CLEAN AIR NORTHEAST FLORIDA

REGIONAL COMPREHENSIVE CLIMATE ACTION PLAN APPENDIX

FEBRUARY 2026

CLEAN AIR NORTHEAST FLORIDA

REGIONAL CLIMATE ACTION PLAN

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Clean Air Northeast Florida Regional Comprehensive Climate Action Plan Appendix
February 2026

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DETAILED GHG INVENTORIES, BY COUNTY

Duval County

Residential Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Energy Cost
245903	3766653	2019-Duval-Residential-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.1.2	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Residential Energy	Activity	American Community Survey ACSST5Y2019 Electricity Used: JEA provided data	FALSE	apolematidis@hanson-inc.com	2023 Dec 26 11:10pm	1996147.731	127.5081939	16.22831559	2004018.464	2019 RESIDENTIAL DUVAL Electricity		
245904	3766673	2019-Duval-Residential-FO-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity		FALSE	apolematidis@hanson-inc.com	2023 Dec 26 11:45pm	9606.07272	1.41176087	0.094117391	9670.543133	2019	129882	0
245901	3766605	2019-Duval-Residential-NG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	apolematidis@hanson-inc.com	2023 Dec 26 10:47pm	40371.09283	3.807157	0.07614314	40497.87116	2019 RESIDENTIAL DUVAL natural gas	761431.4	0
245902	3766629	2019-Duval-Residential-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	apolematidis@hanson-inc.com	2023 Dec 26 11:04pm	17771.54021	3.067146957	0.306714696	17938.69972	2019 RESIDENTIAL DUVAL LPG	282177.52	0
247902	3801690	2019-Duval-Residential-WOOD-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:46pm	0	4.24609832	0.056435484	133.8461562	2019 RESIDENTIAL DUVAL fuel	13437.02	0
291001	4466597	2019-Duval-Residential-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	data sent from TECO	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 03:07pm	15757.93635	1.486037	0.02972074	15807.42138		297207.4	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Biogenic CO2 (M	MMBtu per House	CO2e per Household (MT)	MMBtu per Person	CO2e per Person (MT)	CO2 Emissions Factor	Biogenic CO2 Emissions Factor	CH4 Emissions	N2O Emissions Factor	Were emissions calculated	Fuel Type	Fuel Use	Data Source	Number of Households (opt	Building Area (optional)	Population (optional)	Data Quality: Activity Data
245903	3766653	2019-Duval-Residential-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)		50.85216226	5.842108457	19.09004746	2.193144259	0.114432965		7.30965E-06	9.30319E-07	No				343030		913765	High
245904	3766673	2019-Duval-Residential-FO-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	0	125.6112186	9.352556222	47.16122004	3.51145357	73.96	0	0.010869565	0.000724638	No	Distillate Fuel Oil No. 2	129882	Estimation using EIA usage	1034		2754	Low
245901	3766605	2019-Duval-Residential-NG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	0	89.87622757	4.780201978	33.73942751	1.794482061	53.02	0	0.005	0.0001	No	Natural Gas	761431.4	Estimation using EIA usage	8472		22568	Low
245902	3766629	2019-Duval-Residential-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	0	91.29004206	5.803526276	34.2697984	2.178613034	62.98	0	0.010869565	0.001086957	No	LPG	282177.52	Estimation using EIA usage	3091		8234	Low
247902	3801690	2019-Duval-Residential-WOOD-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	1260.392476	17.58772251	0.175191304	6.602958231	0.065772067	0	93.8	0.316	0.0042	No	Wood	13437.02	Estimation using EIA usage	764		2035	
291001	4466597	2019-Duval-Residential-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	0	18.99331544	1.010187972	Infinity	Infinity	53.02	0	0.005	0.0001	No	Natural Gas	2972074	Measured usage	15648			

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: Em	Electricity Energy	Energy Cost ($)	Electricity Used	CO2 lbs/MWh	CO2 kg/MWh	CH4 lbs/GWh	CH4 kg/GWh	N2O lbs/GWh	N2O kg/GWh
245903	3766653	2019-Duval-Residential-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Low	17443817.22	0	5111038445	861.028		55		7	
245904	3766673	2019-Duval-Residential-FO-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
245901	3766605	2019-Duval-Residential-NG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
245902	3766629	2019-Duval-Residential-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
247902	3801690	2019-Duval-Residential-WOOD-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
291001	4466597	2019-Duval-Residential-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)										

Industrial Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Biogenic CO2 (MT)
263905	4082479	2019-Duval-Industrial-Elec-JEA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.3.2	Florida Power and Light 2019 (I	IPCC 5th Assessment 100 Year Values	Industrial Energy	Activity	Electricity Used: JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 19 07:50pm	818509.8663	81.23556568	11.07757714	823720.0201	2019 - Duval - Industrial		
248461	3811314	Anheuser-Busch LLC - Other Biomass Gases	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Fuel: Other Biomass Gases	FALSE	greilly@hanson-inc.com	2024 Jan 22 03:05pm	5034.5	0.31	0.061	5059.345	2019 - Duval - Industrial	0	0
248462	3811332	US GYPSUM - Jacksonville Plant - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 22 03:07pm	41601	0.78	0.078	41643.51	2019 - Duval - Industrial	0	0
248460	3811296	Anheuser-Busch LLC - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 22 02:54pm	54118.4	1.02	0.102	54173.99	2019 - Duval - Industrial	0	0
248452	3811177	WestRock CP, LLC - Seminole Mill - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	This company also produces 2,402.87 (Metric Tons) of Methane, but it's from an Industrial Waste Lanc	FALSE	greilly@hanson-inc.com	2024 Jan 22 04:23am	255799.5	4.82	0.482	256062.19	2019 - Duval - Industrial	0	0
248463	3811350	IFF Chemical Holdings Inc. - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 22 03:11pm	24497.6	0.46	0.046	24522.67	2019 - Duval - Industrial	0	0
247128	3790012	Symrise - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 11 04:42pm	29091.4	0.55	0.055	29121.375	2019 - Duval - Industrial	0	0
247287	3791507	CMC Steel Florida - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Iron and Steel Production (NOT INCLUDED) Fuel: "Not Stated" Emissions: 58290.6 (Metric Tons)	FALSE	greilly@hanson-inc.com	2024 Jan 12 02:28pm	43066.7	0.81	0.081	43110.845	2019 - Duval - Industrial	0	0
247281	3791429	Symrise - Biogenic Process Derived Fuel	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Fuel: Biogenic Process Derived Fuel (PDF) (Blend (liquid))	FALSE	greilly@hanson-inc.com	2024 Jan 12 02:07pm	12915.4	0.52	0.103	12957.255	2019 - Duval - Industrial	0	0
247285	3791486	IFF Chemical Holdings Inc. - Used Oil	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Fuel: Used Oil	FALSE	greilly@hanson-inc.com	2024 Jan 12 02:16pm	11691.5	0.47	0.095	11729.835	2019 - Duval - Industrial	0	0
247288	3791525	Trail Ridge Landfill Inc. - Distillate Fuel Oil No. 2	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 12 02:36pm	1041.2	0.04	0.008	1044.44	2019 - Duval - Industrial	0	0
247282	3791447	Anchor Glass Container Corporation - Plant 07 - Stationary Combustion	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	HAVE NOT BEEN INCLUDED Glass Manufacturing: -Furnace 4 : CO2 Emissions = 7596 (Metric Tons	FALSE	greilly@hanson-inc.com	2024 Jan 12 02:11pm	48120.2	25.48	24.115	55224.115	2019 - Duval - Industrial	912932.1	0
291035	4466668	2019-Duval-Industrial-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Data sent from TECO	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 03:16pm	2027324.786	38.236982	3.8236982	2029408.701		38236982	
248002	3803489	Anchor Glass Container Corporation - Plant 07 - Stationary Manufacturing	Previously Calculated Stationary Combustion Point Source	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	apolematidis@hanson-inc.com	2024 Jan 18 06:10pm	18756.6			18756.6	2019 - Duval - Industrial		

Id	Output Record Ids With Co2e	Inventory Record	Calculator	CO2 Emissions F	CH4 Emissions Fa	N2O Emissions Factor	Biogenic CO2 Emissions Factor	Biogenic CO2 Emissions Fa	Were emissions calculated	Fuel Type	Fuel Use	CO2	CH4	N2O	Data Quality: Activity Data	Data Quality: Emissions Fact	Electricity Energy Equivalent	Electricity Used	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh
263905	4082479	2019-Duval-Industrial-Elec-JEA	Emissions from Grid Electricity (USCP Required)	0.08838031	8.77158E-06	1.19612E-06			No						High	Low	9261224.16	2713538679	665	66	9
248461	3811314	Anheuser-Busch LLC - Other Biomass Gases	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes			5034.5	0.31	0.061							
248462	3811332	US GYPSUM - Jacksonville Plant - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Natural Gas		41601	0.78	0.078							
248460	3811296	Anheuser-Busch LLC - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Natural Gas		54118.4	1.02	0.102							
248452	3811177	WestRock CP, LLC - Seminole Mill - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Natural Gas		255799.5	4.82	0.482							
248463	3811350	IFF Chemical Holdings Inc. - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)			0	0	0	Yes	Natural Gas		24497.6	0.46	0.046							
247128	3790012	Symrise - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Natural Gas		29091.4	0.55	0.055							
247287	3791507	CMC Steel Florida - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Natural Gas		43066.7	0.81	0.081							
247281	3791429	Symrise - Biogenic Process Derived Fuel	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes			12915.4	0.52	0.103							
247285	3791486	IFF Chemical Holdings Inc. - Used Oil	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes			11691.5	0.47	0.095							
247288	3791525	Trail Ridge Landfill Inc. - Distillate Fuel Oil No. 2	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Distillate Fuel Oil No. 2		1041.2	0.04	0.008							
247282	3791447	Anchor Glass Container Corporation - Plant 07 - Stationary Combustion	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Natural Gas	9129321	48120.2	25.48	24.115							
291035	4466668	2019-Duval-Industrial-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	0.05302	0.000001	0.0000001	0	0	Yes	Natural Gas	382369820										
248002	3803489	Anchor Glass Container Corporation - Plant 07 - Stationary Manufacturing	Previously Calculated Stationary Combustion Point Source					0	No												

