357449.2438	15.93%
StanCOG	2022	LDT2	Aggregate	Aggregate	Diesel	204.2114164	0.05%	8418.145871	0.05%	970.6124513	0.04%
StanCOG	2022	LDT2	Aggregate	Aggregate	Electricity	139.9092312	0.03%	5208.655076	0.03%	721.6109235	0.03%
StanCOG	2022	LDT2	Aggregate	Aggregate	Plug-in Hybrid	300.6775391	0.07%	14785.02261	0.09%	1243.301624	0.06%
StanCOG	2022	LHD1	Aggregate	Aggregate	Gasoline	9492.143093	2.23%	332501.294	2.08%	141418.7888	6.30%
StanCOG	2022	LHD1	Aggregate	Aggregate	Diesel	9683.604913	2.28%	344078.1158	2.15%	121807.5678	5.43%
StanCOG	2022	LHD2	Aggregate	Aggregate	Gasoline	1611.102131	0.38%	60974.34374	0.38%	24003.0212	1.07%
StanCOG	2022	LHD2	Aggregate	Aggregate	Diesel	3296.355603	0.78%	124367.624	0.78%	41464.00667	1.85%
StanCOG	2022	MCY	Aggregate	Aggregate	Gasoline	10681.40648	2.51%	57567.20952	0.36%	21362.81297	0.95%
StanCOG	2022	MDV	Aggregate	Aggregate	Gasoline	82643.45533	19.45%	2801827.308	17.54%	372440.6321	16.60%
StanCOG	2022	MDV	Aggregate	Aggregate	Diesel	1220.570055	0.29%	47397.16098	0.30%	5721.647849	0.26%
StanCOG	2022	MDV	Aggregate	Aggregate	Electricity	148.9339277	0.04%	5515.344021	0.03%	766.8189946	0.03%
StanCOG	2022	MDV	Aggregate	Aggregate	Plug-in Hybrid	288.0844869	0.07%	13781.86417	0.09%	1191.229353	0.05%
StanCOG	2022	MH	Aggregate	Aggregate	Gasoline	1436.726738	0.34%	12189.64652	0.08%	143.7301429	0.01%
StanCOG	2022	MH	Aggregate	Aggregate	Diesel	571.8906356	0.13%	5038.471273	0.03%	57.18906356	0.00%
StanCOG	2022	Motor Coach	Aggregate	Aggregate	Diesel	23.971361	0.01%	3428.516453	0.02%	550.8618758	0.02%
StanCOG	2022	OBUS	Aggregate	Aggregate	Gasoline	154.0481269	0.04%	6659.760333	0.04%	3082.194923	0.14%
StanCOG	2022	PTO	Aggregate	Aggregate	Diesel	0	0.00%	10559.50923	0.07%	0	0.00%
StanCOG	2022	SBUS	Aggregate	Aggregate	Gasoline	201.4635282	0.05%	9994.568459	0.06%	805.8541129	0.04%
StanCOG	2022	SBUS	Aggregate	Aggregate	Diesel	483.8465311	0.11%	11257.4681	0.07%	7006.09777	0.31%
StanCOG	2022	SBUS	Aggregate	Aggregate	Natural Gas	92.88961544	0.02%	2392.316097	0.01%	1345.041632	0.06%
StanCOG	2022	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	7.479659163	0.00%	495.7477	0.00%	171.8825676	0.01%
StanCOG	2022	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	10.07263414	0.00%	680.0766971	0.00%	231.4691325	0.01%
StanCOG	2022	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	30.36628123	0.01%	1777.059867	0.01%	697.8171427	0.03%
StanCOG	2022	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	53.8947146	0.01%	11146.61771	0.07%	1238.500541	0.06%
StanCOG	2022	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	128.3481905	0.03%	4312.401052	0.03%	1831.528678	0.08%
StanCOG	2022	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	134.519305	0.03%	4620.844037	0.03%	1919.590482	0.09%
StanCOG	2022	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	412.547751	0.10%	14319.73127	0.09%	5887.056407	0.26%
StanCOG	2022	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	143.5926387	0.03%	7852.136373	0.05%	2049.066955	0.09%
StanCOG	2022	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	1.209869427	0.00%	65.71232844	0.00%	17.26483672	0.00%
StanCOG	2022	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	504.2403775	0.12%	20377.57828	0.13%	5829.018764	0.26%
StanCOG	2022	T6 Instate Other Class 5	Aggregate	Aggregate	Diesel	977.3027274	0.23%	43567.72865	0.27%	11297.61953	0.50%
StanCOG	2022	T6 Instate Other Class 6	Aggregate	Aggregate	Diesel	650.6293082	0.15%	27572.51942	0.17%	7521.274803	0.34%
StanCOG	2022	T6 Instate Other Class 7	Aggregate	Aggregate	Diesel	476.0241252	0.11%	21519.33304	0.13%	5502.838887	0.25%
StanCOG	2022	T6 Instate Other Class 7	Aggregate	Aggregate	Natural Gas	5.856617007	0.00%	352.6503182	0.00%	67.7024926	0.00%
StanCOG	2022	T6 Instate Tractor Class 6	Aggregate	Aggregate	Diesel	13.10707827	0.00%	684.171677	0.00%	151.5178248	0.01%
StanCOG	2022	T6 Instate Tractor Class 7	Aggregate	Aggregate	Diesel	530.7116279	0.12%	32991.22823	0.21%	6135.026419	0.27%
StanCOG	2022	T6 Instate Tractor Class 7	Aggregate	Aggregate	Natural Gas	4.136634656	0.00%	318.8979876	0.00%	47.81949662	0.00%
StanCOG	2022	T6 OOS Class 4	Aggregate	Aggregate	Diesel	4.306978734	0.00%	283.1066936	0.00%	98.97437131	0.00%
StanCOG	2022	T6 OOS Class 5	Aggregate	Aggregate	Diesel	5.777146841	0.00%	388.3714743	0.00%	132.7588344	0.01%
StanCOG	2022	T6 OOS Class 6	Aggregate	Aggregate	Diesel	17.45565351	0.00%	1014.825774	0.01%	401.1309177	0.02%
StanCOG	2022	T6 OOS Class 7	Aggregate	Aggregate	Diesel	29.55370994	0.01%	7379.045301	0.05%	679.1442544	0.03%
StanCOG	2022	T6 Public Class 4	Aggregate	Aggregate	Diesel	42.71114877	0.01%	1362.598817	0.01%	219.1081932	0.01%
StanCOG	2022	T6 Public Class 4	Aggregate	Aggregate	Natural Gas	1.795341534	0.00%	76.58939237	0.00%	9.210102067	0.00%
StanCOG	2022	T6 Public Class 5	Aggregate	Aggregate	Diesel	111.3307862	0.03%	4006.350052	0.03%	571.1269333	0.03%
StanCOG	2022	T6 Public Class 5	Aggregate	Aggregate	Natural Gas	9.457914724	0.00%	396.0462478	0.00%	48.51910254	0.00%

