

# **Attachment A: Emission Calculations**

# GSE Emissions Calculations - 2017

Total Annual Emissions (TPY)				
NOx	SOx	VOC	CO	PM
103.02	0.17	20.61	913.68	1.73

Fleet Average
3.62

Equip Type	Fuel Type	Model Year	HP	Published Emission Factors (g/hp-hr)					Load Factor	Activity (hr)	Annual Emissions (tpy)					NOx Emission Factor	
				NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM	EF*HP (g/hr)	EF (g/hp-hr)
Air Conditioner	Diesel	2006	99	5.071	--	--	0.373	0.149	0.75	1,271	0.510	0.000	0.018	0.039	0.016	363.66	4.90
Air Conditioner	Diesel	2011	126	2.834	--	--	1.044	0.157	0.75	1,271	0.358	0.000	0.017	0.138	0.021	255.65	2.71
Air Conditioner	Diesel	2011	126	2.834	--	--	1.044	0.157	0.75	1,271	0.358	0.000	0.017	0.138	0.021	255.65	2.71
Air Conditioner	Diesel	2015	110		--	--			0.75	1,271	0.076	0.000	0.005	0.200	0.003	54.25	0.66
Air Conditioner	Diesel	2016	118	0.336	--	0.045	0.149	0.015	0.75	1,271	0.042	0.000	0.006	0.018	0.002	29.70	0.34
Air Conditioner	Diesel	2016	130	0.336	--	0.045	0.149	0.015	0.75	1,271	0.046	0.000	0.006	0.020	0.002	32.72	0.34
Air Conditioner	Gasoline	2018	201	0.298	--	--	2.908		0.75	1,271	0.053	0.000	0.006	0.614	0.000	37.83	0.25
Air Start	Diesel	1999	500	4.922	--	0.075	0.671	0.075	0.31	1,271	1.069	0.001	0.016	0.146	0.016	762.86	4.92
Air Start	Diesel	2001	600	6.453	--	0.040	0.701	0.063	0.31	1,271	1.682	0.001	0.010	0.183	0.016	1,200.19	6.45
Air Start	Diesel	2005	300	2.908	--	--	0.895	0.134	0.31	1,271	0.345	0.001	0.034	0.117	0.017	246.20	2.65
Air Start	Diesel	2007	511	2.900	--	--	0.900	0.130	0.31	1,271	0.644	0.001	0.060	0.200	0.029	459.39	2.90
Air Start	Diesel	2011	679	2.163	--	--	0.000	0.030	0.31	1,271	0.638	0.001	0.057	0.028	0.009	455.20	2.16
Air Start	Diesel	2015	360	0.127	--	--	0.000	0.002	0.31	1,271	0.020	0.001	0.010	0.130	0.000	14.17	0.13
Air Start	Diesel	2015	333	0.142	--	0.030	--	0.007	0.31	1,271	0.020	0.001	0.004	0.144	0.001	14.63	0.14
Air Start	Diesel	2015	544	0.142	--	0.060	0.149	0.015	0.31	1,271	0.033	0.001	0.014	0.035	0.004	23.89	0.14
Air Start	Diesel	2016	425	0.170	--	--	0.520	0.015	0.31	1,271	0.031	0.000	0.001	0.096	0.003	22.40	0.17
Air Start	Diesel	2017	600	0.250	--	--	0.015	0.007	0.31	1,271	0.065	0.001	0.017	0.004	0.002	46.50	0.25
Air Start	Diesel	2017	325	0.270	--	--	0.300	0.015	0.31	1,271	0.038	0.001	0.013	0.042	0.002	27.20	0.27
Air Start	Diesel	2017	600	0.127	--	0.001	--	0.002	0.31	1,271	0.033	0.001	0.000	0.170	0.001	23.58	0.13
Air Start	Diesel	2018	380	0.007	--	--	0.075	0.015	0.31	1,271	0.001	0.001	0.017	0.012	0.002	0.88	0.01
Air Start	Diesel	2018	600	0.112	--	--	--	0.002	0.31	1,271	0.029	0.001	0.017	0.170	0.001	20.81	0.11
Air Start	Diesel	2018	600	0.112	--	--	--	0.002	0.31	1,271	0.029	0.001	0.017	0.170	0.001	20.81	0.11
Air Start	Diesel	2018	600	0.112	--	--	--	0.002	0.31	1,271	0.029	0.001	0.017	0.170	0.001	20.81	0.11
Aircraft Tug	Diesel	1987	115	12.590	--	--	--	0.670	0.54	215	0.185	0.000	0.014	0.070	0.010	781.84	12.59
Aircraft Tug	Diesel	1997	265	6.900	--	1.000	8.500	0.400	0.54	287	0.312	0.000	0.045	0.385	0.018	987.39	6.90
Aircraft Tug	Diesel	1998	87	6.900	--	--	--	--	0.54	323	0.115	0.000	0.020	0.070	0.014	324.16	6.90
Aircraft Tug	Diesel	1999	67	5.623	--	--	--	0.426	0.54	323	0.072	0.000	0.017	0.063	0.005	203.44	5.62
Aircraft Tug	Diesel	2001	88	5.841	--	--	--	0.242	0.54	323	0.099	0.000	0.020	0.079	0.004	277.58	5.84
Aircraft Tug	Diesel	2004	304	4.800	--	--	2.600	0.150	0.54	323	0.267	0.000	0.014	0.152	0.009	748.65	4.56
Aircraft Tug	Diesel	2007	152	2.831	--	--	--	0.182	0.54	323	0.083	0.000	0.004	0.072	0.005	232.99	2.83
Aircraft Tug	Diesel	2008	173	3.000	--	--	3.700	0.220	0.54	323	0.095	0.000	0.005	0.123	0.007	266.22	2.85
Aircraft Tug	Diesel	2008	200	3.000	--	--	2.600	0.150	0.54	323	0.109	0.000	0.006	0.100	0.006	307.15	2.84
Aircraft Tug	Diesel	2010	305	3.000	--	--	2.600	0.150	0.54	323	0.169	0.000	0.007	0.152	0.009	474.44	2.88
Aircraft Tug	Diesel	2010	260	3.000	--	--	2.600	0.150	0.54	323	0.143	0.000	0.007	0.130	0.007	401.54	2.86
Aircraft Tug	Diesel	2015	300	0.300	--	0.140	2.600	0.010	0.54	323	0.017	0.000	0.008	0.150	0.001	48.60	0.30
Aircraft Tug	Diesel	2015	290	0.300	--	0.140	2.600	0.010	0.54	323	0.017	0.000	0.008	0.145	0.001	46.98	0.30
Aircraft Tug	Diesel	2016	74	3.500	--	--	3.700	0.020	0.54	323	0.049	0.000	0.001	0.053	0.000	137.05	3.43
Aircraft Tug	Electric	1988	140	--	--	--	--	--	0.54	323	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Aircraft Tug	Electric	2000	200	--	--	--	--	--	0.54	323	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Aircraft Tug	Electric	2001	110	--	--	--	--	--	0.54	323	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Aircraft Tug	Electric	2001	110	--	--	--	--	--	0.54	323	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Aircraft Tug	Electric	2001	110	--	--	--	--	--	0.54	323	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Aircraft Tug	Electric	2002	200	--	--	--	--	--	0.54	323	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Aircraft Tug	Electric	2018	58.3	--	--	--	--	--	0.54	323	0.000	0.000	0.000	0.000	0.000	0.00	0.00



## GSE Emissions Calculations - 2017

Equip Type	Fuel Type	Model Year	HP	Published Emission Factors (g/hp-hr)					Load Factor	Activity (hr)	Annual Emissions (tpy)					NOx Emission Factor	
				NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM	EF*HP (g/hr)	EF (g/hp-hr)
Bag TUG	Diesel	2014	49	3.237	--	--	--	0.104	0.37	719	0.047	0.000	0.002	0.057	0.001	58.69	3.24
Bag TUG	Diesel	2014	49	3.237	--	--	--	0.104	0.37	719	0.047	0.000	0.002	0.057	0.001	58.69	3.24
Bag TUG	Electric	1995	115	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	1995	80	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	1996	80	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	1996	80	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2002	115	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2005	80	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2007	115	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2011	80	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2015	80	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2015	80	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2015	80	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2015	80	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2017	40	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2017	40	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2017	40	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2017	40	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2017	40	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2017	40	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2017	40	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2017	40	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Electric	2017	40	--	--	--	--	--	0.37	719	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Bag TUG	Gasoline	1986	50	10.119	0.177	--	178.944	0.068	0.37	870	0.180	0.001	0.237	3.538	0.003	187.20	10.12
Bag TUG	Gasoline	1987	107	10.119	0.177	--	178.944	0.068	0.37	875	0.386	0.001	0.240	3.582	0.003	400.62	10.12
Bag TUG	Gasoline	1989	105	--	--	--	--	--	0.37	868	0.559	0.010	0.329	9.888		584.43	15.04
Bag TUG	Gasoline	1995	107	10.119	0.177	--	178.944	0.068	0.37	880	0.389	0.000	0.238	3.565	0.003	400.62	10.12
Bag TUG	Gasoline	1996	107	10.119	0.177	--	178.944	0.068	0.37	880	0.389	0.000	0.239	3.582	0.003	400.62	10.12
Bag TUG	Gasoline	1997	107	10.119	0.177	--	178.944	0.068	0.37	875	0.386	0.000	0.238	3.562	0.003	400.62	10.12
Bag TUG	Gasoline	1997	107	10.119	0.177	--	178.944	0.068	0.37	875	0.386	0.000	0.238	3.562	0.003	400.62	10.12
Bag TUG	Gasoline	1998	105	--	--	--	--	--	0.37	868	0.559	0.010	0.329	9.888		584.43	15.04
Bag TUG	Gasoline	2000	93	--	--	--	--	--	0.37	868	0.493	0.009	0.290	8.711		514.86	15.04
Bag TUG	Gasoline	2003	107	10.119	0.177	--	178.944	0.068	0.37	875	0.527	0.000	0.150	5.545	0.003	546.19	13.80
Bag TUG	Gasoline	2003	107	10.119	0.177	--	178.944	0.068	0.37	875	0.527	0.000	0.150	5.545	0.003	546.19	13.80
Bag TUG	Gasoline	2003	202	--	--	--	--	--	0.37	875	0.527	0.001	0.150	5.545	0.003	546.19	7.31
Bag TUG	Gasoline	2003	202	--	--	--	--	--	0.37	875	0.527	0.001	0.150	5.545	0.003	546.19	7.31
Bag TUG	Gasoline	2016	107	1.241	0.004	0.176	11.631	0.033	0.37	875	0.047	0.000	0.007	0.444	0.001	49.12	1.24
Bag TUG	Gasoline	2016	107	1.241	0.004	0.176	11.631	0.033	0.37	875	0.047	0.000	0.007	0.444	0.001	49.12	1.24
Bag TUG	Gasoline	2018	107	1.241	0.004	0.176	11.631	0.033	0.37	875	0.047	0.000	0.007	0.444	0.001	49.12	1.24
Belt Loader	Diesel	1993	45	--	--	--	--	--	0.34	503	0.063	0.000	0.033	0.092	0.009	113.62	7.43
Belt Loader	Diesel	2000	60	5.948	--	--	--	0.222	0.34	503	0.067	0.000	0.020	0.060	0.003	121.34	5.95
Belt Loader	Diesel	2009	65	2.955	--	--	--	0.191	0.34	503	0.036	0.000	0.003	0.053	0.002	65.31	2.96
Belt Loader	Diesel	2009	25	4.168	--	--	--	0.181	0.34	503	0.020	0.000	0.003	0.053	0.001	35.43	4.17
Belt Loader	Diesel	2011	49	4.560	--	--	--	0.171	0.34	503	0.042	0.000	0.002	0.050	0.002	75.96	4.56
Belt Loader	Diesel	2011	49	4.560	--	--	--	0.171	0.34	503	0.042	0.000	0.002	0.050	0.002	75.96	4.56

## GSE Emissions Calculations - 2017

Equip Type	Fuel Type	Model Year	HP	Published Emission Factors (g/hp-hr)					Load Factor	Activity (hr)	Annual Emissions (tpy)					NOx Emission Factor	
				NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM	EF*HP (g/hr)	EF (g/hp-hr)
Belt Loader	Diesel	2017	84	0.448	0.002	0.023	1.035	0.003	0.34	503	0.007	0.000	0.000	0.016	0.000	12.79	0.45
Belt Loader	Diesel	2017	84	0.448	0.002	0.023	1.035	0.003	0.34	503	0.007	0.000	0.000	0.016	0.000	12.79	0.45
Belt Loader	Diesel	2018	61	0.448	0.002	0.023	1.035	0.003	0.34	503	0.015	0.000	0.001	0.035	0.000	27.05	1.30
Belt Loader	Diesel	2018	61	0.448	0.002	0.023	1.035	0.003	0.34	503	0.015	0.000	0.001	0.035	0.000	27.05	1.30
Belt Loader	Electric	2004	81	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2004	80	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2005	81	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2006	81	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2006	81	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2006	81	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2011	19	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2014	81	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Electric	2014	81	--	--	--	--	--	0.34	503	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Belt Loader	Gasoline	1997	105	--	--	--	--	--	0.34	810	0.329	0.000	0.115	1.742	0.002	368.08	10.31
Belt Loader	Gasoline	2001	107	10.131	0.177	--	124.832	0.069	0.34	810	0.345	0.000	0.126	2.663	0.002	386.14	10.61
Belt Loader	Gasoline	2001	107	10.131	0.177	--	124.832	0.069	0.34	810	0.345	0.000	0.126	2.663	0.002	386.14	10.61
Belt Loader	Gasoline	2004	107	2.280	0.004	0.549	41.088	0.030	0.34	810	0.074	0.000	0.018	1.335	0.001	82.95	2.28
Belt Loader	Gasoline	2004	84	--	--	--	--	--	0.34	821	0.120	0.000	0.029	2.230	0.002	132.60	4.62
Belt Loader	Gasoline	2007	107	1.705	0.004	0.318	33.496	0.030	0.34	811	0.055	0.000	0.010	1.089	0.001	62.02	1.70
Belt Loader	Gasoline	2007	107	1.705	0.004	0.318	33.496	0.030	0.34	811	0.055	0.000	0.010	1.089	0.001	62.02	1.70
Belt Loader	Gasoline	2012	107	1.377	0.004	0.228	20.498	0.030	0.34	811	0.045	0.000	0.007	0.667	0.001	50.10	1.38
Belt Loader	Gasoline	2012	69	--	--	--	--	--	0.34	811	0.074	0.000	0.012	1.100	0.002	82.78	3.53
Belt Loader	Gasoline	2015	80	--	--	--	--	--	0.34	811	0.063	0.000	0.009	0.680	0.002	70.47	2.59
Belt Loader	Gasoline	2015	80	--	--	--	--	--	0.34	811	0.063	0.000	0.009	0.680	0.002	70.47	2.59
Belt Loader	Gasoline	2016	84	--	--	--	--	--	0.34	812	0.050	0.000	0.008	0.540	0.002	55.86	1.95
Belt Loader	Gasoline	2017	114	1.052	0.004	0.139	7.548	0.030	0.34	811	0.036	0.000	0.005	0.262	0.001	40.76	1.05
Cargo Loader	Diesel	2000	152	6.900	--	--	--	--	0.34	468	0.184	0.000	0.018	0.074	0.011	356.59	6.90
Cargo Loader	Diesel	2001	152	6.900	--	--	--	--	0.34	468	0.184	0.000	0.020	0.083	0.012	356.59	6.90
Cargo Loader	Diesel	2001	152	6.900	--	--	--	--	0.34	468	0.184	0.000	0.020	0.083	0.012	356.59	6.90

## GSE Emissions Calculations - 2017

Equip Type	Fuel Type	Model Year	HP	Published Emission Factors (g/hp-hr)					Load Factor	Activity (hr)	Annual Emissions (tpy)					NOx Emission Factor	
				NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM	EF*HP (g/hr)	EF (g/hp-hr)
Cargo Loader	Diesel	2001	152	6.900	--	--	--	--	0.34	468	0.184	0.000	0.020	0.083	0.012	356.59	6.90
Cargo Loader	Diesel	2001	152	6.900	--	--	--	--	0.34	468	0.184	0.000	0.020	0.083	0.012	356.59	6.90
Cargo Loader	Diesel	2004	99	5.600	--	--	3.700	0.300	0.34	468	0.089	0.000	0.008	0.064	0.005	172.99	5.14
Cargo Loader	Diesel	2005	132	4.900	--	--	3.700	0.220	0.34	468	0.106	0.000	0.007	0.086	0.005	206.34	4.60
Cargo Loader	Diesel	2005	152	4.900	--	--	3.700	0.220	0.34	468	0.124	0.000	0.007	0.099	0.006	239.66	4.64
Cargo Loader	Diesel	2005	102	4.900	--	--	3.700	0.220	0.34	468	0.081	0.000	0.007	0.066	0.004	156.36	4.51
Cargo Loader	Diesel	2007	102	3.000	--	--	3.700	0.220	0.34	468	0.050	0.000	0.004	0.066	0.004	96.29	2.78
Cargo Loader	Diesel	2008	125	3.000	--	--	3.700	0.220	0.34	468	0.062	0.000	0.004	0.081	0.005	119.75	2.82
Cargo Loader	Diesel	2010	175	3.000	--	--	2.600	0.150	0.34	468	0.089	0.000	0.003	0.080	0.005	172.68	2.90
Cargo Loader	Diesel	2010	142	3.000	--	--	3.700	0.220	0.34	468	0.072	0.000	0.003	0.092	0.005	139.02	2.88
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2011	142	3.000	--	--	3.700	0.220	0.34	468	0.071	0.000	0.004	0.092	0.005	137.09	2.84
Cargo Loader	Diesel	2011	160	3.000	--	--	3.700	0.220	0.34	468	0.080	0.000	0.004	0.104	0.006	155.45	2.86
Cargo Loader	Diesel	2011	160	3.000	--	--	3.700	0.220	0.34	468	0.080	0.000	0.004	0.104	0.006	155.45	2.86
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2011	110	3.000	--	--	3.700	0.220	0.34	468	0.054	0.000	0.004	0.071	0.004	104.45	2.79
Cargo Loader	Diesel	2013	110	2.500	--	0.140	3.700	0.010	0.34	468	0.048	0.000	0.003	0.071	0.000	93.50	2.50
Cargo Loader	Diesel	2018	160	0.290	--	0.140	3.700	0.010	0.34	468	0.008	0.000	0.004	0.104	0.000	15.78	0.29
Cargo Loader	Gasoline	2013	102	--	--	--	--	--	0.34	720	0.140	0.000	0.023	2.020	0.003	176.40	5.10
Cargo Loader	Gasoline	2014	102	--	--	--	--	--	0.34	720	0.130	0.000	0.021	1.720	0.003	163.80	4.74
Cargo Loader	Gasoline	2015	229	--	--	--	--	--	0.34	720	0.064	0.000	0.009	0.660	0.002	80.64	1.04
Cargo Loader	Gasoline	2016	229	--	--	--	--	--	0.34	720	0.110	0.000	0.015	0.820	0.003	138.60	1.78
Cargo Loader	Gasoline	2017	229	--	--	--	--	--	0.34	720	0.058	0.000	0.007	0.400	0.002	73.08	0.94
Cargo Loader	Gasoline	2017	229	--	--	--	--	--	0.34	720	0.058	0.000	0.007	0.400	0.002	73.08	0.94
Cargo Loader	Gasoline	2017	229	--	--	--	--	--	0.34	720	0.058	0.000	0.007	0.400	0.002	73.08	0.94
Cargo Loader	Gasoline	2017	229	--	--	--	--	--	0.34	720	0.110	0.000	0.015	0.820	0.003	138.60	1.78
Cargo Loader K-LOADER	Diesel	1995	78	--	--	--	--	--	0.34	342	0.105	0.000	0.013	0.046	0.009	278.52	10.50
Cargo Loader K-LOADER	Diesel	1998	138	--	--	--	--	--	0.34	468	0.352	0.000	0.019	0.056	0.009	682.08	14.54
Cargo Loader K-LOADER	Diesel	2007	110	--	--	--	--	--	0.34	468	0.078	0.000	0.004	0.053	0.004	151.20	4.04
Cargo Loader K-LOADER	Diesel	2012	126	--	--	--	--	--	0.34	468	0.054	0.000	0.003	0.071	0.002	104.68	2.44
Cargo Loader K-LOADER	Diesel	2012	126	--	--	--	--	--	0.34	468	0.054	0.000	0.003	0.071	0.002	104.68	2.44
Cargo Loader K-LOADER	Diesel	2015	74	--	--	--	--	--	0.34	468	0.021	0.000	0.001	0.050	0.000	40.71	1.62
Cargo Loader K-LOADER	Diesel	2016	130	--	--	--	--	--	0.34	468	0.020	0.000	0.001	0.050	0.000	38.77	0.88
Cargo Loader K-LOADER	Diesel	2016	130	--	--	--	--	--	0.34	468	0.020	0.000	0.001	0.050	0.000	38.77	0.88
Cargo Loader K-LOADER	Diesel	2016	130	--	--	--	--	--	0.34	468	0.020	0.000	0.001	0.050	0.000	38.77	0.88
Cargo Loader K-LOADER	Diesel	2016	130	--	--	--	--	--	0.34	468	0.020	0.000	0.001	0.050	0.000	38.77	0.88
Cargo Tractor	Diesel	1998	55	7.240	0.004	1.160	3.980	0.890	0.36	656	0.104	0.000	0.017	0.057	0.013	143.35	7.24
Cargo Tractor	Diesel	1998	55	7.240	0.004	1.160	3.980	0.890	0.36	656	0.104	0.000	0.017	0.057	0.013	143.35	7.24
Cargo Tractor	Diesel	2002	113	3.130	0.003	1.450	4.180	0.430	0.36	677	0.095	0.000	0.044	0.127	0.013	127.33	3.13
Cargo Tractor	Diesel	2002	113	3.130	0.003	1.450	4.180	0.430	0.36	677	0.095	0.000	0.044	0.127	0.013	127.33	3.13
Cargo Tractor	Diesel	2002	113	3.130	0.003	1.450	4.180	0.430	0.36	677	0.095	0.000	0.044	0.127	0.013	127.33	3.13
Cargo Tractor	Diesel	2002	113	3.130	0.003	1.450	4.180	0.430	0.36	677	0.095	0.000	0.044	0.127	0.013	127.33	3.13
Cargo Tractor	Diesel	2002	113	3.130	0.003	1.450	4.180	0.430	0.36	677	0.095	0.000	0.044	0.127	0.013	127.33	3.13
Cargo Tractor	Diesel	2002	113	3.130	0.003	1.450	4.180	0.430	0.36	677	0.095	0.000	0.044	0.127	0.013	127.33	3.13



## GSE Emissions Calculations - 2017

Equip Type	Fuel Type	Model Year	HP	Published Emission Factors (g/hp-hr)					Load Factor	Activity (hr)	Annual Emissions (tpy)					NOx Emission Factor	
				NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM	EF*HP (g/hr)	EF (g/hp-hr)
Cargo Tractor	Electric	2011	80	--	--	--	--	--	0.36	677	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Cargo Tractor	Electric	2016	101	--	--	--	--	--	0.36	677	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Cargo Tractor	Electric	2016	101	--	--	--	--	--	0.36	677	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Cargo Tractor	Electric	2016	101	--	--	--	--	--	0.36	677	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Cargo Tractor	Electric	2016	101	--	--	--	--	--	0.36	677	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Cargo Tractor	Gasoline	1989	101	--	--	--	--	--	0.36	1,390	1.061	0.001	0.700	9.302	0.005	692.49	19.08
Cargo Tractor	Gasoline	1991	101	--	--	--	--	--	0.36	1,340	1.016	0.000	0.671	8.910	0.005	688.08	18.96
Cargo Tractor	Gasoline	2000	101	--	--	--	--	--	0.36	1,350	1.130	0.001	0.690	10.000	0.004	759.35	20.93
Cargo Tractor	Gasoline	2002	101	--	--	--	--	--	0.36	1,350	1.110	0.001	0.460	12.050	0.005	745.91	20.56
Cargo Tractor	Gasoline	2002	101	--	--	--	--	--	0.36	1,350	1.110	0.001	0.460	12.050	0.005	745.91	20.56
Cargo Tractor	Gasoline	2002	101	--	--	--	--	--	0.36	1,350	1.110	0.001	0.460	12.050	0.005	745.91	20.56
Cargo Tractor	Gasoline	2002	101	--	--	--	--	--	0.36	1,350	1.110	0.001	0.460	12.050	0.005	745.91	20.56
Cargo Tractor	Gasoline	2004	101	--	--	--	--	--	0.36	1,350	0.480	0.001	0.130	10.000	0.004	322.55	8.89
Cargo Tractor	Gasoline	2007	101	--	--	--	--	--	0.36	1,350	0.330	0.001	0.069	8.090	0.004	221.76	6.11
Cargo Tractor	Gasoline	2007	101	--	--	--	--	--	0.36	1,350	0.330	0.001	0.069	8.090	0.004	221.76	6.11
Cargo Tractor	Gasoline	2007	101	--	--	--	--	--	0.36	1,350	0.330	0.001	0.069	8.090	0.004	221.76	6.11
Cargo Tractor	Gasoline	2007	101	--	--	--	--	--	0.36	1,350	0.330	0.001	0.069	8.090	0.004	221.76	6.11
Cargo Tractor	Gasoline	2007	101	--	--	--	--	--	0.36	1,350	0.330	0.001	0.069	8.090	0.004	221.76	6.11
Cargo Tractor	Gasoline	2007	67	6.230	0.009	1.280	150.800	0.085	0.36	1,352	0.224	0.000	0.046	5.421	0.003	150.27	6.23
Cargo Tractor	Gasoline	2007	67	6.230	0.009	1.280	150.800	0.085	0.36	1,352	0.224	0.000	0.046	5.421	0.003	150.27	6.23
Cargo Tractor	Gasoline	2007	67	6.230	0.009	1.280	150.800	0.085	0.36	1,352	0.224	0.000	0.046	5.421	0.003	150.27	6.23
Cargo Tractor	Gasoline	2007	67	6.230	0.009	1.280	150.800	0.085	0.36	1,352	0.224	0.000	0.046	5.421	0.003	150.27	6.23
Cargo Tractor	Gasoline	2008	75	--	--	--	--	--	0.36	1,350	0.320	0.001	0.064	7.420	0.005	215.04	7.96
Cargo Tractor	Gasoline	2008	75	--	--	--	--	--	0.36	1,350	0.320	0.001	0.064	7.420	0.005	215.04	7.96
Cargo Tractor	Gasoline	2008	75	--	--	--	--	--	0.36	1,350	0.320	0.001	0.064	7.420	0.005	215.04	7.96
Cargo Tractor	Gasoline	2008	75	--	--	--	--	--	0.36	1,350	0.320	0.001	0.064	7.420	0.005	215.04	7.96
Cargo Tractor	Gasoline	2008	75	--	--	--	--	--	0.36	1,350	0.320	0.001	0.064	7.420	0.005	215.04	7.96
Cargo Tractor	Gasoline	2009	75	--	--	--	--	--	0.36	1,350	0.300	0.001	0.060	6.750	0.005	201.60	7.47
Cargo Tractor	Gasoline	2009	75	--	--	--	--	--	0.36	1,350	0.300	0.001	0.060	6.750	0.005	201.60	7.47
Cargo Tractor	Gasoline	2010	75	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.005	188.16	6.97
Cargo Tractor	Gasoline	2010	80	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.005	188.16	6.53
Cargo Tractor	Gasoline	2010	75	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.005	188.16	6.97
Cargo Tractor	Gasoline	2010	75	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.005	188.16	6.97
Cargo Tractor	Gasoline	2010	80	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.005	188.16	6.53
Cargo Tractor	Gasoline	2010	80	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.005	188.16	6.53
Cargo Tractor	Gasoline	2010	80	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.005	188.16	6.53
Cargo Tractor	Gasoline	2010	80	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.005	188.16	6.53
Cargo Tractor	Gasoline	2010	80	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.005	188.16	6.53
Cargo Tractor	Gasoline	2010	101	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.004	188.16	5.19
Cargo Tractor	Gasoline	2010	101	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.004	188.16	5.19
Cargo Tractor	Gasoline	2010	101	--	--	--	--	--	0.36	1,350	0.280	0.001	0.055	6.090	0.004	188.16	5.19
Cargo Tractor	Gasoline	2011	79	--	--	--	--	--	0.36	1,350	0.260	0.001	0.050	5.420	0.005	174.72	6.14
Cargo Tractor	Gasoline	2012	101	--	--	--	--	--	0.36	1,350	0.250	0.001	0.046	4.760	0.004	168.00	4.63
Cargo Tractor	Gasoline	2012	101	--	--	--	--	--	0.36	1,350	0.250	0.001	0.046	4.760	0.004	168.00	4.63