Commercial Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Biogenic CO2 (MT)
246913	3786632	2019-Duval-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.2.2	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Commercial Energy	Activity	The above data is pulled from the United States Census Bureau's "On The Map" tool. the United States	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 07:30pm	1550781.495	99.0594757	12.60756963	1556896.167	2019 DUVAL Commercial Electricity		
247105	3789476	2019-Duval-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bureau's "On The Map" tool. the United States	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:47pm	31409.68614	5.616032967	0.561603297	31715.75994	2019 DUVAL Commercial fuel	511059	0
247102	3789404	2019-Duval-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bureau's "On The Map" tool. the United States	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:45pm	214472.4215	20.225615	0.4045123	215145.9344	2019 DUVAL Commercial fuel	4045123	0
247101	3789380	2019-Duval-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bureau's "On The Map" tool. the United States	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:44pm	197345.4368	34.05936957	3.405936957	199201.6724	2019 DUVAL Commercial fuel	3133462	0
247103	3789428	2019-Duval-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bureau's "On The Map" tool. the United States	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:46pm	37.5248	0.005544444	0.00036963	37.7779963	2019 DUVAL Commercial fuel	499	0
247104	3789452	2019-Duval-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bureau's "On The Map" tool. the United States	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:47pm	124783.8892	19.9028704	1.4216336	125717.9025	2019 DUVAL Commercial fuel	1777042	0
246936	3787039	2019-Duval-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bureau's "On The Map" tool. the United States	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 08:33pm	62481.408	9.182608696	0.612173913	62900.74713	2019 DUVAL Commercial fuel	844800	0
291002	4466620	2019-Duval-Commercial-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	Data sent from TECO; included in NG census	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 03:10pm	235726.745	22.2299835	0.44459987	236467.0035		4445996.7	
291034	4466644	2019-Duval-Government-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	Data sent from TECO; included in NG census	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 03:16pm	27664.66956	2.60889	0.0521778	27751.5456		521778	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	MMBtu per 1000	MMBtu per Busine	CO2e per 1000 SQFT Floor Are	CO2e per Establishment (MT)	MMBtu per Employee	CO2e per Employee (MT)	CO2 Emissions Factor (kg/MMBtu)	CH4 Emissions	N2O Emissions Factor (kg/MMBtu)	Biogenic CO2 Emissions Fa	Were emissions calculated	Fuel Type	Fuel Use	Data Source	Commercial Floor Area (optional)	Commercial Workforce Size (optiona	Number of Commercial Establishments (optional)
246913	3786632	2019-Duval-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)						2.826927081					No						26277
247105	3789476	2019-Duval-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	19.44890969	Infinity	1.206977963	0.927953038	0.057587746	61.46	0.010869011	0.001098901	0	No	Propane	511059			550738	26277
247102	3789404	2019-Duval-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	153.9415839	Infinity	8.187614052	7.344913552	0.390650245	53.02	0.005	0.0001	0	No	Natural Gas	4045123			550738	26277
247101	3789380	2019-Duval-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	119.2473266	Infinity	7.580837706	5.689569269	0.361699524	62.98	0.010869565	0.001086957	0	No	LPG	3133462			550738	26277
247103	3789428	2019-Duval-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	0.018989991	Infinity	0.001437683	0.000906057	6.85952E-05	75.2	0.011111111	0.000740741	0	No	Kerosene	499			550738	26277
247104	3789452	2019-Duval-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	67.62727861	Infinity	4.784332402	3.226655869	0.228271705	70.22	0.0112	0.0008	0	No	Gasoline	1777042			550738	26277
246936	3787039	2019-Duval-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	32.14978879	Infinity	2.393756788	1.533941729	0.114211743	73.96	0.010869565	0.000724638	0	No	Distillate Fuel Oil No. 2	844800			550738	26277
291002	4466620	2019-Duval-Commercial-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	1578.834055	Infinity	83.97265749	Infinity	Infinity	53.02	0.005	0.0001	0	No	Natural Gas	4445996.7	Measured usage			2816
291034	4466644	2019-Duval-Government-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	1605.470769	Infinity	85.38937107	Infinity		53.02	0.005	0.0001	0	No	Natural Gas	5217780				325

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: Act	Data Quality: Emi	Electricity Energy Equivalent (M	MMBtu per 1,000 SQFT Floor Area	CO2e per 1,000 SQFT Floo	MMBTU per Employee	MMBtu per Establishment	CO2e per Estal	CO2 Emissions Factor	CH4 Emissions Factor	N2O Emissions Factor	Electricity Used	Commercial Workforce Size (c	Data Quality: Emissions Fa	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh
246913	3786632	2019-Duval-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	High		13551877.22	Infinity	Infinity	24.60675896	515.7315224	59.24938793	0.114432965	7.30965E-06	9.30319E-07	3970700024	550738	Low	861.028	55	7
247105	3789476	2019-Duval-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247102	3789404	2019-Duval-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247101	3789380	2019-Duval-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247103	3789428	2019-Duval-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247104	3789452	2019-Duval-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
246936	3787039	2019-Duval-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
291002	4466620	2019-Duval-Commercial-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)																	
291034	4466644	2019-Duval-Government-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)																	

Transportation & Mobile Sources

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	On Road VMT	Fossil Fuel Energy Equivalent (MMBtu)
259802	4023655	2019-Duval-Aviation-Fuel-JIA IF	Aviation Travel (USCP Recommended)																	
259803	4023670	2019-Duval-Aviation-Fuel-Cecil DP	Aviation Travel (USCP Recommended)																	
259804	4023685	2019-Duval-Aviation-Fuel-Herlong DP	Aviation Travel (USCP Recommended)																	
259799	4023610	2019-Duval-Aviation-Fuel-JIA DP	Aviation Travel (USCP Recommended)	Scope 3	II.4.3		IPCC 5th Assessment 100 Year Values	Transportation & Mobile So		JIA Domestic Passenger. Data from 2019 JAA Fuel Report.	FALSE	caugustine@hanson-inc.com	2024 May 20 07:05pm	394401.2617	16.5850787	3.236112917	395723.2139	2019-Duval-Aviation		
259805	4023700	2019-Duval-Aviation-Fuel-JaxEx DP	Aviation Travel (USCP Recommended)	Scope 3	II.4.3		IPCC 5th Assessment 100 Year Values	Transportation & Mobile So		JaxEx Domestic Passenger. Data from 2019 JAA Fuel Report.	FALSE	caugustine@hanson-inc.com	2024 May 20 07:42pm	9104.667098	0.382862924	0.074704961	9135.184074	2019-Duval-Aviation		
259801	4023640	2019-Duval-Aviation-Fuel-JIA IP	Aviation Travel (USCP Recommended)	Scope 3	II.4.3		IPCC 5th Assessment 100 Year Values	Transportation & Mobile So		JIA International Passenger. Data from 2019 JAA Fuel Report.	FALSE	caugustine@hanson-inc.com	2024 May 20 07:33pm	8220.14271	0.34566754	0.067447325	8247.694942	2019-Duval-Aviation		
259800	4023625	2019-Duval-Aviation-Fuel-JIA DF	Aviation Travel (USCP Recommended)	Scope 3	II.4.3		IPCC 5th Assessment 100 Year Values	Transportation & Mobile So		JIA Domestic Freight. Data from JAA 2019 Fuel Report.	FALSE	caugustine@hanson-inc.com	2024 May 20 07:26pm	4110.071355	0.17283377	0.033723662	4123.847471	2019-Duval-Aviation		
246130	3771527	2019-Duval-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.1	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	The above data is pulled from Google's Environmental Insights platform for Duval County and calculate	FALSE	mcoalson@hanson-inc.com	2024 Jan 4 10:48pm	881370.5499	2.755897751	2.632580803	882145.3489	2019 Diesel transportation DUVAL	599091275.9	11920967.28
245984	3768163,3995015	2019-Duval-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	Scope 1Scope 1	II.1.1II.1.1	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and ActivitySource ar	The above data is pulled from Google's Environmental Insights platform for Duval County and calculate	FALSE	mcoalson@hanson-inc.com	2024 Jan 2 05:23pm	2346866.12	0	0	2346866.12	2019 DUVAL transportation Gasoline GEI 2019 D	0	33412103.08
258438	3994842,3994891,3994916,39	2019-Duval-Transportation-EV-GEI	On Road Transportation (USCP Required)	Scope 3Scope 3S	II.1.3II.1.3II.1.2II.1.	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	ActivityActivityActivityActivity	The above data is pulled from Google's Environmental Insights platform for Duval County and calculate	FALSE	apolematidis@hanson-inc.com	2024 Apr 22 11:20pm	0	0	0	0		0	0
247843	3800620	2019-Duval-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)	Scope 1	II.2.1	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	Where available Sustainability or ESG reports were used to determine Total GHG Emissions in units o	FALSE	mcoalson@hanson-inc.com	2024 Jan 17 05:43pm	18061			18061	DUVAL Rail Diesel 2019		

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Biofuel Energy (MMBtu)	Biogenic-CO2 (MT)	Biofuel CH4 (MT)	Biofuel N2O (MT)	Emissions per Capita (MT C	Miles per person	Emissions per Mile (g CO2e per mile)	CO2 Emissions	Biogenic CO2 Emissions Factor	CH4 Emissions Factor	N2O Emissions Factor	Calculation Method	VMT Location	Travel Type	Type of VMT or Emissions Data	Type of Freight VMT or Emissions Da	Fuel Type
259802	4023655	2019-Duval-Aviation-Fuel-JIA IF	Aviation Travel (USCP Recommended)																	Jet Kerosene
259803	4023670	2019-Duval-Aviation-Fuel-Cecil DP	Aviation Travel (USCP Recommended)																	Aviation Gasoline
259804	4023685	2019-Duval-Aviation-Fuel-Herlong DP	Aviation Travel (USCP Recommended)																	Jet Kerosene
259799	4023610	2019-Duval-Aviation-Fuel-JIA DP	Aviation Travel (USCP Recommended)																	Jet Kerosene
259805	4023700	2019-Duval-Aviation-Fuel-JaxEx DP	Aviation Travel (USCP Recommended)																	Jet Kerosene
259801	4023640	2019-Duval-Aviation-Fuel-JIA IP	Aviation Travel (USCP Recommended)																	Jet Kerosene
259800	4023625	2019-Duval-Aviation-Fuel-JIA DF	Aviation Travel (USCP Recommended)																	Jet Kerosene
246130	3771527	2019-Duval-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0	0	0	0	0.886079542	601.7631041	1472.472367	0.073934483	0.073773234	4.60013E-09	4.39429E-09	VMT & MPG	In-Boundary	Freight		Origin-Destination	Diesel
245984	3768163,3995015	2019-Duval-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0	0	0	0	2.444578362	NaN	NaN	0.07024	0.068413598	0	0	VMT & MPG	In-Boundary	Passenger	Origin-Destination		Gasoline
258438	3994842,3994891,3994916,39	2019-Duval-Transportation-EV-GEI	On Road Transportation (USCP Required)	0	0	0	0	NaN	NaN	NaN	0.114432965	0	0	0	Direct Entry	In-Boundary	Passenger			Electric
247843	3800620	2019-Duval-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)								0									Diesel

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Is this a T&D Loss	VMT	Percent Motorcycles	Percent Passenger Vehicles	Percent Light Trucks	Percent Heavy Tucks	Fuel Use	T&D Loss Fact	Previously Calculated CO2	Population (optional)	Number of Passenger Trips	Data Quality: Activity Data	CO2 lbs/MWh	CH4 lbs/GWh	CH4 kg/GWh	N2O lbs/GWh	N2O kg/GWh
259802	4023655	2019-Duval-Aviation-Fuel-JIA IF	Aviation Travel (USCP Recommended)												High					
259803	4023670	2019-Duval-Aviation-Fuel-Cecil DP	Aviation Travel (USCP Recommended)												High					
259804	4023685	2019-Duval-Aviation-Fuel-Herlong DP	Aviation Travel (USCP Recommended)												High					
259799	4023610	2019-Duval-Aviation-Fuel-JIA DP	Aviation Travel (USCP Recommended)												High					
259805	4023700	2019-Duval-Aviation-Fuel-JaxEx DP	Aviation Travel (USCP Recommended)												High					
259801	4023640	2019-Duval-Aviation-Fuel-JIA IP	Aviation Travel (USCP Recommended)												High					
259800	4023625	2019-Duval-Aviation-Fuel-JIA DF	Aviation Travel (USCP Recommended)												High					
246130	3771527	2019-Duval-Transportation-Diesel-GEI	On Road Transportation (USCP Required)		599091275.9	0	3.46	8.31	88.23		0	0	995560			861.028	55		7	
245984	3768163,3995015	2019-Duval-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)		5768651956	0.67	75.91	21.8	1.62		0	0	960029	1772650244		861.028				
258438	3994842,3994891,3994916,39	2019-Duval-Transportation-EV-GEI	On Road Transportation (USCP Required)	Yes	36504794					13371608	5.1	0				861.028	24.37713	0.0183	0.0083	17.86788
247843	3800620	2019-Duval-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)									18061				861.028				