SCENARIO	StanCOG 2046 RTP/SCS - RUNEX

Source	EMFAC2021 (v1.0.2) Emission Rates
Region Type	MPO
Region	StanCOG
Calendar Year	2046
Season	Annual
Vehicle Classification	EMFAC202X Categories
Emissions Rate and Vehicle Activity Units	Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip

Daily VMT	14,922,100

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	CO_2 RUNEX	CH_4 RUNEX	N_2O RUNEX	Fleet Mix	VMT per Day	CO_2 RUNEX Emissions (tons/day)	CH_4 RUNEX Emissions (tons/day)	N_2O RUNEX Emissions (tons/day)
StanCOG	2046	All Other Buses	Aggregate	Aggregate	Diesel	1040.636601	0.001851352	0.16395272	0.03%	5,014.01	5.22E+00	9.28E-06	8.22E-04
StanCOG	2046	All Other Buses	Aggregate	Aggregate	Natural Gas	897.2084243	0.851602571	0.182901807	0.00%	340.59	3.06E-01	2.90E-04	6.23E-05
StanCOG	2046	LDA	Aggregate	Aggregate	Gasoline	217.9040443	0.000954534	0.003227318	42.51%	6,343,646.63	1.38E+03	6.06E-03	2.05E-02
StanCOG	2046	LDA	Aggregate	Aggregate	Diesel	169.3685794	0.000202093	0.026684089	0.02%	3,698.92	6.26E-01	7.48E-07	9.87E-05
StanCOG	2046	LDA	Aggregate	Aggregate	Electricity	0	0	0	5.90%	881,113.82	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LDA	Aggregate	Aggregate	Plug-in Hybrid	118.8081381	0.000370033	0.000467928	2.02%	301,636.61	3.58E+01	1.12E-04	1.41E-04
StanCOG	2046	LDT1	Aggregate	Aggregate	Gasoline	252.1292085	0.001030849	0.003357605	2.34%	349,897.70	8.82E+01	3.61E-04	1.17E-03
StanCOG	2046	LDT1	Aggregate	Aggregate	Diesel	316.326459	0.00058293	0.049837362	0.00%	4.11	1.30E-03	2.40E-09	2.05E-07
StanCOG	2046	LDT1	Aggregate	Aggregate	Electricity	0	0	0	0.08%	11,338.38	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LDT1	Aggregate	Aggregate	Plug-in Hybrid	118.5218092	0.000367316	0.000462266	0.06%	8,383.94	9.94E-01	3.08E-06	3.88E-06
StanCOG	2046	LDT2	Aggregate	Aggregate	Gasoline	261.1801323	0.001272323	0.003455039	20.49%	3,057,584.53	7.99E+02	3.89E-03	1.06E-02
StanCOG	2046	LDT2	Aggregate	Aggregate	Diesel	234.453121	0.000581451	0.036938185	0.08%	11,679.22	2.74E+00	6.79E-06	4.31E-04
StanCOG	2046	LDT2	Aggregate	Aggregate	Electricity	0	0	0	0.60%	89,164.19	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LDT2	Aggregate	Aggregate	Plug-in Hybrid	118.7440804	0.000367227	0.000461206	0.56%	83,859.72	9.96E+00	3.08E-05	3.87E-05
StanCOG	2046	LHD1	Aggregate	Aggregate	Gasoline	752.7062789	0.001255549	0.001856971	0.77%	115,051.98	8.66E+01	1.44E-04	2.14E-04
StanCOG	2046	LHD1	Aggregate	Aggregate	Diesel	607.7966222	0.004635282	0.095758605	0.51%	75,896.54	4.61E+01	3.52E-04	7.27E-03
StanCOG	2046	LHD1	Aggregate	Aggregate	Electricity	0	0	0	0.98%	146,215.46	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LHD2	Aggregate	Aggregate	Gasoline	856.2531775	0.001193616	0.00234854	0.09%	13,731.43	1.18E+01	1.64E-05	3.22E-05
StanCOG	2046	LHD2	Aggregate	Aggregate	Diesel	714.3848728	0.005994164	0.112551628	0.25%	36,854.20	2.63E+01	2.21E-04	4.15E-03
StanCOG	2046	LHD2	Aggregate	Aggregate	Electricity	0	0	0	0.22%	33,543.70	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	MCY	Aggregate	Aggregate	Gasoline	178.5693594	0.126973545	0.035307374	0.24%	36,463.56	6.51E+00	4.63E-03	1.29E-03
StanCOG	2046	MDV	Aggregate	Aggregate	Gasoline	316.7353382	0.001342316	0.003579667	11.75%	1,753,732.31	5.55E+02	2.35E-03	6.28E-03
StanCOG	2046	MDV	Aggregate	Aggregate	Diesel	307.3650805	0.000222498	0.048425494	0.13%	19,292.49	5.93E+00	4.29E-06	9.34E-04
StanCOG	2046	MDV	Aggregate	Aggregate	Electricity	0	0	0	0.55%	81,700.72	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	MDV	Aggregate	Aggregate	Plug-in Hybrid	118.8028884	0.000367003	0.000460492	0.35%	52,458.14	6.23E+00	1.93E-05	2.42E-05
StanCOG	2046	MH	Aggregate	Aggregate	Gasoline	1947.469612	0.004063656	0.018796231	0.03%	4,146.92	8.08E+00	1.69E-05	7.79E-05
StanCOG	2046	MH	Aggregate	Aggregate	Diesel	1089.088514	0.004133458	0.171586339	0.02%	2,428.27	2.64E+00	1.00E-05	4.17E-04
StanCOG	2046	Motor Coach	Aggregate	Aggregate	Diesel	1528.724664	0.000489034	0.240851193	0.02%	2,939.91	4.49E+00	1.44E-06	7.08E-04
StanCOG	2046	OBUS	Aggregate	Aggregate	Gasoline	1544.10464	0.005737797	0.018128656	0.01%	1,471.68	2.27E+00	8.44E-06	2.67E-05
StanCOG	2046	OBUS	Aggregate	Aggregate	Electricity	0	0	0	0.01%	1,690.12	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	PTO	Aggregate	Aggregate	Diesel	1750.28827	0.000712064	0.27575863	0.04%	6,330.52	1.11E+01	4.51E-06	1.75E-03
StanCOG	2046	PTO	Aggregate	Aggregate	Electricity	0	0	0	0.04%	6,158.25	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	SBUS	Aggregate	Aggregate	Gasoline	766.1292133	0.001844507	0.016192588	0.02%	3,206.81	2.46E+00	5.91E-06	5.19E-05
StanCOG	2046	SBUS	Aggregate	Aggregate	Diesel	1046.249126	0.000323311	0.164836976	0.03%	4,190.21	4.38E+00	1.35E-06	6.91E-04
StanCOG	2046	SBUS	Aggregate	Aggregate	Electricity	0	0	0	0.04%	5,526.75	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	SBUS	Aggregate	Aggregate	Natural Gas	1097.667624	2.47524861	0.223766726	0.01%	1,400.21	1.54E+00	3.47E-03	3.13E-04
StanCOG	2046	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	1013.994628	0.000246437	0.159755267	0.00%	264.85	2.69E-01	6.53E-08	4.23E-05
StanCOG	2046	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0	0	0	0.00%	383.39	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	1014.300107	0.000246809	0.159803395	0.00%	363.84	3.69E-01	8.98E-08	5.81E-05
StanCOG	2046	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	0	0	0	0.00%	525.43	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	1013.180774	0.000245984	0.159627044	0.01%	947.11	9.60E-01	2.33E-07	1.51E-04
StanCOG	2046	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	0	0	0	0.01%	1,376.57	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	895.3591622	0.000265499	0.141064201	0.07%	11,043.59	9.89E+00	2.93E-06	1.56E-03
StanCOG	2046	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	0	0	0	0.02%	3,531.68	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	1043.522788	0.000278761	0.16440744	0.02%	2,640.35	2.76E+00	7.36E-07	4.34E-04
StanCOG	2046	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	0	0	0	0.02%	2,998.53	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	1044.589442	0.000278546	0.164575492	0.02%	2,825.88	2.95E+00	7.87E-07	4.65E-04
StanCOG	2046	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	0	0	0	0.02%	3,216.32	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	1045.011114	0.000279613	0.164641927	0.06%	8,772.62	9.17E+00	2.45E-06	1.44E-03
StanCOG	2046	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	0	0	0	0.07%	9,951.80	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	1066.516474	0.000360442	0.168030105	0.04%	6,220.85	6.63E+00	2.24E-06	1.05E-03
StanCOG	2046	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	0	0	0	0.03%	4,000.71	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	1022.879044	0.872638374	0.208520585	0.00%	131.79	1.35E-01	1.15E-04	2.75E-05
StanCOG	2046	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	1011.382438	0.000252915	0.159343715	0.08%	12,130.15	1.23E+01	3.07E-06	1.93E-03
StanCOG	2046	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	0	0	0	0.10%	14,515.49	0.00E+00	0.00E+00	0.00E+00