## GSE Emissions Calculations - 2017

Equip Type	Fuel Type	Model Year	HP	Published Emission Factors (g/hp-hr)					Load Factor	Activity (hr)	Annual Emissions (tpy)					NOx Emission Factor	
				NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM	EF*HP (g/hr)	EF (g/hp-hr)
Cargo Tractor	Gasoline	2018	84	3.130	0.009	0.430	26.690	0.085	0.36	1,351	0.141	0.000	0.019	1.202	0.004	94.65	3.13
Cargo Tractor	Gasoline	2018	61	3.130	0.009	0.430	26.690	0.085	0.36	1,351	0.102	0.000	0.014	0.873	0.003	68.73	3.13
Cargo Tractor	Gasoline	2018	61	3.130	0.009	0.430	26.690	0.085	0.36	1,351	0.102	0.000	0.014	0.873	0.003	68.73	3.13
Cargo Tractor	Gasoline	2018	61	3.130	0.009	0.430	26.690	0.085	0.36	1,351	0.102	0.000	0.014	0.873	0.003	68.73	3.13
Cargo Tractor	Gasoline	2018	61	3.130	0.009	0.430	26.690	0.085	0.36	1,351	0.102	0.000	0.014	0.873	0.003	68.73	3.13
Cargo Tractor	Gasoline	2018	61	3.130	0.009	0.430	26.690	0.085	0.36	1,351	0.102	0.000	0.014	0.873	0.003	68.73	3.13
Cargo Tractor	Propane	2011	84	2.190	0.000	0.000	23.340	0.080	0.36	156	0.011	0.000	0.000	0.121	0.000	66.23	2.19
Cargo Tractor	Propane	2012	84	2.180	0.000	0.000	23.140	0.080	0.36	156	0.011	0.000	0.000	0.120	0.000	65.92	2.18
Deicer	Diesel	2012	200	1.500	--	0.140	2.600	0.015	0.34	20	0.002		0.000	0.004	0.000	102.00	1.50
Fork Lift	Diesel	2013	70	3.500	--	--	3.700	0.020	0.20	383	0.020	0.000	0.001	0.022	0.000	46.87	3.35
Fork Lift	Electric	2008	19	--	--	--	--	--	0.20	383	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Fork Lift	Gasoline	2008	57	--	--	--	--	--	0.20	730	0.048	0.000	0.019	2.390	0.001	59.65	5.23
Fork Lift	LPG/Propane	2007	57	--	--	--	--	--	0.20	730	0.030	0.000	0.000	0.130	0.001	37.28	3.27
Fork Lift	LPG/Propane	2008	51	--	--	--	--	--	0.20	723	0.030	0.000	0.000	0.120	0.001	37.64	3.69
Golf cart	Electric	2007	50	--	--	--	--	--	0.50	200	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Golf cart	Electric	2007	50	--	--	--	--	--	0.50	200	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Golf cart	Electric	2007	50	--	--	--	--	--	0.50	200	0.000	0.000	0.000	0.000	0.000	0.00	0.00
GPU	Diesel	1994	200	12.078	0.739	--	3.222	0.995	0.31	476	0.130	0.000	0.012	0.047	0.007	247.76	4.00
GPU	Diesel	1999	208	6.000	--	--	1.000	0.150	0.31	476	0.203	0.000	0.024	0.034	0.005	386.88	6.00
GPU	Diesel	1999	208	6.000	--	--	1.000	0.150	0.31	476	0.203	0.000	0.024	0.034	0.005	386.88	6.00
GPU	Diesel	2000	185	4.892	--	0.239	0.462	0.104	0.31	476	0.147	0.000	0.007	0.014	0.003	280.55	4.89
GPU	Diesel	2000	185	4.892	--	0.239	0.462	0.104	0.31	476	0.147	0.000	0.007	0.014	0.003	280.55	4.89
GPU	Diesel	2001	152	6.700	--	--	1.040	0.270	0.31	476	0.166	0.000	0.020	0.026	0.007	315.70	6.70
GPU	Diesel	2001	135	4.251	--	--	--	--	0.31	476	0.093	0.000	0.020	0.083	0.013	177.89	4.25
GPU	Diesel	2001	165	4.251	--	--	--	--	0.31	476	0.114	0.000	0.020	0.083	0.013	217.42	4.25
GPU	Diesel	2005	44	4.900	--	--	3.700	0.380	0.31	476	0.029	0.000	0.004	0.027	0.003	55.27	4.03
GPU	Diesel	2006	173	2.535	--	--	1.342	0.104	0.31	476	0.063	0.000	0.008	0.038	0.003	120.73	2.25
GPU	Diesel	2006	170	2.535	--	--	1.342	0.104	0.31	476	0.062	0.000	0.008	0.037	0.003	118.37	2.25
GPU	Diesel	2006	165	4.101	--	--	0.597	0.104	0.31	476	0.102	0.000	0.008	0.016	0.003	194.54	3.80
GPU	Diesel	2007	165	2.535	--	--	1.342	0.104	0.31	476	0.062	0.000	0.006	0.036	0.003	118.25	2.31
GPU	Diesel	2008	110	2.834	--	--	0.671	0.097	0.31	476	0.046	0.000	0.005	0.012	0.002	87.10	2.55
GPU	Diesel	2008	170	2.535	--	--	1.342	0.104	0.31	476	0.065	0.000	0.005	0.037	0.003	124.09	2.35
GPU	Diesel	2008	110	2.834	--	--	0.671	0.097	0.31	476	0.046	0.000	0.005	0.012	0.002	87.10	2.55
GPU	Diesel	2009	170	2.535	--	--	1.342	0.104	0.31	476	0.065	0.000	0.005	0.037	0.003	124.09	2.35
GPU	Diesel	2010	155	2.834	--	--	0.671	0.097	0.31	476	0.067	0.000	0.004	0.017	0.002	128.54	2.68
GPU	Diesel	2010	155	2.834	--	--	0.671	0.097	0.31	476	0.067	0.000	0.004	0.017	0.002	128.54	2.68
GPU	Diesel	2010	155	2.834	--	--	0.671	0.097	0.31	476	0.067	0.000	0.004	0.017	0.002	128.54	2.68
GPU	Diesel	2011	200	2.500	--	--	0.970	0.075	0.31	476	0.081	0.000	0.004	0.032	0.002	155.00	2.50
GPU	Diesel	2011	220	2.500	--	--	0.970	0.075	0.31	476	0.089	0.000	0.004	0.035	0.003	170.50	2.50
GPU	Diesel	2011	220	2.500	--	--	0.970	0.075	0.31	476	0.089	0.000	0.004	0.035	0.003	170.50	2.50
GPU	Diesel	2011	160	2.834	--	--	1.044	0.157	0.31	476	0.070	0.000	0.004	0.027	0.004	132.93	2.68
GPU	Diesel	2011	160	2.834	--	--	1.044	0.157	0.31	476	0.070	0.000	0.004	0.027	0.004	132.93	2.68
GPU	Diesel	2011	160	2.834	--	--	1.044	0.157	0.31	476	0.070	0.000	0.004	0.027	0.004	132.93	2.68
GPU	Diesel	2011	160	2.834	--	--	1.044	0.157	0.31	476	0.070	0.000	0.004	0.027	0.004	132.93	2.68
GPU	Diesel	2011	160	2.834	--	--	1.044	0.157	0.31	476	0.070	0.000	0.004	0.027	0.004	132.93	2.68
GPU	Diesel	2011	160	2.834	--	--	1.044	0.157	0.31	476	0.070	0.000	0.004	0.027	0.004	132.93	2.68
GPU	Diesel	2013	150	2.300	--	--	0.075	0.007	0.31	476	0.056	0.000	0.001	0.032	0.000	106.95	2.30
GPU	Diesel	2015	155	0.220	--	--	0.075	0.007	0.31	476	0.007	0.000	0.002	0.073	0.000	13.34	0.28

## GSE Emissions Calculations - 2017

Equip Type	Fuel Type	Model Year	HP	Published Emission Factors (g/hp-hr)					Load Factor	Activity (hr)	Annual Emissions (tpy)					NOx Emission Factor	
				NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM	EF*HP (g/hr)	EF (g/hp-hr)
GPU	Diesel	2015	155	0.075	--	0.030	0.022	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.58	0.07
GPU	Diesel	2015	158	0.075	--	0.030	0.022	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.65	0.07
GPU	Diesel	2015	158	0.075	--	0.030	0.022	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.65	0.07
GPU	Diesel	2015	158	0.075	--	0.030	0.022	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.65	0.07
GPU	Diesel	2016	115	0.160	--	--	0.075	0.007	0.31	476	0.003	0.000	0.002	0.082	0.000	5.70	0.16
GPU	Diesel	2016	240	0.140	--	--	--	0.007	0.31	476	0.010	0.000	0.002	0.036	0.000	19.06	0.26
GPU	Diesel	2016	240	0.140	--	--	--	0.007	0.31	476	0.010	0.000	0.002	0.036	0.000	19.06	0.26
GPU	Diesel	2016	162	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2016	162	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2016	147	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.40	0.07
GPU	Diesel	2016	147	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.40	0.07
GPU	Diesel	2016	162	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2016	162	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2016	162	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2016	162	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2016	162	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2016	162	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2017	240	0.140	--	--	--	0.007	0.31	476	0.010	0.000	0.002	0.039	0.000	19.06	0.26
GPU	Diesel	2017	240	0.140	--	--	--	0.007	0.31	476	0.010	0.000	0.002	0.039	0.000	19.06	0.26
GPU	Diesel	2017	154	0.075	--	0.022	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.56	0.07
GPU	Diesel	2018	162	0.075	--	0.030	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2018	162	0.075	--	0.030	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2018	155	0.075	--	0.030	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.58	0.07
GPU	Diesel	2018	162	0.075	--	0.030	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2018	162	0.075	--	0.030	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2018	162	0.075	--	0.030	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2018	162	0.075	--	0.030	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
GPU	Diesel	2018	162	0.075	--	0.030	0.030	0.015	0.31	476	0.002	0.000	0.001	0.001	0.000	3.74	0.07
Lavatory Cart	Electric	2004	43	--	--	--	--	--	0.50	365	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lavatory Cart	Electric	2014	43	--	--	--	--	--	0.50	365	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lavatory Truck	Diesel	1999	152	--	--	--	--	--	0.25	365	0.230	0.000	0.024	0.097	0.014	571.65	15.04
Lavatory Truck	Electric	2001	19	--	--	--	--	--	0.25	365	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lavatory Truck	Electric	2006	19	--	--	--	--	--	0.25	365	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lavatory Truck	Gasoline	2000	300	3.299	0.001	0.417	7.514	0.012	0.25	1,492	0.407	0.000	0.051	0.927	0.001	247.40	3.30
Lift	Diesel	2000	137	6.900	--	--	--	--	0.34	408	0.145	0.000	0.011	0.034	0.005	321.40	6.90
Lift	Diesel	2004	65	5.600	--	--	3.700	0.300	0.34	408	0.048	7.23 E-05	0.008	0.037	0.003	105.97	4.80
Lift	Diesel	2006	200	3.000	--	--	2.600	0.150	0.34	408	0.089	0.000	0.003	0.080	0.005	197.33	2.90
Lift	Diesel	2007	200	--	--	--	--	--	0.34	408	0.074	0.000	0.005	0.030	0.003	164.54	2.42
Lift	Electric	1993	50	--	--	--	--	--	0.34	408	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lift	Electric	2000	50	--	--	--	--	--	0.34	408	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lift	Electric	2001	50	--	--	--	--	--	0.34	408	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lift	Electric	2002	50	--	--	--	--	--	0.34	408	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lift	Electric	2006	50	--	--	--	--	--	0.34	408	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lift	Electric	2006	50	--	--	--	--	--	0.34	408	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lift	Electric	2007	25	--	--	--	--	--	0.34	408	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Lift	Gasoline	2002	114	--	--	--	--	--	0.34	377	0.200	0.000	0.055	1.570	0.001	481.27	12.46
Lift	Gasoline	2002	114	--	--	--	--	--	0.34	377	0.200	0.000	0.055	1.570	0.001	481.27	12.46
Lift	Gasoline	2004	114	--	--	--	--	--	0.34	377	0.065	0.000	0.013	0.900	0.001	156.41	4.05
Lift	Gasoline	2013	114	--	--	--	--	--	0.34	377	0.047	0.000	0.007	0.450	0.001	113.10	2.93
Lift	Gasoline	2013	114	--	--	--	--	--	0.34	377	0.047	0.000	0.007	0.450	0.001	113.10	2.93
Other	Diesel	2006	65	5.600	--	--	3.700	0.300	0.34	476	0.061	0.000	0.004	0.043	0.003	116.14	5.26



## GSE Emissions Calculations - 2017

Equip Type	Fuel Type	Model Year	HP	Published Emission Factors (g/hp-hr)					Load Factor	Activity (hr)	Annual Emissions (tpy)					NOx Emission Factor	
				NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM	EF*HP (g/hr)	EF (g/hp-hr)
Other	Gasoline	2009	138	--	--	--	--	--	0.34	183	0.010	0.000	0.004	0.390	0.000	49.57	1.06
Other	Gasoline	2012	138	--	--	--	--	--	0.34	183	0.009	0.000	0.004	0.330	0.000	44.62	0.95
Other	Gasoline	2012	138	--	--	--	--	--	0.34	183	0.009	0.000	0.004	0.330	0.000	44.62	0.95
Other	Gasoline	2012	138	--	--	--	--	--	0.34	183	0.009	0.000	0.004	0.330	0.000	44.62	0.95
Other	Gasoline	2013	138	--	--	--	--	--	0.34	184	0.009	0.000	0.004	0.310	0.000	44.37	0.95
Other	Gasoline	2013	138	--	--	--	--	--	0.34	184	0.009	0.000	0.004	0.310	0.000	44.37	0.95
Other	Gasoline	2013	138	--	--	--	--	--	0.34	184	0.009	0.000	0.004	0.310	0.000	44.37	0.95
Other	Gasoline	2014	138	--	--	--	--	--	0.34	183	0.009	0.000	0.004	0.290	0.000	44.62	0.95
Other	Gasoline	2015	138	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.85
Other	Gasoline	2015	138	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.85
Other	Gasoline	2015	138	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.85
Other	Gasoline	2015	360	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.32
Other	Gasoline	2015	360	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.32
Other	Gasoline	2015	138	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.85
Other	Gasoline	2015	360	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.32
Other	Gasoline	2015	275	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.42
Other	Gasoline	2015	138	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.85
Other	Gasoline	2015	138	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.85
Other	Gasoline	2015	138	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.85
Other	Gasoline	2015	360	--	--	--	--	--	0.34	183	0.008	0.000	0.004	0.270	0.000	39.66	0.32
Other	Gasoline	2016	138	--	--	--	--	--	0.34	183	0.008	0.000	0.003	0.250	0.000	39.66	0.85
Other	Gasoline	2016	138	--	--	--	--	--	0.34	183	0.008	0.000	0.003	0.250	0.000	39.66	0.85
Other	Gasoline	2016	138	--	--	--	--	--	0.34	183	0.008	0.000	0.003	0.250	0.000	39.66	0.85
Other	Gasoline	2018	49	--	--	--	--	--	0.34	183	0.008	0.000	0.003	0.240	0.000	39.66	2.38
Passenger Stand - Stairs	Gasoline	1979	200	--	--	--	--	--	0.50	365	0.259	0.000	0.101	1.479	0.001	643.25	6.43
Passenger Stand - Stairs	Gasoline	2011	100	--	--	--	--	--	0.50	187	0.034	0.000	0.003	0.370	0.001	164.94	3.30
Pushback	Diesel	1990	100	5.202	0.003	0.641	2.284	0.429	0.54	323	0.100	0.000	0.012	0.044	0.008	280.91	5.20
Pushback	Diesel	1997	265	--	--	--	--	--	0.54	323	0.130	0.000	0.015	0.057	0.010	365.12	2.55
Pushback	Diesel	2006	56	4.800	--	--	0.600	0.070	0.54	323	0.052	0.001	0.045	0.006	0.001	145.15	4.80
Pushback	Diesel	2010	129	--	--	--	--	--	0.54	323	0.064	0.000	0.004	0.076	0.003	179.75	2.58
Pushback	Diesel	2010	129	--	--	--	--	--	0.54	323	0.064	0.000	0.004	0.076	0.003	179.75	2.58
Pushback	Diesel	2016	121	--	--	--	--	--	0.54	323	0.007	0.000	0.001	0.075	0.000	19.66	0.30
Pushback	Diesel	2018	100	0.230	--	0.001	0.050	0.015	0.54	323	0.004	0.000	0.000	0.001	0.000	12.42	0.23
Pushback	Electric	2014	130	--	--	--	--	0.000	0.54	323	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Pushback	Electric	2014	130	--	--	--	--	0.000	0.54	323	0.000	0.000	0.000	0.000	0.000	0.00	0.00
Service Truck	Gasoline	1987	230	--	--	--	--	--	0.50	842	0.550	0.000	0.073	1.290	0.002	592.58	5.15
Service Truck	Gasoline	2002	133	--	--	--	--	--	0.50	842	0.330	0.000	0.049	1.200	0.001	355.55	5.37

# GSE Emissions Calculations - 2023

Fleet Average
2.93

Total Annual Emissions (TPY)				
NOx	SOx	VOC	CO	PM
91.10	0.17	18.43	1,095.95	1.87

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Air Conditioner	Diesel	2012	99	0.75	85.13	1.15	1,502	0.141	0.000	0.011	0.179	0.011
Air Conditioner	Diesel	2017	126	0.75	58.14	0.62	1,502	0.096	0.000	0.012	0.267	0.003
Air Conditioner	Diesel	2017	126	0.75	58.14	0.62	1,502	0.096	0.000	0.012	0.267	0.003
Air Conditioner	Diesel	2021	110	0.75	15.72	0.19	1,502	0.026	0.000	0.007	0.220	0.001
Air Conditioner	Diesel	2022	118	0.75	8.12	0.09	1,502	0.013	0.000	0.010	0.256	0.001
Air Conditioner	Diesel	2022	130	0.75	8.12	0.08	1,502	0.013	0.000	0.010	0.256	0.001
Air Conditioner	Gasoline	2024	201	0.75	3.12	0.02	1,502	0.005	0.000	0.000	0.056	0.000
Air Start	Diesel	2005	500	0.31	431.46	2.78	1,502	0.714	0.001	0.056	0.183	0.022
Air Start	Diesel	2007	600	0.31	337.66	1.82	1,502	0.559	0.001	0.063	0.207	0.028
Air Start	Diesel	2011	300	0.31	122.73	1.32	1,502	0.203	0.001	0.029	0.147	0.008
Air Start	Diesel	2013	511	0.31	193.69	1.22	1,502	0.321	0.001	0.037	0.217	0.010
Air Start	Diesel	2017	679	0.31	163.81	0.78	1,502	0.271	0.002	0.057	0.398	0.017
Air Start	Diesel	2021	360	0.31	14.79	0.13	1,502	0.024	0.001	0.018	0.185	0.002
Air Start	Diesel	2021	333	0.31	14.79	0.14	1,502	0.024	0.001	0.018	0.185	0.002
Air Start	Diesel	2021	544	0.31	14.79	0.09	1,502	0.024	0.001	0.018	0.185	0.002
Air Start	Diesel	2022	425	0.31	16.59	0.13	1,502	0.027	0.001	0.028	0.213	0.002
Air Start	Diesel	2023	600	0.31	17.28	0.09	1,502	0.029	0.001	0.024	0.218	0.002
Air Start	Diesel	2023	325	0.31	17.28	0.17	1,502	0.029	0.001	0.024	0.218	0.002
Air Start	Diesel	2023	600	0.31	17.28	0.09	1,502	0.029	0.001	0.024	0.218	0.002
Air Start	Diesel	2024	380	0.31	17.28	0.15	1,502	0.029	0.001	0.024	0.218	0.002
Air Start	Diesel	2024	600	0.31	17.28	0.09	1,502	0.029	0.001	0.024	0.218	0.002
Air Start	Diesel	2024	600	0.31	17.28	0.09	1,502	0.029	0.001	0.024	0.218	0.002
Air Start	Diesel	2024	600	0.31	17.28	0.09	1,502	0.029	0.001	0.024	0.218	0.002
Aircraft Tug	Diesel	1993	115	0.54	423.41	6.82	254	0.119	0.000	0.015	0.052	0.010
Aircraft Tug	Diesel	2003	265	0.54	402.97	2.82	339	0.151	0.000	0.022	0.082	0.016
Aircraft Tug	Diesel	2004	87	0.54	264.14	5.62	382	0.111	0.000	0.011	0.070	0.008
Aircraft Tug	Diesel	2005	67	0.54	286.32	7.91	382	0.120	0.000	0.009	0.081	0.007
Aircraft Tug	Diesel	2007	88	0.54	247.27	5.20	382	0.104	0.000	0.007	0.089	0.006
Aircraft Tug	Diesel	2010	304	0.54	360.55	2.20	382	0.152	0.000	0.011	0.062	0.007
Aircraft Tug	Diesel	2013	152	0.54	177.38	2.16	382	0.075	0.000	0.005	0.098	0.000
Aircraft Tug	Diesel	2014	173	0.54	178.68	1.91	382	0.075	0.000	0.005	0.098	0.000
Aircraft Tug	Diesel	2014	200	0.54	31.08	0.29	382	0.013	0.000	0.004	0.049	0.000
Aircraft Tug	Diesel	2016	305	0.54	37.40	0.23	382	0.016	0.000	0.004	0.058	0.001
Aircraft Tug	Diesel	2016	260	0.54	37.40	0.27	382	0.016	0.000	0.004	0.058	0.001





## GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Aircraft Tug	Gasoline	2018	200	0.54	251.98	2.33	863	0.240	0.001	0.029	2.723	0.006
Bag TUG	Diesel	2003	60	0.37	130.65	5.89	850	0.122	0.000	0.011	0.086	0.009
Bag TUG	Diesel	2013	49	0.37	90.36	4.98	850	0.085	0.000	0.007	0.117	0.003
Bag TUG	Diesel	2013	65	0.37	90.36	3.76	850	0.085	0.000	0.007	0.117	0.003
Bag TUG	Diesel	2013	65	0.37	90.36	3.76	850	0.085	0.000	0.007	0.117	0.003
Bag TUG	Diesel	2013	65	0.37	90.36	3.76	850	0.085	0.000	0.007	0.117	0.003
Bag TUG	Diesel	2013	65	0.37	90.36	3.76	850	0.085	0.000	0.007	0.117	0.003
Bag TUG	Diesel	2013	65	0.37	90.36	3.76	850	0.085	0.000	0.007	0.117	0.003
Bag TUG	Diesel	2020	49	0.37	52.44	2.89	850	0.049	0.000	0.003	0.059	0.000
Bag TUG	Diesel	2020	49	0.37	52.44	2.89	850	0.049	0.000	0.003	0.059	0.000
Bag TUG	Electric	2001	115	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2001	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2002	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2002	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2008	115	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2011	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2013	115	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2017	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2021	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2021	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2021	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2021	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2021	80	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000

## GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2023	40	0.37	0.00	0.00	850	0.000	0.000	0.000	0.000	0.000
Bag TUG	Gasoline	1992	50	0.37	689.99	37.30	1,028	0.782	0.000	0.280	4.167	0.004
Bag TUG	Gasoline	1993	107	0.37	670.20	16.93	1,034	0.764	0.000	0.278	4.165	0.004
Bag TUG	Gasoline	1995	105	0.37	673.96	17.35	1,026	0.762	0.000	0.278	4.154	0.004
Bag TUG	Gasoline	2001	107	0.37	691.63	17.47	1,040	0.793	0.000	0.281	5.962	0.004
Bag TUG	Gasoline	2002	107	0.37	619.70	15.65	1,040	0.710	0.000	0.230	6.281	0.004
Bag TUG	Gasoline	2003	107	0.37	549.32	13.88	1,034	0.626	0.000	0.178	6.590	0.004
Bag TUG	Gasoline	2003	107	0.37	549.32	13.88	1,034	0.626	0.000	0.178	6.590	0.004
Bag TUG	Gasoline	2004	105	0.37	241.64	6.22	1,026	0.273	0.000	0.065	4.809	0.004
Bag TUG	Gasoline	2006	93	0.37	241.27	7.05	1,026	0.273	0.000	0.065	4.802	0.004
Bag TUG	Gasoline	2009	107	0.37	201.51	5.09	1,034	0.230	0.000	0.044	4.840	0.004
Bag TUG	Gasoline	2009	107	0.37	201.51	5.09	1,034	0.230	0.000	0.044	4.840	0.004
Bag TUG	Gasoline	2009	202	0.37	201.51	2.70	1,034	0.230	0.000	0.044	4.840	0.004
Bag TUG	Gasoline	2009	202	0.37	201.51	2.70	1,034	0.230	0.000	0.044	4.840	0.004
Bag TUG	Gasoline	2022	107	0.37	123.75	3.13	1,034	0.141	0.000	0.020	1.322	0.004
Bag TUG	Gasoline	2022	107	0.37	123.75	3.13	1,034	0.141	0.000	0.020	1.322	0.004
Bag TUG	Gasoline	2024	107	0.37	116.02	2.93	1,034	0.132	0.000	0.018	0.971	0.004
Belt Loader	Diesel	1999	45	0.34	215.21	14.07	594	0.141	0.000	0.023	0.077	0.017
Belt Loader	Diesel	2006	60	0.34	78.05	3.83	594	0.051	0.000	0.006	0.050	0.004
Belt Loader	Diesel	2015	65	0.34	48.89	2.21	594	0.032	0.000	0.003	0.042	0.000
Belt Loader	Diesel	2015	25	0.34	48.89	5.75	594	0.032	0.000	0.003	0.042	0.000
Belt Loader	Diesel	2017	49	0.34	49.05	2.94	594	0.032	0.000	0.002	0.040	0.000
Belt Loader	Diesel	2017	49	0.34	49.05	2.94	594	0.032	0.000	0.002	0.040	0.000
Belt Loader	Diesel	2023	84	0.34	42.36	1.48	594	0.028	0.000	0.001	0.064	0.000
Belt Loader	Diesel	2023	84	0.34	42.36	1.48	594	0.028	0.000	0.001	0.064	0.000
Belt Loader	Diesel	2024	61	0.34	27.64	1.33	594	0.018	0.000	0.001	0.042	0.000
Belt Loader	Diesel	2024	61	0.34	27.64	1.33	594	0.018	0.000	0.001	0.042	0.000
Belt Loader	Electric	2010	81	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000

# GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2010	80	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2011	81	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2012	81	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2012	81	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2012	81	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2017	19	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2020	81	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2020	81	0.34	0.00	0.00	594	0.000	0.000	0.000	0.000	0.000
Belt Loader	Gasoline	2003	105	0.34	304.70	8.54	957	0.321	0.000	0.093	3.420	0.002
Belt Loader	Gasoline	2007	107	0.34	113.52	3.12	957	0.120	0.000	0.023	2.601	0.002
Belt Loader	Gasoline	2007	107	0.34	113.52	3.12	957	0.120	0.000	0.023	2.601	0.002
Belt Loader	Gasoline	2010	107	0.34	113.69	3.12	957	0.120	0.000	0.023	2.605	0.002
Belt Loader	Gasoline	2010	84	0.34	113.69	3.96	970	0.122	0.000	0.024	2.640	0.002
Belt Loader	Gasoline	2013	107	0.34	101.86	2.80	958	0.108	0.000	0.020	2.114	0.002
Belt Loader	Gasoline	2013	107	0.34	101.86	2.80	958	0.108	0.000	0.020	2.114	0.002
Belt Loader	Gasoline	2018	107	0.34	82.79	2.28	958	0.087	0.000	0.014	1.302	0.002
Belt Loader	Gasoline	2018	69	0.34	82.79	3.53	958	0.087	0.000	0.014	1.302	0.002
Belt Loader	Gasoline	2021	80	0.34	71.04	2.61	958	0.075	0.000	0.011	0.808	0.002
Belt Loader	Gasoline	2021	80	0.34	71.04	2.61	958	0.075	0.000	0.011	0.808	0.002
Belt Loader	Gasoline	2022	84	0.34	67.16	2.34	959	0.071	0.000	0.010	0.645	0.002
Belt Loader	Gasoline	2023	114	0.34	63.21	1.63	958	0.067	0.000	0.009	0.479	0.002
Cargo Loader	Diesel	2006	152	0.34	103.12	2.00	553	0.063	0.000	0.004	0.044	0.004

# GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Loader	Diesel	2007	152	0.34	118.26	2.29	553	0.072	0.000	0.007	0.091	0.005
Cargo Loader	Diesel	2007	152	0.34	118.26	2.29	553	0.072	0.000	0.007	0.091	0.005
Cargo Loader	Diesel	2007	152	0.34	118.26	2.29	553	0.072	0.000	0.007	0.091	0.005
Cargo Loader	Diesel	2007	152	0.34	118.26	2.29	553	0.072	0.000	0.007	0.091	0.005
Cargo Loader	Diesel	2010	99	0.34	86.83	2.58	553	0.053	0.000	0.004	0.063	0.004
Cargo Loader	Diesel	2011	132	0.34	121.68	2.71	553	0.074	0.000	0.006	0.092	0.005
Cargo Loader	Diesel	2011	152	0.34	121.68	2.35	553	0.074	0.000	0.006	0.092	0.005
Cargo Loader	Diesel	2011	102	0.34	121.68	3.51	553	0.074	0.000	0.006	0.092	0.005
Cargo Loader	Diesel	2013	102	0.34	71.41	2.06	553	0.044	0.000	0.003	0.059	0.001
Cargo Loader	Diesel	2014	125	0.34	66.43	1.56	553	0.040	0.000	0.003	0.054	0.000
Cargo Loader	Diesel	2016	175	0.34	12.40	0.21	553	0.008	0.000	0.002	0.083	0.000
Cargo Loader	Diesel	2016	142	0.34	12.40	0.26	553	0.008	0.000	0.002	0.083	0.000
Cargo Loader	Diesel	2017	110	0.34	12.31	0.33	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2017	142	0.34	12.31	0.25	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2017	160	0.34	12.31	0.23	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2017	160	0.34	12.31	0.23	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2017	110	0.34	12.31	0.33	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2017	110	0.34	12.31	0.33	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2017	110	0.34	12.31	0.33	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2017	110	0.34	12.31	0.33	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2017	110	0.34	12.31	0.33	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2017	110	0.34	12.31	0.33	553	0.008	0.000	0.002	0.082	0.000
Cargo Loader	Diesel	2019	110	0.34	13.66	0.37	553	0.008	0.000	0.002	0.090	0.000
Cargo Loader	Diesel	2024	160	0.34	12.26	0.23	553	0.007	0.000	0.001	0.079	0.000
Cargo Loader	Gasoline	2019	102	0.34	89.22	2.58	851	0.084	0.000	0.013	1.079	0.002
Cargo Loader	Gasoline	2020	102	0.34	85.25	2.47	851	0.080	0.000	0.012	0.929	0.002
Cargo Loader	Gasoline	2021	229	0.34	81.22	1.04	851	0.076	0.000	0.011	0.778	0.002
Cargo Loader	Gasoline	2022	229	0.34	77.19	0.99	851	0.072	0.000	0.010	0.627	0.002
Cargo Loader	Gasoline	2023	229	0.34	73.05	0.94	851	0.069	0.000	0.009	0.476	0.002
Cargo Loader	Gasoline	2023	229	0.34	73.05	0.94	851	0.069	0.000	0.009	0.476	0.002
Cargo Loader	Gasoline	2023	229	0.34	73.05	0.94	851	0.069	0.000	0.009	0.476	0.002
Cargo Loader	Gasoline	2023	229	0.34	73.05	0.94	851	0.069	0.000	0.009	0.476	0.002
Cargo Loader K-LOADER	Diesel	2001	78	0.34	236.29	8.91	404	0.105	0.000	0.017	0.058	0.013
Cargo Loader K-LOADER	Diesel	2004	138	0.34	293.84	6.26	553	0.179	0.000	0.016	0.103	0.010
Cargo Loader K-LOADER	Diesel	2013	110	0.34	115.46	3.09	553	0.070	0.000	0.005	0.094	0.000
Cargo Loader K-LOADER	Diesel	2018	126	0.34	24.31	0.57	553	0.015	0.000	0.002	0.080	0.000
Cargo Loader K-LOADER	Diesel	2018	126	0.34	24.31	0.57	553	0.015	0.000	0.002	0.080	0.000
Cargo Loader K-LOADER	Diesel	2021	74	0.34	40.27	1.60	553	0.025	0.000	0.002	0.070	0.000

# GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Loader K-LOADER	Diesel	2022	130	0.34	13.26	0.30	553	0.008	0.000	0.002	0.086	0.000
Cargo Loader K-LOADER	Diesel	2022	130	0.34	13.26	0.30	553	0.008	0.000	0.002	0.086	0.000
Cargo Loader K-LOADER	Diesel	2022	130	0.34	13.26	0.30	553	0.008	0.000	0.002	0.086	0.000
Cargo Loader K-LOADER	Diesel	2022	130	0.34	13.26	0.30	553	0.008	0.000	0.002	0.086	0.000
Cargo Tractor	Diesel	2004	55	0.36	178.33	9.01	775	0.152	0.000	0.017	0.099	0.014
Cargo Tractor	Diesel	2004	55	0.36	178.33	9.01	775	0.152	0.000	0.017	0.099	0.014
Cargo Tractor	Diesel	2008	113	0.36	100.89	2.48	800	0.089	0.000	0.009	0.111	0.007
Cargo Tractor	Diesel	2008	113	0.36	100.89	2.48	800	0.089	0.000	0.009	0.111	0.007
Cargo Tractor	Diesel	2008	113	0.36	100.89	2.48	800	0.089	0.000	0.009	0.111	0.007
Cargo Tractor	Diesel	2008	113	0.36	100.89	2.48	800	0.089	0.000	0.009	0.111	0.007
Cargo Tractor	Diesel	2008	113	0.36	100.89	2.48	800	0.089	0.000	0.009	0.111	0.007
Cargo Tractor	Diesel	2008	113	0.36	100.89	2.48	800	0.089	0.000	0.009	0.111	0.007
Cargo Tractor	Diesel	2008	113	0.36	100.89	2.48	800	0.089	0.000	0.009	0.111	0.007
Cargo Tractor	Diesel	2008	113	0.36	100.89	2.48	800	0.089	0.000	0.009	0.111	0.007
Cargo Tractor	Diesel	2013	99	0.36	51.88	1.46	800	0.046	0.000	0.004	0.063	0.001
Cargo Tractor	Diesel	2013	67	0.36	51.88	2.15	800	0.046	0.000	0.004	0.063	0.001
Cargo Tractor	Diesel	2013	67	0.36	51.88	2.15	800	0.046	0.000	0.004	0.063	0.001
Cargo Tractor	Electric	1998	55	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2002	55	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2004	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2004	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2004	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2004	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2005	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000

# GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Tractor	Electric	2006	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	95	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2006	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2010	19	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2016	80	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2016	80	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2016	80	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2016	80	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2017	80	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2017	80	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2022	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2022	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2022	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2022	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2022	101	0.36	0.00	0.00	800	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Gasoline	1995	101	0.36	694.64	19.14	1,642	1.258	0.001	0.830	11.025	0.006
Cargo Tractor	Gasoline	1997	101	0.36	691.01	19.04	1,583	1.206	0.001	0.796	10.573	0.005
Cargo Tractor	Gasoline	2006	101	0.36	389.59	10.74	1,595	0.685	0.001	0.190	15.082	0.005
Cargo Tractor	Gasoline	2008	101	0.36	280.56	7.73	1,595	0.493	0.001	0.109	13.484	0.005
Cargo Tractor	Gasoline	2008	101	0.36	280.56	7.73	1,595	0.493	0.001	0.109	13.484	0.005
Cargo Tractor	Gasoline	2008	101	0.36	280.56	7.73	1,595	0.493	0.001	0.109	13.484	0.005
Cargo Tractor	Gasoline	2008	101	0.36	280.56	7.73	1,595	0.493	0.001	0.109	13.484	0.005
Cargo Tractor	Gasoline	2010	101	0.36	258.38	7.12	1,595	0.454	0.001	0.098	11.920	0.005
Cargo Tractor	Gasoline	2013	101	0.36	224.81	6.20	1,595	0.395	0.001	0.082	9.559	0.005
Cargo Tractor	Gasoline	2013	101	0.36	224.81	6.20	1,595	0.395	0.001	0.082	9.559	0.005

# GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Tractor	Gasoline	2013	101	0.36	224.81	6.20	1,595	0.395	0.001	0.082	9.559	0.005
Cargo Tractor	Gasoline	2013	101	0.36	224.81	6.20	1,595	0.395	0.001	0.082	9.559	0.005
Cargo Tractor	Gasoline	2013	101	0.36	224.81	6.20	1,595	0.395	0.001	0.082	9.559	0.005
Cargo Tractor	Gasoline	2013	101	0.36	224.81	6.20	1,595	0.395	0.001	0.082	9.559	0.005
Cargo Tractor	Gasoline	2013	67	0.36	224.81	9.32	1,598	0.396	0.001	0.082	9.573	0.005
Cargo Tractor	Gasoline	2013	67	0.36	224.81	9.32	1,598	0.396	0.001	0.082	9.573	0.005
Cargo Tractor	Gasoline	2013	67	0.36	224.81	9.32	1,598	0.396	0.001	0.082	9.573	0.005
Cargo Tractor	Gasoline	2013	67	0.36	224.81	9.32	1,598	0.396	0.001	0.082	9.573	0.005
Cargo Tractor	Gasoline	2014	75	0.36	213.57	7.91	1,595	0.376	0.001	0.076	8.769	0.005
Cargo Tractor	Gasoline	2014	75	0.36	213.57	7.91	1,595	0.376	0.001	0.076	8.769	0.005
Cargo Tractor	Gasoline	2014	75	0.36	213.57	7.91	1,595	0.376	0.001	0.076	8.769	0.005
Cargo Tractor	Gasoline	2014	75	0.36	213.57	7.91	1,595	0.376	0.001	0.076	8.769	0.005
Cargo Tractor	Gasoline	2014	75	0.36	213.57	7.91	1,595	0.376	0.001	0.076	8.769	0.005
Cargo Tractor	Gasoline	2015	75	0.36	202.45	7.50	1,595	0.356	0.001	0.071	7.985	0.005
Cargo Tractor	Gasoline	2015	75	0.36	202.45	7.50	1,595	0.356	0.001	0.071	7.985	0.005
Cargo Tractor	Gasoline	2016	75	0.36	191.21	7.08	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	80	0.36	191.21	6.64	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	75	0.36	191.21	7.08	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	75	0.36	191.21	7.08	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	80	0.36	191.21	6.64	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	80	0.36	191.21	6.64	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	80	0.36	191.21	6.64	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	80	0.36	191.21	6.64	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	80	0.36	191.21	6.64	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	80	0.36	191.21	6.64	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	101	0.36	191.21	5.27	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	101	0.36	191.21	5.27	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2016	101	0.36	191.21	5.27	1,595	0.336	0.001	0.065	7.196	0.005
Cargo Tractor	Gasoline	2017	79	0.36	180.04	6.33	1,595	0.317	0.001	0.060	6.410	0.005
Cargo Tractor	Gasoline	2018	101	0.36	168.85	4.65	1,595	0.297	0.001	0.054	5.623	0.005
Cargo Tractor	Gasoline	2018	101	0.36	168.85	4.65	1,595	0.297	0.001	0.054	5.623	0.005
Cargo Tractor	Gasoline	2018	101	0.36	168.85	4.65	1,595	0.297	0.001	0.054	5.623	0.005
Cargo Tractor	Gasoline	2018	101	0.36	168.85	4.65	1,595	0.297	0.001	0.054	5.623	0.005
Cargo Tractor	Gasoline	2018	101	0.36	168.85	4.65	1,595	0.297	0.001	0.054	5.623	0.005
Cargo Tractor	Gasoline	2018	101	0.36	168.85	4.65	1,595	0.297	0.001	0.054	5.623	0.005
Cargo Tractor	Gasoline	2018	101	0.36	168.85	4.65	1,595	0.297	0.001	0.054	5.623	0.005
Cargo Tractor	Gasoline	2018	101	0.36	168.85	4.65	1,595	0.297	0.001	0.054	5.623	0.005







## GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Tractor	Gasoline	2023	84	0.36	112.95	3.74	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	84	0.36	112.95	3.74	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	84	0.36	112.95	3.74	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	84	0.36	112.95	3.74	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	84	0.36	112.95	3.74	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2023	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2024	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2024	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2024	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2024	84	0.36	112.95	3.74	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2024	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2024	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2024	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2024	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Gasoline	2024	61	0.36	112.95	5.14	1,596	0.199	0.001	0.027	1.692	0.005
Cargo Tractor	Propane	2017	84	0.36	138.04	4.56	184	0.028	0.000	0.000	0.298	0.001
Cargo Tractor	Propane	2018	84	0.36	137.23	4.54	184	0.028	0.000	0.000	0.296	0.001
Deicer	Diesel	2018	200	0.34	15.10	0.22	24	0.000	0.000	0.000	0.004	0.000
Fork Lift	Diesel	2019	70	0.20	21.79	1.56	453	0.011	0.000	0.001	0.026	0.000
Fork Lift	Electric	2014	19	0.20	0.00	0.00	453	0.000	0.000	0.000	0.000	0.000
Fork Lift	Gasoline	2014	57	0.20	60.97	5.35	863	0.058	0.000	0.023	2.853	0.001
Fork Lift	LPG/Propane	2013	57	0.20	42.19	3.70	863	0.040	0.000	0.000	0.153	0.001
Fork Lift	LPG/Propane	2014	51	0.20	41.20	4.04	854	0.039	0.000	0.000	0.148	0.001
Golf cart	Electric	2013	50	0.50	0.00	0.00	236	0.000	0.000	0.000	0.000	0.000
Golf cart	Electric	2013	50	0.50	0.00	0.00	236	0.000	0.000	0.000	0.000	0.000
Golf cart	Electric	2013	50	0.50	0.00	0.00	236	0.000	0.000	0.000	0.000	0.000
Golf cart	Electric	2013	50	0.50	0.00	0.00	236	0.000	0.000	0.000	0.000	0.000
GPU	Diesel	2000	200	0.31	408.89	6.59	562	0.254	0.000	0.027	0.107	0.016
GPU	Diesel	2005	208	0.31	367.93	5.71	562	0.228	0.000	0.014	0.056	0.006
GPU	Diesel	2005	208	0.31	367.93	5.71	562	0.228	0.000	0.014	0.056	0.006
GPU	Diesel	2006	185	0.31	119.39	2.08	562	0.074	0.000	0.005	0.052	0.004
GPU	Diesel	2006	185	0.31	119.39	2.08	562	0.074	0.000	0.005	0.052	0.004
GPU	Diesel	2007	152	0.31	205.24	4.36	562	0.127	0.000	0.013	0.055	0.006

## GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
GPU	Diesel	2007	135	0.31	205.24	4.90	562	0.127	0.000	0.013	0.055	0.006
GPU	Diesel	2007	165	0.31	205.24	4.01	562	0.127	0.000	0.013	0.055	0.006
GPU	Diesel	2011	44	0.31	56.41	4.12	562	0.035	0.000	0.002	0.030	0.001
GPU	Diesel	2012	173	0.31	121.84	2.27	562	0.076	0.000	0.006	0.101	0.000
GPU	Diesel	2012	170	0.31	121.84	2.31	562	0.076	0.000	0.006	0.101	0.000
GPU	Diesel	2012	165	0.31	121.84	2.38	562	0.076	0.000	0.006	0.101	0.000
GPU	Diesel	2013	165	0.31	118.02	2.31	562	0.073	0.000	0.005	0.098	0.000
GPU	Diesel	2014	110	0.31	133.41	3.91	562	0.083	0.000	0.006	0.110	0.000
GPU	Diesel	2014	170	0.31	133.41	2.53	562	0.083	0.000	0.006	0.110	0.000
GPU	Diesel	2014	110	0.31	133.41	3.91	562	0.083	0.000	0.006	0.110	0.000
GPU	Diesel	2015	170	0.31	13.56	0.26	562	0.008	0.000	0.003	0.093	0.000
GPU	Diesel	2016	155	0.31	13.72	0.29	562	0.009	0.000	0.003	0.094	0.000
GPU	Diesel	2016	155	0.31	13.72	0.29	562	0.009	0.000	0.003	0.094	0.000
GPU	Diesel	2016	155	0.31	13.72	0.29	562	0.009	0.000	0.003	0.094	0.000
GPU	Diesel	2017	200	0.31	21.93	0.35	562	0.014	0.000	0.004	0.051	0.000
GPU	Diesel	2017	220	0.31	21.93	0.32	562	0.014	0.000	0.004	0.051	0.000
GPU	Diesel	2017	220	0.31	21.93	0.32	562	0.014	0.000	0.004	0.051	0.000
GPU	Diesel	2017	160	0.31	15.11	0.30	562	0.009	0.000	0.004	0.051	0.000
GPU	Diesel	2017	160	0.31	15.11	0.30	562	0.009	0.000	0.004	0.051	0.000
GPU	Diesel	2017	160	0.31	15.11	0.30	562	0.009	0.000	0.004	0.051	0.000
GPU	Diesel	2017	160	0.31	15.11	0.30	562	0.009	0.000	0.004	0.051	0.000
GPU	Diesel	2017	160	0.31	15.11	0.30	562	0.009	0.000	0.004	0.051	0.000
GPU	Diesel	2019	150	0.31	14.82	0.32	562	0.009	0.000	0.002	0.100	0.000
GPU	Diesel	2021	155	0.31	13.83	0.29	562	0.009	0.000	0.002	0.092	0.000
GPU	Diesel	2021	155	0.31	13.83	0.29	562	0.009	0.000	0.002	0.092	0.000
GPU	Diesel	2021	158	0.31	13.83	0.28	562	0.009	0.000	0.002	0.092	0.000
GPU	Diesel	2021	158	0.31	13.83	0.28	562	0.009	0.000	0.002	0.092	0.000
GPU	Diesel	2021	158	0.31	13.83	0.28	562	0.009	0.000	0.002	0.092	0.000
GPU	Diesel	2021	158	0.31	13.83	0.28	562	0.009	0.000	0.002	0.092	0.000
GPU	Diesel	2022	115	0.31	11.80	0.33	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	240	0.31	11.80	0.16	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	240	0.31	11.80	0.16	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	162	0.31	11.80	0.23	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	162	0.31	11.80	0.23	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	147	0.31	11.80	0.26	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	147	0.31	11.80	0.26	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	162	0.31	11.80	0.23	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	162	0.31	11.80	0.23	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	162	0.31	11.80	0.23	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2022	162	0.31	11.80	0.23	562	0.007	0.000	0.001	0.078	0.000

# GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
GPU	Diesel	2022	162	0.31	11.80	0.23	562	0.007	0.000	0.001	0.078	0.000
GPU	Diesel	2023	240	0.31	18.89	0.25	562	0.012	0.000	0.002	0.043	0.000
GPU	Diesel	2023	240	0.31	18.89	0.25	562	0.012	0.000	0.002	0.043	0.000
GPU	Diesel	2023	154	0.31	10.98	0.23	562	0.007	0.000	0.002	0.043	0.000
GPU	Diesel	2024	162	0.31	19.86	0.40	562	0.012	0.000	0.002	0.045	0.000
GPU	Diesel	2024	162	0.31	19.86	0.40	562	0.012	0.000	0.002	0.045	0.000
GPU	Diesel	2024	155	0.31	19.86	0.41	562	0.012	0.000	0.002	0.045	0.000
GPU	Diesel	2024	162	0.31	19.86	0.40	562	0.012	0.000	0.002	0.045	0.000
GPU	Diesel	2024	162	0.31	19.86	0.40	562	0.012	0.000	0.002	0.045	0.000
GPU	Diesel	2024	162	0.31	19.86	0.40	562	0.012	0.000	0.002	0.045	0.000
GPU	Diesel	2024	162	0.31	19.86	0.40	562	0.012	0.000	0.002	0.045	0.000
GPU	Diesel	2024	162	0.31	19.86	0.40	562	0.012	0.000	0.002	0.045	0.000
Lavatory Cart	Electric	2010	43	0.50	0.00	0.00	431	0.000	0.000	0.000	0.000	0.000
Lavatory Cart	Electric	2020	43	0.50	0.00	0.00	431	0.000	0.000	0.000	0.000	0.000
Lavatory Truck	Diesel	2005	152	0.25	274.15	7.21	431	0.130	0.000	0.009	0.091	0.006
Lavatory Truck	Electric	2007	19	0.25	0.00	0.00	431	0.000	0.000	0.000	0.000	0.000
Lavatory Truck	Electric	2012	19	0.25	0.00	0.00	431	0.000	0.000	0.000	0.000	0.000
Lavatory Truck	Gasoline	2006	300	0.25	290.19	3.87	1,763	0.564	0.000	0.141	2.786	0.004
Lift	Diesel	2006	137	0.34	133.51	2.87	482	0.071	0.000	0.004	0.050	0.004
Lift	Diesel	2010	65	0.34	98.36	4.45	482	0.052	0.000	0.004	0.062	0.004
Lift	Diesel	2012	200	0.34	64.35	0.95	482	0.034	0.000	0.002	0.046	0.001
Lift	Diesel	2013	200	0.34	73.54	1.08	482	0.039	0.000	0.003	0.052	0.001
Lift	Electric	1999	50	0.34	0.00	0.00	482	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2006	50	0.34	0.00	0.00	482	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2007	50	0.34	0.00	0.00	482	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2008	50	0.34	0.00	0.00	482	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2012	50	0.34	0.00	0.00	482	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2012	50	0.34	0.00	0.00	482	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2013	25	0.34	0.00	0.00	482	0.000	0.000	0.000	0.000	0.000
Lift	Gasoline	2008	114	0.34	145.54	3.77	445	0.071	0.000	0.012	1.173	0.001
Lift	Gasoline	2008	114	0.34	145.54	3.77	445	0.071	0.000	0.012	1.173	0.001
Lift	Gasoline	2010	114	0.34	139.48	3.61	445	0.068	0.000	0.012	1.056	0.001
Lift	Gasoline	2019	114	0.34	112.52	2.91	445	0.055	0.000	0.008	0.531	0.001
Lift	Gasoline	2019	114	0.34	112.52	2.91	445	0.055	0.000	0.008	0.531	0.001
Other	Diesel	2012	65	0.34	53.31	2.41	562	0.033	0.000	0.002	0.045	0.001
Other	Gasoline	1992	138	0.34	193.15	4.12	215	0.046	0.000	0.027	0.619	0.000
Other	Gasoline	1992	138	0.34	193.15	4.12	215	0.046	0.000	0.027	0.619	0.000
Other	Gasoline	1992	138	0.34	193.15	4.12	215	0.046	0.000	0.027	0.619	0.000
Other	Gasoline	1992	138	0.34	193.15	4.12	215	0.046	0.000	0.027	0.619	0.000



# GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Other	Gasoline	2012	138	0.34	57.25	1.22	216	0.014	0.000	0.006	0.546	0.000
Other	Gasoline	2013	138	0.34	55.63	1.19	216	0.013	0.000	0.006	0.523	0.000
Other	Gasoline	2014	138	0.34	53.94	1.15	216	0.013	0.000	0.005	0.499	0.000
Other	Gasoline	2014	138	0.34	53.94	1.15	216	0.013	0.000	0.005	0.499	0.000
Other	Gasoline	2015	138	0.34	52.34	1.12	216	0.012	0.000	0.005	0.475	0.000
Other	Gasoline	2015	138	0.34	52.34	1.12	216	0.012	0.000	0.005	0.475	0.000
Other	Gasoline	2015	138	0.34	52.34	1.12	216	0.012	0.000	0.005	0.475	0.000
Other	Gasoline	2018	138	0.34	47.34	1.01	216	0.011	0.000	0.005	0.404	0.000
Other	Gasoline	2018	138	0.34	47.34	1.01	216	0.011	0.000	0.005	0.404	0.000
Other	Gasoline	2018	138	0.34	47.34	1.01	216	0.011	0.000	0.005	0.404	0.000
Other	Gasoline	2018	138	0.34	47.34	1.01	216	0.011	0.000	0.005	0.404	0.000
Other	Gasoline	2019	138	0.34	45.71	0.98	217	0.011	0.000	0.005	0.382	0.000
Other	Gasoline	2019	138	0.34	45.71	0.98	217	0.011	0.000	0.005	0.382	0.000
Other	Gasoline	2019	138	0.34	45.71	0.98	217	0.011	0.000	0.005	0.382	0.000
Other	Gasoline	2019	138	0.34	45.71	0.98	217	0.011	0.000	0.005	0.382	0.000
Other	Gasoline	2020	138	0.34	44.09	0.94	216	0.011	0.000	0.005	0.356	0.000
Other	Gasoline	2021	138	0.34	42.40	0.90	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	138	0.34	42.40	0.90	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	138	0.34	42.40	0.90	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	138	0.34	42.40	0.90	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	360	0.34	42.40	0.35	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	360	0.34	42.40	0.35	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	138	0.34	42.40	0.90	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	360	0.34	42.40	0.35	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	138	0.34	42.40	0.90	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	360	0.34	42.40	0.35	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	275	0.34	42.40	0.45	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	138	0.34	42.40	0.90	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	138	0.34	42.40	0.90	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	138	0.34	42.40	0.90	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2021	360	0.34	42.40	0.35	216	0.010	0.000	0.004	0.332	0.000
Other	Gasoline	2022	138	0.34	40.77	0.87	216	0.010	0.000	0.004	0.309	0.000
Other	Gasoline	2022	138	0.34	40.77	0.87	216	0.010	0.000	0.004	0.309	0.000
Other	Gasoline	2022	138	0.34	40.77	0.87	216	0.010	0.000	0.004	0.309	0.000
Other	Gasoline	2022	138	0.34	40.77	0.87	216	0.010	0.000	0.004	0.309	0.000
Other	Gasoline	2024	49	0.34	39.10	2.35	216	0.009	0.000	0.004	0.285	0.000
Passenger Stand - Stairs	Gasoline	1985	200	0.50	1,648.64	16.49	431	0.784	0.000	0.085	1.342	0.003
Passenger Stand - Stairs	Gasoline	2017	100	0.50	162.76	3.26	221	0.040	0.000	0.003	0.438	0.001