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gas Passenger V	Gas Passenger Ve	Gas PassengerVehicle g N2O/	Gas Light Truck Fuel Economy (MPG)	Gas Light Truck g CH4/mi	Gas Light Truck g N2O/mi	Gas Heavy Truck Fuel Economy (MPG)	Gas Heavy Truc	Gas Heavy Truck g N2O/mi	Gas Transit Bus Fuel Econor	Gas Transit Bus g CH4/mi	Gas Transit Bus g N2O/mi	Gas Para Transit Bus Fuel Ec	Gas Para Transit Bus g CH	Gas Para Transit Bus g N2O/mi	Gas Motorcycle Fuel Economy (MPG	Gas Motorcycle g CH4/mi
259802	4023655	2019-Duval-Aviation-Fuel-JIA IF	Aviation Travel (USCP Recommended)																	
259803	4023670	2019-Duval-Aviation-Fuel-Cecil DP	Aviation Travel (USCP Recommended)																	
259804	4023685	2019-Duval-Aviation-Fuel-Herlong DP	Aviation Travel (USCP Recommended)																	
259799	4023610	2019-Duval-Aviation-Fuel-JIA DP	Aviation Travel (USCP Recommended)																	
259805	4023700	2019-Duval-Aviation-Fuel-JaxEx DP	Aviation Travel (USCP Recommended)																	
259801	4023640	2019-Duval-Aviation-Fuel-JIA IP	Aviation Travel (USCP Recommended)																	
259800	4023625	2019-Duval-Aviation-Fuel-JIA DF	Aviation Travel (USCP Recommended)																	
246130	3771527	2019-Duval-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183
245984	3768163,3995015	2019-Duval-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)																	
258438	3994842,3994891,3994916,39	2019-Duval-Transportation-EV-GEI	On Road Transportation (USCP Required)	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005
247843	3800620	2019-Duval-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)																	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gas Motorcycle g	Electric Vehicle Fu	Diesel Passenger Vehicle Fuel	Diesel Passenger Vehicle g CH4/mi	Diesel PassengerVehicle g	Diesel Light Truck Fuel Econ	Diesel Light Truck g CH4/mi	Diesel Light Tru	Diesel Heavy Truck Fuel Economy (MP	Diesel Heavy Truck g CH4/m	Diesel Heavy Truck g N2O/	Diesel Transit Bus Fuel Ec	Diesel Transit Bus g CH4/mi	Diesel Transit Bus g N2O/m	Diesel Para Transit Bus Fuel Economy (MPG)	Diesel Para Transit Bus g CH4/mi	Diesel Para Transit Bus g N2O/mi
259802	4023655	2019-Duval-Aviation-Fuel-JIA IF	Aviation Travel (USCP Recommended)																	
259803	4023670	2019-Duval-Aviation-Fuel-Cecil DP	Aviation Travel (USCP Recommended)																	
259804	4023685	2019-Duval-Aviation-Fuel-Herlong DP	Aviation Travel (USCP Recommended)																	
259799	4023610	2019-Duval-Aviation-Fuel-JIA DP	Aviation Travel (USCP Recommended)																	
259805	4023700	2019-Duval-Aviation-Fuel-JaxEx DP	Aviation Travel (USCP Recommended)																	
259801	4023640	2019-Duval-Aviation-Fuel-JIA IP	Aviation Travel (USCP Recommended)																	
259800	4023625	2019-Duval-Aviation-Fuel-JIA DF	Aviation Travel (USCP Recommended)																	
246130	3771527	2019-Duval-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0.0083		24.37713	0.0005	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015
245984	3768163,3995015	2019-Duval-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)																	
258438	3994842,3994891,3994916,39	2019-Duval-Transportation-EV-GEI	On Road Transportation (USCP Required)	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001	
247843	3800620	2019-Duval-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)																	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Diesel Motorcycle	Diesel Motorcycle	Diesel Motorcycle g N2O/mi	Aviation Energy (MMBtu)	CO2 Emissions Factor (kg/	CH4 Emissions Factor (g/gal	N2O Emissions Factor (g/gallon)	Were emission	Aviation Type	Flight Type	Local Attribution	Fuel Loading	Data Quality: Emissions Factors
259802	4023655	2019-Duval-Aviation-Fuel-JIA IF	Aviation Travel (USCP Recommended)				50585.4936	9.75	0.41	0.08	No	Between Jurisdictions	International Freight	100	421545.78	High
259803	4023670	2019-Duval-Aviation-Fuel-Cecil DP	Aviation Travel (USCP Recommended)				5058549.372	8.31	0.36	0.07	No	Between Jurisdictions	Domestic Passenger	100	42154578.1	High
259804	4023685	2019-Duval-Aviation-Fuel-Herlong DP	Aviation Travel (USCP Recommended)				18420.0048	9.75	0.41	0.08	No	Between Jurisdictions	Domestic Passenger	100	153500.04	High
259799	4023610	2019-Duval-Aviation-Fuel-JIA DP	Aviation Travel (USCP Recommended)				4854169.375	9.75	0.41	0.08	No	Between Jurisdictions	Domestic Passenger	100	40451411.46	High
259805	4023700	2019-Duval-Aviation-Fuel-JaxEx DP	Aviation Travel (USCP Recommended)				112057.4412	9.75	0.41	0.08	No	Between Jurisdictions	Domestic Passenger	100	933812.01	High
259801	4023640	2019-Duval-Aviation-Fuel-JIA IP	Aviation Travel (USCP Recommended)				101170.9872	9.75	0.41	0.08	No	Between Jurisdictions	International Passenger	100	843091.56	High
259800	4023625	2019-Duval-Aviation-Fuel-JIA DF	Aviation Travel (USCP Recommended)				50585.4936	9.75	0.41	0.08	No	Between Jurisdictions	Domestic Freight	100	421545.78	High
246130	3771527	2019-Duval-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	24.37713	0.0005	0.001										
245984	3768163,3995015	2019-Duval-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)													
258438	3994842,3994891,3994916,39	2019-Duval-Transportation-EV-GEI	On Road Transportation (USCP Required)													
247843	3800620	2019-Duval-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)													

AFOLU

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Land Area (hectares / year)	Net Carbon Flux (MT CO2e / year)	Category

246290	3774377	2019-Duval-County-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Yea	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 08:51pm					2019 AFOLU Duval	60	6113	Forest to other non-forest
246286	3774361	2019-Duval-County-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Yea	AFOLU		LEARN Report 2016-2019 (G	TRUE	rvolenec@hans	2024 Jan 5 08:43pm					2019 AFOLU Duval	77880	-288674	Undisturbed Forest
246287	3774365	2019-Duval-County-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Yea	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 08:46pm					2019 AFOLU Duval	1747	60843	Forest to Grassland
246288	3774369	2019-Duval-County-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Yea	AFOLU		LEARN Report 2016-2019 (G	TRUE	rvolenec@hans	2024 Jan 5 08:47pm					2019 AFOLU Duval	3230	-38674	Non-Forest to Forest
246289	3774373	2019-Duval-County-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Yea	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 08:48pm					2019 AFOLU Duval	916	65478	Forest to Settlement
246291	3774381	2019-Duval-County-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Yea	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 08:55pm					2019 AFOLU Duval	425	28414	Forest to Wetland
246292	3774387	2019-Duval-County-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Yea	AFOLU		LEARN Report 2016-2019 (G	TRUE	rvolenec@hans	2024 Jan 5 08:57pm					2019 AFOLU Duval		-287651	
247793	3799843	2019-Duval-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1	IPCC 5th Assessment 100 Yea	AFOLU	Source	2017 USDA Agricultural Cen	FALSE	rvolenec@hans	2024 Jan 16 10:05pm	0	1077.43	0	30168.04	2019 AFOLU Duval			
248455	3811223	x2019-Duval-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1	IPCC 5th Assessment 100 Yea	AFOLU	Source	2017 USDA Agricultural Cen	TRUE	rvolenec@hans	2024 Jan 22 07:27am	0	30168	0	844704				

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Land Area (optior	Net Annual Carbo	Canopy Area of Trees Outside	Canopy Area	Emissions from Tree Loss (	CO2 Removals from Trees O	Emissions per Acre Cultivated (MT CO2e / Acre)	Emissions per	Emissions per Production Value (MT C(	Agricultural Process	CO2 Emissions From Agric	CH4 Emissions from Agricu	N2O Emissions from Agricultu	Data Source
246290	3774377	2019-Duval-County-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)	60	6113												
246286	3774361	2019-Duval-County-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)	77880	-288674												
246287	3774365	2019-Duval-County-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)	1747	60843												
246288	3774369	2019-Duval-County-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)	3230	-38674												
246289	3774373	2019-Duval-County-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)	916	65478												
246291	3774381	2019-Duval-County-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)	425	28414												
246292	3774387	2019-Duval-County-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommended)			23875	23875	167983	-455634								
247793	3799843	2019-Duval-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)							Infinity	Infinity	Infinity	Enteric Fermentation	0	1077.43	0	US Community Protocol Method A.1 or A.2
248455	3811223	x2019-Duval-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)							Infinity	Infinity	Infinity	Enteric Fermentation	0	30168	0	US Community Protocol Method A.1 or A.2

Solid Waste

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Waste Generated (wet tons)	Mixed MSW Emissions Factor (MT CH4/wet short ton)
246914	3786673	2019 Duval County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	Scope 1	III.1.1	2019 Duval MSW Factor Set	IPCC 5th Assessment 100 Year Values	Solid Waste	Source		FALSE	avo@hanson-inc.com	2024 Jan 10 07:32pm		12872.94219		360442.3812		2752896	0.0648

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Newspaper Emis	Office Paper Emis	Corrugated Cardboard Emissio	Magazines/Third Class Mail Emissions Factor (MT	Food Scraps Emissions Fa	Grass Emissions Factor (MT	Leaves Emissions Factor (MT CH4/wet short ton)	Branches Emis	Dimensional Lumber Emissions Factor	Mixed MSW LFG Capture Ra	Newspaper LFG Capture R	Office Paper LFG Capture F	Corrugated Containers LFG C	Magazines/Third Class Mail	Food Scraps LFG Capture Rate (%)	Grass LFG Capture Rate (%)	Leaves LFG Capture Rate (%)
246914	3786673	2019 Duval County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	0.042	0.1556	0.1048	0.0476	0.0648	0.0228	0.026	0.058	0.0068	60	59	58	54	52	50	39	47

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Branches LFG Ca	Dimensional Lumb	Oxidation Rate	Waste per Household	Waste per Business	CO2e per Household	CO2e per Business	Were emission	Total Waste Generated	Landfill Methane Collection S	Landfill Moisture Content	Waste Type to Calculate Er	CH4 Released (for Previously	Disposal Location	Number of Households	Number of Businesses
246914	3786673	2019 Duval County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	51	57	0.1	7.113279312	100.2255798	0.931356409	13.12274297	No	2752896	Typical	Wet	All		Inside the Jurisdiction	387008	27467

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Percentage Mixed	Percentage Newsp	Percentage Office Paper	Percentage Corrugated Cardboard	Percentage Magazines / Th	Percentage Food Scraps	Percentage Grass	Percentage Lea	Percentage Branches	Percentage Dimensional Lumber
246914	3786673	2019 Duval County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	0	0.59	1.05	5.36	0.53	0.083	2.11	2.11	2.11	16.83

Waste & Wastewater

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Wastewater Electric Energy Equivalent (MMBtu)	Gallons per Capita	CO2e per Person (MT)
263921	4082780	2019-Duval-Wastewater-Elec-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	Scope 3	VI.1	Florida Power and Light 2019 (I	IPCC 5th Assessment 100 Year Values	Water & Wastewater	Activity	JEA provided data	FALSE	cbarsanti@hanson-inc.com	2024 Jun 20 03:16pm	71466.7365	7.048147772	0.861694845	71892.43377	876991.8282	37657.19375	0.124563693
263922	4082803	2019-Duval-Digester-JEA	Emissions from the Combustion of Digester Gas (USCP Recommended, where a			Florida Power and Light 2019 (I	IPCC 5th Assessment 100 Year Values	Water & Wastewater		JEA provided data; gas production is the average of the range JEA provided (450-950 scf/day)	FALSE	cbarsanti@hanson-inc.com	2024 Jun 20 03:47pm		0.000468806	9.22961E-05	0.03758503			
263906	4082494	2019-Duval-Water-Elec-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	Scope 2	VI.1	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Water & Wastewater	Activity	JEA provided data	FALSE	cbarsanti@hanson-inc.com	2024 Jun 19 07:58pm	8422.823181	0.538025796	0.06847601	8456.034046			0.012787624
263923	4082815	2019-Duval-EffluentDischarge-JEA	Process N2O from Effluent Discharge to River, Ocean, or Deep Well Injection (US			Florida Power and Light 2019 (I	IPCC 5th Assessment 100 Year Values	Water & Wastewater		JEA provided data	FALSE	cbarsanti@hanson-inc.com	2024 Jun 20 03:50pm			2.830311475	750.0325409			