SCENARIO	StanCOG 2046 RTP/SCS - STREX and IDLEX

Source	EMFAC2021 (v1.0.2) Emission Rates
Region Type	MPO
Region	StanCOG
Calendar Year	2046
Season	Annual
Vehicle Classification	EMFAC202X Categories
Emissions Rate and Vehicle Activity Units	Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW,

Daily Trips	1,898,441
Daily Vehicles	364,486

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	CO_2 IDLEX	CO_2 STREX	CH_4 IDLEX	CH_4 STREX	N_2O IDLEX	N_2O STREX	Fleet Mix (by Vehicle Trips)	Vehicle Trips per Day	Fleet Mix (by Vehicle Population)	Vehicles per Day	CO_2 STREX Emissions (MT/day)	CO_2 IDLEX Emissions (MT/day)	CH_4 STREX Emissions (MT/day)	CH_4 IDLEX Emissions (MT/day)	N_2O STREX Emissions (MT/day)	N_2O IDLEX Emissions (MT/day)
StanCOG	2046	All Other Buses	Aggregate	Aggregate	Diesel	543.3530746	0	0.002446394	0	0.085605498	0	0.05%	1,005.42	0.03%	112.91	0.00E+00	6.14E-02	0.00E+00	2.76E-07	0.00E+00	9.67E-06
StanCOG	2046	All Other Buses	Aggregate	Aggregate	Natural Gas	1144.935837	0	3.46771025	0	0.23340266	0	0.00%	73.57	0.00%	8.26	0.00E+00	9.46E-03	0.00E+00	2.86E-05	0.00E+00	1.93E-06
StanCOG	2046	LDA	Aggregate	Aggregate	Gasoline	0	53.58437218	0	0.032079591	0	0.026101555	37.76%	716,920.27	42.60%	155,263.99	3.84E+01	0.00E+00	2.30E-02	0.00E+00	1.87E-02	0.00E+00
StanCOG	2046	LDA	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.02%	440.84	0.03%	98.62	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LDA	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	5.21%	98,852.42	5.81%	21,174.96	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LDA	Aggregate	Aggregate	Plug-in Hybrid	0	55.51122125	0	0.03991439	0	0.019065369	1.59%	30,185.12	2.00%	7,296.18	1.68E+00	0.00E+00	1.20E-03	0.00E+00	5.75E-04	0.00E+00
StanCOG	2046	LDT1	Aggregate	Aggregate	Gasoline	0	62.81858709	0	0.034832839	0	0.027530414	2.25%	42,738.94	2.61%	9,530.85	2.68E+00	0.00E+00	1.49E-03	0.00E+00	1.18E-03	0.00E+00
StanCOG	2046	LDT1	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.00%	0.49	0.00%	0.11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LDT1	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.07%	1,263.84	0.07%	269.78	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LDT1	Aggregate	Aggregate	Plug-in Hybrid	0	63.55482239	0	0.03986927	0	0.019020677	0.05%	858.08	0.06%	207.41	5.45E-02	0.00E+00	3.42E-05	0.00E+00	1.63E-05	0.00E+00
StanCOG	2046	LDT2	Aggregate	Aggregate	Gasoline	0	65.92214132	0	0.041607441	0	0.031024249	19.13%	363,157.27	21.77%	79,359.39	2.39E+01	0.00E+00	1.51E-02	0.00E+00	1.13E-02	0.00E+00
StanCOG	2046	LDT2	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.07%	1,380.53	0.08%	300.01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LDT2	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.76%	14,374.01	0.84%	3,070.02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LDT2	Aggregate	Aggregate	Plug-in Hybrid	0	66.84343362	0	0.039774502	0	0.018931799	0.46%	8,757.00	0.58%	2,116.69	5.85E-01	0.00E+00	3.48E-04	0.00E+00	1.66E-04	0.00E+00
StanCOG	2046	LHD1	Aggregate	Aggregate	Gasoline	108.2943858	23.81516733	0.086135627	0.020449004	0.002507349	0.04040201	2.51%	47,580.36	0.88%	3,192.00	1.13E+00	3.46E-01	9.73E-04	2.75E-04	1.92E-03	8.00E-06
StanCOG	2046	LHD1	Aggregate	Aggregate	Diesel	119.8360711	0	0.005098128	0	0.018880222	0	1.52%	28,822.44	0.63%	2,290.19	0.00E+00	2.74E-01	0.00E+00	1.17E-05	0.00E+00	4.32E-05
StanCOG	2046	LHD1	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	2.34%	44,394.76	0.87%	3,155.26	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	LHD2	Aggregate	Aggregate	Gasoline	126.607528	23.64178062	0.082722027	0.019806525	0.002349364	0.037941772	0.32%	6,146.98	0.11%	412.38	1.45E-01	5.22E-02	1.22E-04	3.41E-05	2.33E-04	9.69E-07
StanCOG	2046	LHD2	Aggregate	Aggregate	Diesel	196.584815	0	0.005098128	0	0.030972018	0	0.78%	14,746.85	0.32%	1,171.76	0.00E+00	2.30E-01	0.00E+00	5.97E-06	0.00E+00	3.63E-05
StanCOG	2046	LHD2	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.52%	9,823.59	0.20%	741.95	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	MCY	Aggregate	Aggregate	Gasoline	0	38.47130422	0	0.137077483	0	0.004873587	0.70%	13,229.30	1.81%	6,611.27	5.09E-01	0.00E+00	1.81E-03	0.00E+00	6.45E-05	0.00E+00
StanCOG	2046	MDV	Aggregate	Aggregate	Gasoline	0	81.14230782	0	0.045014875	0	0.032275778	11.37%	215,795.35	13.15%	47,945.80	1.75E+01	0.00E+00	9.71E-03	0.00E+00	6.96E-03	0.00E+00
StanCOG	2046	MDV	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.13%	2,422.36	0.15%	543.60	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	MDV	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.70%	13,273.95	0.78%	2,847.22	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	MDV	Aggregate	Aggregate	Plug-in Hybrid	0	81.45332284	0	0.039585103	0	0.018755977	0.30%	5,610.82	0.37%	1,356.22	4.57E-01	0.00E+00	2.22E-04	0.00E+00	1.05E-04	0.00E+00