## GSE Emissions Calculations - 2023

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Projected Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Pushback	Diesel	1996	100	0.54	576.28	10.67	382	0.242	0.000	0.030	0.106	0.020
Pushback	Diesel	2003	265	0.54	402.97	2.82	382	0.170	0.000	0.025	0.092	0.018
Pushback	Diesel	2012	56	0.54	187.01	6.18	382	0.079	0.000	0.005	0.103	0.000
Pushback	Diesel	2016	129	0.54	20.26	0.29	382	0.009	0.000	0.002	0.092	0.092
Pushback	Diesel	2016	129	0.54	20.26	0.29	382	0.009	0.000	0.002	0.092	0.092
Pushback	Diesel	2022	121	0.54	43.59	0.67	382	0.018	0.000	0.002	0.085	0.000
Pushback	Diesel	2024	100	0.54	71.37	1.32	382	0.030	0.000	0.001	0.069	0.000
Pushback	Electric	2020	130	0.54	0.00	0.00	382	0.000	0.000	0.000	0.000	0.000
Pushback	Electric	2020	130	0.54	0.00	0.00	382	0.000	0.000	0.000	0.000	0.000
Service Truck	Gasoline	1993	230	0.50	568.96	4.95	995	0.624	0.000	0.083	1.478	0.002
Service Truck	Gasoline	2008	133	0.50	107.88	1.63	995	0.118	0.000	0.023	1.424	0.002

# GSE Emissions Calculations - 2031

Fleet Average
2.36

Total Annual Emissions (TPY)				
NOx	SOx	VOC	CO	PM
79.84	0.19	15.95	1,280.05	1.51

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Air Conditioner	Diesel	2020	99	0.75	41.33	0.56	1,713	0.078	0.000	0.009	0.223	0.007
Air Conditioner	Diesel	2025	126	0.75	6.30	0.07	1,713	0.012	0.000	0.014	0.299	0.001
Air Conditioner	Diesel	2025	126	0.75	6.30	0.07	1,713	0.012	0.000	0.014	0.299	0.001
Air Conditioner	Diesel	2029	110	0.75	5.51	0.07	1,713	0.010	0.000	0.009	0.249	0.001
Air Conditioner	Diesel	2030	118	0.75	5.43	0.06	1,713	0.010	0.000	0.007	0.239	0.001
Air Conditioner	Diesel	2030	130	0.75	5.43	0.06	1,713	0.010	0.000	0.007	0.239	0.001
Air Conditioner	Gasoline	2032	201	0.75	2.95	0.02	1,713	0.006	0.000	0.000	0.060	0.000
Air Start	Diesel	2013	500	0.31	191.08	1.23	1,713	0.361	0.001	0.039	0.244	0.011
Air Start	Diesel	2015	600	0.31	81.62	0.44	1,713	0.154	0.001	0.021	0.192	0.007
Air Start	Diesel	2019	300	0.31	9.63	0.10	1,713	0.018	0.001	0.023	0.166	0.002
Air Start	Diesel	2021	511	0.31	18.26	0.12	1,713	0.034	0.001	0.039	0.269	0.003
Air Start	Diesel	2025	679	0.31	34.83	0.17	1,713	0.066	0.002	0.064	0.441	0.006
Air Start	Diesel	2029	360	0.31	16.72	0.15	1,713	0.032	0.001	0.023	0.239	0.002
Air Start	Diesel	2029	333	0.31	16.72	0.16	1,713	0.032	0.001	0.023	0.239	0.002
Air Start	Diesel	2029	544	0.31	16.72	0.10	1,713	0.032	0.001	0.023	0.239	0.002
Air Start	Diesel	2030	425	0.31	14.67	0.11	1,713	0.028	0.001	0.018	0.208	0.002
Air Start	Diesel	2031	600	0.31	14.09	0.08	1,713	0.027	0.001	0.017	0.200	0.002
Air Start	Diesel	2031	325	0.31	14.09	0.14	1,713	0.027	0.001	0.017	0.200	0.002
Air Start	Diesel	2031	600	0.31	14.09	0.08	1,713	0.027	0.001	0.017	0.200	0.002
Air Start	Diesel	2032	380	0.31	14.09	0.12	1,713	0.027	0.001	0.017	0.200	0.002
Air Start	Diesel	2032	600	0.31	14.09	0.08	1,713	0.027	0.001	0.017	0.200	0.002
Air Start	Diesel	2032	600	0.31	14.09	0.08	1,713	0.027	0.001	0.017	0.200	0.002
Air Start	Diesel	2032	600	0.31	14.09	0.08	1,713	0.027	0.001	0.017	0.200	0.002
Aircraft Tug	Diesel	2001	115	0.54	384.10	6.19	290	0.123	0.000	0.011	0.070	0.007
Aircraft Tug	Diesel	2011	265	0.54	186.68	1.30	387	0.080	0.000	0.007	0.099	0.006
Aircraft Tug	Diesel	2012	87	0.54	173.68	3.70	435	0.083	0.000	0.007	0.113	0.000
Aircraft Tug	Diesel	2013	67	0.54	173.68	4.80	435	0.083	0.000	0.007	0.113	0.000
Aircraft Tug	Diesel	2015	88	0.54	71.15	1.50	435	0.034	0.000	0.003	0.083	0.000
Aircraft Tug	Diesel	2018	304	0.54	38.35	0.23	435	0.018	0.000	0.006	0.068	0.001
Aircraft Tug	Diesel	2021	152	0.54	19.64	0.24	435	0.009	0.000	0.003	0.103	0.000
Aircraft Tug	Diesel	2022	173	0.54	18.32	0.20	435	0.009	0.000	0.002	0.096	0.000
Aircraft Tug	Diesel	2022	200	0.54	18.32	0.17	435	0.009	0.000	0.002	0.096	0.000
Aircraft Tug	Diesel	2024	305	0.54	32.68	0.20	435	0.016	0.000	0.004	0.058	0.001
Aircraft Tug	Diesel	2024	260	0.54	32.68	0.23	435	0.016	0.000	0.004	0.058	0.001



## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Aircraft Tug	Diesel	2029	300	0.54	28.16	0.17	435	0.014	0.000	0.003	0.049	0.000
Aircraft Tug	Diesel	2029	290	0.54	28.16	0.18	435	0.014	0.000	0.003	0.049	0.000
Aircraft Tug	Diesel	2030	74	0.54	39.41	0.99	435	0.019	0.000	0.001	0.044	0.000
Aircraft Tug	Electric	2002	140	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Aircraft Tug	Electric	2014	200	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Aircraft Tug	Electric	2015	110	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Aircraft Tug	Electric	2015	110	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Aircraft Tug	Electric	2015	110	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Aircraft Tug	Electric	2016	200	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Aircraft Tug	Electric	2032	58.3	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Aircraft Tug	Electric	2032	58.3	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Aircraft Tug	Gasoline	2008	200	0.54	338.68	3.13	984	0.367	0.001	0.081	4.490	0.007
Aircraft Tug	Gasoline	2009	200	0.54	329.46	3.04	984	0.357	0.001	0.077	4.355	0.007
Aircraft Tug	Gasoline	2009	200	0.54	329.46	3.04	984	0.357	0.001	0.077	4.355	0.007
Aircraft Tug	Gasoline	2010	200	0.54	326.50	3.02	1,002	0.360	0.001	0.076	4.379	0.007
Aircraft Tug	Gasoline	2010	200	0.54	326.50	3.02	1,002	0.360	0.001	0.076	4.379	0.007
Aircraft Tug	Gasoline	2010	200	0.54	326.50	3.02	1,002	0.360	0.001	0.076	4.379	0.007
Aircraft Tug	Gasoline	2010	200	0.54	326.50	3.02	1,002	0.360	0.001	0.076	4.379	0.007
Aircraft Tug	Gasoline	2010	200	0.54	326.50	3.02	1,002	0.360	0.001	0.076	4.379	0.007
Aircraft Tug	Gasoline	2010	200	0.54	326.50	3.02	1,002	0.360	0.001	0.076	4.379	0.007
Aircraft Tug	Gasoline	2011	200	0.54	326.71	3.02	971	0.350	0.001	0.072	4.230	0.007
Aircraft Tug	Gasoline	2011	200	0.54	326.71	3.02	971	0.350	0.001	0.072	4.230	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2014	200	0.54	309.72	2.86	973	0.332	0.001	0.064	3.983	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Aircraft Tug	Gasoline	2026	200	0.54	251.13	2.32	984	0.272	0.001	0.033	3.095	0.007
Bag TUG	Diesel	2011	60	0.37	76.93	3.47	969	0.082	0.000	0.009	0.104	0.006
Bag TUG	Diesel	2021	49	0.37	32.16	1.77	969	0.034	0.000	0.004	0.086	0.000
Bag TUG	Diesel	2021	65	0.37	32.16	1.34	969	0.034	0.000	0.004	0.086	0.000
Bag TUG	Diesel	2021	65	0.37	32.16	1.34	969	0.034	0.000	0.004	0.086	0.000
Bag TUG	Diesel	2021	65	0.37	32.16	1.34	969	0.034	0.000	0.004	0.086	0.000
Bag TUG	Diesel	2021	65	0.37	32.16	1.34	969	0.034	0.000	0.004	0.086	0.000
Bag TUG	Diesel	2021	65	0.37	32.16	1.34	969	0.034	0.000	0.004	0.086	0.000
Bag TUG	Diesel	2028	49	0.37	32.84	1.81	969	0.035	0.000	0.003	0.083	0.000
Bag TUG	Diesel	2028	49	0.37	32.84	1.81	969	0.035	0.000	0.003	0.083	0.000
Bag TUG	Electric	2009	115	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2009	80	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2010	80	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2010	80	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2016	115	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2019	80	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2021	115	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2025	80	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2029	80	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2029	80	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2029	80	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2029	80	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Electric	2031	40	0.37	0.00	0.00	969	0.000	0.000	0.000	0.000	0.000
Bag TUG	Gasoline	2000	50	0.37	761.06	41.14	1,173	0.984	0.001	0.374	5.988	0.004
Bag TUG	Gasoline	2001	107	0.37	687.68	17.37	1,180	0.894	0.001	0.317	6.725	0.004
Bag TUG	Gasoline	2003	105	0.37	546.19	14.06	1,170	0.704	0.001	0.201	7.415	0.004
Bag TUG	Gasoline	2009	107	0.37	201.51	5.09	1,186	0.264	0.001	0.051	5.554	0.004
Bag TUG	Gasoline	2010	107	0.37	201.42	5.09	1,186	0.263	0.001	0.051	5.551	0.004
Bag TUG	Gasoline	2011	107	0.37	201.81	5.10	1,180	0.262	0.001	0.051	5.529	0.004
Bag TUG	Gasoline	2011	107	0.37	201.81	5.10	1,180	0.262	0.001	0.051	5.529	0.004
Bag TUG	Gasoline	2012	105	0.37	202.16	5.20	1,170	0.261	0.001	0.050	5.495	0.004
Bag TUG	Gasoline	2014	93	0.37	201.36	5.88	1,170	0.260	0.001	0.050	5.474	0.004
Bag TUG	Gasoline	2017	107	0.37	200.88	5.07	1,180	0.261	0.001	0.050	5.504	0.004
Bag TUG	Gasoline	2017	107	0.37	200.88	5.07	1,180	0.261	0.001	0.050	5.504	0.004
Bag TUG	Gasoline	2017	202	0.37	200.88	2.69	1,180	0.261	0.001	0.050	5.504	0.004
Bag TUG	Gasoline	2017	202	0.37	200.88	2.69	1,180	0.261	0.001	0.050	5.504	0.004
Bag TUG	Gasoline	2030	107	0.37	123.74	3.13	1,180	0.161	0.001	0.023	1.508	0.004
Bag TUG	Gasoline	2030	107	0.37	123.74	3.13	1,180	0.161	0.001	0.023	1.508	0.004
Bag TUG	Gasoline	2032	107	0.37	116.01	2.93	1,180	0.151	0.001	0.020	1.108	0.004
Belt Loader	Diesel	2007	45	0.34	137.70	9.00	678	0.103	0.000	0.008	0.075	0.007
Belt Loader	Diesel	2014	60	0.34	75.41	3.70	678	0.056	0.000	0.005	0.079	0.000
Belt Loader	Diesel	2023	65	0.34	32.46	1.47	678	0.024	0.000	0.002	0.059	0.000
Belt Loader	Diesel	2023	25	0.34	25.14	2.96	678	0.019	0.000	0.001	0.024	0.000
Belt Loader	Diesel	2025	49	0.34	43.31	2.60	678	0.032	0.000	0.003	0.077	0.000
Belt Loader	Diesel	2025	49	0.34	43.31	2.60	678	0.032	0.000	0.003	0.077	0.000
Belt Loader	Diesel	2031	84	0.34	30.14	1.06	678	0.023	0.000	0.001	0.052	0.000
Belt Loader	Diesel	2031	84	0.34	30.14	1.06	678	0.023	0.000	0.001	0.052	0.000
Belt Loader	Diesel	2032	61	0.34	30.14	1.45	678	0.023	0.000	0.001	0.052	0.000
Belt Loader	Diesel	2032	61	0.34	30.14	1.45	678	0.023	0.000	0.001	0.052	0.000
Belt Loader	Electric	2018	81	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2018	80	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2019	81	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2020	81	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2020	81	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2020	81	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2025	19	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2028	81	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Electric	2028	81	0.34	0.00	0.00	678	0.000	0.000	0.000	0.000	0.000
Belt Loader	Gasoline	2011	105	0.34	113.41	3.18	1,092	0.136	0.000	0.027	2.964	0.002
Belt Loader	Gasoline	2015	107	0.34	115.08	3.16	1,092	0.139	0.000	0.027	3.009	0.002
Belt Loader	Gasoline	2015	107	0.34	115.08	3.16	1,092	0.139	0.000	0.027	3.009	0.002
Belt Loader	Gasoline	2018	107	0.34	113.15	3.11	1,092	0.136	0.000	0.027	2.958	0.002
Belt Loader	Gasoline	2018	84	0.34	113.15	3.94	1,107	0.138	0.000	0.027	2.998	0.002
Belt Loader	Gasoline	2021	107	0.34	101.75	2.80	1,093	0.123	0.000	0.023	2.408	0.002
Belt Loader	Gasoline	2021	107	0.34	101.75	2.80	1,093	0.123	0.000	0.023	2.408	0.002
Belt Loader	Gasoline	2026	107	0.34	82.29	2.26	1,093	0.099	0.000	0.016	1.476	0.002
Belt Loader	Gasoline	2026	69	0.34	82.29	3.51	1,093	0.099	0.000	0.016	1.476	0.002
Belt Loader	Gasoline	2029	80	0.34	70.62	2.59	1,093	0.085	0.000	0.013	0.917	0.002
Belt Loader	Gasoline	2029	80	0.34	70.62	2.59	1,093	0.085	0.000	0.013	0.917	0.002
Belt Loader	Gasoline	2030	84	0.34	66.72	2.33	1,095	0.081	0.000	0.011	0.731	0.002
Belt Loader	Gasoline	2031	114	0.34	62.84	1.62	1,093	0.076	0.000	0.010	0.544	0.002
Cargo Loader	Diesel	2014	152	0.34	112.10	2.17	631	0.078	0.000	0.007	0.107	0.000
Cargo Loader	Diesel	2015	152	0.34	14.14	0.27	631	0.010	0.000	0.004	0.112	0.000
Cargo Loader	Diesel	2015	152	0.34	14.14	0.27	631	0.010	0.000	0.004	0.112	0.000
Cargo Loader	Diesel	2015	152	0.34	14.14	0.27	631	0.010	0.000	0.004	0.112	0.000
Cargo Loader	Diesel	2015	152	0.34	14.14	0.27	631	0.010	0.000	0.004	0.112	0.000

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Loader	Diesel	2018	99	0.34	41.83	1.24	631	0.029	0.000	0.003	0.072	0.000
Cargo Loader	Diesel	2019	132	0.34	12.62	0.28	631	0.009	0.000	0.003	0.099	0.000
Cargo Loader	Diesel	2019	152	0.34	12.62	0.24	631	0.009	0.000	0.003	0.099	0.000
Cargo Loader	Diesel	2019	102	0.34	12.62	0.36	631	0.009	0.000	0.003	0.099	0.000
Cargo Loader	Diesel	2021	102	0.34	43.33	1.25	631	0.030	0.000	0.003	0.073	0.000
Cargo Loader	Diesel	2022	125	0.34	40.55	0.95	631	0.028	0.000	0.003	0.087	0.000
Cargo Loader	Diesel	2024	175	0.34	13.57	0.23	631	0.009	0.000	0.003	0.104	0.000
Cargo Loader	Diesel	2024	142	0.34	13.57	0.28	631	0.009	0.000	0.003	0.104	0.000
Cargo Loader	Diesel	2025	110	0.34	13.57	0.36	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	142	0.34	13.57	0.28	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	160	0.34	13.57	0.25	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	160	0.34	13.57	0.25	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	110	0.34	13.57	0.36	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	110	0.34	13.57	0.36	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	110	0.34	13.57	0.36	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	110	0.34	13.57	0.36	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	110	0.34	13.57	0.36	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	110	0.34	13.57	0.36	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2025	110	0.34	13.57	0.36	631	0.009	0.000	0.003	0.103	0.000
Cargo Loader	Diesel	2027	110	0.34	11.40	0.30	631	0.008	0.000	0.002	0.086	0.000
Cargo Loader	Diesel	2032	160	0.34	26.21	0.48	631	0.018	0.000	0.002	0.089	0.000
Cargo Loader	Gasoline	2027	102	0.34	89.32	2.58	971	0.096	0.000	0.015	1.232	0.002
Cargo Loader	Gasoline	2028	102	0.34	85.22	2.46	971	0.091	0.000	0.014	1.059	0.002
Cargo Loader	Gasoline	2029	229	0.34	81.17	1.04	971	0.087	0.000	0.013	0.887	0.002
Cargo Loader	Gasoline	2030	229	0.34	77.15	0.99	971	0.083	0.000	0.011	0.715	0.002
Cargo Loader	Gasoline	2031	229	0.34	73.16	0.94	971	0.078	0.000	0.010	0.544	0.002
Cargo Loader	Gasoline	2031	229	0.34	73.16	0.94	971	0.078	0.000	0.010	0.544	0.002
Cargo Loader	Gasoline	2031	229	0.34	73.16	0.94	971	0.078	0.000	0.010	0.544	0.002
Cargo Loader	Gasoline	2031	229	0.34	73.16	0.94	971	0.078	0.000	0.010	0.544	0.002
Cargo Loader K-LOADER	Diesel	2009	78	0.34	82.61	3.12	461	0.042	0.000	0.004	0.053	0.003
Cargo Loader K-LOADER	Diesel	2012	138	0.34	104.83	2.23	631	0.073	0.000	0.007	0.090	0.006
Cargo Loader K-LOADER	Diesel	2021	110	0.34	13.90	0.37	631	0.010	0.000	0.003	0.108	0.000
Cargo Loader K-LOADER	Diesel	2026	126	0.34	12.57	0.29	631	0.009	0.000	0.002	0.095	0.000
Cargo Loader K-LOADER	Diesel	2026	126	0.34	12.57	0.29	631	0.009	0.000	0.002	0.095	0.000
Cargo Loader K-LOADER	Diesel	2029	74	0.34	47.29	1.88	631	0.033	0.000	0.002	0.036	0.000
Cargo Loader K-LOADER	Diesel	2030	130	0.34	12.94	0.29	631	0.009	0.000	0.002	0.096	0.000
Cargo Loader K-LOADER	Diesel	2030	130	0.34	12.94	0.29	631	0.009	0.000	0.002	0.096	0.000
Cargo Loader K-LOADER	Diesel	2030	130	0.34	12.94	0.29	631	0.009	0.000	0.002	0.096	0.000
Cargo Loader K-LOADER	Diesel	2030	130	0.34	12.94	0.29	631	0.009	0.000	0.002	0.096	0.000
Cargo Tractor	Diesel	2012	55	0.36	69.05	3.49	884	0.067	0.000	0.007	0.085	0.005

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Tractor	Diesel	2012	55	0.36	69.05	3.49	884	0.067	0.000	0.007	0.085	0.005
Cargo Tractor	Diesel	2016	113	0.36	34.21	0.84	913	0.034	0.000	0.005	0.088	0.000
Cargo Tractor	Diesel	2016	113	0.36	34.21	0.84	913	0.034	0.000	0.005	0.088	0.000
Cargo Tractor	Diesel	2016	113	0.36	34.21	0.84	913	0.034	0.000	0.005	0.088	0.000
Cargo Tractor	Diesel	2016	113	0.36	34.21	0.84	913	0.034	0.000	0.005	0.088	0.000
Cargo Tractor	Diesel	2016	113	0.36	34.21	0.84	913	0.034	0.000	0.005	0.088	0.000
Cargo Tractor	Diesel	2016	113	0.36	34.21	0.84	913	0.034	0.000	0.005	0.088	0.000
Cargo Tractor	Diesel	2016	113	0.36	34.21	0.84	913	0.034	0.000	0.005	0.088	0.000
Cargo Tractor	Diesel	2021	99	0.36	17.73	0.50	913	0.018	0.000	0.007	0.203	0.001
Cargo Tractor	Diesel	2021	67	0.36	32.14	1.33	913	0.032	0.000	0.004	0.080	0.000
Cargo Tractor	Diesel	2021	67	0.36	32.14	1.33	913	0.032	0.000	0.004	0.080	0.000
Cargo Tractor	Electric	2006	55	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2010	55	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2012	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2012	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2012	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2012	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2013	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Tractor	Electric	2014	95	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2014	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2018	19	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2021	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2021	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2024	80	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2024	80	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2024	80	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2024	80	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2025	80	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2025	80	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2030	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2030	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2030	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2030	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Electric	2030	101	0.36	0.00	0.00	913	0.000	0.000	0.000	0.000	0.000
Cargo Tractor	Gasoline	2003	101	0.36	910.08	25.08	1,874	1.880	0.001	0.669	22.911	0.006
Cargo Tractor	Gasoline	2005	101	0.36	451.67	12.45	1,806	0.899	0.001	0.256	20.562	0.006
Cargo Tractor	Gasoline	2014	101	0.36	302.85	8.35	1,820	0.608	0.001	0.136	17.174	0.006
Cargo Tractor	Gasoline	2016	101	0.36	279.83	7.71	1,820	0.561	0.001	0.124	15.343	0.006
Cargo Tractor	Gasoline	2016	101	0.36	279.83	7.71	1,820	0.561	0.001	0.124	15.343	0.006
Cargo Tractor	Gasoline	2016	101	0.36	279.83	7.71	1,820	0.561	0.001	0.124	15.343	0.006
Cargo Tractor	Gasoline	2016	101	0.36	279.83	7.71	1,820	0.561	0.001	0.124	15.343	0.006
Cargo Tractor	Gasoline	2018	101	0.36	258.17	7.11	1,820	0.518	0.001	0.112	13.588	0.006
Cargo Tractor	Gasoline	2021	101	0.36	224.76	6.19	1,820	0.451	0.001	0.093	10.900	0.006
Cargo Tractor	Gasoline	2021	101	0.36	224.76	6.19	1,820	0.451	0.001	0.093	10.900	0.006
Cargo Tractor	Gasoline	2021	101	0.36	224.76	6.19	1,820	0.451	0.001	0.093	10.900	0.006
Cargo Tractor	Gasoline	2021	101	0.36	224.76	6.19	1,820	0.451	0.001	0.093	10.900	0.006
Cargo Tractor	Gasoline	2021	101	0.36	224.76	6.19	1,820	0.451	0.001	0.093	10.900	0.006
Cargo Tractor	Gasoline	2021	67	0.36	224.76	9.32	1,823	0.452	0.001	0.093	10.916	0.006
Cargo Tractor	Gasoline	2021	67	0.36	224.76	9.32	1,823	0.452	0.001	0.093	10.916	0.006
Cargo Tractor	Gasoline	2021	67	0.36	224.76	9.32	1,823	0.452	0.001	0.093	10.916	0.006

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Tractor	Gasoline	2021	67	0.36	224.76	9.32	1,823	0.452	0.001	0.093	10.916	0.006
Cargo Tractor	Gasoline	2022	75	0.36	213.58	7.91	1,820	0.428	0.001	0.087	10.004	0.006
Cargo Tractor	Gasoline	2022	75	0.36	213.58	7.91	1,820	0.428	0.001	0.087	10.004	0.006
Cargo Tractor	Gasoline	2022	75	0.36	213.58	7.91	1,820	0.428	0.001	0.087	10.004	0.006
Cargo Tractor	Gasoline	2022	75	0.36	213.58	7.91	1,820	0.428	0.001	0.087	10.004	0.006
Cargo Tractor	Gasoline	2022	75	0.36	213.58	7.91	1,820	0.428	0.001	0.087	10.004	0.006
Cargo Tractor	Gasoline	2023	75	0.36	202.45	7.50	1,820	0.406	0.001	0.081	9.110	0.006
Cargo Tractor	Gasoline	2023	75	0.36	202.45	7.50	1,820	0.406	0.001	0.081	9.110	0.006
Cargo Tractor	Gasoline	2024	75	0.36	191.24	7.08	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	80	0.36	191.24	6.64	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	75	0.36	191.24	7.08	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	75	0.36	191.24	7.08	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	80	0.36	191.24	6.64	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	80	0.36	191.24	6.64	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	80	0.36	191.24	6.64	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	80	0.36	191.24	6.64	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	80	0.36	191.24	6.64	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	80	0.36	191.24	6.64	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	80	0.36	191.24	6.64	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	80	0.36	191.24	6.64	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	101	0.36	191.24	5.27	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	101	0.36	191.24	5.27	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2024	101	0.36	191.24	5.27	1,820	0.384	0.001	0.075	8.211	0.006
Cargo Tractor	Gasoline	2025	79	0.36	180.03	6.33	1,820	0.361	0.001	0.068	7.313	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006





## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2026	101	0.36	168.86	4.65	1,820	0.339	0.001	0.062	6.416	0.006
Cargo Tractor	Gasoline	2029	86	0.36	135.32	4.37	1,820	0.271	0.001	0.044	3.724	0.006
Cargo Tractor	Gasoline	2029	86	0.36	135.32	4.37	1,820	0.271	0.001	0.044	3.724	0.006
Cargo Tractor	Gasoline	2029	86	0.36	135.32	4.37	1,820	0.271	0.001	0.044	3.724	0.006
Cargo Tractor	Gasoline	2029	86	0.36	135.32	4.37	1,820	0.271	0.001	0.044	3.724	0.006
Cargo Tractor	Gasoline	2029	86	0.36	135.32	4.37	1,820	0.271	0.001	0.044	3.724	0.006
Cargo Tractor	Gasoline	2029	86	0.36	135.32	4.37	1,820	0.271	0.001	0.044	3.724	0.006
Cargo Tractor	Gasoline	2029	86	0.36	135.32	4.37	1,820	0.271	0.001	0.044	3.724	0.006
Cargo Tractor	Gasoline	2030	86	0.36	124.14	4.01	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	86	0.36	124.14	4.01	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	86	0.36	124.14	4.01	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	86	0.36	124.14	4.01	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	86	0.36	124.14	4.01	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	86	0.36	124.14	4.01	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	86	0.36	124.14	4.01	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	86	0.36	124.14	4.01	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	86	0.36	124.14	4.01	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	101	0.36	124.14	3.42	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2030	101	0.36	124.14	3.42	1,820	0.249	0.001	0.037	2.827	0.006
Cargo Tractor	Gasoline	2031	86	0.36	112.96	3.64	1,820	0.227	0.001	0.031	1.929	0.006
Cargo Tractor	Gasoline	2031	86	0.36	112.96	3.64	1,820	0.227	0.001	0.031	1.929	0.006
Cargo Tractor	Gasoline	2031	86	0.36	112.96	3.65	1,820	0.227	0.001	0.031	1.929	0.006
Cargo Tractor	Gasoline	2031	86	0.36	112.96	3.64	1,820	0.227	0.001	0.031	1.929	0.006
Cargo Tractor	Gasoline	2031	86	0.36	112.96	3.64	1,820	0.227	0.001	0.031	1.929	0.006
Cargo Tractor	Gasoline	2031	86	0.36	112.96	3.65	1,820	0.227	0.001	0.031	1.929	0.006
Cargo Tractor	Gasoline	2031	86	0.36	112.96	3.64	1,820	0.227	0.001	0.031	1.929	0.006
Cargo Tractor	Gasoline	2031	86	0.36	112.96	3.64	1,820	0.227	0.001	0.031	1.929	0.006
Cargo Tractor	Gasoline	2031	84	0.36	112.96	3.74	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	84	0.36	112.96	3.74	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	84	0.36	112.96	3.74	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	84	0.36	112.96	3.74	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	84	0.36	112.96	3.74	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	84	0.36	112.96	3.74	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2031	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Cargo Tractor	Gasoline	2031	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2032	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2032	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2032	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2032	84	0.36	112.96	3.74	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2032	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2032	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2032	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2032	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Gasoline	2032	61	0.36	112.96	5.14	1,821	0.227	0.001	0.031	1.931	0.006
Cargo Tractor	Propane	2025	84	0.36	138.42	4.58	210	0.032	0.000	0.000	0.341	0.001
Cargo Tractor	Propane	2026	84	0.36	137.64	4.55	210	0.032	0.000	0.000	0.339	0.001
Deicer	Diesel	2026	200	0.34	20.37	0.30	27	0.001	0.000	0.000	0.002	0.000
Fork Lift	Diesel	2027	70	0.20	21.14	1.51	516	0.012	0.000	0.001	0.042	0.000
Fork Lift	Electric	2022	19	0.20	0.00	0.00	516	0.000	0.000	0.000	0.000	0.000
Fork Lift	Gasoline	2022	57	0.20	60.78	5.33	984	0.066	0.000	0.026	3.244	0.001
Fork Lift	LPG/Propane	2021	57	0.20	42.64	3.74	984	0.046	0.000	0.000	0.177	0.001
Fork Lift	LPG/Propane	2022	51	0.20	41.06	4.03	975	0.044	0.000	0.000	0.168	0.001
Golf cart	Electric	2021	50	0.50	0.00	0.00	270	0.000	0.000	0.000	0.000	0.000
Golf cart	Electric	2021	50	0.50	0.00	0.00	270	0.000	0.000	0.000	0.000	0.000
Golf cart	Electric	2021	50	0.50	0.00	0.00	270	0.000	0.000	0.000	0.000	0.000
Golf cart	Electric	2021	50	0.50	0.00	0.00	270	0.000	0.000	0.000	0.000	0.000
GPU	Diesel	2008	200	0.31	193.49	3.12	642	0.137	0.000	0.017	0.061	0.007
GPU	Diesel	2013	208	0.31	139.16	2.16	642	0.098	0.000	0.010	0.137	0.001
GPU	Diesel	2013	208	0.31	139.16	2.16	642	0.098	0.000	0.010	0.137	0.001
GPU	Diesel	2014	185	0.31	138.55	2.42	642	0.098	0.000	0.009	0.135	0.000
GPU	Diesel	2014	185	0.31	138.55	2.42	642	0.098	0.000	0.009	0.135	0.000
GPU	Diesel	2015	152	0.31	15.82	0.34	642	0.011	0.000	0.005	0.128	0.000
GPU	Diesel	2015	135	0.31	15.82	0.38	642	0.011	0.000	0.005	0.128	0.000
GPU	Diesel	2015	165	0.31	15.82	0.31	642	0.011	0.000	0.005	0.128	0.000
GPU	Diesel	2019	44	0.31	30.13	2.20	642	0.021	0.000	0.002	0.030	0.000
GPU	Diesel	2020	173	0.31	15.58	0.29	642	0.011	0.000	0.004	0.123	0.000
GPU	Diesel	2020	170	0.31	15.58	0.30	642	0.011	0.000	0.004	0.123	0.000
GPU	Diesel	2020	165	0.31	15.58	0.30	642	0.011	0.000	0.004	0.123	0.000
GPU	Diesel	2021	165	0.31	15.29	0.30	642	0.011	0.000	0.004	0.121	0.000
GPU	Diesel	2022	110	0.31	14.96	0.44	642	0.011	0.000	0.003	0.117	0.000
GPU	Diesel	2022	170	0.31	14.96	0.28	642	0.011	0.000	0.003	0.117	0.000
GPU	Diesel	2022	110	0.31	14.96	0.44	642	0.011	0.000	0.003	0.117	0.000
GPU	Diesel	2023	170	0.31	15.79	0.30	642	0.011	0.000	0.003	0.123	0.000

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
GPU	Diesel	2024	155	0.31	12.20	0.25	642	0.009	0.000	0.003	0.095	0.000
GPU	Diesel	2024	155	0.31	12.20	0.25	642	0.009	0.000	0.003	0.095	0.000
GPU	Diesel	2024	155	0.31	12.20	0.25	642	0.009	0.000	0.003	0.095	0.000
GPU	Diesel	2025	200	0.31	19.50	0.31	642	0.014	0.000	0.004	0.052	0.000
GPU	Diesel	2025	220	0.31	19.50	0.29	642	0.014	0.000	0.004	0.052	0.000
GPU	Diesel	2025	220	0.31	19.50	0.29	642	0.014	0.000	0.004	0.052	0.000
GPU	Diesel	2025	160	0.31	13.54	0.27	642	0.010	0.000	0.003	0.105	0.000
GPU	Diesel	2025	160	0.31	13.54	0.27	642	0.010	0.000	0.003	0.105	0.000
GPU	Diesel	2025	160	0.31	13.54	0.27	642	0.010	0.000	0.003	0.105	0.000
GPU	Diesel	2025	160	0.31	13.54	0.27	642	0.010	0.000	0.003	0.105	0.000
GPU	Diesel	2025	160	0.31	13.54	0.27	642	0.010	0.000	0.003	0.105	0.000
GPU	Diesel	2027	150	0.31	12.55	0.27	642	0.009	0.000	0.002	0.096	0.000
GPU	Diesel	2029	155	0.31	11.85	0.25	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2029	155	0.31	11.85	0.25	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2029	158	0.31	11.85	0.24	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2029	158	0.31	11.85	0.24	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2029	158	0.31	11.85	0.24	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2030	115	0.31	11.85	0.33	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2030	240	0.31	20.79	0.28	642	0.015	0.000	0.003	0.053	0.000
GPU	Diesel	2030	240	0.31	20.79	0.28	642	0.015	0.000	0.003	0.053	0.000
GPU	Diesel	2030	162	0.31	11.85	0.24	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2030	162	0.31	11.85	0.24	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2030	147	0.31	11.85	0.26	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2030	147	0.31	11.85	0.26	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2030	162	0.31	11.85	0.24	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2030	162	0.31	11.85	0.24	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2030	162	0.31	11.85	0.24	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2030	162	0.31	11.85	0.24	642	0.008	0.000	0.002	0.090	0.000
GPU	Diesel	2031	240	0.31	16.77	0.23	642	0.012	0.000	0.002	0.043	0.000
GPU	Diesel	2031	240	0.31	16.77	0.23	642	0.012	0.000	0.002	0.043	0.000
GPU	Diesel	2031	154	0.31	10.95	0.23	642	0.008	0.000	0.001	0.082	0.000
GPU	Diesel	2032	162	0.31	10.95	0.22	642	0.008	0.000	0.001	0.082	0.000
GPU	Diesel	2032	162	0.31	10.95	0.22	642	0.008	0.000	0.001	0.082	0.000
GPU	Diesel	2032	155	0.31	10.95	0.23	642	0.008	0.000	0.001	0.082	0.000
GPU	Diesel	2032	162	0.31	10.95	0.22	642	0.008	0.000	0.001	0.082	0.000
GPU	Diesel	2032	162	0.31	10.95	0.22	642	0.008	0.000	0.001	0.082	0.000
GPU	Diesel	2032	162	0.31	10.95	0.22	642	0.008	0.000	0.001	0.082	0.000
GPU	Diesel	2032	162	0.31	10.95	0.22	642	0.008	0.000	0.001	0.082	0.000
Lavatory Cart	Electric	2018	43	0.50	0.00	0.00	492	0.000	0.000	0.000	0.000	0.000

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Lavatory Cart	Electric	2028	43	0.50	0.00	0.00	492	0.000	0.000	0.000	0.000	0.000
Lavatory Truck	Diesel	2013	152	0.25	139.16	3.66	492	0.075	0.000	0.008	0.105	0.000
Lavatory Truck	Electric	2015	19	0.25	0.00	0.00	492	0.000	0.000	0.000	0.000	0.000
Lavatory Truck	Electric	2020	19	0.25	0.00	0.00	492	0.000	0.000	0.000	0.000	0.000
Lavatory Truck	Gasoline	2014	300	0.25	112.96	1.51	2,011	0.250	0.001	0.061	3.123	0.004
Lift	Diesel	2014	137	0.34	66.27	1.42	550	0.040	0.000	0.003	0.055	0.000
Lift	Diesel	2018	65	0.34	35.52	1.61	550	0.022	0.000	0.002	0.053	0.000
Lift	Diesel	2020	200	0.34	18.52	0.27	550	0.011	0.000	0.004	0.042	0.000
Lift	Diesel	2021	200	0.34	19.33	0.28	550	0.012	0.000	0.004	0.044	0.000
Lift	Electric	2007	50	0.34	0.00	0.00	550	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2014	50	0.34	0.00	0.00	550	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2015	50	0.34	0.00	0.00	550	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2016	50	0.34	0.00	0.00	550	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2020	50	0.34	0.00	0.00	550	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2020	50	0.34	0.00	0.00	550	0.000	0.000	0.000	0.000	0.000
Lift	Electric	2021	25	0.34	0.00	0.00	550	0.000	0.000	0.000	0.000	0.000
Lift	Gasoline	2016	114	0.34	147.13	3.81	508	0.082	0.000	0.014	1.353	0.002
Lift	Gasoline	2016	114	0.34	147.13	3.81	508	0.082	0.000	0.014	1.353	0.002
Lift	Gasoline	2018	114	0.34	141.01	3.65	508	0.079	0.000	0.013	1.218	0.002
Lift	Gasoline	2027	114	0.34	114.02	2.95	508	0.064	0.000	0.009	0.614	0.002
Lift	Gasoline	2027	114	0.34	114.02	2.95	508	0.064	0.000	0.009	0.614	0.002
Other	Diesel	2020	65	0.34	37.60	1.70	642	0.027	0.000	0.003	0.065	0.000
Other	Gasoline	2000	138	0.34	228.86	4.88	245	0.062	0.000	0.039	0.937	0.000
Other	Gasoline	2000	138	0.34	228.86	4.88	245	0.062	0.000	0.039	0.937	0.000
Other	Gasoline	2000	138	0.34	228.86	4.88	245	0.062	0.000	0.039	0.937	0.000
Other	Gasoline	2000	138	0.34	228.86	4.88	245	0.062	0.000	0.039	0.937	0.000
Other	Gasoline	2000	138	0.34	228.86	4.88	245	0.062	0.000	0.039	0.937	0.000
Other	Gasoline	2000	138	0.34	228.86	4.88	245	0.062	0.000	0.039	0.937	0.000
Other	Gasoline	2000	138	0.34	228.86	4.88	245	0.062	0.000	0.039	0.937	0.000
Other	Gasoline	2001	138	0.34	259.38	5.54	210	0.060	0.000	0.032	1.526	0.000
Other	Gasoline	2001	138	0.34	259.38	5.54	210	0.060	0.000	0.032	1.526	0.000
Other	Gasoline	2001	138	0.34	259.38	5.54	210	0.060	0.000	0.032	1.526	0.000
Other	Gasoline	2001	138	0.34	259.38	5.54	210	0.060	0.000	0.032	1.526	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2002	138	0.34	187.39	4.00	226	0.047	0.000	0.024	1.253	0.000
Other	Gasoline	2003	138	0.34	189.71	4.05	272	0.057	0.000	0.024	1.514	0.000
Other	Gasoline	2014	138	0.34	65.37	1.40	247	0.018	0.000	0.007	0.765	0.000
Other	Gasoline	2014	138	0.34	65.37	1.40	247	0.018	0.000	0.007	0.765	0.000
Other	Gasoline	2014	138	0.34	65.37	1.40	247	0.018	0.000	0.007	0.765	0.000
Other	Gasoline	2014	138	0.34	65.37	1.40	247	0.018	0.000	0.007	0.765	0.000
Other	Gasoline	2014	138	0.34	65.37	1.40	247	0.018	0.000	0.007	0.765	0.000
Other	Gasoline	2015	138	0.34	63.68	1.36	247	0.017	0.000	0.007	0.738	0.000
Other	Gasoline	2015	138	0.34	63.68	1.36	247	0.017	0.000	0.007	0.738	0.000
Other	Gasoline	2015	138	0.34	63.68	1.36	247	0.017	0.000	0.007	0.738	0.000
Other	Gasoline	2015	138	0.34	63.68	1.36	247	0.017	0.000	0.007	0.738	0.000
Other	Gasoline	2015	138	0.34	63.68	1.36	247	0.017	0.000	0.007	0.738	0.000
Other	Gasoline	2015	138	0.34	63.68	1.36	247	0.017	0.000	0.007	0.738	0.000
Other	Gasoline	2016	138	0.34	62.20	1.33	247	0.017	0.000	0.007	0.713	0.000
Other	Gasoline	2018	138	0.34	58.87	1.26	247	0.016	0.000	0.007	0.659	0.000
Other	Gasoline	2018	138	0.34	58.87	1.26	247	0.016	0.000	0.007	0.659	0.000
Other	Gasoline	2018	138	0.34	58.87	1.26	247	0.016	0.000	0.007	0.659	0.000
Other	Gasoline	2019	138	0.34	57.31	1.22	247	0.016	0.000	0.006	0.633	0.000
Other	Gasoline	2020	138	0.34	55.73	1.19	247	0.015	0.000	0.006	0.607	0.000
Other	Gasoline	2021	138	0.34	54.09	1.15	247	0.015	0.000	0.006	0.580	0.000
Other	Gasoline	2022	138	0.34	52.46	1.12	247	0.014	0.000	0.006	0.553	0.000
Other	Gasoline	2022	138	0.34	52.46	1.12	247	0.014	0.000	0.006	0.553	0.000
Other	Gasoline	2023	138	0.34	50.95	1.09	247	0.014	0.000	0.006	0.528	0.000
Other	Gasoline	2023	138	0.34	50.95	1.09	247	0.014	0.000	0.006	0.528	0.000
Other	Gasoline	2023	138	0.34	50.95	1.09	247	0.014	0.000	0.006	0.528	0.000
Other	Gasoline	2026	138	0.34	46.07	0.98	247	0.013	0.000	0.005	0.448	0.000
Other	Gasoline	2026	138	0.34	46.07	0.98	247	0.013	0.000	0.005	0.448	0.000
Other	Gasoline	2026	138	0.34	46.07	0.98	247	0.013	0.000	0.005	0.448	0.000
Other	Gasoline	2026	138	0.34	46.07	0.98	247	0.013	0.000	0.005	0.448	0.000
Other	Gasoline	2027	138	0.34	44.46	0.95	248	0.012	0.000	0.005	0.424	0.000
Other	Gasoline	2027	138	0.34	44.46	0.95	248	0.012	0.000	0.005	0.424	0.000
Other	Gasoline	2027	138	0.34	44.46	0.95	248	0.012	0.000	0.005	0.424	0.000

## GSE Emissions Calculations - 2031

Equip Type	Fuel Type	Model Year	HP	Load Factor	Derived NOx Emission Factor		Activity (hr)	Annual Emissions (TPY)				
					EF*HP (g/hr)	EF (g/hp-hr)		NOx	SOx	VOC	CO	PM
Other	Gasoline	2027	138	0.34	44.46	0.95	248	0.012	0.000	0.005	0.424	0.000
Other	Gasoline	2028	138	0.34	42.88	0.92	247	0.012	0.000	0.005	0.396	0.000
Other	Gasoline	2029	138	0.34	41.29	0.88	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	138	0.34	41.29	0.88	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	138	0.34	41.29	0.88	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	138	0.34	41.29	0.88	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	360	0.34	41.29	0.34	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	360	0.34	41.29	0.34	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	138	0.34	41.29	0.88	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	360	0.34	41.29	0.34	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	138	0.34	41.29	0.88	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	360	0.34	41.29	0.34	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	275	0.34	41.29	0.44	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	138	0.34	41.29	0.88	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	138	0.34	41.29	0.88	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	138	0.34	41.29	0.88	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2029	360	0.34	41.29	0.34	247	0.011	0.000	0.005	0.369	0.000
Other	Gasoline	2030	138	0.34	39.67	0.85	247	0.011	0.000	0.005	0.343	0.000
Other	Gasoline	2030	138	0.34	39.67	0.85	247	0.011	0.000	0.005	0.343	0.000
Other	Gasoline	2030	138	0.34	39.67	0.85	247	0.011	0.000	0.005	0.343	0.000
Other	Gasoline	2030	138	0.34	39.67	0.85	247	0.011	0.000	0.005	0.343	0.000
Other	Gasoline	2032	49	0.34	38.44	2.31	247	0.010	0.000	0.005	0.319	0.000
Passenger Stand - Stairs	Gasoline	1993	200	0.50	852.33	8.52	492	0.462	0.000	0.050	0.791	0.002
Passenger Stand - Stairs	Gasoline	2025	100	0.50	162.52	3.25	252	0.045	0.000	0.004	0.499	0.001
Pushback	Diesel	2004	100	0.54	384.10	7.11	435	0.184	0.000	0.016	0.106	0.010
Pushback	Diesel	2011	265	0.54	275.40	1.92	435	0.132	0.000	0.012	0.057	0.006
Pushback	Diesel	2020	56	0.54	73.86	2.44	435	0.035	0.000	0.003	0.085	0.000
Pushback	Diesel	2024	129	0.54	46.01	0.66	435	0.022	0.000	0.003	0.100	0.000
Pushback	Diesel	2024	129	0.54	46.01	0.66	435	0.022	0.000	0.003	0.100	0.000
Pushback	Diesel	2030	121	0.54	23.87	0.37	435	0.011	0.000	0.002	0.122	0.000
Pushback	Diesel	2032	100	0.54	71.34	1.32	435	0.034	0.000	0.002	0.079	0.000
Pushback	Electric	2028	130	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Pushback	Electric	2028	130	0.54	0.00	0.00	435	0.000	0.000	0.000	0.000	0.000
Service Truck	Gasoline	2001	230	0.50	528.56	4.60	1,135	0.661	0.000	0.100	2.163	0.003
Service Truck	Gasoline	2016	133	0.50	107.93	1.63	1,135	0.135	0.000	0.026	1.625	0.003

## Fuel Truck Emission Calculations

**Assumption:**

- Number of fuel trucks per departing domestic flight:	1
- Number of fuel trucks per departing freight flight:	1.75
- Number of fuel trucks per departing China Airlines flights:	4

**Round Trip Distances:**

- Rack to Terminal 2	0.66	mi
- Rack to Terminal 4	2.00	mi
- Rack to UPS Hub	4.00	mi
- Rack to FedEx Hub	5.00	mi
- Rack to Majestic	1.00	mi
- Rack to China Airlines Terminal	0.60	mi

Number of Departing Flights (2017)	# of Truck Trips	Round Trip Distance (mi)	Annual VMT
Domestic	28362	28362	1.665 47,223
Freight	11267	19717	3.33 65,724
China Airlines*	260	1040	0.6 624
Volaris	431	431	2 862
<b>Total</b>		49,550	114,433

Average Truck trips/day 135.75  
 10 minutes idling assumed per truck trip  
 Average fleet model year 1998  
 EMFAC 2011 T6 instate small category EFS, Aggregated

	Emission Factors (g/vehicle/day)					emissions g/day (or g/idle-hr?)					tpy (assuming EF unit is g/vehicle/day)				
	NOx	SOx	VOC (ROG)	CO	PM	NOx	SOx	VOC (ROG)	CO	PM	NOx	SOx	VOC (ROG)	CO	PM
<b>Idling Emissions</b>	12.438	0.007	0.290	2.957	0.208	1,688.51	0.90	39.42	401.43	28.26	0.68	0.00	0.02	0.16	0.01
<b>Running Emissions</b>	Emission Factors (g/mi)					emissions tpy									
	NOx	SOx	VOC (ROG)	CO	PM	NOx	SOx	VOC (ROG)	CO	PM					
	12.141	0.011	0.858	2.908	1.023	1.53	0.00	0.11	0.37	0.13					
<b>Total Emissions (tpy)</b>	2.21	1.70E-03	0.12	0.53	0.14										

### 2023

Annual Truck trips 58,548.04  
 Average fleet model year 2004  
 Annual VMT 135,213

	Emission Factors (g/vehicle/day)					tpy (assuming EF unit is g/vehicle/day)				
	NOx	SOx	VOC (ROG)	CO	PM	NOx	SOx	VOC (ROG)	CO	PM
<b>Idling Emissions</b>	13.544	0.007	0.232	2.620	0.170	0.87	0.00	0.02	0.17	0.01
<b>Running Emissions</b>	Emission Factors (g/mi)					emissions tpy				
	NOx	SOx	VOC (ROG)	CO	PM	NOx	SOx	VOC (ROG)	CO	PM
	7.453	0.011	0.768	2.830	1.291	1.11	0.00	0.11	0.42	0.19
<b>Total Emissions (tpy)</b>	1.98	2.03E-03	0.13	0.59	0.20					

### 2031

Annual Truck trips 66,795.54  
 Average fleet model year 2012  
 Annual VMT 154,260

	Emission Factors (g/vehicle/day)					tpy (assuming EF unit is g/vehicle/day)				
	NOx	SOx	VOC (ROG)	CO	PM	NOx	SOx	VOC (ROG)	CO	PM
<b>Idling Emissions</b>	2.855	0.006	0.049	2.089	0.001	0.21	0.00	0.00	0.15	0.00
<b>Running Emissions</b>	Emission Factors (g/mi)					emissions tpy				
	NOx	SOx	VOC (ROG)	CO	PM	NOx	SOx	VOC (ROG)	CO	PM
	2.289	0.010	0.011	0.108	0.232	0.39	0.00	0.00	0.02	0.04
<b>Total Emissions (tpy)</b>	0.60	2.16E-03	0.01	0.17	0.04					



## Crash Truck Emissions Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
<b>Total (2017)</b>	7.45	0.00	0.38	3.07	0.28
<b>Total (w/ replaced veh)</b>	4.19	0.00	0.23	1.68	0.15
<b>Percent Change</b>	44%	--	39%	45%	45%

Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor				EF Unit	Laod Factor	Activity	Activity Unit	Annual Emissions (tpy)			
					NOx	VOC	CO	PM					NOx	VOC	CO	PM
60582/140-Bravo	Crash Truck	Diesel	1000	2000	5.600	0.300	2.300	0.200	g/bhp-hr	0.5	750	hr/yr	2.315	0.124	0.951	0.083
60534/140-Charlie	Crash Truck	Diesel	1000	1998	5.600	0.300	2.300	0.200	g/bhp-hr	0.5	750	hr/yr	2.315	0.124	0.951	0.083
F-0169/140-Echo	Crash Truck	Diesel	585	1998	6.600	0.400	2.400	0.200	g/bhp-hr	0.5	750	hr/yr	1.596	0.097	0.580	0.048
C-1303/140-Foxtrot	Reserve Crash Truck	Diesel	500	1993	4.800	0.100	2.300	0.230	g/bhp-hr	0.5	100	hr/yr	0.132	0.003	0.063	0.006
C-1310/140-Delta	Reserve Crash Truck	Diesel	500	1988	5.900	0.500	2.600	0.540	g/bhp-hr	0.5	100	hr/yr	0.163	0.014	0.072	0.015
F-0299/140-Alpha	Reserve Crash Truck	Diesel	500	1993	4.800	0.100	2.300	0.230	g/bhp-hr	0.5	100	hr/yr	0.132	0.003	0.063	0.006
C-3519/U-140	Utility Truck/Reserve Squad	Gasoline	362	2001	0.200	0.112	1.000	--	g/mile	0.5	300	mile/yr	3.31E-05	1.85E-05	1.65E-04	--
C-3605/Stairs 140	Rescue Stair Unit	Gasoline	362	2002	0.200	0.098	1.600	--	g/mile	0.5	300	mile/yr	3.31E-05	1.62E-05	2.65E-04	--
C-2443/Captain1840	Command Vehicle	Gasoline	300	2005	0.200	0.103	2.800	--	g/mile	0.5	2500	mile/yr	2.76E-04	1.42E-04	3.86E-03	--
C-2444/Captain1841	Reserve Command Vehicle	Gasoline	300	2005	0.200	0.103	2.800	--	g/mile	0.5	1000	mile/yr	1.10E-04	5.68E-05	1.54E-03	--
001/ Medic Squad-140	Type 1 Engine	Diesel	400	1992	4.800	0.100	2.300	0.230	g/bhp-hr	0.5	750	hr/yr	0.794	0.017	0.380	0.038
C-2464	Utility Truck	CNG	360	2007	0.100	0.021	0.900	0.060	g/mile	0.5	300	mile/yr	1.65E-05	3.47E-06	1.49E-04	9.92E-06

### New Equipment

Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor				EF Unit	Laod Factor	Activity	Activity Unit	Annual Emissions (tpy)			
					NOx	VOC	CO	PM					NOx	VOC	CO	PM
140 Alpha	Crash Truck	Diesel	700	2018	0.127	0.007	0.075	0.015	g/bhp-hr	0.5	750	hr/yr	0.037	0.002	0.022	0.004
140 Bravo	Crash Truck	Diesel	700	2018	0.127	0.007	0.075	0.015	g/bhp-hr	0.5	750	hr/yr	0.037	0.002	0.022	0.004
140 Charlie	Crash Truck	Diesel	700	2018	0.127	0.007	0.075	0.015	g/bhp-hr	0.5	750	hr/yr	0.037	0.002	0.022	0.004
Medic Squad 140	Medic Squad/Crash Truck	Diesel	700	2019	0.127	0.007	0.075	0.015	g/bhp-hr	0.5	750	hr/yr	0.037	0.002	0.022	0.004
Captain 1840	Command Vehicle	Gasoline	355	2019	0.036		0.200	0.001	g/mile	0.5	2500	mile/yr	4.96E-05	0.00E+00	2.76E-04	1.38E-06
Stairs 140	Rescue Stair Unit	Gasoline	362	2019	0.370	0.066	3.260	0.060	g/mile	0.5	300	mile/yr	6.12E-05	1.10E-05	5.39E-04	9.92E-06
Utility 140	Utility Truck/Reserve Squad	Diesel	445	2019	0.200	0.043	0.200	0.010	g/mile	0.5	300	mile/yr	3.31E-05	7.11E-06	3.31E-05	1.65E-06

### Notes

- Equipment data (equipment type, vehicle make/model, engine hp/model year, fuel type, activity) provided by Fire Station 10
- Emission factor values from CARB on-road engine certification program
- Load factor value from [...]