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Electricity Energy	Natural Gas Energ	Electric CO2 Emissions Factor	Natural Gas CO2 Emissions Factor	Electric CH4 Emissions Fac	Natural Gas CH4 Emissions	Electric N2O Emissions Factor	Natural Gas N2	Were emissions calculated externally fr	Electricity Used	Natural Gas Used	Treatment Location	Volume of Water Treated (opti	Population Served (optional	Notation Keys	Data Quality: Activity Data	Data Quality: Emissions Factor
263921	4082780	2019-Duval-Wastewater-Elec-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	706120.2082	170871.62	0.08838031	0.05302	8.77158E-06	0.000005	1.19612E-06	0.0000001	No	206893221	1708716.2		21734	577154		High	Low
263922	4082803	2019-Duval-Digester-JEA	Emissions from the Combustion of Digester Gas (USCP Recommended, where applicable)																Medium	Low
263906	4082494	2019-Duval-Water-Elec-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	73604.86689			0.05302		0.000005		0.0000001	No	21566226				661267		High	Low
263923	4082815	2019-Duval-EffluentDischarge-JEA	Process N2O from Effluent Discharge to River, Ocean, or Deep Well Injection (USCP Recommended, where applicable)									No							High	Low

Id	Output Record Ids With Co2e	Inventory Record	Calculator	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh	Annual Gas Production (scf / Year)	Energy Equivalent (MMBtu)	Biogenic CO2 (MT)	Biogenic CO2 Emissions Factor (kg/MMBtu)	CH4 Emissions	N2O Emissions Factor (kg/MMBtu)	Calculation Type	Do you have data on Gas C	Gas Production	Heat Content	Population Served	Is Energy Recovered from Combustion?	N Uptake in Treatment Process (kg N	Fraction N Removed in Nitrification/Denitrifiction
263921	4082780	2019-Duval-Wastewater-Elec-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	665	66	9														
263922	4082803	2019-Duval-Digester-JEA	Emissions from the Combustion of Digester Gas (USCP Recommended, where a	665	66	9	255675	146.501775	7.628347424	52.07	0.0032	0.00063	Site Specific	Heat Content	700	573		No		
263906	4082494	2019-Duval-Water-Elec-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	861.028	55	7														
263923	4082815	2019-Duval-EffluentDischarge-JEA	Process N2O from Effluent Discharge to River, Ocean, or Deep Well Injection (US	665	66	9													0	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Daily N Load at F	Emissions per Ca	N2O Emissions Factor (kg N2O	Do You have daily N load data from your effluent di	Daily N Load	Is your effluent discharged to	Water Supply Energy Equivalent (MMBtu)	Gallons per Ca	Electricity CO2 Emissions Factor	Electricity CH4 Emissions Fa	Electricity N2O Emissions F	Volume of Water Delivered	Facility Location
263921	4082780	2019-Duval-Wastewater-Elec-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)													
263922	4082803	2019-Duval-Digester-JEA	Emissions from the Combustion of Digester Gas (USCP Recommended, where applicable)													
263906	4082494	2019-Duval-Water-Elec-JEA	Emissions from the Supply of Potable Water (USCP Recommended)							73604.86689	38814.88113	0.114432965	7.30965E-06	0	25667	In Boundary
263923	4082815	2019-Duval-EffluentDischarge-JEA	Process N2O from Effluent Discharge to River, Ocean, or Deep Well Injection (US	987.13	Infinity	0.005	Yes	987.13	River							

St. Johns County

Residential Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Energy Cost
246097	3770885	2019-StJohns-County-Residential-Energy-FPL	Emissions from Grid Electricity (USCP Required)	Scope 2	I.1.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Residential Energy	Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 4 09:33pm	448903.4851	44.55282709	6.075385513	451760.9414	2019 StJohns RESIDENTIAL FPL		
264205	4089061	2019-StJohns-County-Residential-Energy-JEA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.1.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Residential Energy	Activity	Electricity Used: JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 25 03:40pm	95498.20968	9.478017803	1.292456973	96106.09527			
247914	3801961	2019-StJohns-County-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 09:02pm	10551.06218	0.99500775	0.019900155	10584.19594	2019 RESIDENTIAL StJohns fuel	199001.55	0
247917	3802033	2019-StJohns-County-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 09:05pm	0	1.10972564	0.014749518	34.98094019	2019 RESIDENTIAL StJohns fuel	3511.79	0
247916	3802009	2019-StJohns-County-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 09:04pm	4644.625737	0.801604674	0.080160467	4688.313192	2019 RESIDENTIAL StJohns fuel	73747.63	0
247915	3801985	2019-StJohns-County-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 09:02pm	86.577576	0.012723913	0.000848261	87.1586347	2019 RESIDENTIAL StJohns fuel	1170.6	0
291067	4466828	2019-StJohns-County-Residential-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	data sent from TECO; included in NG census	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 05:18pm	11300.33817	1.0656675	0.02131335	11335.8249		213133.5	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Biogenic CO2 /	MMBtu per Household	CO2e per Household (MT)	MMBtu per Person	CO2e per Person (MT)	CO2 Emissions Factor	Biogenic CO2 Emissions Factor	CH4 Emissions	N2O Emissions Factor	Were emissions calculated e	Fuel Type	Fuel Use	Data Source	Number of Households (opt	Building Area (optional)	Population (optional)	Data Quality: Activity Data
246097	3770885	2019-StJohns-County-Residential-Energy-FPL	Emissions from Grid Electricity (USCP Required)		61.56412533	5.475691083	20.64910289	1.836590839	0.08838031		8.77158E-06	1.19612E-06	No				82503		245978	Low
264205	4089061	2019-StJohns-County-Residential-Energy-JEA	Emissions from Grid Electricity (USCP Required)		13.09694387	1.164880008	4.392820335	0.390710126	0.08838031		8.77158E-06	1.19612E-06	No				82503		245978	High
247914	3801961	2019-StJohns-County-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	0	55.77397702	2.966422629	18.70666949	0.994942277	53.02	0	0.005	0.0001	No	Natural Gas	199001.55	Estimation using EIA usage	3568		10638	
247917	3802033	2019-StJohns-County-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	329.405902	7.519892934	0.074905654	2.522837644	0.025129986	0	93.8	0.316	0.0042	No	Wood	3511.79	Estimation using EIA usage	467		1392	Low
247916	3802009	2019-StJohns-County-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	0	47.9503446	3.04831807	16.08454308	1.022532866	62.98	0	0.010869565	0.001086957	No	LPG	73747.63	Estimation using EIA usage	1538		4585	Low
247915	3801985	2019-StJohns-County-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	0	9.83697479	0.732425502	3.297464789	0.245517281	73.96	0	0.010869565	0.000724638	No	Distillate Fuel Oil No. 2	1170.6	Estimation using EIA usage	119		355	Low
291067	4466828	2019-StJohns-County-Residential-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	0	15.44893447	0.821674753	Infinity	Infinity	53.02	0	0.005	0.0001	No	Natural Gas	2131335	Measured usage	13796			

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: E	Electricity Energy Equ	Energy Cost ($)	Electricity Used	CO2 lbs/MWh	CO2 kg/MWh	CH4 lbs/GWh	CH4 kg/GWh	N2O lbs/GWh	N2O kg/GWh
246097	3770885	2019-StJohns-County-Residential-Energy-FPL	Emissions from Grid Electricity (USCP Required)	Low	5079225.032	0	1488212934	665		66		9	
264205	4089061	2019-StJohns-County-Residential-Energy-JEA	Emissions from Grid Electricity (USCP Required)	Low	1080537.16	0	316597388	665		66		9	
247914	3801961	2019-StJohns-County-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)										
247917	3802033	2019-StJohns-County-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
247916	3802009	2019-StJohns-County-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
247915	3801985	2019-StJohns-County-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
291067	4466828	2019-StJohns-County-Residential-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)										

Industrial Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Electricity Energy Equivalent (MMBtu)
264207	4089102	2019-StJohns-Industrial-Elec-JEA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.3.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Industrial Energy	Activity	Electricity Used: JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 25 03:46pm	578.6442924	0.057429358	0.007831276	582.3276027	6547.208191

Id	Output Record Ids With Co2e	Inventory Record	Calculator	CO2 Emissions	CH4 Emissions Facto	N2O Emissions Factor	Were emissions calculated externally from ClearP	Electricity Used	CO2	CH4	N2O	Notation Keys	Data Quality: Activity Data	Data Quality: Emissions F	CO2 lbs/MWh	CO2 kg/MWh	CH4 lbs/GWh	CH4 kg/GWh	N2O lbs/GWh	N2O kg/GWh
264207	4089102	2019-StJohns-Industrial-Elec-JEA	Emissions from Grid Electricity (USCP Required)	0.08838031	8.77158E-06	1.19612E-06	No	1918332					High	Low	665		66		9	

Commercial Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Biogenic CO2 (MT)
246916	3786716	2019-StJohns-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.2.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Commercial Energy	Activity	The above data is pulled from the United States Census Bur	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 07:37pm	262077.1811	26.0106676	3.546909218	263745.4107	2019 StJohns Commercial Electricity		
246206	4089080	2019-StJohns-Commercial-Elec-JEA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.2.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Commercial Energy	Activity	Electricity Used: JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 25 03:43pm	28736.25104	2.8520189	0.388911668	28919.16916			
247116	3789740	2019-StJohns-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bur	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 02:04pm	28468.5345	4.913315217	0.491331522	28736.31018	2019 StJohns Commercial fuel	452025	0
247117	3789764	2019-StJohns-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bur	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 02:05pm	9013.43124	1.324663043	0.08831087	9073.924186	2019 StJohns Commercial fuel	121869	0
247120	3789836	2019-StJohns-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bur	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 02:07pm	4531.07704	0.810153846	0.081015385	4575.230425	2019 StJohns Commercial fuel	73724	0
247118	3789788	2019-StJohns-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bur	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 02:06pm	5.4144	0.0008	5.33333E-05	5.450933333	2019 StJohns Commercial fuel	72	0
247119	3789812	2019-StJohns-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bur	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 02:07pm	18000.96722	2.8711312	0.2050808	18135.70531	2019 StJohns Commercial fuel	256351	0
246940	3787115	2019-StJohns-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bur	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 08:37pm	30939.23778	2.917695	0.0583539	31036.39702	2019 StJohns Commercial fuel	583539	0
291069	4466875	2019-StJohns-County-Commercial-Fuel-NG-TECO-Natural	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	data sent from TECO; included in NG census	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 05:23pm	42534.40426	4.011166	0.08022332	42667.97609		802233.2	0
291068	4466851	2019-StJohns-County-Government-Fuel-NG-TECO-Natural	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	Data sent from TECO; Included in NG census	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 05:21pm	2841.442538	0.2679595	0.00535919	2850.365589		53591.9	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	MMBtu per 100	MMBtu per Business	CO2e per 1000 SQFT Floor Area (MT)	CO2e per Establishment (MT)	MMBtu per Employee	CO2e per Employee (MT)	CO2 Emissions Factor (kg/MMBtu)	CH4 Emissions	N2O Emissions Factor (kg/MMBtu)	Biogenic CO2 Emissions Fac	Were emissions calculate	Fuel Type	Fuel Use	Data Source	Commercial Workforce Size (optional)	Number of Commercial Establishments (optional)
246916	3786716	2019-StJohns-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)						3.319723728					No					6804
246206	4089080	2019-StJohns-Commercial-Elec-JEA	Emissions from Grid Electricity (USCP Required)						0.364001223					No					6804
247116	3789740	2019-StJohns-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	66.43518519	Infinity	4.223443589	5.689570537	0.361699605	62.98	0.010869565	0.001086957	0	No	LPG	452025		79448	6804
247117	3789764	2019-StJohns-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	17.91137566	Infinity	1.333616135	1.533946732	0.114212116	73.96	0.010869565	0.000724638	0	No	Distillate Fuel Oil No. 2	121869		79448	6804
247120	3789836	2019-StJohns-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	10.83539095	Infinity	0.672432455	0.927952875	0.057587736	61.46	0.010989011	0.001098901	0	No	Propane	73724		79448	6804
247118	3789788	2019-StJohns-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	0.010582011	Infinity	0.000801137	0.000906253	6.86101E-05	75.2	0.011111111	0.000740741	0	No	Kerosene	72		79448	6804
247119	3789812	2019-StJohns-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	37.67651382	Infinity	2.665447576	3.226651395	0.228271389	70.22	0.0112	0.0008	0	No	Gasoline	256351		79448	6804
246940	3787115	2019-StJohns-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	85.76410935	Infinity	4.561492802	7.34491743	0.390650451	53.02	0.005	0.0001	0	No	Natural Gas	583539		79448	6804
291069	4466875	2019-StJohns-County-Commercial-Fuel-NG-TECO-Natural	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	1790.699107	Infinity	95.24101806	Infinity	Infinity	53.02	0.005	0.0001	0	No	Natural Gas	8022332	Measured usage		448
291068	4466851	2019-StJohns-County-Government-Fuel-NG-TECO-Natural	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	1488.663889	Infinity	79.17682193	Infinity	Infinity	53.02	0.005	0.0001	0	No	Natural Gas	535919	Measured usage		36