StanCOG	2046	MH	Aggregate	Aggregate	Gasoline	0	29.97746192	0	0.032455105	0	0.04589369	0.00%	36.88	0.10%	368.50	1.11E-03	0.00E+00	1.20E-06	0.00E+00	1.69E-06	0.00E+00
StanCOG	2046	MH	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.00%	25.20	0.07%	251.85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	Motor Coach	Aggregate	Aggregate	Diesel	8334.136335	0	0.185553219	0	1.313046574	0	0.03%	532.38	0.01%	23.16	0.00E+00	1.93E-01	0.00E+00	4.30E-06	0.00E+00	3.04E-05
StanCOG	2046	OBUS	Aggregate	Aggregate	Gasoline	350.7472992	28.43301768	0.188540094	0.031579667	0.003807544	0.025268072	0.05%	906.75	0.01%	45.30	2.58E-02	1.59E-02	2.86E-05	8.54E-06	2.29E-05	1.72E-07
StanCOG	2046	OBUS	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.03%	505.48	0.01%	25.25	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	PTO	Aggregate	Aggregate	Diesel	0	0	0	0	0	0	0.00%	-	0.00%	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	PTO	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.00%	-	0.00%	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	SBUS	Aggregate	Aggregate	Gasoline	2462.681488	52.58664892	2.512807551	0.071191497	0.073864135	0.090932982	0.01%	247.04	0.02%	61.73	1.30E-02	1.52E-01	1.76E-05	1.55E-04	2.25E-05	4.56E-06
StanCOG	2046	SBUS	Aggregate	Aggregate	Diesel	1876.821831	0	0.007758321	0	0.295694044	0	0.16%	2,942.69	0.06%	203.12	0.00E+00	3.81E-01	0.00E+00	1.58E-06	0.00E+00	6.01E-05
StanCOG	2046	SBUS	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.15%	2,774.86	0.06%	202.89	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	SBUS	Aggregate	Aggregate	Natural Gas	4265.779023	0	12.55624591	0	0.869606959	0	0.05%	1,009.93	0.02%	69.71	0.00E+00	2.97E-01	0.00E+00	8.75E-04	0.00E+00	6.06E-05
StanCOG	2046	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	512.8231257	0	0.002291385	0	0.080795492	0	0.00%	84.44	0.00%	3.67	0.00E+00	1.88E-03	0.00E+00	8.42E-09	0.00E+00	2.97E-07
StanCOG	2046	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.01%	115.49	0.00%	5.02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	513.1389227	0	0.002291413	0	0.080845246	0	0.01%	103.79	0.00%	4.51	0.00E+00	2.32E-03	0.00E+00	1.03E-08	0.00E+00	3.65E-07
StanCOG	2046	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.01%	141.49	0.00%	6.15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	512.1798346	0	0.002291356	0	0.080694142	0	0.02%	471.13	0.01%	20.49	0.00E+00	1.05E-02	0.00E+00	4.70E-08	0.00E+00	1.65E-06
StanCOG	2046	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.03%	648.47	0.01%	28.20	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	501.4385953	0	0.002291359	0	0.079001855	0	0.07%	1,251.68	0.01%	54.44	0.00E+00	2.73E-02	0.00E+00	1.25E-07	0.00E+00	4.30E-06
StanCOG	2046	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.02%	385.61	0.00%	16.77	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	1751.698068	0	0.007729384	0	0.275980744	0	0.06%	1,142.25	0.02%	80.00	0.00E+00	1.40E-01	0.00E+00	6.18E-07	0.00E+00	2.21E-05
StanCOG	2046	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.06%	1,212.18	0.02%	84.90	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	1753.538677	0	0.007729243	0	0.276270733	0	0.06%	1,221.95	0.02%	85.59	0.00E+00	1.50E-01	0.00E+00	6.62E-07	0.00E+00	2.36E-05
StanCOG	2046	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.07%	1,299.81	0.02%	91.04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	1754.176083	0	0.007729493	0	0.276371156	0	0.20%	3,795.33	0.07%	265.83	0.00E+00	4.66E-01	0.00E+00	2.05E-06	0.00E+00	7.35E-05
StanCOG	2046	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.21%	4,025.96	0.08%	281.98	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	1828.746857	0	0.0077376	0	0.288119812	0	0.09%	1,753.00	0.03%	122.78	0.00E+00	2.25E-01	0.00E+00	9.50E-07	0.00E+00	3.54E-05
StanCOG	2046	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.06%	1,063.53	0.02%	74.49	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
StanCOG	2046	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	4351.695118	0	11.40962839	0	0.887121518	0	0.00%	36.68	0.00%	2.57	0.00E+00	1.12E-02	0.00E+00	2.93E-05	0.00E+00	2.28E-06
StanCOG	2046	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	1885.396546	0	0.008310092	0	0.297044994	0	0.19%	3,616.55	0.09%	312.69	0.00E+00	5.90E-01	0.00E+00	2.60E-06	0.00E+00	9.29E-05
StanCOG	2046	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	0	0	0	0	0	0	0.20%	3,826.87	0.09%	330.88	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Source: EMFAC2021 (v1.0.2) Emission Rates
Region Type: MPO
Region: StanCOG
Calendar Year: 2046
Season: Annual
Vehicle Classification: EMFAC202x Categories

Units: miles/day for CVMT and EVMT, trips/day for Trips, g/mile for RUNEX, PMBW and PMTW, g/trip for STREX, HOTSOAK and RUNLOSS, g/vehicle/day for IDLEX and DIURN. PHEV calculated based on total VMT.