### OIAA Fleet Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
Total (2017)	0.0791	0.0004	0.0076	0.1932	0.0088
Total (Reduced)	0.0036	0.0002	0.0006	0.0401	0.0030

2017 Vehicles		Emission Factor												Annual Emissions (tpy)				
Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
C-2463	Chevrolet	CNG	300	2006	0.100	--	0.017	1.000	--	g/mile	0.5	5,466	mi/yr	3.01E-04	--	5.12E-05	3.01E-03	--
C-1071	Chevrolet	Gasoline	230	1998	0.932	0.005	0.211	7.115	0.069	g/mile	0.5	5,466	mi/yr	2.81E-03	1.46E-05	6.37E-04	2.14E-02	2.09E-04
C-1079	Ford Ranger	Gasoline	152	1999	0.642	0.005	0.127	5.045	0.069	g/mile	0.5	5,466	mi/yr	1.93E-03	1.45E-05	3.82E-04	1.52E-02	2.09E-04
C-1087	Ford F350	Gasoline	250	1999	0.343	0.008	0.016	0.365	0.122	g/mile	0.5	5,466	mi/yr	1.03E-03	2.53E-05	4.72E-05	1.10E-03	3.69E-04
C-2144	Ford Van	Gasoline	250	1997	0.351	0.008	0.016	0.373	0.122	g/mile	0.5	5,466	mi/yr	1.06E-03	2.53E-05	4.83E-05	1.12E-03	3.69E-04
C-2447	Ford	Gasoline	224	2004	0.090	0.005	0.019	1.197	0.063	g/mile	0.5	5,466	mi/yr	2.70E-04	1.66E-05	5.81E-05	3.61E-03	1.90E-04
C-2880	Ford	Gasoline	224	2008	0.090	0.005	0.019	1.197	0.063	g/mile	0.5	5,466	mi/yr	2.70E-04	1.66E-05	5.81E-05	3.61E-03	1.90E-04
C-3054	GMC Sierra 3500	Gasoline	200	1995	1.495	0.008	0.177	4.967	0.126	g/mile	0.5	5,466	mi/yr	4.50E-03	2.56E-05	5.32E-04	1.50E-02	3.81E-04
C-3100	Chevrolet	Gasoline	230	1998	0.932	0.005	0.211	7.115	0.069	g/mile	0.5	5,466	mi/yr	2.81E-03	1.46E-05	6.37E-04	2.14E-02	2.09E-04
C-3352	Peterbilt 357	Diesel	280	1996	14.173	0.010	0.741	2.149	0.845	g/mile	0.5	5,466	mi/yr	4.27E-02	3.04E-05	2.23E-03	6.47E-03	2.55E-03
C-3366	Ford Van	Gasoline	250	1996	0.353	0.008	0.016	0.376	0.122	g/mile	0.5	5,466	mi/yr	1.06E-03	2.53E-05	4.83E-05	1.13E-03	3.69E-04
C-3374	Ford F250	Gasoline	205	1997	0.351	0.008	0.016	0.373	0.122	g/mile	0.5	5,466	mi/yr	1.06E-03	2.53E-05	4.83E-05	1.12E-03	3.69E-04
C-3376	Ford Van	Gasoline	250	1996	0.353	0.008	0.016	0.376	0.122	g/mile	0.5	5,466	mi/yr	1.06E-03	2.53E-05	4.83E-05	1.13E-03	3.69E-04
C-3377	Ford	Gasoline	200	1996	1.189	0.005	0.190	5.700	0.069	g/mile	0.5	5,466	mi/yr	3.58E-03	1.45E-05	5.73E-04	1.72E-02	2.08E-04
C-3378	Ford F350	Gasoline	242	1996	0.353	0.008	0.016	0.376	0.122	g/mile	0.5	5,466	mi/yr	1.06E-03	2.53E-05	4.83E-05	1.13E-03	3.69E-04
C-3379	Ford	Gasoline	255	1996	0.353	0.008	0.016	0.376	0.122	g/mile	0.5	5,466	mi/yr	1.06E-03	2.53E-05	4.83E-05	1.13E-03	3.69E-04
C-3477	Chevrolet	Gasoline	230	1998	0.997	0.005	0.164	5.129	0.069	g/mile	0.5	5,466	mi/yr	3.00E-03	1.45E-05	4.93E-04	1.55E-02	2.08E-04
C-3478	Ford	Gasoline	200	1998	0.932	0.005	0.211	7.115	0.069	g/mile	0.5	5,466	mi/yr	2.81E-03	1.46E-05	6.37E-04	2.14E-02	2.09E-04
C-5095	Ford E-350 Van	Gasoline	275	2006	0.181	0.008	0.010	0.243	0.119	g/mile	0.5	5,466	mi/yr	5.47E-04	2.53E-05	2.98E-05	7.31E-04	3.60E-04
C-3542	Ford	Gasoline	305	2001	0.330	0.008	0.015	0.353	0.122	g/mile	0.5	5,466	mi/yr	9.94E-04	2.53E-05	4.61E-05	1.06E-03	3.69E-04
C-3576	Ford F150	CNG	200	2001	0.220	--	0.030	0.900	--	g/mile	0.5	5,466	mi/yr	6.63E-04	--	9.04E-05	2.71E-03	--
C-3624	Ford F150	CNG	260	2004	0.100	--	0.028	1.500	--	g/mile	0.5	5,466	mi/yr	3.01E-04	--	8.44E-05	4.52E-03	--
C-3768	GMC Sierra	CNG	300	2007	0.100	--	0.021	0.900	0.060	g/mile	0.5	5,466	mi/yr	3.01E-04	--	6.33E-05	2.71E-03	1.81E-04
C-3790	Chevrolet Silverado	CNG	300	2007	0.100	--	0.021	0.900	0.060	g/mile	0.5	5,466	mi/yr	3.01E-04	--	6.33E-05	2.71E-03	1.81E-04
C-3779	Chevrolet Silverado	CNG	300	2006	0.100	--	0.017	1.000	--	g/mile	0.5	5,466	mi/yr	3.01E-04	--	5.12E-05	3.01E-03	--
C-3789	Chevrolet	Gasoline	230	2000	0.646	0.005	0.120	4.058	0.069	g/mile	0.5	5,466	mi/yr	1.95E-03	1.63E-05	3.60E-04	1.22E-02	2.09E-04
C-5005	Ford Windstar	Gasoline	200	2001	0.360	0.005	0.049	3.037	0.069	g/mile	0.5	5,466	mi/yr	1.08E-03	1.46E-05	1.48E-04	9.15E-03	2.09E-04
C-5213	GMC Savana	CNG	295	2007	0.100	--	0.021	0.900	0.060	g/mile	0.5	5,466	mi/yr	3.01E-04	--	6.33E-05	2.71E-03	1.81E-04

Current Vehicles		Emission Factor												Annual Emissions (tpy)				
Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
885	Chevy Tahoe (Mark Thorpe)	Gasoline	350	2016	0.024	0.004	0.006	0.535	0.067	g/mile	0.5	5,466	mi/yr	7.11E-05	1.21E-05	1.90E-05	1.61E-03	2.01E-04
C-1129	Ford Escape	Gasoline	175	2007	0.027	0.004	0.007	0.617	0.063	g/mile	0.5	793	mi/yr	1.20E-05	1.70E-06	3.01E-06	2.70E-04	2.75E-05
C-1130	Ford Escape	Gasoline	175	2007	0.027	0.004	0.007	0.617	0.063	g/mile	0.5	946	mi/yr	1.43E-05	2.03E-06	3.59E-06	3.22E-04	3.28E-05
C-1131	Ford Escape	Gasoline	175	2007	0.027	0.004	0.007	0.617	0.063	g/mile	0.5	2,842	mi/yr	4.31E-05	6.09E-06	1.08E-05	9.67E-04	9.86E-05
C-2242	Chevy Astro Van	Gasoline	190	2005	0.033	0.004	0.010	0.862	0.063	g/mile	0.5	4,990	mi/yr	8.98E-05	1.22E-05	2.66E-05	2.37E-03	1.73E-04
C-3624	Ford F150	CNG	260	2004	0.100	--	0.028	1.500	--	g/mile	0.5	5,466	mi/yr	3.01E-04	--	8.44E-05	4.52E-03	--
C-3790	Chevrolet Silverado	CNG	300	2007	0.100	--	0.021	0.900	0.060	g/mile	0.5	5,466	mi/yr	3.01E-04	--	6.33E-05	2.71E-03	1.81E-04
C-3820	Ford F-150	Gasoline	350	2012	0.024	0.004	0.006	0.537	0.064	g/mile	0.5	4,962	mi/yr	6.67E-05	1.21E-05	1.70E-05	1.47E-03	1.75E-04
C-3872	Ford F-350 SD	CNG	400	2016	0.100	--	0.038	2.230	0.060	g/mile	0.5	5,466	mi/yr	3.01E-04	--	1.14E-04	6.72E-03	1.81E-04
C-5027	Honda Civic	CNG	150	2004	0.010	--	0.001	0.200	--	g/mile	0.5	5,466	mi/yr	3.01E-05	--	3.01E-06	6.03E-04	--
C-5095	Ford E-350 Van	Gasoline	275	2006	0.181	0.008	0.010	0.243	0.119	g/mile	0.5	15,727	mi/yr	1.57E-03	7.28E-05	8.56E-05	2.10E-03	1.04E-03
C-5140	Honda Civic	CNG	150	2005	0.010	--	0.001	0.200	--	g/mile	0.5	5,466	mi/yr	3.01E-05	--	3.01E-06	6.03E-04	--
C-5175	Chevy Impala	Gasoline	250	2007	0.027	0.003	0.007	0.618	0.063	g/mile	0.5	4,472	mi/yr	6.73E-05	8.38E-06	1.70E-05	1.52E-03	1.55E-04
C-5194	Honda Civic	CNG	150	2007	0.010	--	0.002	0.500	--	g/mile	0.5	5,466	mi/yr	3.01E-05	--	6.03E-06	1.51E-03	--
C-5195	Honda Civic	CNG	150	2007	0.010	--	0.002	0.500	--	g/mile	0.5	5,466	mi/yr	3.01E-05	--	6.03E-06	1.51E-03	--
C-5196	Honda Civic	CNG	150	2007	0.010	--	0.002	0.500	--	g/mile	0.5	5,466	mi/yr	3.01E-05	--	6.03E-06	1.51E-03	--
C-5204	Chevy Express Van	CNG	250	2007	0.100	--	0.021	0.900	--	g/mile	0.5	5,466	mi/yr	3.01E-04	--	6.33E-05	2.71E-03	--
C-5265	Ford Taurus	Gasoline	300	2011	0.027	0.003	0.007	0.618	0.063	g/mile	0.5	7,351	mi/yr	1.11E-04	1.38E-05	2.79E-05	2.50E-03	2.55E-04
C-5266	Ford Taurus	Gasoline	300	2011	0.027	0.003	0.007	0.618	0.063	g/mile	0.5	11,873	mi/yr	1.79E-04	2.23E-05	4.50E-05	4.04E-03	4.12E-04
C-5267	Ford Taurus	Gasoline	300	2011	0.027	0.003	0.007	0.618	0.063	g/mile	0.5	702	mi/yr	1.06E-05	1.32E-06	2.66E-06	2.39E-04	2.44E-05
C-5283	Honda Civic	CNG	150	2014	0.010	--	0.002	0.100	--	g/mile	0.5	5,466	mi/yr	3.01E-05	--	6.03E-06	3.01E-04	--

## OIAA Fleet Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
	<b>BAU 2023</b>	0.056	0.000	0.002	0.064
<b>Reduced 2023</b>	0.011	0.000	0.002	0.300	0.003

2017 Vehicles						Emission Factor					Annual Emissions (tpy)								
	Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
	C-2463	Chevrolet	CNG	300	2012	0.100	--	0.017	1.000	--	g/mile	0.5	5,466	mi/yr	3.01E-04	--	5.12E-05	3.01E-03	--

Current Vehicles						Emission Factor					Annual Emissions (tpy)								
	Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
	885	Chevy Tahoe (Mark Thorpe)	Gasoline	350	2022	0.014	0.003	0.004	0.511	0.065	g/mile	0.5	5,466	mi/yr	4.32E-05	9.22E-06	1.06E-05	1.54E-03	1.94E-04

## OIAA Fleet Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
BAU 2031	0.048	0.000	0.003	0.049	0.009
Reduced 2031	0.002	0.000	0.000	0.034	0.003

	2017 Vehicles					Emission Factor								Annual Emissions (tpy)					
	Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
	C-2463	Chevrolet	CNG	300	2020	0.1000	--	0.0170	1.0000	--		g/mile	0.5	5,466	mi/yr	3.01E-04	--	5.12E-05	3.01E-03

	Current Vehicles					Emission Factor								Annual Emissions (tpy)					
	Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
	885	Chevy Tahoe (Mark Thorpe)	Gasoline	350	2030	0.0123	0.0027	0.0023	0.4590	0.0636		g/mile	0.5	5,466	mi/yr	3.70E-05	8.15E-06	6.94E-06	1.38E-03

# Maintenance Contractor Fleet Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
<b>Total (2017)</b>	1.1036	0.0006	0.1388	3.6288	0.0505

On Road	Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor					EF Unit	Load Factor	Activity	Activity Unit	Annual Emissions (tpy)				
						NOx	SOx	VOC	CO	PM					NOx	SOx	VOC	CO	PM
Ops	C-2460	GMC Yukon 1500	Gasoline	300	2006	0.015	0.005	0.005	0.450	0.063	g/mile	0.5	1,681	mi/yr	1.41E-05	4.79E-06	4.24E-06	4.17E-04	5.83E-05
Ops	C-2465	Ford Crown Victoria	Gasoline	224	2008	0.027	0.003	0.007	0.614	0.063	g/mile	0.5	3,444	mi/yr	5.04E-05	6.27E-06	1.24E-05	1.16E-03	1.20E-04
Ops	C-2782	Ford Crown Victoria	Gasoline	224	2004	0.032	0.004	0.009	0.807	0.063	g/mile	0.5	3,450	mi/yr	6.05E-05	6.89E-06	1.67E-05	1.53E-03	1.20E-04
Ops	C-3637	GMC Sierra 2500	CNG	300	2004	0.100	--	0.017	1.000	--	g/mile	0.5	5,202	mi/yr	2.87E-04	--	4.87E-05	2.87E-03	--
Maintenance	C-3652	Ford F-450 SD	Gasoline	305	2004	0.200	0.010	0.010	0.243	0.138	g/mile	0.5	2,141	mi/yr	2.36E-04	1.14E-05	1.20E-05	2.87E-04	1.62E-04
Ops	C-3673	GMC Yukon 1500	Gasoline	300	2006	0.015	0.005	0.005	0.450	0.063	g/mile	0.5	3,444	mi/yr	2.89E-05	9.83E-06	8.68E-06	8.55E-04	1.19E-04
Ops	C-3703	Ford Expedition	Gasoline	300	2006	0.015	0.005	0.005	0.450	0.063	g/mile	0.5	3,444	mi/yr	2.89E-05	9.83E-06	8.68E-06	8.55E-04	1.19E-04
Ops	C-3704	Ford Expedition	Gasoline	300	2006	0.015	0.005	0.005	0.450	0.063	g/mile	0.5	3,444	mi/yr	2.89E-05	9.83E-06	8.68E-06	8.55E-04	1.19E-04
Maintenance	C-3775	Chevrolet Silverado 2500	CNG	300	2007	0.100	--	0.021	0.900	0.060	g/mile	0.5	4,693	mi/yr	2.59E-04	--	5.43E-05	2.33E-03	1.55E-04
Maintenance	C-3813	GMC C 5500	Propane	330	2009	0.140	--	0.130	7.000	0.000	g/bhp-hr	0.5	165	hr/yr	4.20E-03	--	3.90E-03	2.10E-01	--
Maintenance	C-3819	Ford F150	Gasoline	360	2012	0.024	0.004	0.006	0.537	0.064	g/mile	0.5	5,543	mi/yr	7.46E-05	1.35E-05	1.90E-05	1.64E-03	1.95E-04
Maintenance	C-5276	Ford Transit	Gasoline	136	2012	0.024	0.004	0.006	0.538	0.064	g/mile	0.5	165	mi/yr	2.20E-06	3.35E-07	5.67E-07	4.90E-05	5.81E-06
Maintenance	D-1645	Tymco Sweeper	CNG	200	2004	--	--	--	--	--	--	0.5	2,000	mi/yr	2.06E-02	--	--	6.04E-02	4.08E-04
Maintenance	D1646	Schwartz M6000 Sweeper	CNG	300	2004	--	--	--	--	--	--	0.5	2,000	mi/yr	2.06E-02	--	--	6.04E-02	4.08E-04
Maintenance	D-1648	Tennant Sweeper	CNG	300	2004	--	--	--	--	--	--	0.5	2,000	mi/yr	2.06E-02	--	--	6.04E-02	4.08E-04
Maintenance	D-1756	Acterra Broom Bear	CNG	250	2009	--	--	--	--	--	--	0.5	2,000	mi/yr	1.63E-02	--	--	6.03E-02	4.40E-04

Off Road	Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
Tier 4i	D-1767	Massey Ferguson Tractor	Diesel	92	2012	--	--	--	--	--	--	0.5	300	hr/yr	6.04E-02	1.16E-04	4.04E-03	8.12E-02	1.81E-03
	D-1852	John Deere Ride Mower	Diesel	26	2005	--	--	--	--	--	--	0.5	100	hr/yr	2.40E-02	3.99E-05	3.13E-03	1.30E-02	1.68E-03
	E-2892	Tennant Scrubber	Propane	40	1996	--	--	--	--	--	--	0.5	100	hr/yr	1.37E-01	--	--	1.01E-01	6.13E-04
	L-0103	John Deere Mower	Diesel	26	1998	--	--	--	--	--	--	0.5	100	hr/yr	3.53E-02	3.89E-05	9.86E-03	2.70E-02	3.29E-03
	O-0109	Komatsu Fork Lift	Propane	110	2001	--	--	--	--	--	--	0.5	300	hr/yr	1.69E-01	--	--	4.94E-01	1.08E-03
	O-0207	John Deere 1435 Mower	Diesel	26	2005	--	--	--	--	--	--	0.5	100	hr/yr	2.40E-02	3.99E-05	3.13E-03	1.30E-02	1.68E-03
	O-0213	John Deere 1435 Mower	Diesel	26	2005	--	--	--	--	--	--	0.5	100	hr/yr	2.40E-02	3.99E-05	3.13E-03	1.30E-02	1.68E-03
	O-0214	Tennant Sweeper	Propane	40	2006	--	--	--	--	--	--	0.5	100	hr/yr	1.97E-02	--	--	5.92E-02	4.12E-04
	O-0061	M. Ferguson 6265 Tractor	Diesel	96	2000	--	--	--	--	--	--	0.5	300	hr/yr	9.76E-02	5.93E-05	1.52E-02	5.34E-02	1.14E-02
	O-0060	Rino Mower	N/A	26	2000	--	--	--	--	--	--	0.5	100	hr/yr	3.01E-02	3.94E-05	3.48E-03	1.28E-02	1.67E-03
	LNLR 2500C	Arfld Painter	Gasoline	49	2005	--	--	--	--	--	--	0.5	100	hr/yr	--	--	--	--	--
	GTRACO	Arfld Painter	Gasoline	49	2005	--	--	--	--	--	--	0.5	100	hr/yr	--	--	--	--	--
	Snapper	Ride Mower	Gasoline	49	2000	--	--	--	--	--	--	0.5	100	hr/yr	2.02E-02	2.17E-05	9.67E-03	2.56E-01	1.36E-04
	Snapper	Ride Mower	Gasoline	49	2000	--	--	--	--	--	--	0.5	100	hr/yr	2.02E-02	2.17E-05	9.67E-03	2.56E-01	1.36E-04

Portable	Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
	D-1772	Sherwin IND Runway X	Gasoline	20	2012	1.045	0.003	1.281	74.722	0.095	g/bhp-hr	0.33	400	hr/yr	9.22E-03	3.07E-05	1.13E-02	6.59E-01	8.39E-04
	D-1773	Sherwin IND Runway X	Gasoline	20	2012	1.045	0.003	1.281	74.722	0.095	g/bhp-hr	0.33	400	hr/yr	9.22E-03	3.07E-05	1.13E-02	6.59E-01	8.39E-04
	D-1785	Concrete Saw	Gasoline	15	2013	1.682	0.004	1.995	87.173	1.225	g/bhp-hr	0.66	20	hr/yr	5.56E-04	1.32E-06	6.60E-04	2.88E-02	4.05E-04
	D-1843	Mitsu Target	Diesel	10	2015	1.808	0.003	0.226	1.208	0.069	g/bhp-hr	0.33	100	hr/yr	1.99E-03	3.72E-06	2.49E-04	1.33E-03	7.60E-05
	D-1844	Mitsu Target	Diesel	10	2015	1.808	0.003	0.226	1.208	0.069	g/bhp-hr	0.33	100	hr/yr	1.99E-03	3.72E-06	2.49E-04	1.33E-03	7.60E-05
	O-0037	Hydro Tek Pressure Washer	Gasoline	10	1999	0.722	0.003	3.759	77.660	0.163	g/bhp-hr	0.33	20	hr/yr	1.59E-04	6.45E-07	8.29E-04	1.71E-02	3.59E-05
	O-0159	Spraying Device	Gasoline	10	2001	0.743	0.003	3.356	94.537	1.023	g/bhp-hr	0.33	20	hr/yr	1.64E-04	6.95E-07	7.40E-04	2.08E-02	2.25E-04
	O-0234	Batts 245 Runway Target	Diesel	25	2005	1.808	0.003	0.226	1.208	0.129	g/bhp-hr	0.33	100	hr/yr	4.98E-03	9.29E-06	6.23E-04	3.33E-03	3.57E-04
	O-0235	Batts 245 Runway Target	Diesel	25	2005	1.808	0.003	0.226	1.208	0.129	g/bhp-hr	0.33	100	hr/yr	4.98E-03	9.29E-06	6.23E-04	3.33E-03	3.57E-04
	O-0236	Ingersoll Light Tower	Diesel	25	2005	1.808	0.003	0.226	1.208	0.129	g/bhp-hr	0.33	50	hr/yr	2.49E-03	4.64E-06	3.12E-04	1.67E-03	1.78E-04
	D-1414	L8-4MH Ingsol Light Tower	Diesel	25	1996	3.226	0.003	0.409	2.129	0.194	g/bhp-hr	0.33	50	hr/yr	4.45E-03	5.63E-06	5.63E-04	2.93E-03	2.67E-04
	O-0239	L8-4MH Ingsol Light Tower	Diesel	25	2007	1.808	0.003	0.226	1.208	0.129	g/bhp-hr	0.33	50	hr/yr	2.49E-03	4.66E-06	3.12E-04	1.67E-03	1.78E-04
Tier 2	D-1722	New Holland	Diesel	85	2006	1.467	0.001	0.129	1.175	0.081	g/bhp-hr	0.33	50	hr/yr	6.87E-03	6.57E-06	6.06E-04	5.51E-03	3.80E-04

## Maintenance Contractor Fleet Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
<b>2023</b>	0.629	0.001	0.051	2.840	0.025

	Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor					EF Unit	Load Factor	Activity	Activity Unit	Annual Emissions (tpy)									
						NOx	SOx	VOC	CO	PM					NOx	SOx	VOC	CO	PM					
On Road																								
Ops	C-2460	GMC Yukon 1500	Gasoline	300	2012	2006	0.0277	0.0044	0.0068	0.5506	0.0639	g/mile	0.5	1,681	mi/yr	2.56E-05	4.11E-06	6.33E-06	5.10E-04	5.92E-05				
Ops	C-2465	Ford Crown Victoria	Gasoline	224	2014	2008	0.0246	0.0028	0.0054	0.5013	0.0654	g/mile	0.5	1,780	mi/yr	2.41E-05	2.77E-06	5.34E-06	4.92E-04	6.42E-05				
Ops	C-2782	Ford Crown Victoria	Gasoline	224	2010	2004	0.0277	0.0031	0.0060	0.5410	0.0632	g/mile	0.5	3,450	mi/yr	5.26E-05	5.83E-06	1.14E-05	1.03E-03	1.20E-04				
Ops	C-3637	GMC Sierra 2500	CNG	300	2010	2004	0.1600	--	0.0400	2.9000	0.0010	g/bhp-hr	0.5	210	hr/yr	5.56E-03	--	1.39E-03	1.01E-01	3.47E-05				
Maintenance	C-3652	Ford F-450 SD	Gasoline	305	2010	2004	0.0882	0.0096	0.0059	0.1252	0.1377	g/mile	0.5	2,141	mi/yr	1.04E-04	1.13E-05	6.93E-06	1.48E-04	1.63E-04				
Ops	C-3673	GMC Yukon 1500	Gasoline	300	2012	2006	0.0277	0.0044	0.0068	0.5506	0.0639	g/mile	0.5	1,780	mi/yr	2.71E-05	4.35E-06	6.70E-06	5.40E-04	6.27E-05				
Ops	C-3703	Ford Expedition	Gasoline	300	2012	2006	0.0277	0.0044	0.0068	0.5506	0.0639	g/mile	0.5	1,780	mi/yr	2.71E-05	4.35E-06	6.70E-06	5.40E-04	6.27E-05				
Ops	C-3704	Ford Expedition	Gasoline	300	2012	2006	0.0277	0.0044	0.0068	0.5506	0.0639	g/mile	0.5	1,780	mi/yr	2.71E-05	4.35E-06	6.70E-06	5.40E-04	6.27E-05				
Maintenance	C-3775	Chevrolet Silverado 2500	CNG	300	2013	2007	0.1500	--	0.0200	4.1000	0.0030	g/bhp-hr	0.5	190	hr/yr	4.71E-03	--	6.28E-04	1.29E-01	9.42E-05				
Maintenance	C-3813	GMC C 5500	Propane	330	2015	2009	0.1400	--	0.1300	7.0000	0.0000	g/bhp-hr	0.5	2,625	hr/yr	2.03E-04	--	1.88E-04	1.01E-02	0.00E+00				
Maintenance	C-3819	Ford F150	Gasoline	360	2018	2012	0.0240	0.0037	0.0067	0.5492	0.0673	g/mile	0.5	5,543	mi/yr	7.34E-05	1.12E-05	2.05E-05	1.68E-03	2.06E-04				
Maintenance	C-5276	Ford Transit	Gasoline	136	2018	2012	0.0239	0.0030	0.0067	0.5480	0.0673	g/mile	0.5	2,625	mi/yr	3.46E-05	4.41E-06	9.65E-06	7.93E-04	9.73E-05				
Maintenance	D-1645	Tymco Sweeper	CNG	200	2010	2004	--	--	--	--	--	--	0.5	2,000	mi/yr	1.64E-02	0.00E+00	0.00E+00	6.09E-02	4.13E-04				
Maintenance	D1646	Schwartz M6000 Sweeper	CNG	300	2010	2004	--	--	--	--	--	--	0.5	2,000	mi/yr	1.64E-02	0.00E+00	0.00E+00	6.09E-02	4.13E-04				
Maintenance	D-1648	Tennant Sweeper	CNG	300	2010	2004	--	--	--	--	--	--	0.5	2,000	mi/yr	1.64E-02	0.00E+00	0.00E+00	6.09E-02	4.13E-04				
Maintenance	D-1756	Acterra Broom Bear	CNG	250	2015	2009	--	--	--	--	--	--	0.5	2,000	mi/yr	1.60E-02	0.00E+00	0.00E+00	5.89E-02	4.30E-04				