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: A	Data Quality: Emissi	Electricity Energy Equivalent (MMBtu)	MMBtu per 1,000 SQFT Floor Area	CO2e per 1,000 SQFT Floo	MMBTU per Employee	MMBtu per Establishment	CO2e per Establ	CO2 Emissions Factor	CH4 Emissions Factor	N2O Emissions Factor	Electricity Used	Commercial Workforce Size (o	Data Quality: Emissions Fa	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh
246916	3786716	2019-StJohns-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)			2965334.471	Infinity	Infinity	37.32421799	435.8222327	38.76328788	0.08838031	8.77158E-06	1.19612E-06	868843	79448		665	66	9
246206	4089080	2019-StJohns-Commercial-Elec-JEA	Emissions from Grid Electricity (USCP Required)	High		325143.1331	Infinity	Infinity	4.092527604	47.7870566	4.250318807	0.08838031	8.77158E-06	1.19612E-06	95266938	79448	Low	665	66	9
247116	3789740	2019-StJohns-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247117	3789764	2019-StJohns-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247120	3789836	2019-StJohns-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247118	3789788	2019-StJohns-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247119	3789812	2019-StJohns-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
246940	3787115	2019-StJohns-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
291069	4466875	2019-StJohns-County-Commercial-Fuel-NG-TECO-Natural	Emissions from Stationary Fuel Combustion (USCP Required)																	
291068	4466851	2019-StJohns-County-Government-Fuel-NG-TECO-Natural	Emissions from Stationary Fuel Combustion (USCP Required)																	

Transportation & Mobile Sources

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	On Road VMT	Fossil Fuel Energy Equivalent (MMBtu)
246040	3769834	2019-St_Johns-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.1	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Natio	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	The above data is pulled from Google's Environmental Insigl	FALSE	mcoalson@hanson-inc.com	2024 Jan 3 10:09pm	1226506.816	58.39598819	31.7784341	1236563.189	2019 Gasoline transportation StJohns	2995704572	17461657.41
317896	4745814	2019-StJohns-Transportation-EV-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.3	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Natio	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Activity	2019 EV VMT was back-cast from 2025 DMV EV shares by	FALSE	apolematidis@hanson-inc.com	2025 Sep 21 09:39pm	0		0			10822264	565.1216007
246141	3771758	2019-St_Johns-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.1	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Natio	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	The above data is pulled from Google's Environmental Insigl	FALSE	mcoalson@hanson-inc.com	2024 Jan 4 11:06pm	456095.568	1.432387939	1.368293504	458498.2726	2019 StJohns Diesel transportation	311379882.5	6195966.359
247846	3800669	2019-StJohns-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)	Scope 1	II.2.1	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Natio	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	Where available Sustainability and ESG reports were used to	FALSE	mcoalson@hanson-inc.com	2024 Jan 17 05:45pm	4601			4601	2019,StJohns,Rail,Diesel		

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Emissions per	Miles per person	Emissions per Mile (g CO2e per mile)	CO2 Emissions Factor	Biogenic CO2 Emissions F	CH4 Emissions Factor	N2O Emissions Factor	Calculation Met	VMT Location	Travel Type	Type of VMT or Emissions	Type of Freight VMT or Emissi	Fuel Type	Is this a T&D Loss Record?	VMT	Percent Motorcycles	Percent Passenger Vehicles
246040	3769834	2019-St_Johns-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	4.227118456	10240.6397	412.7787501	0.07024	0.068413598	1.94932E-08	1.0608E-08	VMT & MPG	In-Boundary	Passenger	Origin-Destination		Gasoline		2995704572	0.67	75.91
317896	4745814	2019-StJohns-Transportation-EV-GEI	On Road Transportation (USCP Required)	NaN	Infinity	0				0	Direct Entry	In-Boundary	Passenger	Origin-Destination		Electric	Yes	10822264	0.67	75.91
246141	3771758	2019-St_Johns-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	Infinity	Infinity	1472.472367	0.073934483	0.073773234	4.60013E-09	4.39429E-09	VMT & MPG	In-Boundary	Freight		Origin-Destination	Diesel		311379882.5	0	3.46
247846	3800669	2019-StJohns-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)				0									Diesel				

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Percent Light T	Percent Heavy Tucks	Fuel Use	T&D Loss Factor	Percent Biofuel	CO2 On Road Average Emis	CH4 On Road Average Emission Factor	N2O On Road A	Previously Calculated CO2	Population (optional)	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh	Gas Passenger Vehicle Fu	Gas Passenger Vehicle g CH4/mi	Gas PassengerVehicle g N2O/mi	Gas Light Truck Fuel Economy (MPG)
246040	3769834	2019-St_Johns-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	21.8	1.62			0	0			0	292531	665	66	9	24.37713	0.0183	0.0083	17.86788
317896	4745814	2019-StJohns-Transportation-EV-GEI	On Road Transportation (USCP Required)	21.8	1.62	3246679		5.1	0			0		665	66	9	24.37713	0.0183	0.0083	17.86788
246141	3771758	2019-St_Johns-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	8.31	88.23			0	0			0		665	66	9	24.37713	0.0183	0.0083	17.86788
247846	3800669	2019-StJohns-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)									4601		665	66	9				

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gas Light Truck	Gas Light Truck g N2O	Gas Heavy Truck Fuel Economy (MPG)	Gas Heavy Truck g CH4/mi	Gas Heavy Truck g N2O/mi	Gas Transit Bus Fuel Econo	Gas Transit Bus g CH4/mi	Gas Transit Bus g N2O	Gas Para Transit Bus Fuel Economy (M	Gas Para Transit Bus g CH4	Gas Para Transit Bus g N2O	Gas Motorcycle Fuel Econom	Gas Motorcycle g CH4/mi	Gas Motorcycle g N2O/mi	Electric Vehicle Fuel Economy (MPGe)	Diesel Passenger Vehicle Fuel Econ	Diesel Passenger Vehicle g CH4/mi
246040	3769834	2019-St_Johns-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005
317896	4745814	2019-StJohns-Transportation-EV-GEI	On Road Transportation (USCP Required)	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005
246141	3771758	2019-St_Johns-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005
247846	3800669	2019-StJohns-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)																	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Diesel Passeng	Diesel Light Truck Fue	Diesel Light Truck g CH4/mi	Diesel Light Truck g N2O/mi	Diesel Heavy Truck Fuel Ec	Diesel Heavy Truck g CH4/mi	Diesel Heavy Truck g N2O/mi	Diesel Transit E	Diesel Transit Bus g CH4/mi	Diesel Transit Bus g N2O/mi	Diesel Para Transit Bus Fu	Diesel Para Transit Bus g CH	Diesel Para Transit Bus g N2O/mi	Diesel Motorcycle Fuel Eco	Diesel Motorcycle g CH4/mi	Diesel Motorcycle g N2O/mi	Energy Equivalent (MMBtu)
246040	3769834	2019-St_Johns-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001	
317896	4745814	2019-StJohns-Transportation-EV-GEI	On Road Transportation (USCP Required)	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001	
246141	3771758	2019-St_Johns-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001	
247846	3800669	2019-StJohns-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)																	88179.33333

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Were emission	Location	Rail Type	Local Attribution	Fuel Quantity
246040	3769834	2019-St_Johns-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)					
317896	4745814	2019-StJohns-Transportation-EV-GEI	On Road Transportation (USCP Required)					
246141	3771758	2019-St_Johns-Transportation-Diesel-GEI	On Road Transportation (USCP Required)					
247846	3800669	2019-StJohns-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)	Yes	In-Boundary	Freight	100	638540

AFOLU

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Emissions per Acre Cultivated (MT CO2e /	Emissions per Head of Livestock (M	Emissions per Production Value (MT CO2e / $)
246305	3774487	2019-StJohns-County-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	TRUE	rvolenec@hans	2024 Jan 5 09:49pm					2019 AFOLU StJohns			
246306	3774491	2019-StJohns-County-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 09:50pm					2019 AFOLU StJohns			
246307	3774495	2019-StJohns-County-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 09:51pm					2019 AFOLU StJohns			
246302	3774475	2019-StJohns-County-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	TRUE	rvolenec@hans	2024 Jan 5 09:46pm					2019 AFOLU StJohns			
246303	3774479	2019-StJohns-County-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 09:46pm					2019 AFOLU StJohns			
246309	3774503	2019-StJohns-County-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 09:52pm					2019 AFOLU StJohns			
246308	3774499	2019-StJohns-County-AFOLU-Forest to Cropland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 09:52pm					2019 AFOLU StJohns			
246304	3774485	2019-StJohns-County-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	TRUE	rvolenec@hans	2024 Jan 5 09:48pm					2019 AFOLU StJohns			
248458	3811265	x2019-StJohns-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1	IPCC 5th Assessment 100 Year Values	AFOLU	Source	2017 USDA Agricultural Cen	FALSE	rvolenec@hans	2024 Jan 22 07:34am	0	15468	0	433104		Infinity	Infinity	Infinity
247796	3799895	2019-StJohns-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1	IPCC 5th Assessment 100 Year Values	AFOLU	Source	2017 USDA Agricultural Cen	FALSE	rvolenec@hans	2024 Jan 16 10:21pm	0	552.43	0	15468.04	2019 AFOLU StJohns	Infinity	Infinity	Infinity

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Agricultural Pro	CO2 Emissions From	CH4 Emissions from Agriculture	N2O Emissions from Agriculture	Data Source	Land Area (hectares / year)	Net Carbon Flux (MT CO2e / year)	Category	Land Area (optional - needed for foreca	Net Annual Carbon Flux for C	Data Quality: Emissions o	Data Quality: Activity Data (op	Canopy Area of Trees Outside F	Canopy Area	Emissions from Tree Loss Outside of Fore	CO2 Removals from Trees Outside of Forests
246305	3774487	2019-StJohns-County-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)						3341	-44907	Non-Forest to F	3341	-44907						
246306	3774491	2019-StJohns-County-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)						1142	79447	Forest to Settle	1142	79447						
246307	3774495	2019-StJohns-County-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)						88	10573	Forest to other	88	10573						
246302	3774475	2019-StJohns-County-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)						91245	-545152	Undisturbed Fo	91245	-545152						
246303	3774479	2019-StJohns-County-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)						2163	62604	Forest to Grass	2163	62604						
246309	3774503	2019-StJohns-County-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)						535	27029	Forest to Wetla	535	27029						
246308	3774499	2019-StJohns-County-AFOLU-Forest to Cropland	Emissions and Removals from Forests (USCP Recommended)						2	255	Forest to Cropla	2	255						
246304	3774485	2019-StJohns-County-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommended)							-79612						12222	12222	153638	-233250
248458	3811265	x2019-StJohns-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Enteric Fermen	0	15468	0	US Community Protocol Method A.1 or A.2											
247796	3799895	2019-StJohns-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Enteric Fermen	0	552.43	0	US Community Protocol Method A.1 or A.2											