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Fleet Mix (Population)	VMT	Fleet Mix (VMT)	Trips	Fleet Mix (Trips)
StanCOG	2046	All Other Buses	Aggregate	Aggregate	Diesel	149.6800715	0.03%	6643.432351	0.03%	1332.152636	0.05%
StanCOG	2046	All Other Buses	Aggregate	Aggregate	Natural Gas	10.95221818	0.00%	451.2713964	0.00%	97.47474179	0.00%
StanCOG	2046	LDA	Aggregate	Aggregate	Gasoline	205825.7193	42.60%	8405163.178	42.51%	949900.0615	37.76%
StanCOG	2046	LDA	Aggregate	Aggregate	Diesel	130.7421019	0.03%	4900.966403	0.02%	584.1049259	0.02%
StanCOG	2046	LDA	Aggregate	Aggregate	Electricity	28070.58249	5.81%	1167452.397	5.90%	130976.7982	5.21%
StanCOG	2046	LDA	Aggregate	Aggregate	Plug-in Hyb	9672.180907	2.00%	399660.4891	2.02%	39994.46805	1.59%
StanCOG	2046	LDT1	Aggregate	Aggregate	Gasoline	12634.57741	2.61%	463605.1571	2.34%	56627.94478	2.25%
StanCOG	2046	LDT1	Aggregate	Aggregate	Diesel	0.139819799	0.00%	5.445367235	0.00%	0.643997529	0.00%
StanCOG	2046	LDT1	Aggregate	Aggregate	Electricity	357.6336856	0.07%	15023.04744	0.08%	1674.557581	0.07%
StanCOG	2046	LDT1	Aggregate	Aggregate	Plug-in Hyb	274.953296	0.06%	11108.50062	0.06%	1136.931879	0.05%
StanCOG	2046	LDT2	Aggregate	Aggregate	Gasoline	105202.7746	21.77%	4051218.232	20.49%	481173.6087	19.13%
StanCOG	2046	LDT2	Aggregate	Aggregate	Diesel	397.7111729	0.08%	15474.65282	0.08%	1829.167717	0.07%
StanCOG	2046	LDT2	Aggregate	Aggregate	Electricity	4069.777908	0.84%	118140.1877	0.60%	19045.17875	0.76%
StanCOG	2046	LDT2	Aggregate	Aggregate	Plug-in Hyb	2805.994878	0.58%	111111.9045	0.56%	11602.78882	0.46%
StanCOG	2046	LHD1	Aggregate	Aggregate	Gasoline	4231.476428	0.88%	152440.8123	0.77%	63042.69388	2.51%
StanCOG	2046	LHD1	Aggregate	Aggregate	Diesel	3035.991625	0.63%	100560.8934	0.51%	38188.95537	1.52%
StanCOG	2046	LHD1	Aggregate	Aggregate	Electricity	4182.772308	0.87%	193731.5965	0.98%	58821.86397	2.34%
StanCOG	2046	LHD2	Aggregate	Aggregate	Gasoline	546.670668	0.11%	18193.78311	0.09%	8144.578414	0.32%
StanCOG	2046	LHD2	Aggregate	Aggregate	Diesel	1553.34965	0.32%	48830.83128	0.25%	19539.18448	0.78%
StanCOG	2046	LHD2	Aggregate	Aggregate	Electricity	983.5618719	0.20%	44444.50913	0.22%	13015.99479	0.52%
StanCOG	2046	MCY	Aggregate	Aggregate	Gasoline	8764.230599	1.81%	48313.24184	0.24%	17528.4612	0.70%
StanCOG	2046	MDV	Aggregate	Aggregate	Gasoline	63559.35078	13.15%	2323648.693	11.75%	285923.0338	11.37%
StanCOG	2046	MDV	Aggregate	Aggregate	Diesel	720.6221791	0.15%	25562.03422	0.13%	3209.556161	0.13%
StanCOG	2046	MDV	Aggregate	Aggregate	Electricity	3774.415284	0.78%	108251.2773	0.55%	17587.6325	0.70%
StanCOG	2046	MDV	Aggregate	Aggregate	Plug-in Hyb	1797.867986	0.37%	69505.63502	0.35%	7434.184123	0.30%
StanCOG	2046	MH	Aggregate	Aggregate	Gasoline	488.4964493	0.10%	5494.557619	0.03%	48.86918479	0.00%
StanCOG	2046	MH	Aggregate	Aggregate	Diesel	333.8615092	0.07%	3217.399776	0.02%	33.38615092	0.00%
StanCOG	2046	Motor Coach	Aggregate	Aggregate	Diesel	30.69605026	0.01%	3895.299891	0.02%	705.3952349	0.03%
StanCOG	2046	OBUS	Aggregate	Aggregate	Gasoline	60.04715909	0.01%	1949.93604	0.01%	1201.423559	0.05%
StanCOG	2046	OBUS	Aggregate	Aggregate	Electricity	33.47388368	0.01%	2239.35838	0.01%	669.7454647	0.03%
StanCOG	2046	PTO	Aggregate	Aggregate	Diesel	0	0.00%	8387.76683	0.04%	0	0.00%
StanCOG	2046	PTO	Aggregate	Aggregate	Electricity	0	0.00%	8159.523191	0.04%	0	0.00%
StanCOG	2046	SBUS	Aggregate	Aggregate	Gasoline	81.83081332	0.02%	4248.944597	0.02%	327.3232533	0.01%
StanCOG	2046	SBUS	Aggregate	Aggregate	Diesel	269.2671055	0.06%	5551.912126	0.03%	3898.987688	0.16%
StanCOG	2046	SBUS	Aggregate	Aggregate	Electricity	268.9615191	0.06%	7322.797385	0.04%	3676.618923	0.15%