Off Road																									
	Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor					EF Unit	Load Factor	Activity	Activity Unit	Annual Emissions (tpy)										
						NOx	SOx	VOC	CO	PM					NOx	SOx	VOC	CO	PM						
	D-1521	John Deere Mower	Diesel	269	2006	2000	3.0000	--	--	2.6000	0.1500	g/bhp-hr	0.5	300	hr/yr	1.33E-01	--	--	1.16E-01	6.67E-03					
	D-1767	Massey Ferguson Tractor	Diesel	92	2018	2012	--	--	--	--	--	--	0.5	300	hr/yr	3.46E-02	1.20E-04	3.19E-03	8.39E-02	3.08E-04					
	D-1852	John Deere Ride Mower	Diesel	26	2011	2005	--	--	--	--	--	--	0.5	100	hr/yr	2.40E-02	3.99E-05	3.13E-03	1.29E-02	8.94E-04					
	E-2892	Tennant Scrubber	Propane	40	2002	1996	--	--	--	--	--	--	0.5	100	hr/yr	1.00E-01	0.00E+00	0.00E+00	1.07E-01	6.46E-04					
	L-0103	John Deere Mower	Diesel	26	2004	1998	--	--	--	--	--	--	0.5	100	hr/yr	3.25E-02	4.26E-05	3.77E-03	1.38E-02	1.80E-03					
	O-0109	Komatsu Fork Lift	Propane	110	2007	2001	--	--	--	--	--	--	0.5	300	hr/yr	4.68E-02	0.00E+00	0.00E+00	4.87E-01	1.06E-03					
	O-0207	John Deere 1435 Mower	Diesel	26	2011	2005	--	--	--	--	--	--	0.5	100	hr/yr	2.40E-02	3.99E-05	3.13E-03	1.29E-02	8.94E-04					
	O-0213	John Deere 1435 Mower	Diesel	26	2011	2005	--	--	--	--	--	--	0.5	100	hr/yr	2.40E-02	3.99E-05	3.13E-03	1.29E-02	8.94E-04					
	O-0214	Tennant Sweeper	Propane	40	2012	2006	--	--	--	--	--	--	0.5	100	hr/yr	1.55E-02	0.00E+00	0.00E+00	5.76E-02	4.02E-04					
	O-0061	M. Ferguson 6265 Tractor	Diesel	96	2006	2000	--	--	--	--	--	--	0.5	300	hr/yr	7.25E-02	6.51E-05	5.22E-03	5.18E-02	4.35E-03					
	O-0060	Rino Mower	N/A	26	2006	2000	--	--	--	--	--	--	0.5	100	hr/yr	2.38E-02	3.96E-05	3.11E-03	1.28E-02	1.67E-03					
	LNLZR 2500C	Arfld Painter	Gasoline	49	2011	2005	--	--	--	--	--	--	0.5	100	hr/yr	--	--	--	--	--					
	GTRACO	Arfld Painter	Gasoline	49	2011	2005	--	--	--	--	--	--	0.5	100	hr/yr	--	--	--	--	--					
	Snapper	Ride Mower	Gasoline	49	2006	2000	--	--	--	--	--	--	0.5	100	hr/yr	6.30E-03	2.30E-05	2.38E-03	2.14E-01	1.45E-04					
	Snapper	Ride Mower	Gasoline	49	2006	2000	--	--	--	--	--	--	0.5	100	hr/yr	6.30E-03	2.30E-05	2.38E-03	2.14E-01	1.45E-04					

Portable																									
	Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor					EF Unit	Load Factor	Activity	Activity Unit	Annual Emissions (tpy)										
						NOx	SOx	VOC	CO	PM					NOx	SOx	VOC	CO	PM						
	D-1617	Sullair Compressor	Diesel	80	2008	2002	1.5208	0.0013	0.2878	1.0528	0.0699	g/bhp-hr	0.33	20	hr/yr	2.68E-03	2.22E-06	5.08E-04	1.86E-03	1.23E-04					
	D-1772	Sherwin IND Runway X	Gasoline	20	2018	2012	1.0570	0.0035	1.2870	75.6335	0.0942	g/bhp-hr	0.33	400	hr/yr	9.32E-03	3.10E-05	1.13E-02	6.67E-01	8.31E-04					
	D-1773	Sherwin IND Runway X	Gasoline	20	2018	2012	1.0570	0.0035	1.2870	75.6335	0.0942	g/bhp-hr	0.33	400	hr/yr	9.32E-03	3.10E-05	1.13E-02	6.67E-01	8.31E-04					
	D-1785	Concrete Saw	Gasoline	15	2019	2013	1.6816	0.0040	1.9939	87.1185	1.2251	g/bhp-hr	0.66	20	hr/yr	5.56E-04	1.32E-06	6.59E-04	2.88E-02	4.05E-04					
	D-1843	Mitsu Target	Diesel	10	2021	2015	1.8083	0.0034	0.2262	1.2084	0.0689	g/bhp-hr	0.33	100	hr/yr	1.99E-03	3.73E-06	2.49E-04	1.33E-03	7.59E-05					
	D-1844	Mitsu Target	Diesel	10	2021	2015	1.8083	0.0034	0.2262	1.2084	0.0689	g/bhp-hr	0.33	100	hr/yr	1.99E-03	3.73E-06	2.49E-04	1.33E-03	7.59E-05					
	O-0037	Hydro Tek Pressure Washer	Gasoline	10	2005	1999	1.1222	0.0029	1.6110	46.3769	0.1626	g/bhp-hr	0.33	20	hr/yr	2.47E-04	6.38E-07	3.55E-04	1.02E-02	3.59E-05					
	O-0159	Spraying Device	Gasoline	10	2007	2001	1.3443	0.0031	1.6824	73.5052	1.0199	g/bhp-hr	0.33	20	hr/yr	2.96E-04	6.91E-07	3.71E-04	1.62E-02	2.25E-04					
	O-0234	Batts 245 Runway Target	Diesel	25	2011	2005	1.8085	0.0034	0.2262	1.2086	0.0689	g/bhp-hr	0.33	100	hr/yr	4.98E-03	9.28E-06	6.23E-04	3.33E-03	1.90E-04					
	O-0235	Batts 245 Runway Target	Diesel	25	2011	2005	1.8085	0.0034	0.2262	1.2086	0.0689	g/bhp-hr	0.33	100	hr/yr	4.98E-03	9.28E-06	6.23E-04	3.33E-03	1.90E-04					
	O-0236	Ingersoll Light Tower	Diesel	25	2011	2005	1.8085	0.0034	0.2262	1.2086	0.0689	g/bhp-hr	0.33	50	hr/yr	2.49E-03	4.64E-06	3.12E-04	1.67E-03	9.49E-05					
	D-1414	L8-4MH Ingsol Light Tower	Diesel	25	2002	1996	2.3880	0.0034	0.2783	1.2085	0.1429	g/bhp-hr	0.33	50	hr/yr	3.29E-03	4.66E-06	3.83E-04	1.67E-03	1.97E-04					
	O-0239	L8-4MH Ingsol Light Tower	Diesel	25	2013	2007	1.8083	0.0034	0.2262	1.2084	0.0689	g/bhp-hr	0.33	50	hr/yr	2.49E-03	4.65E-06	3.12E-04	1.67E-03	9.49E-05					
	D-1722	New Holland	Diesel	85	2012	2006	0.8513	0.0014	0.0683	1.0815	0.0644	g/bhp-hr	0.33	50	hr/yr	3.99E-03	6.64E-06	3.20E-04	5.07E-03	3.02E-04					

### Maintenance Contractor Fleet Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
<b>2031</b>	0.365	0.001	0.052	2.588	0.013

On Road	Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor					EF Unit	Load Factor	Activity	Activity Unit	Annual Emissions (tpy)				
						NOx	SOx	VOC	CO	PM					NOx	SOx	VOC	CO	PM
Ops	C-2460	GMC Yukon 1500	Gasoline	300	2020	0.0213	0.0034	0.0059	0.5624	0.0658	g/mile	0.5	1,681	mi/yr	1.97E-05	3.11E-06	5.43E-06	5.21E-04	6.09E-05
Ops	C-2465	Ford Crown Victoria	Gasoline	224	2022	0.0187	0.0022	0.0034	0.4784	0.0645	g/mile	0.5	3,444	mi/yr	3.56E-05	4.21E-06	6.37E-06	9.08E-04	1.22E-04
Ops	C-2782	Ford Crown Victoria	Gasoline	224	2018	0.0250	0.0025	0.0052	0.5148	0.0673	g/mile	0.5	3,450	mi/yr	4.76E-05	4.83E-06	9.86E-06	9.79E-04	1.28E-04
Ops	C-3637	GMC Sierra 2500	CNG	300	2018	0.1000	--	0.0170	1.0000	--	g/mile	0.5	5,202	mi/yr	2.87E-04	--	4.87E-05	2.87E-03	--
Maintenance	C-3652	Ford F-450 SD	Gasoline	305	2018	0.0587	0.0087	0.0046	0.1257	0.1397	g/mile	0.5	2,141	mi/yr	6.93E-05	1.03E-05	5.43E-06	1.48E-04	1.65E-04
Ops	C-3673	GMC Yukon 1500	Gasoline	300	2020	0.0213	0.0034	0.0059	0.5624	0.0658	g/mile	0.5	3,444	mi/yr	4.05E-05	6.38E-06	1.11E-05	1.07E-03	1.25E-04
Ops	C-3703	Ford Expedition	Gasoline	300	2020	0.0213	0.0034	0.0059	0.5624	0.0658	g/mile	0.5	3,444	mi/yr	4.05E-05	6.38E-06	1.11E-05	1.07E-03	1.25E-04
Ops	C-3704	Ford Expedition	Gasoline	300	2020	0.0213	0.0034	0.0059	0.5624	0.0658	g/mile	0.5	3,444	mi/yr	4.05E-05	6.38E-06	1.11E-05	1.07E-03	1.25E-04
Maintenance	C-3775	Chevrolet Silverado 2500	CNG	300	2021	0.1000	--	0.0210	0.9000	0.0600	g/mile	0.5	4,693	mi/yr	2.59E-04	--	5.43E-05	2.33E-03	1.55E-04
Maintenance	C-3813	GMC C 5500	Propane	330	2023	0.1400	--	0.1300	7.0000	0.0000	g/bhp-hr	0.5	4,126	mi/yr	3.18E-04	--	2.96E-04	1.59E-02	--
Maintenance	C-3819	Ford F150	Gasoline	360	2026	0.0158	0.0027	0.0026	0.4713	0.0642	g/mile	0.5	5,543	mi/yr	4.82E-05	8.25E-06	7.91E-06	1.44E-03	1.96E-04
Maintenance	C-5276	Ford Transit	Gasoline	136	2026	0.0154	0.0022	0.0026	0.4703	0.0642	g/mile	0.5	4,126	mi/yr	3.50E-05	5.08E-06	5.83E-06	1.07E-03	1.46E-04
Maintenance	D-1645	Tymco Sweeper	CNG	200	2018	--	--	--	--	--	--	0.5	2,000	mi/yr	1.64E-02	--	--	6.11E-02	4.14E-04
Maintenance	D1646	Schwartz M6000 Sweeper	CNG	300	2018	--	--	--	--	--	--	0.5	2,000	mi/yr	1.64E-02	--	--	6.11E-02	4.14E-04
Maintenance	D-1648	Tennant Sweeper	CNG	300	2018	--	--	--	--	--	--	0.5	2,000	mi/yr	1.64E-02	--	--	6.11E-02	4.14E-04
Maintenance	D-1756	Acterra Broom Bear	CNG	250	2023	--	--	--	--	--	--	0.5	2,000	mi/yr	1.63E-02	--	--	6.01E-02	4.38E-04

Off Road	Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
	D-1521	John Deere Mower	Diesel	269	2014	0.3000	--	0.1400	2.6000	0.0100	g/bhp-hr	0.5	300	hr/yr	1.33E-02	--	6.23E-03	1.16E-01	4.45E-04
	D-1767	Massey Ferguson Tractor	Diesel	92	2026	--	--	--	--	--	--	0.5	300	hr/yr	3.93E-02	1.36E-04	3.63E-03	9.54E-02	3.50E-04
	D-1852	John Deere Ride Mower	Diesel	26	2019	--	--	--	--	--	--	0.5	100	hr/yr	2.39E-02	3.98E-05	3.13E-03	1.29E-02	8.93E-04
	E-2892	Tennant Scrubber	Propane	40	2010	--	--	--	--	--	--	0.5	100	hr/yr	1.74E-02	0.00E+00	0.00E+00	6.57E-02	3.96E-04
	L-0103	John Deere Mower	Diesel	26	2012	--	--	--	--	--	--	0.5	100	hr/yr	2.26E-02	3.77E-05	2.94E-03	1.22E-02	8.44E-04
	O-0109	Komatsu Fork Lift	Propane	110	2015	--	--	--	--	--	--	0.5	300	hr/yr	4.81E-02	0.00E+00	0.00E+00	4.99E-01	1.09E-03
	O-0207	John Deere 1435 Mower	Diesel	26	2019	--	--	--	--	--	--	0.5	100	hr/yr	2.39E-02	3.98E-05	3.13E-03	1.29E-02	8.93E-04
	O-0213	John Deere 1435 Mower	Diesel	26	2019	--	--	--	--	--	--	0.5	100	hr/yr	2.39E-02	3.98E-05	3.13E-03	1.29E-02	8.93E-04
	O-0214	Tennant Sweeper	Propane	40	2020	--	--	--	--	--	--	0.5	100	hr/yr	1.64E-02	0.00E+00	0.00E+00	6.08E-02	4.26E-04
	O-0061	M. Ferguson 6265 Tractor	Diesel	96	2014	--	--	--	--	--	--	0.5	300	hr/yr	2.68E-02	4.82E-05	2.68E-03	3.78E-02	1.68E-04
	O-0060	Rino Mower	N/A	26	2014	--	--	--	--	--	--	0.5	100	hr/yr	2.42E-02	4.02E-05	3.16E-03	1.31E-02	9.02E-04
	LNLZR 2500C	Arfid Painter	Gasoline	49	2019	--	--	--	--	--	--	0.5	100	hr/yr	--	--	--	--	--
	GTRACO	Arfid Painter	Gasoline	49	2019	--	--	--	--	--	--	0.5	100	hr/yr	--	--	--	--	--
	Snapper	Ride Mower	Gasoline	49	2014	--	--	--	--	--	--	0.5	100	hr/yr	3.39E-03	2.10E-05	2.10E-03	1.95E-01	1.32E-04
	Snapper	Ride Mower	Gasoline	49	2014	--	--	--	--	--	--	0.5	100	hr/yr	3.39E-03	2.10E-05	2.10E-03	1.95E-01	1.32E-04

Portable	Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
	D-1617	Sullair Compressor	Diesel	80	2016	1.5208	0.0013	0.2878	1.0528	0.0699	g/bhp-hr	0.33	20	hr/yr	2.68E-03	2.22E-06	5.08E-04	1.86E-03	1.23E-04
	D-1772	Sherwin IND Runway X	Gasoline	20	2026	1.0552	0.0035	1.2859	75.4935	0.0943	g/bhp-hr	0.33	400	hr/yr	9.31E-03	3.10E-05	1.13E-02	6.66E-01	8.32E-04
	D-1773	Sherwin IND Runway X	Gasoline	20	2026	1.0552	0.0035	1.2859	75.4935	0.0943	g/bhp-hr	0.33	400	hr/yr	9.31E-03	3.10E-05	1.13E-02	6.66E-01	8.32E-04
	D-1785	Concrete Saw	Gasoline	15	2027	1.6809	0.0040	1.9930	87.0747	1.2250	g/bhp-hr	0.66	20	hr/yr	5.56E-04	1.32E-06	6.59E-04	2.88E-02	4.05E-04
	D-1843	Mitsu Target	Diesel	10	2029	1.8084	0.0034	0.2262	1.2085	0.0689	g/bhp-hr	0.33	100	hr/yr	1.99E-03	3.72E-06	2.49E-04	1.33E-03	7.60E-05
	D-1844	Mitsu Target	Diesel	10	2029	1.8084	0.0034	0.2262	1.2085	0.0689	g/bhp-hr	0.33	100	hr/yr	1.99E-03	3.72E-06	2.49E-04	1.33E-03	7.60E-05
	O-0037	Hydro Tek Pressure Washer	Gasoline	10	2013	0.7156	0.0029	1.2860	47.2575	0.1626	g/bhp-hr	0.33	20	hr/yr	1.58E-04	6.45E-07	2.84E-04	1.04E-02	3.59E-05
	O-0159	Spraying Device	Gasoline	10	2015	1.3401	0.0031	1.6796	73.3872	1.0186	g/bhp-hr	0.33	20	hr/yr	2.95E-04	6.89E-07	3.70E-04	1.62E-02	2.25E-04
	O-0234	Batts 245 Runway Target	Diesel	25	2019	1.8083	0.0034	0.2262	1.2085	0.0689	g/bhp-hr	0.33	100	hr/yr	4.98E-03	9.31E-06	6.23E-04	3.33E-03	1.90E-04
	O-0235	Batts 245 Runway Target	Diesel	25	2019	1.8083	0.0034	0.2262	1.2085	0.0689	g/bhp-hr	0.33	100	hr/yr	4.98E-03	9.31E-06	6.23E-04	3.33E-03	1.90E-04
	O-0236	Ingersoll Light Tower	Diesel	25	2019	1.8083	0.0034	0.2262	1.2085	0.0689	g/bhp-hr	0.33	50	hr/yr	2.49E-03	4.66E-06	3.12E-04	1.67E-03	9.49E-05
	D-1414	L8-4MH Ingersoll Light Tower	Diesel	25	2010	1.8084	0.0034	0.2262	1.2085	0.0647	g/bhp-hr	0.33	50	hr/yr	2.49E-03	4.65E-06	3.12E-04	1.67E-03	8.92E-05
	O-0239	L8-4MH Ingersoll Light Tower	Diesel	25	2021	1.8083	0.0034	0.2262	1.2084	0.0689	g/bhp-hr	0.33	50	hr/yr	2.49E-03	4.65E-06	3.12E-04	1.67E-03	9.49E-05
	D-1722	New Holland	Diesel	85	2020	0.4133	0.0014	0.0487	1.1801	0.0351	g/bhp-hr	0.33	50	hr/yr	1.94E-03	6.71E-06	2.28E-04	5.53E-03	1.64E-04

## Maintenance Contractor Fleet Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
<b>Total (2017)</b>	0.1895	0.0007	0.0139	0.4307	0.0151

	Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor					EF Unit	Load Factor	Activity	Activity Unit	Annual Emissions (tpy)					
						NOx	SOx	VOC	CO	PM					NOx	SOx	VOC	CO	PM	
<b>On-Road</b>	C-1067	FORD RANGER PICKUP	Gasoline	119	1998	0.932	0.005	0.211	7.115	0.069	g/mile	0.5	2,846	mi/yr	1.46E-03	7.60E-06	3.32E-04	1.12E-02	1.09E-04	
	C-1069	FORD RANGER PICKUP	Gasoline	119	1998	0.932	0.005	0.211	7.115	0.069	g/mile	0.5	4,528	mi/yr	2.33E-03	1.21E-05	5.28E-04	1.78E-02	1.73E-04	
	C-2459	FORD F250 CREW CAB	Gasoline	300	2006	0.181	0.008	0.010	0.243	0.119	g/mile	0.5	7,037	mi/yr	7.04E-04	3.26E-05	3.83E-05	9.41E-04	4.63E-04	
	C-3099	GMC SIERRA 3500	Gasoline	200	1992	2.636	0.009	0.338	9.677	0.131	g/mile	0.5	6,216	mi/yr	9.03E-03	2.94E-05	1.16E-03	3.32E-02	4.47E-04	
	C-3289	GMC SIERRA 3500	Gasoline	200	1994	2.630	0.009	0.336	9.594	0.131	g/mile	0.5	3,903	mi/yr	5.66E-03	1.84E-05	7.23E-04	2.06E-02	2.81E-04	
	C-3484	CHEV 3500	Gasoline	245	1998	0.348	0.008	0.016	0.371	0.122	g/mile	0.5	5,517	mi/yr	1.06E-03	2.56E-05	4.87E-05	1.13E-03	3.72E-04	
	C-3486	CHEV 3500	Gasoline	245	1998	0.348	0.008	0.016	0.371	0.122	g/mile	0.5	2,284	mi/yr	4.38E-04	1.06E-05	2.02E-05	4.67E-04	1.54E-04	
	C-3487	CHEV 3500	Gasoline	245	1998	0.348	0.008	0.016	0.371	0.122	g/mile	0.5	16,893	mi/yr	3.24E-03	7.83E-05	1.49E-04	3.45E-03	1.14E-03	
	C-3699	GMC SIERRA 3500	Gasoline	300	2006	0.181	0.008	0.010	0.243	0.119	g/mile	0.5	6,534	mi/yr	6.53E-04	3.02E-05	3.56E-05	8.74E-04	4.30E-04	
	C-3700	GMC SIERRA 3500	Gasoline	300	2006	0.181	0.008	0.010	0.243	0.119	g/mile	0.5	6,534	mi/yr	6.53E-04	3.02E-05	3.56E-05	8.74E-04	4.30E-04	
	C-3727	GMC SIERRA 2500	Gasoline	300	2006	0.181	0.008	0.010	0.243	0.119	g/mile	0.5	6,534	mi/yr	6.53E-04	3.02E-05	3.56E-05	8.74E-04	4.30E-04	
	C-3728	GMC SIERRA 2500	Gasoline	300	2006	0.181	0.008	0.010	0.243	0.119	g/mile	0.5	6,534	mi/yr	6.53E-04	3.02E-05	3.56E-05	8.74E-04	4.30E-04	
	C-3729	GMC SIERRA 2500	Gasoline	300	2006	0.181	0.008	0.010	0.243	0.119	g/mile	0.5	6,534	mi/yr	6.53E-04	3.02E-05	3.56E-05	8.74E-04	4.30E-04	
	C-3750	FORD F550 TOW TRUCK	Gasoline	305	2007	0.149	0.018	0.009	0.216	0.201	g/mile	0.5	1,000	mi/yr	8.19E-05	9.73E-06	4.96E-06	1.19E-04	1.11E-04	
	C-3788	CHEV 2500	CNG	300	2007	0.100	--	0.210	0.900	0.060	g/mile	0.5	6,534	mi/yr	3.60E-04	--	7.56E-04	3.24E-03	2.16E-04	
	C-3822	FORD F-350	Gasoline	383	2012	0.048	0.008	0.006	0.112	0.120	g/mile	0.5	5,660	mi/yr	1.49E-04	2.62E-05	1.78E-05	3.49E-04	3.74E-04	
	C-3863	FORD F-350	Gasoline	383	2015	0.058	0.008	0.007	0.116	0.121	g/mile	0.5	6,534	mi/yr	2.07E-04	2.96E-05	2.51E-05	4.16E-04	4.36E-04	
	C-3866	FORD F-250	Gasoline	383	2015	0.058	0.008	0.007	0.116	0.121	g/mile	0.5	6,534	mi/yr	2.07E-04	2.96E-05	2.51E-05	4.16E-04	4.36E-04	
	C-3867	FORD F-250	Gasoline	383	2015	0.058	0.008	0.007	0.116	0.121	g/mile	0.5	6,534	mi/yr	2.07E-04	2.96E-05	2.51E-05	4.16E-04	4.36E-04	
	C-5003	FORD F-150	Gasoline	200	2001	0.477	0.005	0.097	3.566	0.069	g/mile	0.5	11,030	mi/yr	2.90E-03	3.28E-05	5.91E-04	2.17E-02	4.21E-04	
	C-5004	FORD WINDSTAR MINIVAN	Gasoline	200	2001	0.360	0.005	0.049	3.037	0.069	g/mile	0.5	5,954	mi/yr	1.18E-03	1.59E-05	1.61E-04	9.97E-03	2.28E-04	
	C-5274	FORD TRANSIT CONNECT	CNG	136	2012	0.010	--	0.002	0.200	0.010	g/mile	0.5	6,534	mi/yr	3.60E-05	--	7.20E-06	7.20E-04	3.60E-05	
	O-0079	C3500 29' Bucket Truck	Gasoline	300	2001	0.330	0.010	0.015	0.355	0.141	g/mile	0.5	1,000	mi/yr	1.82E-04	5.31E-06	8.50E-06	1.96E-04	7.75E-05	
	C-3476	C2500 Service Body	Gasoline	255	1998	0.348	0.008	0.016	0.371	0.122	g/mile	0.5	6,534	mi/yr	1.25E-03	3.03E-05	5.77E-05	1.34E-03	4.41E-04	
	C-3485	C3500 Service Body	Gasoline	255	1998	0.348	0.008	0.016	0.371	0.122	g/mile	0.5	6,534	mi/yr	1.25E-03	3.03E-05	5.77E-05	1.34E-03	4.41E-04	
	<b>Off-Road</b>	D-1618	PRESSURE WASHER	Gasoline	10	2003	1.127	0.003	1.617	46.702	0.163	g/bhp-hr	0.33	20	hr/yr	2.49E-04	6.42E-07	3.57E-04	1.03E-02	3.59E-05
		D-1766	CASE BACKHOE	Diesel	85	2012	0.788	0.002	0.053	1.059	0.024	g/bhp-hr	0.5	500	hr/yr	3.69E-02	7.07E-05	2.47E-03	4.96E-02	1.11E-03
		O-0131	Forklift	Propane	50	2001	6.549	--	--	7.617	0.030	g/bhp-hr	0.5	100	hr/yr	3.61E-02	--	--	4.20E-02	1.65E-04
O-0077		Manlift	Propane	24.5	2001	6.549	--	--	7.617	0.030	g/bhp-hr	0.5	100	hr/yr	1.77E-02	--	--	2.06E-02	8.10E-05	
O-0192		Manlift	Propane	24.5	2005	2.068	--	--	4.461	0.015	g/bhp-hr	0.5	100	hr/yr	5.59E-03	--	--	1.20E-02	3.99E-05	
O-0193		Manlift	Propane	24.5	2005	2.068	--	--	4.461	0.015	g/bhp-hr	0.5	100	hr/yr	5.59E-03	--	--	1.20E-02	3.99E-05	
O-0237		Manlift	Propane	24.5	2011	1.348	--	--	47.957	0.173	g/bhp-hr	0.5	100	hr/yr	3.64E-03	--	--	1.30E-01	4.68E-04	
Tier 0		D-1324	Skiploader w/36" Backhoe	Diesel	75	1996	2.938	0.001	0.371	1.295	0.253	g/bhp-hr	0.5	200	hr/yr	4.86E-02	2.35E-05	6.13E-03	2.14E-02	4.18E-03



## Maintenance Contractor Fleet Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
<b>Total (current)</b>	0.090	0.001	0.009	0.415	0.014

	Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor					EF Unit	Load Factor	Activity	Activity Unit	Annual Emissions (tpy)				
						NOx	SOx	VOC	CO	PM					NOx	SOx	VOC	CO	PM
<b>On Road</b>	C-1067	FORD RANGER PICKUP	Gasoline	119	2004	0.0361	0.0046	0.0095	0.9573	0.0630	g/mile	0.5	2,846	mi/yr	5.66E-05	7.15E-06	1.50E-05	1.50E-03	9.88E-05
	C-1069	FORD RANGER PICKUP	Gasoline	119	2004	0.0361	0.0046	0.0095	0.9573	0.0630	g/mile	0.5	4,528	mi/yr	9.01E-05	1.14E-05	2.38E-05	2.39E-03	1.57E-04
	C-2459	FORD F250 CREW CAB	Gasoline	300	2012	0.0516	0.0084	0.0054	0.1218	0.1199	g/mile	0.5	7,037	mi/yr	2.00E-04	3.26E-05	2.11E-05	4.73E-04	4.65E-04
	C-3099	GMC SIERRA 3500	Gasoline	200	1998	0.3544	0.0084	0.0159	0.3758	0.1224	g/mile	0.5	6,216	mi/yr	1.21E-03	2.88E-05	5.45E-05	1.29E-03	4.19E-04
	C-3289	GMC SIERRA 3500	Gasoline	200	2000	0.3540	0.0084	0.0158	0.3713	0.1224	g/mile	0.5	3,903	mi/yr	7.61E-04	1.81E-05	3.39E-05	7.99E-04	2.63E-04
	C-3484	CHEV 3500	Gasoline	245	2004	0.2329	0.0084	0.0105	0.2416	0.1194	g/mile	0.5	5,517	mi/yr	7.08E-04	2.55E-05	3.18E-05	7.35E-04	3.63E-04
	C-3486	CHEV 3500	Gasoline	245	2004	0.2329	0.0084	0.0105	0.2416	0.1194	g/mile	0.5	2,284	mi/yr	2.93E-04	1.06E-05	1.32E-05	3.04E-04	1.50E-04
	C-3487	CHEV 3500	Gasoline	245	2004	0.2329	0.0084	0.0105	0.2416	0.1194	g/mile	0.5	16,893	mi/yr	2.17E-03	7.81E-05	9.74E-05	2.25E-03	1.11E-03
	C-3699	GMC SIERRA 3500	Gasoline	300	2012	0.0516	0.0084	0.0054	0.1218	0.1199	g/mile	0.5	6,534	mi/yr	1.86E-04	3.02E-05	1.96E-05	4.39E-04	4.32E-04
	C-3700	GMC SIERRA 3500	Gasoline	300	2012	0.0516	0.0084	0.0054	0.1218	0.1199	g/mile	0.5	6,534	mi/yr	1.86E-04	3.02E-05	1.96E-05	4.39E-04	4.32E-04
	C-3727	GMC SIERRA 2500	Gasoline	300	2012	0.0516	0.0084	0.0054	0.1218	0.1199	g/mile	0.5	6,534	mi/yr	1.86E-04	3.02E-05	1.96E-05	4.39E-04	4.32E-04
	C-3728	GMC SIERRA 2500	Gasoline	300	2012	0.0516	0.0084	0.0054	0.1218	0.1199	g/mile	0.5	6,534	mi/yr	1.86E-04	3.02E-05	1.96E-05	4.39E-04	4.32E-04
	C-3729	GMC SIERRA 2500	Gasoline	300	2012	0.0516	0.0084	0.0054	0.1218	0.1199	g/mile	0.5	6,534	mi/yr	1.86E-04	3.02E-05	1.96E-05	4.39E-04	4.32E-04
	C-3750	FORD F550 TOW TRUCK	Gasoline	305	2013	0.0779	0.0175	0.0082	0.1847	0.2022	g/mile	0.5	1,000	mi/yr	4.29E-05	9.65E-06	4.51E-06	1.02E-04	1.11E-04
	C-3788	CHEV 2500	CNG	300	2013	0.1000	--	0.2100	0.9000	0.0600	g/mile	0.5	6,534	mi/yr	3.60E-04	--	7.56E-04	3.24E-03	2.16E-04
	C-3822	FORD F-350	Gasoline	383	2018	0.0350	0.0076	0.0043	0.1056	0.1215	g/mile	0.5	5,660	mi/yr	1.09E-04	2.36E-05	1.34E-05	3.29E-04	3.79E-04
	C-3863	FORD F-350	Gasoline	383	2021	0.0303	0.0074	0.0041	0.1140	0.1215	g/mile	0.5	6,534	mi/yr	1.09E-04	2.66E-05	1.47E-05	4.11E-04	4.38E-04
	C-3866	FORD F-250	Gasoline	383	2021	0.0303	0.0074	0.0041	0.1140	0.1215	g/mile	0.5	6,534	mi/yr	1.09E-04	2.66E-05	1.47E-05	4.11E-04	4.38E-04
	C-3867	FORD F-250	Gasoline	383	2021	0.0303	0.0074	0.0041	0.1140	0.1215	g/mile	0.5	6,534	mi/yr	1.09E-04	2.66E-05	1.47E-05	4.11E-04	4.38E-04
	C-5003	FORD F-150	Gasoline	200	2007	0.0313	0.0052	0.0081	0.6730	0.0629	g/mile	0.5	11,030	mi/yr	1.90E-04	3.15E-05	4.95E-05	4.09E-03	3.83E-04
	C-5004	FORD WINDSTAR MINIVAN	Gasoline	200	2007	0.0306	0.0043	0.0082	0.6729	0.0630	g/mile	0.5	5,954	mi/yr	1.00E-04	1.41E-05	2.69E-05	2.21E-03	2.07E-04
	C-5274	FORD TRANSIT CONNECT	CNG	136	2018	0.0820	--	0.0050	1.3400	0.0600	g/mile	0.5	6,534	mi/yr	2.95E-04	--	1.80E-05	4.83E-03	2.16E-04
	O-0079	C3500 29' Bucket Truck	Gasoline	300	2007	0.2204	0.0096	0.0099	0.2416	0.1375	g/mile	0.5	1,000	mi/yr	1.21E-04	5.30E-06	5.45E-06	1.33E-04	7.58E-05
	C-3476	C2500 Service Body	Gasoline	255	2004	0.2329	0.0084	0.0105	0.2416	0.1194	g/mile	0.5	6,534	mi/yr	8.39E-04	3.02E-05	3.77E-05	8.70E-04	4.30E-04
	C-3485	C3500 Service Body	Gasoline	255	2004	0.2329	0.0084	0.0105	0.2416	0.1194	g/mile	0.5	6,534	mi/yr	8.39E-04	3.02E-05	3.77E-05	8.70E-04	4.30E-04

	Equipment ID	Equipment Type	Fuel type	HP Range	Year	NOx	SOx	VOC	CO	PM	EF Unit	Load Factor	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
	D-1766	CASE BACKHOE	Diesel	85	2018	0.4358	0.0015	0.0403	1.0581	0.0039	g/bhp-hr	0.5	500	hr/yr	2.04E-02	7.07E-05	1.89E-03	4.96E-02	1.82E-04
	O-0131	Forklift	Propane	50	2007	1.2701	--	--	13.1929	0.0288	g/bhp-hr	0.5	100	hr/yr	7.00E-03	--	--	7.27E-02	1.59E-04
	O-0077	Manlift	Propane	24.5	2007	1.2701	--	--	13.1929	0.0288	g/bhp-hr	0.5	100	hr/yr	3.43E-03	--	--	3.56E-02	7.77E-05
	O-0192	Manlift	Propane	24.5	2011	1.1961	--	--	12.8045	0.0299	g/bhp-hr	0.5	100	hr/yr	3.23E-03	--	--	3.46E-02	8.09E-05
	O-0193	Manlift	Propane	24.5	2011	1.1961	--	--	12.8045	0.0299	g/bhp-hr	0.5	100	hr/yr	3.23E-03	--	--	3.46E-02	8.09E-05
	O-0237	Manlift	Propane	24.5	2017	1.3482	--	--	47.9759	0.1735	g/bhp-hr	0.5	100	hr/yr	3.64E-03	--	--	1.30E-01	4.69E-04
	D-1324	Skiploader w/36" Backhoe	Diesel	75	2002	2.4735	0.0015	0.3883	1.3552	0.2942	g/bhp-hr	0.5	200	hr/yr	4.09E-02	2.46E-05	6.42E-03	2.24E-02	4.86E-03

## Maintenance Contractor Fleet Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
<b>Total (current)</b>	0.0611	0.0006	0.0042	0.4067	0.0101

	Equipment ID	Equipment Type	Fuel type	HP Range	Year	Emission Factor					EF Unit	Load Factor	Activity	Activity Unit	Annual Emissions (tpy)				
						NOx	SOx	VOC	CO	PM					NOx	SOx	VOC	CO	PM
<b>On-Road</b>	C-1067	FORD RANGER PICKUP	Gasoline	119	2012	0.030	0.004	0.007	0.565	0.064	g/mile	0.5	2,846	mi/yr	4.71963E-05	5.7978E-06	1.15218E-05	0.000887003	0.000100272
	C-1069	FORD RANGER PICKUP	Gasoline	119	2012	0.030	0.004	0.007	0.565	0.064	g/mile	0.5	4,528	mi/yr	7.5081E-05	9.22327E-06	1.83291E-05	0.001411066	0.000159515
	C-2459	FORD F250 CREW CAB	Gasoline	300	2020	0.032	0.008	0.004	0.121	0.122	g/mile	0.5	7,037	mi/yr	0.000125878	2.94149E-05	1.41644E-05	0.000469395	0.000471454
	C-3099	GMC SIERRA 3500	Gasoline	200	2006	0.247	0.008	0.011	0.244	0.119	g/mile	0.5	6,216	mi/yr	0.000847484	2.8816E-05	3.69397E-05	0.000836246	0.000409134
	C-3289	GMC SIERRA 3500	Gasoline	200	2008	0.153	0.008	0.008	0.188	0.119	g/mile	0.5	3,903	mi/yr	0.000329172	1.80982E-05	1.75549E-05	0.000404495	0.000256965
	C-3484	CHEV 3500	Gasoline	245	2012	0.057	0.008	0.005	0.131	0.120	g/mile	0.5	5,517	mi/yr	0.000172931	2.56012E-05	1.66122E-05	0.000397111	0.000364508
	C-3486	CHEV 3500	Gasoline	245	2012	0.057	0.008	0.005	0.131	0.120	g/mile	0.5	2,284	mi/yr	7.15952E-05	1.05991E-05	6.8776E-06	0.000164407	0.000150911
	C-3487	CHEV 3500	Gasoline	245	2012	0.057	0.008	0.005	0.131	0.120	g/mile	0.5	16,893	mi/yr	0.000529504	7.83889E-05	5.08653E-05	0.001215923	0.001116099
	C-3699	GMC SIERRA 3500	Gasoline	300	2020	0.032	0.008	0.004	0.121	0.122	g/mile	0.5	6,534	mi/yr	0.000116872	2.73103E-05	1.3151E-05	0.000435811	0.000437723
	C-3700	GMC SIERRA 3500	Gasoline	300	2020	0.032	0.008	0.004	0.121	0.122	g/mile	0.5	6,534	mi/yr	0.000116872	2.73103E-05	1.3151E-05	0.000435811	0.000437723
	C-3727	GMC SIERRA 2500	Gasoline	300	2020	0.032	0.008	0.004	0.121	0.122	g/mile	0.5	6,534	mi/yr	0.000116872	2.73103E-05	1.3151E-05	0.000435811	0.000437723
	C-3728	GMC SIERRA 2500	Gasoline	300	2020	0.032	0.008	0.004	0.121	0.122	g/mile	0.5	6,534	mi/yr	0.000116872	2.73103E-05	1.3151E-05	0.000435811	0.000437723
	C-3729	GMC SIERRA 2500	Gasoline	300	2020	0.032	0.008	0.004	0.121	0.122	g/mile	0.5	6,534	mi/yr	0.000116872	2.73103E-05	1.3151E-05	0.000435811	0.000437723
	C-3750	FORD F550 TOW TRUCK	Gasoline	305	2021	0.081	0.015	0.008	0.185	0.204	g/mile	0.5	1,000	mi/yr	4.48244E-05	8.03241E-06	4.59722E-06	0.000101961	0.000112171
	C-3788	CHEV 2500	CNG	300	2021	0.100	--	0.210	0.900	0.060	g/mile	0.5	6,534	mi/yr	0.000360099	--	0.000756208	0.003240893	0.000216066
	C-3822	FORD F-350	Gasoline	383	2026	0.022	0.007	0.003	0.105	0.122	g/mile	0.5	5,660	mi/yr	6.72935E-05	2.03237E-05	8.57154E-06	0.000326307	0.000379225
	C-3863	FORD F-350	Gasoline	383	2029	0.026	0.006	0.004	0.115	0.122	g/mile	0.5	6,534	mi/yr	9.44478E-05	2.28901E-05	1.30776E-05	0.000414024	0.000437729
	C-3866	FORD F-250	Gasoline	383	2029	0.026	0.006	0.004	0.115	0.122	g/mile	0.5	6,534	mi/yr	9.44478E-05	2.28901E-05	1.30776E-05	0.000414024	0.000437729
	C-3867	FORD F-250	Gasoline	383	2029	0.026	0.006	0.004	0.115	0.122	g/mile	0.5	6,534	mi/yr	9.44478E-05	2.28901E-05	1.30776E-05	0.000414024	0.000437729
	C-5003	FORD F-150	Gasoline	200	2015	0.029	0.004	0.008	0.574	0.066	g/mile	0.5	11,030	mi/yr	0.000174357	2.5418E-05	5.11672E-05	0.003491509	0.000402358
	C-5004	FORD WINDSTAR MINIVAN	Gasoline	200	2015	0.028	0.003	0.008	0.574	0.066	g/mile	0.5	9,954	mi/yr	9.28732E-05	1.13986E-05	2.74518E-05	0.00188311	0.000217417
	C-5274	FORD TRANSIT CONNECT	CNG	136	2026	0.010	--	0.002	0.200	0.010	g/mile	0.5	6,534	mi/yr	3.60099E-05	--	7.20198E-06	0.000720198	3.60099E-05
	O-0079	C3500 29' Bucket Truck	Gasoline	300	2015	0.093	0.009	0.006	0.127	0.139	g/mile	0.5	1,000	mi/yr	5.10914E-05	5.19166E-06	3.2054E-06	7.02353E-05	7.66949E-05
	C-3476	C2500 Service Body	Gasoline	255	2012	0.057	0.008	0.005	0.131	0.120	g/mile	0.5	6,534	mi/yr	0.000204795	3.03183E-05	1.96731E-05	0.000470279	0.000431671
	C-3485	C3500 Service Body	Gasoline	255	2012	0.057	0.008	0.005	0.131	0.120	g/mile	0.5	6,534	mi/yr	0.000204795	3.03183E-05	1.96731E-05	0.000470279	0.000431671

<b>Off-Road</b>	D-1618	PRESSURE WASHER	Gasoline	10	2017	0.706	0.003	1.278	46.519	0.163	g/bhp-hr	0.33	20	hr/yr	0.000155676	6.40987E-07	0.00028177	0.010255724	3.58686E-05
	D-1766	CASE BACKHOE	Diesel	85	2026	0.441	0.002	0.041	1.070	0.004	g/bhp-hr	0.5	500	hr/yr	0.020653514	7.15348E-05	0.001908774	0.050143271	0.000184233
	O-0131	Forklift	Propane	50	2015	1.315	--	--	13.640	0.030	g/bhp-hr	0.5	100	hr/yr	0.00725	--	--	0.0751795	0.000164
	O-0077	Manlift	Propane	24.5	2015	1.315	--	--	13.640	0.030	g/bhp-hr	0.5	100	hr/yr	0.0035525	--	--	0.036837955	0.0008036
	O-0192	Manlift	Propane	24.5	2019	1.192	--	--	12.774	0.030	g/bhp-hr	0.5	100	hr/yr	0.00322	--	--	0.034497983	8.07333E-05
	O-0193	Manlift	Propane	24.5	2019	1.192	--	--	12.774	0.030	g/bhp-hr	0.5	100	hr/yr	0.00322	--	--	0.034497983	8.07333E-05
	O-0237	Manlift	Propane	24.5	2025	1.348	--	--	47.972	0.173	g/bhp-hr	0.5	100	hr/yr	0.003640696	--	--	0.12955542	0.000467708
	D-1324	Skiploader w/36" Backhoe	Diesel	75	2010	0.956	0.001	0.095	1.193	0.066	g/bhp-hr	0.5	200	hr/yr	0.015810542	2.47798E-05	0.00157552	0.01972727	0.001092987

## Delivery Truck Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
<b>2017</b>	0.72	1.58E-03	0.04	0.15	0.02
<b>2023</b>	0.30	1.59E-03	0.01	0.09	1.58E-03
<b>2031</b>	0.35	1.62E-03	0.01	0.11	1.90E-03

### 2017

Run Emissions			Emission Factor					Annual Emissions (tpy)								
Vehicle Type	Fuel type	Year	NOx	SOx	VOC	CO	PM	EF Unit	Trips/day	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
T6 instate heavy	Diesel	Aggregate	4.585	0.010	0.256	0.797	0.149	g/mile	8	25	mile/trip	0.2628	0.0006	0.0147	0.0457	0.0085
T6 instate small	Diesel	Aggregate	4.320	0.010	0.264	0.892	0.162	g/mile	6	25	mile/trip	0.1857	0.0004	0.0114	0.0383	0.0070
T7 POLA	Diesel	Aggregate	5.890	0.016	0.223	0.686	0.039	g/mile	4	25	mile/trip	0.1688	0.0005	0.0064	0.0197	0.0011

Idle Emissions			Emission Factor					Annual Emissions (tpy)								
Vehicle Type	Fuel type	Year	NOx	SOx	VOC	CO	PM	EF Unit	Trips/day	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
T6 instate heavy	Diesel	Aggregate	7.722	0.006	0.204	2.279	0.061	g/veh/day	8	1	veh-day	0.0177	0.0000	0.0005	0.0052	0.0001
T6 instate small	Diesel	Aggregate	8.338	0.007	0.156	2.269	0.048	g/veh/day	6	1	veh-day	0.0143	0.0000	0.0003	0.0039	0.0001
T7 POLA	Diesel	Aggregate	64.258	0.091	3.276	30.016	0.022	g/veh/day	4	1	veh-day	0.0737	0.0001	0.0038	0.0344	0.0000

### 2023

Run Emissions			Emission Factor					Annual Emissions (tpy)								
Vehicle Type	Fuel type	Year	NOx	SOx	VOC	CO	PM	EF Unit	Trips/day	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
T6 instate heavy	Diesel	Aggregate	1.070	0.008	0.007	0.069	0.007	g/mile	9.5	25	mile/trip	0.0725	0.0006	0.0005	0.0047	0.0005
T6 instate small	Diesel	Aggregate	1.085	0.009	0.007	0.069	0.007	g/mile	7.1	25	mile/trip	0.0551	0.0004	0.0004	0.0035	0.0004
T7 POLA	Diesel	Aggregate	3.042	0.014	0.023	0.279	0.022	g/mile	4.7	25	mile/trip	0.1030	0.0005	0.0008	0.0094	0.0007

Idle Emissions			Emission Factor					Annual Emissions (tpy)								
Vehicle Type	Fuel type	Year	NOx	SOx	VOC	CO	PM	EF Unit	Trips/day	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
T6 instate heavy	Diesel	Aggregate	2.855	0.006	0.049	2.089	0.001	g/veh/day	9.5	1	veh-day	0.0077	0.0000	0.0001	0.0057	0.0000
T6 instate small	Diesel	Aggregate	2.855	0.006	0.049	2.089	0.001	g/veh/day	7.1	1	veh-day	0.0058	0.0000	0.0001	0.0042	0.0000
T7 POLA	Diesel	Aggregate	38.630	0.077	3.269	48.302	0.014	g/veh/day	4.7	1	veh-day	0.0523	0.0001	0.0044	0.0654	0.0000

### 2031

Run Emissions			Emission Factor					Annual Emissions (tpy)								
Vehicle Type	Fuel type	Year	NOx	SOx	VOC	CO	PM	EF Unit	Trips/day	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
T6 instate heavy	Diesel	Aggregate	1.190	0.007	0.007	0.074	0.008	g/mile	10.8	25	mile/trip	0.0919	0.0006	0.0006	0.0058	0.0006
T6 instate small	Diesel	Aggregate	1.127	0.008	0.007	0.072	0.007	g/mile	8.1	25	mile/trip	0.0653	0.0004	0.0004	0.0042	0.0004
T7 POLA	Diesel	Aggregate	3.032	0.012	0.024	0.286	0.022	g/mile	5.4	25	mile/trip	0.1171	0.0005	0.0009	0.0110	0.0009

Idle Emissions			Emission Factor					Annual Emissions (tpy)								
Vehicle Type	Fuel type	Year	NOx	SOx	VOC	CO	PM	EF Unit	Trips/day	Activity	Activity Unit	NOx	SOx	VOC	CO	PM
T6 instate heavy	Diesel	Aggregate	2.855	0.005	0.049	2.089	0.001	g/veh/day	10.8	1	veh-day	0.0088	0.0000	0.0002	0.0065	0.0000
T6 instate small	Diesel	Aggregate	2.855	0.005	0.049	2.089	0.001	g/veh/day	8.1	1	veh-day	0.0066	0.0000	0.0001	0.0048	0.0000
T7 POLA	Diesel	Aggregate	38.630	0.071	3.269	48.302	0.014	g/veh/day	5.4	1	veh-day	0.0597	0.0001	0.0051	0.0746	0.0000

## Passenger Vehicle Emission Calculations

	Annual Emissions (tpy)				
	NOx	SOx	VOC	CO	PM
<b>Total (2017)</b>	39.20	1.11	11.44	469.93	22.60
<b>Total (2023)</b>	20.96	1.22	5.42	329.02	29.21
<b>Total (2031)</b>	12.74	1.18	2.72	267.05	34.43

Total Passenger VMT	<b>616,563,898</b>
Avg round Trip Distance (mi)	<b>73.28</b>
Total # of Round Trips	<b>8,413,809</b>

### February 2019 FAA TAF Data:

Year	2017	2023	2031
Total Enplanements	2,198,009	2,875,779	3,451,509

Total Passengers (2017)	4,552,225
Total Passengers (2002)	6,517,050
Average Daily Trips (2002)	33,001
Average Daily Trips (2017)	23,052
Average Annual Trips (2017)	8,413,809

### 2017

Vehicle Category	Fuel	EF (g/mile)					Activity (miles/yr)	Load Factor	Annual Emissions (tpy)				
		NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM
LDA (GAS)	Gasoline	0.084	0.003	0.027	1.181	0.066	427,169,269	0.5	19.669	0.717	6.384	278.049	15.552
LDA (DSL)	Diesel	0.193	0.002	0.035	0.352	0.103	2,690,183	0.5	0.286	0.003	0.053	0.522	0.153
LDA (ELEC)	Electric	0.000	0.000	0.000	0.000	0.063	3,510,063	0.5	0.000	0.000	0.000	0.000	0.121
LDT1 (GAS)	Gasoline	0.248	0.004	0.077	2.684	0.069	41,347,964	0.5	5.646	0.081	1.758	61.166	1.582
LDT1 (DSL)	Diesel	1.342	0.004	0.257	1.419	0.447	24,446	0.5	0.018	0.000	0.003	0.019	0.006
LDT1(ELEC)	Electric	0.000	0.000	0.000	0.000	0.063	68,025	0.5	0.000	0.000	0.000	0.000	0.002
LDT2 (GAS)	Gasoline	0.175	0.004	0.042	1.676	0.066	140,878,982	0.5	13.553	0.309	3.237	130.119	5.150
LDT2 (DSL)	Diesel	0.085	0.003	0.029	0.184	0.086	570,330	0.5	0.027	0.001	0.009	0.058	0.027
LDT2 (ELEC)	Electric	0.000	0.000	0.000	0.000	0.063	304,637	0.5	0.000	0.000	0.000	0.000	0.010

Vehicle Category	Fuel	EMFAC VMT	EMFAC VMT%
LDA (GAS)	Gasoline	250,017,263	69.3%
LDA (DSL)	Diesel	1,574,533	0.44%
LDA (ELEC)	Electric	2,054,400	0.6%
LDT1 (GAS)	Gasoline	24,200,488	6.7%
LDT1 (DSL)	Diesel	14,308	0.00%
LDT1(ELEC)	Electric	39,814	0.01%
LDT2 (GAS)	Gasoline	82,454,849	22.8%
LDT2 (DSL)	Diesel	333,807	0.09%
LDT2 (ELEC)	Electric	178,301	0.05%
	<b>Total</b>	<b>360,867,762</b>	

Total Passengers (2017)	4,552,225
Total Passengers (2023)	5,955,932
Total Passengers (2031)	7,148,308

## Passenger Vehicle Emission Calculations

2023

Vehicle Category	Fuel	EF (g/mile)					Activity (miles/yr)	Load Factor	Annual Emissions (tpy)				
		NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM
LDA	Gasoline	0.034	0.003	0.009	0.654	0.066	541,623,856	0.5	10.249	0.781	2.782	195.272	19.561
LDA	Diesel	0.059	0.002	0.016	0.249	0.077	5,293,452	0.5	0.171	0.006	0.047	0.727	0.223
LDA	Electric	0.000	0.000	0.000	0.000	0.063	13,367,726	0.5	0.000	0.000	0.000	0.000	0.460
LDT1	Gasoline	0.101	0.003	0.028	1.258	0.067	59,610,423	0.5	3.306	0.100	0.905	41.321	2.198
LDT1	Diesel	0.986	0.004	0.183	1.078	0.332	18,022	0.5	0.010	0.000	0.002	0.011	0.003
LDT1	Electric	0.000	0.000	0.000	0.000	0.063	650,495	0.5	0.000	0.000	0.000	0.000	0.022
LDT2	Gasoline	0.071	0.003	0.017	0.909	0.066	182,760,775	0.5	7.190	0.327	1.668	91.557	6.619
LDT2	Diesel	0.043	0.003	0.020	0.174	0.073	1,393,895	0.5	0.033	0.002	0.015	0.133	0.056
LDT2	Electric	0.000	0.000	0.000	0.000	0.063	1,966,638	0.5	0.000	0.000	0.000	0.000	0.068

Vehicle Category	Fuel	EMFAC VMT	EMFAC VMT%
LDA	Gasoline	252,710,543	67%
LDA	Diesel	2,469,816	1%
LDA	Electric	6,237,106	2%
LDT1	Gasoline	27,812,996	7%
LDT1	Diesel	8,409	0%
LDT1	Electric	303,508	0%
LDT2	Gasoline	85,272,416	23%
LDT2	Diesel	650,363	0%
LDT2	Electric	917,593	0%
Total		376,382,748	

Total Passenger VMT                      806,685,282

## Passenger Vehicle Emission Calculations

2031

Vehicle Category	Fuel	EF (g/mile)					Activity (miles/yr)	Load Factor	Annual Emissions (tpy)				
		NOx	SOx	VOC	CO	PM			NOx	SOx	VOC	CO	PM
LDA	Gasoline	0.020	0.002	0.004	0.476	0.065	623,907,818	0.5	6.929	0.748	1.349	163.623	22.185
LDA	Diesel	0.016	0.002	0.008	0.209	0.066	7,341,850	0.5	0.066	0.007	0.032	0.844	0.267
LDA	Electric	0.000	0.000	0.000	0.000	0.063	33,126,791	0.5	0.000	0.000	0.000	0.000	1.141
LDT1	Gasoline	0.039	0.003	0.009	0.657	0.065	75,127,006	0.5	1.598	0.106	0.391	27.209	2.690
LDT1	Diesel	0.245	0.003	0.040	0.357	0.098	11,203	0.5	0.002	0.000	0.000	0.002	0.001
LDT1	Electric	0.000	0.000	0.000	0.000	0.063	2,231,700	0.5	0.000	0.000	0.000	0.000	0.077
LDT2	Gasoline	0.034	0.003	0.008	0.623	0.065	218,825,583	0.5	4.102	0.313	0.921	75.147	7.801
LDT2	Diesel	0.035	0.002	0.020	0.195	0.071	2,111,191	0.5	0.040	0.003	0.023	0.227	0.083
LDT2	Electric	0.000	0.000	0.000	0.000	0.063	5,500,267	0.5	0.000	0.000	0.000	0.000	0.189

Vehicle Category	Fuel	EMFAC VMT	EMFAC VMT%
LDA	Gasoline	254,895,393	64%
LDA	Diesel	2,999,487	1%
LDA	Electric	13,533,837	3%
LDT1	Gasoline	30,692,880	8%
LDT1	Diesel	4,577	0%
LDT1	Electric	911,753	0%
LDT2	Gasoline	89,400,439	23%
LDT2	Diesel	862,520	0%
LDT2	Electric	2,247,115	1%
Total		395,548,001	

Total Passenger VMT                      968,183,408