Solid Waste

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Waste Generated (wet tons)	Mixed MSW Emissions Factor (MT CH4/wet short ton)
247337	3792633	2019 St. Johns County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	Scope 1	III.1.1	2019 St. Johns MSW Factor Set	IPCC 5th Assessment 100 Year Values	Solid Waste	Source		FALSE	avo@hanson-inc.com	2024 Jan 15 04:58pm		6686.595506		187224.6742		454109	0.0648

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Newspaper Em	Office Paper Emissior	Corrugated Cardboard Emissions Factor (MT CH4/wet short ton)	Magazines/Third Class Mail Emissions Factor (MT	Food Scraps Emissions Fa	Grass Emissions Factor (MT	Leaves Emissions Factor (MT CH4/wet short ton)	Branches Emis	Dimensional Lumber Emissions Factor	Mixed MSW LFG Capture Ra	Newspaper LFG Capture F	Office Paper LFG Capture Rat	Corrugated Containers LFG Ca	Magazines/Third Class Mail	Food Scraps LFG Capture Rate (%)	Grass LFG Capture Rate (%)	Leaves LFG Capture Rate (%)
247337	3792633	2019 St. Johns County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	0.042	0.1556	0.1048	0.0476	0.0648	0.0228	0.026	0.058	0.0068	60	59	58	54	52	50	39	47

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Branches LFG	Dimensional Lumber L	Oxidation Rate	Waste per Household	Waste per Business	CO2e per Household	CO2e per Business	Were emission	Total Waste Generated	Landfill Methane Collection S	Landfill Moisture Content	Waste Type to Calculate Emis	CH4 Released (for Previously C	Disposal Location	Number of Households	Number of Businesses	Percentage Mixed MSW
247337	3792633	2019 St. Johns County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	51	57	0.1	4.449606099	58.98285492	1.834528829	24.31805094	No	454109	Typical	Wet	All		Inside the Jurisdiction	102056	7699	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Percentage Ne	Percentage Office Pa	Percentage Corrugated Cardboard	Percentage Magazines / Third Class Mail	Percentage Food Scraps	Percentage Grass	Percentage Leaves	Percentage Bra	Percentage Dimensional Lumber
247337	3792633	2019 St. Johns County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	2.3	3.22	16.43	2.3	0.42	9.28	9.28	9.28	2.44

Waste & Wastewater

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Water Supply Energy Equivalent (MMBtu)	Gallons per Capita (gallons / person)
264286	4090415	2019-StJohns-Wastewater-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	Scope 2	I.3.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Water & Wastewater	Activity	JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 25 06:46pm	4529.419421	0.449536364	0.061300413	4558.251049		
264284	4090361	2019-StJohns-Water-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	Scope 2	VI.1	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Water & Wastewater	Activity	JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 25 06:45pm	1348.89765	0.133875556	0.018255758	1357.483941	15262.42263	12334.32385

Id	Output Record Ids With Co2e	Inventory Record	Calculator	CO2e per Pers	Electricity Energy (MM	Natural Gas Energy (MMBtu)	Electricity CO2 Emissions Factor	Natural Gas CO2 Emission	Electricity CH4 Emissions Fa	Natural Gas CH4 Emissions Factor	Electricity N2O	Natural Gas N2O Emissions Factor	Were emissions calculated e	Electricity Used	Volume of Water Delivered (optional)
264286	4090415	2019-StJohns-Wastewater-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	0.054993558	51249.19113			0.05302		0.000005		0.0000001	No	15016013	
264284	4090361	2019-StJohns-Water-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	0.00533577	15262.42263		0.08838031	0.05302	8.77158E-06	0.000005	1.19612E-06	0.0000001	No	4471889.83	3138

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Population Sen	Data Quality: Activity	Data Quality: Emissions Factor	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh	Wastewater Electric Energy Equivalent (MMBtu)	Gallons per Cap	Electric CO2 Emissions Factor	Electric CH4 Emissions Fact	Electric N2O Emissions Fa	Treatment Location	Volume of Water Treated (optional)
264286	4090415	2019-StJohns-Wastewater-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	82887	High	Low	665	66	9	51249.19113	32019.49642	0.08838031	8.77158E-06	1.19612E-06	In Boundary	2654
264284	4090361	2019-StJohns-Water-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	254412	High	Low	665	66	9							

Nassau County

Residential Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Energy Cost
246095	3770845	2019-Nassau-County-Residential-Energy-FPL	Emissions from Grid Electricity (USCP Required)	Scope 2	I.1.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Residential Energy	Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 4 09:24pm	152459.9336	15.13136184	2.063367523	153430.4042	2019 Nassau RESIDENTIAL FPL		
247908	3801826	2019-Nassau-County-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:51pm	0	0.3768932	0.00500934	11.8804847	2019 RESIDENTIAL Nassau fuel	1192.7	0
247906	3801778	2019-Nassau-County-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:49pm	29.4042772	0.004321413	0.000288094	29.60162173	2019 RESIDENTIAL Nassau fuel	397.57	0
247905	3801754	2019-Nassau-County-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:49pm	3583.429868	0.3379319	0.006758638	3594.683	2019 RESIDENTIAL Nassau fuel	67586.38	0
247907	3801802	2019-Nassau-County-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:50pm	1577.442426	0.272246957	0.027224696	1592.279885	2019 RESIDENTIAL Nassau fuel	25046.72	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Biogenic CO2 (MT)	MMBtu per	CO2e per Household (MT)	MMBtu per Person	CO2e per Person (MT)	CO2 Emissions Factor	Biogenic CO2 Emissions Factor	CH4 Emissions Fac	N2O Emissions Factor	Were emissions calculated externall	Fuel Type	Fuel Use	Data Source	Number of Households (optional)	Building Area (optional)	Population (optional)	Data Quality: Activity Data
246095	3770845	2019-Nassau-County-Residential-Energy-FPL	Emissions from Grid Electricity (USCP Required)		55.852	4.967635957	20.54651262	1.827466164	0.08838031		8.77158E-06	1.19612E-06	No				30886		83958	Low
247908	3801826	2019-Nassau-County-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	111.87526	6.9343	0.069072585	2.548504274	0.025385651	0	93.8	0.316	0.0042	No	Wood	1192.7	Estimation using EIA usage	172		468	Low
247906	3801778	2019-Nassau-County-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	0	7.50132	0.558521165	2.760902778	0.205566818	73.96	0	0.010869565	0.000724638	No	Distillate Fuel Oil No. 2	397.57	Estimation using EIA usage	53		144	Low
247905	3801754	2019-Nassau-County-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	0	165.248	8.78895599	60.77911871	3.232628597	53.02	0	0.005	0.0001	No	Natural Gas	67586.38	Estimation using EIA usage	409		1112	Low
247907	3801802	2019-Nassau-County-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	0	33.0868	2.103408038	12.17041788	0.773702568	62.98	0	0.010869565	0.001086957	No	LPG	25046.72	Estimation using EIA usage	757		2058	Low

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: Emis	Electricity E	Energy Cost ($)	Electricity Used	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh
246095	3770845	2019-Nassau-County-Residential-Energy-FPL	Emissions from Grid Electricity (USCP Required)	Low	1725044	0	505437923.2	665	66	9
247908	3801826	2019-Nassau-County-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	Low						
247906	3801778	2019-Nassau-County-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	Low						
247905	3801754	2019-Nassau-County-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	Low						
247907	3801802	2019-Nassau-County-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	Low						

Industrial Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Biogenic CO2 (MT)
247302	3791798	Rayonier Performance Fibers LLC - Fernandina Mill - Natural G	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 12 04:37pm	23608.2	0.44	0.044	23632.18	2019 - Nassau - Industrial	0	0
247301	3791780	Rayonier Performance Fibers LLC - Fernandina Mill - Tires	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Fuels: Tires	FALSE	greilly@hanson-inc.com	2024 Jan 12 04:36pm	6540.3	2.43	0.32	6693.14	2019 - Nassau - Industrial	0	0
247300	3791762	Rayonier Performance Fibers LLC - Fernandina Mill - Agricultur	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Fuel: Agricultural Byproducts	FALSE	greilly@hanson-inc.com	2024 Jan 12 04:35pm	48.2	0.01	0.002	49.01	2019 - Nassau - Industrial	0	0
247298	3791726	Rayonier Performance Fibers LLC - Fernandina Mill - Residual	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 12 04:32pm	698.9	0.03	0.005	701.065	2019 - Nassau - Industrial	0	0
247289	3791543	WestRock CP, LLC - Fernandina Beach Mill - Distillate Fuel Oil	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 12 02:49pm	14969	0.61	0.122	15018.41	2019 - Nassau - Industrial	0	0
247290	3791561	WestRock CP, LLC - Fernandina Beach Mill - Wood and Wood	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Fuel: Wood and Wood Residuals (dry basis)	FALSE	greilly@hanson-inc.com	2024 Jan 12 02:50pm	283166.3	21.74	10.868	286655.04	2019 - Nassau - Industrial	0	0
247292	3791597	WestRock CP, LLC - Fernandina Beach Mill - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 12 02:54pm	48552.9	7	0.455	48869.475	2019 - Nassau - Industrial	0	0
247291	3791579	WestRock CP, LLC - Fernandina Beach Mill - Bituminous	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Fuel: Bituminous	FALSE	greilly@hanson-inc.com	2024 Jan 12 02:53pm		15.28	2.222	427.84588	2019 - Nassau - Industrial	0	0
247293	3791615	WestRock CP, LLC - Fernandina Beach Mill - Propane	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 12 02:56pm	61.3	0	0.001	61.565	2019 - Nassau - Industrial	0	0
247294	3791633	Rayonier Performance Fibers LLC - Fernandina Mill - Residual	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source		FALSE	greilly@hanson-inc.com	2024 Jan 12 03:09pm	411.9	0.02	0.003	413.255	2019 - Nassau - Industrial	0	0
247299	3791744	Rayonier Performance Fibers LLC - Fernandina Mill - Wood and	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.3.1		IPCC 5th Assessment 100 Year Values	Industrial Energy	Source	Fuel: Wood and Wood Residuals (dry basis)	FALSE	greilly@hanson-inc.com	2024 Jan 12 04:33pm	295658.6	22.69	11.347	299300.875	2019 - Nassau - Industrial	0	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	CO2 Emissions Factor	CH4 Emissions Factor	N2O Emissions Factor	Biogenic CO2 Emissions Factor	Biogenic CO2 Emissions Factor Units	Were emissions calculated externally from ClearPath?	Fuel Type	Fuel Use	CO2	CH4	N2O
247302	3791798	Rayonier Performance Fibers LLC - Fernandina Mill - Natural G	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Natural Gas		23608.2	0.44	0.044
247301	3791780	Rayonier Performance Fibers LLC - Fernandina Mill - Tires	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes			6540.3	2.43	0.32
247300	3791762	Rayonier Performance Fibers LLC - Fernandina Mill - Agricultur	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes			48.2	0.01	0.002
247298	3791726	Rayonier Performance Fibers LLC - Fernandina Mill - Residual	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Residual Fuel Oil No. 6		698.9	0.03	0.005
247289	3791543	WestRock CP, LLC - Fernandina Beach Mill - Distillate Fuel Oil	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Distillate Fuel Oil No. 2		14969	0.61	0.122
247290	3791561	WestRock CP, LLC - Fernandina Beach Mill - Wood and Wood	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes			283166.3	21.74	10.868
247292	3791597	WestRock CP, LLC - Fernandina Beach Mill - Natural Gas	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Natural Gas		48552.9	7	0.455
247291	3791579	WestRock CP, LLC - Fernandina Beach Mill - Bituminous	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes				15.28	2.222
247293	3791615	WestRock CP, LLC - Fernandina Beach Mill - Propane	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Propane		61.3	0	0.001
247294	3791633	Rayonier Performance Fibers LLC - Fernandina Mill - Residual	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes	Distillate Fuel Oil No. 2		411.9	0.02	0.003
247299	3791744	Rayonier Performance Fibers LLC - Fernandina Mill - Wood and	Emissions from Stationary Fuel Combustion (USCP Required)	0	0	0	0	0	Yes			295658.6	22.69	11.347