StanCOG	2046	SBUS	Aggregate	Aggregate	Natural Gas	92.41233507	0.02%	1855.237511	0.01%	1338.130612	0.05%
StanCOG	2046	T6 CAIRP Class 4	Aggregate	Aggregate	Diesel	4.868795251	0.00%	350.9192736	0.00%	111.8849149	0.00%
StanCOG	2046	T6 CAIRP Class 4	Aggregate	Aggregate	Electricity	6.659009774	0.00%	507.9784874	0.00%	153.0240446	0.01%
StanCOG	2046	T6 CAIRP Class 5	Aggregate	Aggregate	Diesel	5.984084229	0.00%	482.0765198	0.00%	137.5142556	0.01%
StanCOG	2046	T6 CAIRP Class 5	Aggregate	Aggregate	Electricity	8.157806977	0.00%	696.1767578	0.00%	187.4664043	0.01%
StanCOG	2046	T6 CAIRP Class 6	Aggregate	Aggregate	Diesel	27.16423467	0.01%	1254.894844	0.01%	624.2341127	0.02%
StanCOG	2046	T6 CAIRP Class 6	Aggregate	Aggregate	Electricity	37.38910785	0.01%	1823.914682	0.01%	859.2016985	0.03%
StanCOG	2046	T6 CAIRP Class 7	Aggregate	Aggregate	Diesel	72.16912905	0.01%	14632.46138	0.07%	1658.446586	0.07%
StanCOG	2046	T6 CAIRP Class 7	Aggregate	Aggregate	Electricity	22.23310292	0.00%	4679.388155	0.02%	510.9167051	0.02%
StanCOG	2046	T6 Instate Delivery Class 4	Aggregate	Aggregate	Diesel	106.0582053	0.02%	3498.393666	0.02%	1513.45059	0.06%
StanCOG	2046	T6 Instate Delivery Class 4	Aggregate	Aggregate	Electricity	112.5513206	0.02%	3972.970513	0.02%	1606.107344	0.06%
StanCOG	2046	T6 Instate Delivery Class 5	Aggregate	Aggregate	Diesel	113.4584423	0.02%	3744.214497	0.02%	1619.051971	0.06%
StanCOG	2046	T6 Instate Delivery Class 5	Aggregate	Aggregate	Electricity	120.6879354	0.02%	4261.536406	0.02%	1722.216838	0.07%
StanCOG	2046	T6 Instate Delivery Class 6	Aggregate	Aggregate	Diesel	352.3970469	0.07%	11623.48773	0.06%	5028.705859	0.20%
StanCOG	2046	T6 Instate Delivery Class 6	Aggregate	Aggregate	Electricity	373.8111261	0.08%	13185.87623	0.07%	5334.284769	0.21%
StanCOG	2046	T6 Instate Delivery Class 7	Aggregate	Aggregate	Diesel	162.7668065	0.03%	8242.459986	0.04%	2322.682329	0.09%
StanCOG	2046	T6 Instate Delivery Class 7	Aggregate	Aggregate	Electricity	98.74917212	0.02%	5300.83495	0.03%	1409.150686	0.06%
StanCOG	2046	T6 Instate Delivery Class 7	Aggregate	Aggregate	Natural Gas	3.405648688	0.00%	174.615448	0.00%	48.59860678	0.00%
StanCOG	2046	T6 Instate Other Class 4	Aggregate	Aggregate	Diesel	414.5179856	0.09%	16072.12752	0.08%	4791.827914	0.19%
StanCOG	2046	T6 Instate Other Class 4	Aggregate	Aggregate	Electricity	438.6250749	0.09%	19232.6381	0.10%	5070.505865	0.20%

Appendix B

Biology

Table B-1 Special-Status Plant Species with the Potential to Occur in the StanCOG region

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
Acmispon rubriflorus red-flowered bird's-foot-trefoil	None/None G2/S2 1B.1	Cismontane woodland, Valley and foothill grassland. Most recent sighting from sterile, red soils-volcanic mudflow deposits. 200-425m. Blooms Apr-Jun.
Allium sharsmithiae Sharsmith's onion	None/None G2/S2 1B.3	Chaparral, Cismontane woodland. Rocky, Serpentinite 400-1200m. Blooms Mar-May.
Astragalus tener var. tener alkali milk-vetch	None/None G2T1/S1 1B.2	Playas, Valley and foothill grassland, Vernal pools. Alkaline 1-60m. Blooms Mar-Jun.
Atriplex cordulata var. cordulata heartscale	None/None G3T2/S2 1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland. Alkaline (sometimes) 0-560m. Blooms Apr-Oct.
Atriplex minuscula lesser saltscale	None/None G2/S2 1B.1	Chenopod scrub, Playas, Valley and foothill grassland. Alkaline, Sandy 15-200m. Blooms May-Oct.
Atriplex persistens vernal pool smallscale	None/None G2/S2 1B.2	Vernal pools. Alkaline vernal pools. 10-115m. Blooms Jun-Oct.
Atriplex subtilis subtle orache	None/None G1/S1 1B.2	Valley and foothill grassland. Alkaline 40-100m. Blooms (Apr)Jun-Sep (Oct).
Blepharizonia plumose big tarplant	None/None G1G2/S1S2 1B.1	Valley and foothill grassland. Clay (usually) 30-505m. Blooms Jul-Oct.
Calycadenia hooveri Hoover's calycadenia	None/None G2/S2 1B.3	Cismontane woodland, Valley and foothill grassland. Rocky 65-300m. Blooms Jul-Sep.
Campanula exigua chaparral harebell	None/None G2/S2 1B.2	Annual herb. Blooms May-June. Chaparral. Rocky sites, usually on serpentine in chaparral. 275-1250 m.
Campanula sharsmithiae Sharsmith's harebell	None/None G1G2/S1S2 1B.2	Chaparral. Serpentine barrens. 490-855m. Blooms Apr-Jun.
Castilleja campestris ssp. succulent succulent owl's-clover	FT/SCE G4?T2T3/S2S3 1B.2	Vernal pools. Moist places, often in acidic soils. 50-750m. Blooms (Mar)Apr-May.
Caulanthus lemmonii Lemmon's jewel-flower	None/None G3/S3 1B.2	Pinyon and juniper woodland, Valley and foothill grassland. 80-1580m. Blooms Feb-May.
Cirsium fontinale var. campylon Mt. Hamilton fountain thistle	None/None G2T2/S2 1B.2	Perennial herb. Blooms February -September. Chaparral, cismontane woodland. Serpentine seeps. 35-365m (115-120ft).
Clarkia rostrata beaked clarkia	None/None G2G3/S2S3 1B.3	Cismontane woodland, Valley and foothill grassland. North-facing slopes; sometimes on sandstone. 60-500m. Blooms Apr-May.
Cryptantha hooveri Hoover's cryptantha	None/None GH/SH 1A	Inland dunes, Valley and foothill grassland. In coarse sand. 9-150m. Blooms Apr-May.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
Cryptantha mariposae Mariposa cryptantha	None/None G2G3/S2S3 1B.3	Chaparral. On serpentine outcrops. 200-650m. Blooms Apr-Jun.
Delphinium californicum ssp. interius Hospital Canyon larkspur	None/None G3T3/S3 1B.2	Chaparral, Cismontane woodland, Coastal scrub. In wet, boggy meadows, openings in chaparral and in canyons. 195-1095m. Blooms Apr-Jun.
Downingia pusilla dwarf downingia	None/None GU/S2 2B.2	Valley and foothill grassland, Vernal pools. Vernal lake and pool margins with a variety of associates. In several types of vernal pools. 1-445m. Blooms Mar-May.
Eryngium racemosum Delta button-celery	None/SCE G1/S1 1B.1	Riparian scrub. Seasonally inundated floodplain on clay. 3-30m. Blooms (May)Jun-Oct.
Eryngium spinosepalum spiny-sepaled button-celery	None/None G2/S2 1B.2	Valley and foothill grassland, Vernal pools. Some sites on clay soil of granitic origin; vernal pools, within grassland. 80-975m. Blooms Apr-Jun.
Erythranthe mamorata Stanislaus monkeyflower	None/None G2?/S2? 1B.1	Cismontane woodland, Lower montane coniferous forest. 100-900m. Blooms Mar-May.
Eschscholzia rhombipetala diamond-petaled California poppy	None/None G1/S1 1B.1	Valley and foothill grassland. Alkaline, clay slopes and flats. 0-975m. Blooms Mar-Apr.
Euphorbia hooveri Hoover's spurge	FT/None G1/S1 1B.2	Vernal pools. Vernal pools on volcanic mudflow or clay substrate. 25-250m. Blooms Jul-Sep(Oct).
Fritillaria falcate talus fritillary	None/None G2/S2 1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest. Mostly on serpentine talus, but occasionally found on granitic. 300-1525m. Blooms Mar-May.
Lagophylla dichotoma forked hare-leaf	None/None G2/S2 1B.1	Cismontane woodland, Valley and foothill grassland. Sometimes clay. 45-335m. Blooms Apr-May.
Lasthenia chrysantha alkali-sink goldfields	None/None G2/S2 1B.1	Vernal pools. Alkaline 0-200m. Blooms Feb-Apr.
Legenere limosa legenere	None/None G2/S2 1B.1	Vernal pools. In beds of vernal pools. 1-880m. Blooms Apr-Jun.
Leptosyne hamiltonii Mt. Hamilton coreopsis	None/None G2/S2 1B.2	Cismontane woodland. On steep shale talus with open southwestern exposure. 550-1300m. Blooms Mar-May.
Lomatium observatorium Mt. Hamilton lomatium	None/None G1/S1 1B.2	Cismontane woodland. Open to partially shaded openings in Pinus coulteri-oak woodland. Sedimentary Franciscan rocks and volcanic soils. 1219-1330m. Blooms Mar-May.
Madia radiata showy golden madia	None/None G3/S3 1B.1	Annual herb. Cismontane woodland, valley and foothill grassland. Mostly on adobe clay in grassland or among shrubs. Elevations: 80-4000ft (25-1220m). Blooms Mar-May.
Malacothamnus hallii Hall's bush-mallow	None/None G2/S2 1B.2	Chaparral, Coastal scrub. Some populations on serpentine. 10-760m. Blooms (Apr) May-Sep (Oct).
Monardella leucocephala Merced monardella	None/None GX/SX 1A	Valley and foothill grassland. Known from riverbeds, moist sandy depressions. Requires moist subalkaline sands associated with low elevation grassland. 35-100m. Blooms May-Aug.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CRPR	Habitat Requirements
Navarretia gowenii Lime Ridge navarretia	None/None G1/S1 1B.1	Chaparral. On calcium carbonate-rich soil with high clay content. 180-305m. Blooms May-Jun.
Navarretia nigelliformis ssp. *radians* shining navarretia	None/None G4T2/S2 1B.2	Cismontane woodland, Valley and foothill grassland, Vernal pools. Apparently in grassland, and not necessarily in vernal pools. 65-1000m. Blooms (Mar)Apr-Jul.
Neostapfia colusana Colusa grass	FT/SCE G1/S1 1B.1	Vernal pools. Usually in the bottoms of large, or deep vernal pools; adobe soils. 5-200m. Blooms May-Aug.
Orcuttia inaequalis San Joaquin Valley Orcutt grass	FT/SCE G1/S1 1B.1	Vernal pools. 10-755m. Blooms Apr-Sep.
Orcuttia pilosa hairy Orcutt grass	FE/SCE G1/S1 1B.1	Vernal pools. 46-200m. Blooms May-Sep.
Phacelia phacelioides Mt. Diablo phacelia	None/None G2/S2 1B.2	Chaparral, Cismontane woodland. Adjacent to trails, on rock outcrops and talus slopes; sometimes on serpentine. 500-1370m. Blooms Apr-May.
Plagiobothrys verrucosus warty popcorn-flower	None/None G4G5/S1 2B.1	Chaparral. Shale substrate. 610-760m. Blooms Apr-May.
Pseudobahia bahiifolia Hartweg's golden sunburst	FE/SCE G1/S1 1B.1	Cismontane woodland, Valley and foothill grassland. Clay soils, often acidic. Predominantly on the northern slopes of knolls, but also along shady creeks or near vernal pools. 15-150m. Blooms Mar-Apr.
Puccinellia simplex California alkali grass	None/None G3/S2 1B.2	Chenopod scrub, Meadows and seeps, Valley and foothill grassland, Vernal pools. Alkaline, vernally mesic. Sinks, flats, and lake margins. 2-930m. Blooms Mar-May.
Sphenopholis obtusata prairie wedge grass	None/None G5/S2 2B.2	Cismontane woodland, Meadows and seeps. Open moist sites, along rivers and springs, alkaline desert seeps. 300-2000m. Blooms Apr-Jul.
Tuctoria greenei Greene's tuctoria	FE/SCR G1/S1 1B.1	Vernal pools. Vernal pools in open grasslands. 30-1070m. Blooms May-Jul (Sep).
Wolffia brasiliensis Brazilian watermeal	None/None G5/S2 2B.3	Marshes and swamps. Shallow freshwater marshes. 20-100m. Blooms Apr-Dec.