Commercial Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Biogenic CO2 (MT)
246915	3786694	2019-Nassau-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.2.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Commercial Energy	Activity	The above data is pulled from the United States Censu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 07:34pm	77262.79132	7.668186808	1.045661837	77754.60094	2019 Nassau Commercial Electricity		
247109	3789572	2019-Nassau-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Censu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:52pm	5306.8765	0.84644	0.06046	5346.59872	2019 Nassau Commercial fuel	75575	0
247107	3789524	2019-Nassau-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Censu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:50pm	2657.23488	0.390521739	0.026034783	2675.068706	2019 Nassau Commercial fuel	35928	0
247108	3789548	2019-Nassau-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Censu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:51pm	1.5792	0.000233333	1.55556E-05	1.589855556	2019 Nassau Commercial fuel	21	0
247106	3789500	2019-Nassau-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Censu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:50pm	8392.77778	1.44848913	0.144848913	8471.720438	2019 Nassau Commercial fuel	133261	0
247110	3789596	2019-Nassau-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Censu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:52pm	1335.8331	0.238846154	0.023884615	1348.850215	2019 Nassau Commercial fuel	21735	0
246937	3787063	2019-Nassau-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Censu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 08:35pm	9121.18966	0.860165	0.0172033	9149.833155	2019 Nassau Commercial fuel	172033	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	MMBtu per 1000 SQFT Floor Area	MMBtu per Business	CO2e per 1000 SQFT Floor Area (MT)	CO2e per Establishment (MT)	MMBtu per Employee	CO2e per Employee (MT)	CO2 Emissions Factor (kg/MMBtu)	CH4 Emissions Factor (kg/MMBtu)	N2O Emissions Factor (kg/MMBtu)	Biogenic CO2 Emissions Factor	Were emissions calculated externally from ClearPath?	Fuel Type	Fuel Use	Data Source	Commercial Workforce Size (optional)	Number of Commercial Establishments (optional)	Notation Keys
246915	3786694	2019-Nassau-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)						3.319725085					No					1948	
247109	3789572	2019-Nassau-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	38.7962	Infinity	2.744660534	3.226667236	0.22827251	70.22	0.0112	0.0008	0	No	Gasoline	75575		23422	1948	
247107	3789524	2019-Nassau-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	18.4435	Infinity	1.373238555	1.533942447	0.114211797	73.96	0.010869565	0.000724638	0	No	Distillate Fuel Oil No. 2	35928		23422	1948	
247108	3789548	2019-Nassau-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	0.01078	Infinity	0.000816148	0.000896593	6.78787E-05	75.2	0.011111111	0.000740741	0	No	Kerosene	21		23422	1948	
247106	3789500	2019-Nassau-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	68.4091	Infinity	4.348932463	5.689565366	0.361699276	62.98	0.010869565	0.001086957	0	No	LPG	133261		23422	1948	
247110	3789596	2019-Nassau-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	11.1576	Infinity	0.692428242	0.9279737	0.057589028	61.46	0.010989011	0.001098901	0	No	Propane	21735		23422	1948	
246937	3787063	2019-Nassau-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	88.3126	Infinity	4.697039607	7.344932115	0.390651232	53.02	0.005	0.0001	0	No	Natural Gas	172033		23422	1948	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: Activity Data	Data Quality: Emissions Factor	Electricity Energy Equivalent (MMBtu)	MMBtu per 1,000 SQFT Floor Area	CO2e per 1,000 SQFT Floor Area (MT)	MMBTU per Employee	MMBtu per Establishment	CO2e per Establishment	CO2 Emissions Factor	CH4 Emissions Factor	N2O Emissions Factor	Electricity Used	Commercial Workforce Size (optional)	Data Quality: Emissions Factors	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh
246915	3786694	2019-Nassau-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Low		874208.1911	Infinity	Infinity	37.32423325	448.772172	39.91509288	0.08838031	8.77158E-06	1.19612E-06	256143	23422	Low	665	66	9
247109	3789572	2019-Nassau-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247107	3789524	2019-Nassau-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247108	3789548	2019-Nassau-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247106	3789500	2019-Nassau-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247110	3789596	2019-Nassau-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
246937	3787063	2019-Nassau-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															

Transportation & Mobile Sour

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	On Road VMT	Fossil Fuel Energy Equivalent (MMBtu)
246135	3771624	2019-Nassau-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.1	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Nationa	IPCC 5th Assessment 100 Year Values	Transportation & Mobile Sou	Source and Activity	The above data is pulled from Google's Environmental	FALSE	mcoalson@hanson-inc.com	2024 Jan 4 10:56pm	202824.3942	0.634197832	0.60581966	203002.694	2019 transportation Diesel Nassau	137865197.7	2743299.022
317897	4745839	2019-Nassau-Transportation-EV-GEI	On Road Transportation (USCP Required)	Scope 3	II.1.3	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Nationa	IPCC 5th Assessment 100 Year Values	Transportation & Mobile Sou	Activity	2019 EV VMT for Nassau County was estimated by sca	FALSE	apolematidis@hanson-inc.com	2025 Sep 21 09:53pm	0	0	0	0		2278940	0
246037	3769770	2019-Nassau-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.1	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Nationa	IPCC 5th Assessment 100 Year Values	Transportation & Mobile Sou	Source and Activity	The above data is pulled from Google's Environmental	FALSE	mcoalson@hanson-inc.com	2024 Jan 3 09:36pm	544071.5139	25.90413137	14.09673433	548532.4641	2019 Gasoline transportation Nassau	1328877671	7745892.851
247845	3800654	2019-Nassau-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)	Scope 1	II.2.1	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Transportation & Mobile Sou	Source and Activity	Where available Sustainability or ESG reports were use	FALSE	mcoalson@hanson-inc.com	2024 Jan 17 05:44pm	8867			8867	2019,Nassau,Rail,Diesel		

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Biofuel Energy (MMBtu)	Biogenic-CO2 (MT)	Biofuel CH4 (MT)	Biofuel N2O (MT)	Emissions per Capita (MT CO2 per Person)	Miles per person	Emissions per Mile (g CO2e per mile)	CO2 Emissions Factor	Biogenic CO2 Emissions Factor	CH4 Emissions Factor	N2O Emissions Factor	Calculation Method	VMT Location	Travel Type	Type of VMT or Emissions Data	Type of Freight VMT or Emissions Data	Fuel Type
246135	3771624	2019-Nassau-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0	0	0	0	2.290580468	1555.601667	1472.472367	0.073934483	0.073773234	4.60013E-09	4.39429E-09	VMT & MPG	In-Boundary	Freight		Origin-Destination	Diesel
317897	4745839	2019-Nassau-Transportation-EV-GEI	On Road Transportation (USCP Required)	0	0	0	0	NaN	Infinity	0	0.08838031	0	8.77158E-06	1.19612E-06	VMT & MPG	In-Boundary	Passenger	Origin-Destination		Electric
246037	3769770	2019-Nassau-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0	0	0	0	5.885478312	14258.19112	412.7787501	0.07024	0.068413598	1.94932E-08	1.0608E-08	VMT & MPG	In-Boundary	Passenger	Origin-Destination		Gasoline
247845	3800654	2019-Nassau-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)								0									Diesel

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Is this a T&D Loss Record? (Required for EVs)	VMT	Percent Motorcycles	Percent Passenger Vehicles	Percent Light Trucks	Percent Heavy Tucks	T&D Loss Factor	Percent Biofuel	Previously Calculated CO2	Previously Calculated CH4	Previously Calculated N2O	Previously Calculated Biogenic CO2	Population (optional)	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh	Gas Passenger Vehicle Fuel Economy (MPG)
246135	3771624	2019-Nassau-Transportation-Diesel-GEI	On Road Transportation (USCP Required)		1.4E+08	0	3.46	8.31	88.23	0	0	0	0	0	0	88625	665	66	9	24.37713
317897	4745839	2019-Nassau-Transportation-EV-GEI	On Road Transportation (USCP Required)	Yes	2278940	0.67	75.91	21.8	1.62	5.1	0	0	0	0	0		665	66	9	24.37713
246037	3769770	2019-Nassau-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)		1.3E+09	0.67	75.91	21.8	1.62	0	0	0	0	0	0	93201	665	66	9	24.37713
247845	3800654	2019-Nassau-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)									8867					665	66	9	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gas Passenger Vehicle g CH4/mi	Gas Passenger Vehicle g N2O/mi	Gas Light Truck Fuel Economy (MPG)	Gas Light Truck g CH4/mi	Gas Light Truck g N2O/mi	Gas Heavy Truck Fuel Economy (MPG)	Gas Heavy Truck g CH4/mi	Gas Heavy Truck g N2O/mi	Gas Transit Bus Fuel Economy (MPG)	Gas Transit Bus g CH4/mi	Gas Transit Bus g N2O/mi	Gas Para Transit Bus Fuel Economy (MPG)	Gas Para Transit Bus g CH4/mi	Gas Para Transit Bus g N2O/mi	Gas Motorcycle Fuel Economy (MPG)	Gas Motorcycle g CH4/mi	Gas Motorcycle g N2O/mi
246135	3771624	2019-Nassau-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083
317897	4745839	2019-Nassau-Transportation-EV-GEI	On Road Transportation (USCP Required)	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083
246037	3769770	2019-Nassau-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083
247845	3800654	2019-Nassau-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)																	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Electric Vehicle Fuel Economy (MPGe)	Diesel Passenger Vehicle Fuel Economy (MPG)	Diesel Passenger Vehicle g CH4/mi	Diesel PassengerVehicle g N2O/mi	Diesel Light Truck Fuel Economy (MPG)	Diesel Light Truck g CH4/mi	Diesel Light Truck g N2O/mi	Diesel Heavy Truck Fuel Economy (MPG)	Diesel Heavy Truck g CH4/mi	Diesel Heavy Truck g N2O/mi	Diesel Transit Bus Fuel Economy (MPG)	Diesel Transit Bus g CH4/mi	Diesel Transit Bus g N2O/mi	Diesel Para Transit Bus Fuel Economy (MPG)	Diesel Para Transit Bus g CH4/mi	Diesel Para Transit Bus g N2O/mi	Diesel Motorcycle Fuel Economy (MPG)
246135	3771624	2019-Nassau-Transportation-Diesel-GEI	On Road Transportation (USCP Required)		24.3771	0.0005	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713
317897	4745839	2019-Nassau-Transportation-EV-GEI	On Road Transportation (USCP Required)		24.3771	0.0005	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713
246037	3769770	2019-Nassau-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)		24.3771	0.0005	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713
247845	3800654	2019-Nassau-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)																	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Diesel Motorcycle g CH4/mi	Diesel Motorcycle g N2O/mi	Energy Equivalent (MMBtu)	Were emissions calculated externally from ClearPath?	Location	Rail Type	Local Attribution	Fuel Quantity
246135	3771624	2019-Nassau-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0.0005	0.001						
317897	4745839	2019-Nassau-Transportation-EV-GEI	On Road Transportation (USCP Required)	0.0005	0.001						
246037	3769770	2019-Nassau-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0.0005	0.001						
247845	3800654	2019-Nassau-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)			170041.5	Yes	In-Boundary	Freight	100	1231335