FE = Federally Endangered FT = Federally Threatened DL = Delisted

SE = State Endangered ST = State Threatened SR = State Rare

G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind5.

CRPR (California Rare Plant Rank):

1A=Presumed Extinct in California

1B=Rare, Threatened, or Endangered in California and elsewhere

2=Rare, Threatened, or Endangered in California, but more common elsewhere

3=Need more information (a Review List)

4=Plants of Limited Distribution (a Watch List)

CRPR Threat Code Extension:

.1=Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2=Fairly endangered in California (20-80% occurrences threatened)

.3=Not very endangered in California (<20% of occurrences threatened)

Sources: CNDDB (CDFW 2021a); USFWS IPaC (2021a), and CNPS Rare Plant Inventory (2021)

Table B-2 Special-Status Wildlife Species with the Potential to Occur in the StanCOG region

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CDFW	Habitat Requirements
Invertebrates		
Branchinecta conservatio conservancy fairy shrimp	FE/None G2/S2	Endemic to the grasslands of the northern two-thirds of the Central Valley; found in large, turbid pools. Inhabits astatic pools located in swales formed by old, braided alluvium; filled by winter/spring rains, last until June.
Branchinecta lynchi cernal pool fairy shrimp	FT/None G3/S3	Endemic to the grasslands of the Central Valley, central Coast Mountains, and South Coast Mountains. Inhabits, small clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.
Desmocerus californicus dimorphus valley elderberry longhorn beetle	FT/None G3T2/S2	Occurs only in the Central Valley of California, in association with blue elderberry (*Sambucus mexicana*). Prefers to lay eggs in elderberry 2-8 inches in diameter; some preference shown for "stressed" elderberries.
Lepidurus packardi vernal pool tadpole shrimp	FE/None G4/S3S4	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Inhabits pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed and highly turbid.
Fish		
Hesperoleucus symmetricus symmetricus central California roach	None/None G4T3Q/S3 SSC	Generally found in small streams of the Sierra Nevada foothills flowing into the Central Valley and are particularly well adapted to life in intermittent watercourses; dense populations are frequently observed in isolated pools. Rarely above 1,000 meters in elevation. Tolerant of wide temperature ranges and dissolved oxygen levels. Most abundant when only species present, occupying large pools in open water. With other fish, found in shallow margins, pool edges, or dense cover.
Mylopharodon conocephalus hardhead	None/None G3/S3 SSC	Low to mid-elevation streams in the Sacramento-San Joaquin drainage. Also present in the Russian River. Inhabits clear, deep pools with sand-gravel-boulder bottoms & slow water velocity. not found where exotic Centrarchids predominate.
Oncorhynchus mykiss irideus pop. 11 steelhead – Central Valley DPS	FT/None G5T2Q/S2 SSC	Consists of population in the Sacramento and San Joaquin Rivers as well as their tributaries. Inhabits fresh water, fast flowing, highly oxygenated, clear, cool stream where riffles tend to predominate pools; small streams with high elevation headwaters close to the ocean that have no impassible barriers; spawning: high elevation headwaters.
Pogonichthys macrolepidotus Sacramento splittail	None/None GNR/S3 SSC	Endemic to the lakes and rivers of the Central Valley, but now confined to the delta, Suisun Bay, and associated marshes. Inhabits slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning and foraging for young.
Amphibians		
Ambystoma californiense pop. 1 California tiger salamander – central California DPS	FT/ST G2G3/S2S3 WL	Lives in vacant or mammal-occupied burrows throughout most of the year; in grassland, savanna, or open woodland habitats. Need underground refuges, especially ground squirrel burrows, and vernal pools or other seasonal water sources for breeding.
Rana boylii Foothill yellow-legged frog	None/SE G3/S3 SSC	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Need at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CDFW	Habitat Requirements
Rana draytonii California red-legged frog	FT/None G2G3/S2S3 SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby, or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.
Spea hammondii western spadefoot	None/None G3/S3 SSC	Occurs primarily in grassland habitats but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.
Reptiles		
Anniella pulchra Northern California legless lizard	None/None G3/S3 SSC	Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content.
Emys marmorata western pond turtle	None/None G3G4/S3 SSC	A thoroughly aquatic turtle of ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.
Masticophis flagellum ruddocki San Joaquin whipsnake	None/None G5T2T3/S2? SSC	Open, dry habitats with little or no tree cover. Found in valley grassland and saltbush scrub in the San Joaquin Valley. Needs mammal burrows for refuge and oviposition sites.
Masticophis lateralis euryxanthus Alameda whipsnake	FT/ST G4T2/S2	Typically found in chaparral and scrub habitats but will also use adjacent grassland, oak savanna, and woodland habitats. Mostly south-facing slopes and ravines, with rock outcrops, deep crevices, or abundant rodent burrows, where shrubs form a vegetative mosaic with oak trees and grasses.
Phrynosoma blainvillii Coast horned lizard	None/None G4G5/S3S4 SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.
Birds		
Agelaius tricolor tricolored blackbird	None/ST G1G2/S1S2 SSC	Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.
Aquila chrysaetos golden eagle	None/None G5/S3 FP WL	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.
Athene cunicularia burrowing owl	None/None G4/S3 SSC	Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel.
Branta hutchinsii leucopareia cackling (=Aleutian Canada) goose	FD/None G5T3/S3 WL	Winters on lakes and inland prairies. Forages on natural pasture or that cultivated to grain; loafs on lakes, reservoirs, ponds.
Buteo swainsoni Swainson's hawk	None/ST G5/S3	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.
Charadrius montanus mountain plover	None/None G3/S2S3 SSC	Short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Short vegetation, bare ground, and flat topography. Prefers grazed areas and areas with burrowing rodents.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CDFW	Habitat Requirements
Coccyzus americanus occidentalis western yellow-billed cuckoo	FT/SE G5T2T3/S1	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.
Eremophila alpestris actia California horned lark	None/None G5T4Q/S4 WL	Coastal regions, chiefly from Sonoma County to San Diego County. Also, main part of San Joaquin Valley and east to foothills. Short-grass prairie, "bald" hills, mountain meadows, open coastal plains, fallow grain fields, alkali flats.
Falco columbarius merlin	None/None G5/S3S4 WL	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms, and ranches. Clumps of trees or windbreaks are required for roosting in open country.
Falco mexicanus prairie falcon	None/None G5/S4 WL	Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores.
Haliataeetus leucocephalis bald eagle	FD/SE G5/S3 FP	Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with open branches, especially ponderosa pine. Roosts communally in winter.
Icteria virens yellow-breasted chat	None/None G5/S3 SSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground.
Lanius ludovicianus loggerhead shrike	None/None G4/S4 SSC	Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.
Melospiza melodia song sparrow ("Modesto" population)	None/None G5/S3? SSC	Occupies thickets, brush, marshes, roadsides, gardens. Habitat varies over its wide range. In most areas, found in brushy fields, stream sides, shrubby marsh edges, woodland edges, hedgerows, well-vegetated gardens. Some coastal populations live in salt marshes. Nests in dense streamside brush in southwestern deserts, and in any kind of dense low cover.
Vireo bellii pusillus least Bell's vireo	FE/SE G5T2/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.
Mammals		
Antrozous pallidus pallid bat	None/None G4/S3 SSC	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.
Corynorhinus townsendii Townsend's big-eared bat	None/None G4/S2 SSC	Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance.
Eumops perotis californicus western mastiff bat	None/None G4G5T4/S3S4 SSC	Occurs in open, semi-arid to arid habitats, including coniferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.

Scientific Name Common Name	Status Fed/State ESA Global Rank/ State Rank CDFW	Habitat Requirements
Lasiurus blossevillii western red bat	None/None G4/S3 SSC	Roosts in trees in forests and woodlands of varying elevations. Forages in grasslands, shrublands, open woodlands and forests, and agriculture. Typically found in riparian habitats, does not occur in deserts.
Neotoma fuscipes riparia riparian (=San Joaquin Valley) woodrat	FE/None G5T1Q/S1 SSC	Occurs in riparian habitats along the San Joaquin, Stanislaus, and Tuolumne rivers. Builds middens out of grasses, leaves, and woody debris.
Puma concolor *mountain lion*	None/None Provisionally listed	Found across California, often in areas where deer are present. Prime habitat includes foothills and mountains.
Sylvilagus bachmani riparius riparian brush rabbit	FE/SE G5T1/S1	Riparian areas on the San Joaquin River in northern Stanislaus County. Dense thickets of wild rose, willows, and blackberries.
Taxidea taxus American badger	None/None G5/S3 SSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils and open, uncultivated ground. Preys on burrowing rodents. Digs burrows.
Vulpes macrotis mutica San Joaquin kit fox	FE/ST G4T2/S2	Annual grasslands or grassy open stages with scattered shrubby vegetation. Need loose-textured sandy soils for burrowing, and suitable prey base.

FT = Federally Threatened
FC = Federal Candidate Species
FE = Federally Endangered
FS = Federally Sensitive
DL = Delisted
SE = State Endangered
ST = State Threatened
SR = State Rare
SS = State Sensitive
G-Rank/S-Rank = Global Rank and State Rank as per NatureServe and CDFW's CNDDB RareFind3
SSC = CDFW Species of Special Concern FP = Fully Protected WL = Watch List
Sources: CNDDB (CDFW 2021a); USFWS IPaC (2021a)

This page intentionally left blank.