AFOLU

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Canopy Area of Trees Outside Forest (hectares)	Net Carbon Flux (MT CO2e / year)
246300	3774467	2019-Nassau-County-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2		IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (Gainesville reference)	FALSE	rvolenec@hanson-inc.com	2024 Jan 5 09:31pm					2019 AFOLU Nassau		7962
246301	3774471	2019-Nassau-County-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2		IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (Gainesville reference)	FALSE	rvolenec@hanson-inc.com	2024 Jan 5 09:31pm					2019 AFOLU Nassau		31077
246295	3774447	2019-Nassau-County-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2		IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (Gainesville reference)	TRUE	rvolenec@hanson-inc.com	2024 Jan 5 09:25pm					2019 AFOLU Nassau		-732460
246297	3774455	2019-Nassau-County-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2		IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (Gainesville reference)	FALSE	rvolenec@hanson-inc.com	2024 Jan 5 09:26pm					2019 AFOLU Nassau		216653
246298	3774459	2019-Nassau-County-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2		IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (Gainesville reference)	TRUE	rvolenec@hanson-inc.com	2024 Jan 5 09:29pm					2019 AFOLU Nassau		-95477
246299	3774463	2019-Nassau-County-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2		IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (Gainesville reference)	FALSE	rvolenec@hanson-inc.com	2024 Jan 5 09:30pm					2019 AFOLU Nassau		16730
246296	3774453	2019-Nassau-County-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommende	Scope 1	V.2		IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (Gainesville reference)	FALSE	rvolenec@hanson-inc.com	2024 Jan 5 09:26pm					2019 AFOLU Nassau	14575	2061
247795	3799881	2019-Nassau-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1		IPCC 5th Assessment 100 Year Values	AFOLU	Source	2017 USDA Agricultural Census	FALSE	rvolenec@hanson-inc.com	2024 Jan 16 10:17pm	0	1164	0	32592	2019 AFOLU Nassau		
248456	3811237	x2019-Nassau-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1		IPCC 5th Assessment 100 Year Values	AFOLU	Source	2017 USDA Agricultural Census (AR5 GWP = 28)	TRUE	rvolenec@hanson-inc.com	2024 Jan 22 07:30am	0	32591.9	0	912573.2			

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Canopy Area	Emissions from Tree Loss Outside of Forests	CO2 Removals from Trees Outside of Forests	Data Quality: Emissions or Removal Factor (optional)	Data Quality: Activity Data (optional)	Land Area (hectares / year)	Category	Land Area (optional - needed for forecasting)	Net Annual Carbon Flux for Category (Metric Tons CO2)	Biogenic CO2 (MT)	Forecast Quantity	Emissions per Acre Cultivated (MT CO2e / Acre)	Emissions per Head of Livestock (MT CO2e / Head)	Emissions per Production Value (MT CO2e / $)	Agricultural Process	CO2 Emissions From Agriculture	CH4 Emissions from Agriculture
246300	3774467	2019-Nassau-County-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)						55	Forest to other non-forest	55	7962								

246301	3774471	2019-Nassau-County-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)						413	Forest to Wetland	413	31077								
246295	3774447	2019-Nassau-County-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)						101194	Undisturbed Forest	101194	-732460								
246297	3774455	2019-Nassau-County-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)						5484	Forest to Grassland	5484	216653								
246298	3774459	2019-Nassau-County-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)						6756	Non-Forest to Forest	6756	-95477								
246299	3774463	2019-Nassau-County-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)						226	Forest to Settlement	226	16730								
246296	3774453	2019-Nassau-County-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommend	14575	280207	-278146														
247795	3799881	2019-Nassau-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)												Infinity	Infinity	Infinity	Enteric Fermentation	0	1164
248456	3811237	x2019-Nassau-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)												Infinity	Infinity	Infinity	Enteric Fermentation	0	32591.9

Id	Output Record Ids With Co2e	Inventory Record	Calculator	N2O Emissions from Agriculture	Data Source	Acres Cultivated (optional)	Head of Livestock (optional)	Value of Production (optional)	Notation Keys	Data Quality: Activity Data	Data Quality: Emissions Factor
246300	3774467	2019-Nassau-County-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)								
246301	3774471	2019-Nassau-County-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)								
246295	3774447	2019-Nassau-County-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)								
246297	3774455	2019-Nassau-County-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)								
246298	3774459	2019-Nassau-County-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)								
246299	3774463	2019-Nassau-County-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)								
246296	3774453	2019-Nassau-County-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommended)								
247795	3799881	2019-Nassau-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	0	US Comn						
248456	3811237	x2019-Nassau-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	0	US Comn						

Solid Waste

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Waste Generated (wet tons)	Mixed MSW Emissions Factor (MT CH4/wet short ton)
247335	3792569	2019 Nassau County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	Scope 1	III.1.1	2019 Nassau MSW Factor Set	IPCC 5th Assessment 100 Year Values	Solid Waste	Source		FALSE	avo@hanson-inc.com	2024 Jan 15 04:13pm		831.3201001		23276.9628		194034	0.0648

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Newspaper Emissions Factor (MT CH4/wet short ton)	Office Paper Emissions Factor (MT CH4/wet short ton)	Corrugated Cardboard Emissions Factor (MT CH4/wet short ton)	Magazines/Third Class Mail Emissions Factor (MT CH4/wet short ton)	Food Scraps Emissions Factor (MT CH4/wet short ton)	Grass Emissions Factor (MT CH4/wet short ton)	Leaves Emissions Factor (MT CH4/wet short ton)	Branches Emissions Factor (MT CH4/wet short ton)	Dimensional Lumber Emissions Factor (MT CH4/wet short ton)	Mixed MSW LFG Capture Rate (%)	Newspaper LFG Capture Rate (%)	Office Paper LFG Capture Rate (%)	Corrugated Containers LFG Capture Rate (%)	Magazines/Third Class Mail LFG Capture Rate (%)	Food Scraps LFG Capture Rate (%)	Grass LFG Capture Rate (%)	Leaves LFG Capture Rate (%)
247335	3792569	2019 Nassau County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	0.042	0.1556	0.1048	0.0476	0.0648	0.0228	0.026	0.058	0.0068	60	59	58	54	52	50	39	47

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Branches LFG Capture Rate (%)	Dimensional Lumber LFG Capture Rate (%)	Oxidation Rate	Waste per Household	Waste per Business	CO2e per Household	CO2e per Business	Were emissions calculated externally from ClearPath?	Total Waste Generated	Landfill Methane Collection Scenario	Landfill Moisture Content	Waste Type to Calculate Emissions For	CH4 Released (for Previously Calculated records)	Disposal Location	Number of Households	Number of Businesses	Notation Keys
247335	3792569	2019 Nassau County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	51	57	0.1	5.339993395	93.6457529	0.640603336	11.23405541	No	194034	Typical	Wet	All		Inside the Jurisdiction	36336	2072	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: Activity Data	Data Quality: Emissions Factor	Percentage Mixed MSW	Percentage Newspaper	Percentage Office Paper	Percentage Corrugated Cardboard	Percentage Magazines / Third Class Mail	Percentage Food Scraps	Percentage Grass	Percentage Leaves	Percentage Branches	Percentage Dimensional Lumber
247335	3792569	2019 Nassau County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)			0	0.93	0.91	6.27	0.63	0.13	0.39	0.39	0.39	19.77

Waste & Wastewater

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Wastewater Electric Energy Equivalent (MMBtu)	Gallons per Capita
264458	4093631	2019-Nassau-Wastewater-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	Scope 3	VI.1	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Water & Wastewater	Activity		FALSE	cbarsanti@hanson-inc.com	2024 Jun 26 07:49pm	0	0	0	NaN		0	45214.69219
264457	4093609	2019-Nassau-Water-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	Scope 2	VI.1	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Water & Wastewater	Activity	JEA provided data	FALSE	cbarsanti@hanson-inc.com	2024 Jun 26 07:48pm	0	0	0	NaN			

Id	Output Record Ids With Co2e	Inventory Record	Calculator	CO2e per Person (MT)	Electricity Energy (MMBtu)	Natural Gas Energy(MMBtu)	Electric CO2 Emissions Factor	Natural Gas CO2 Emissions Factor	Electric CH4 Emissions Factor	Natural Gas CH4 Emissions Factor	Electric N2O Emissions Factor	Natural Gas N2O Emissions Factor	Were emissions calculated externally from ClearPath?	CO2	CH4	N2O	Electricity Used	Natural Gas Used	Treatment Location	Volume of Water Treated (optional)
264458	4093631	2019-Nassau-Wastewater-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	NaN	0		0	0.05302	0	0.000005	0	0.0000001					0			874
264457	4093609	2019-Nassau-Water-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	NaN	19994.3			0.05302		0.000005		0.0000001	No				5858325			

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Population Served (optional)	Notation Keys	Data Quality: Activity Data	Data Quality: Emissions Factor	CO2 lbs/MWh	CO2 kg/MWh	CH4 lbs/GWh	CH4 kg/GWh	N2O lbs/GWh	N2O kg/GWh	Water Supply Energy Equivalent (MMBtu)	Gallons per Capita (gallons / person)	Natural Gas Energy (MMBtu)	Electricity CO2 Emissions Factor	Electricity CH4 Emissions Factor	Electricity N2O Emissions Factor	Volume of Water Delivered (optional)
264458	4093631	2019-Nassau-Wastewater-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	19330		High	Low	861.028		55		7								
264457	4093609	2019-Nassau-Water-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	20099		High	Low	861.028		55		7		19994.28328	45176.37693		0	0	0	908

Clay County

Residential Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Energy Cost
246093	3770808	2019-Clay-County-Residential-Energy	Emissions from Grid Electricity (USCP Required)	Scope 2	I.1.2	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Residential Energy	Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 4 09:18pm	502199.2261	32.07904672	4.082787764	504179.3782	2019 Clay RESIDENTIAL FPL		
264325	4091404	2019-Clay-County-Residential-Elec-JEA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.1.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Residential Energy	Activity	JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 25 08:53pm	15440.42663	1.53243332	0.20896818	15538.71133			
247898	3801593	2019-Clay-County-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:37pm	74.8053628	0.010993804	0.00073292	75.3074132	2019 RESIDENTIAL Clay Fuel	1011.43	0
247899	3801617	2019-Clay-County-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:37pm	0	0.95883248	0.012743976	30.22446308	2019 RESIDENTIAL Clay Fuel	3034.28	0
247897	3801569	2019-Clay-County-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:36pm	9116.405135	0.8597138	0.017194276	9145.033605	2019 RESIDENTIAL Clay Fuel	171942.76	0
247900	3801641	2019-Clay-County-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:40pm	4013.083081	0.692608261	0.069260826	4050.830231	2019 RESIDENTIAL Clay Fuel	63719.96	0
291038	4466735	2019-Clay-Residential-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	data sent from TECO; include in NG census	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 03:26pm	52.150472	0.004918	0.00009836	52.3142414		983.6	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Biogenic CO2 (	MMBtu per Household	CO2e per Household (MT)	MMBtu per Person	CO2e per Person (MT)	CO2 Emissions Factor	Biogenic CO2 Emissions Factor	CH4 Emissions	N2O Emissions Factor	Were emissions calculated e	Fuel Type	Fuel Use	Data Source	Number of Households (opti	Building Area (optional)	Population (optional)	Data Quality: Activity Data
246093	3770808	2019-Clay-County-Residential-Energy	Emissions from Grid Electricity (USCP Required)		61.00261001	7.008234222	20.68167206	2.37599673	0.114432965		7.30965E-06	9.30319E-07	No				71941		212197	Low
264325	4091404	2019-Clay-County-Residential-Elec-JEA	Emissions from Grid Electricity (USCP Required)		2.428439583	0.215992429	0.823312168	0.073227762	0.08838031		8.77158E-06	1.19612E-06	No				71941		212197	High
247898	3801593	2019-Clay-County-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	0	13.13545455	0.978018353	4.455638767	0.331750719	73.96	0	0.010869565	0.000724638	No	Distillate Fuel Oil No. 2	1011.43	Estimation using EIA usage	77		227	Low
247899	3801617	2019-Clay-County-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	284.615464	9.394055728	0.093574189	3.183924449	0.031715071	0	93.8	0.316	0.0042	No	Wood	3034.28	Estimation using EIA usage	323		953	Low
247897	3801569	2019-Clay-County-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	0	354.5211546	18.85573939	120.1556674	6.390659402	53.02	0	0.005	0.0001	No	Natural Gas	171942.76		485		1431	Low
247900	3801641	2019-Clay-County-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	0	91.28934097	5.803481706	30.94704225	1.96737748	62.98	0	0.010869565	0.001086957	No	LPG	63719.96	Estimation using EIA usage	698		2059	Low
291038	4466735	2019-Clay-Residential-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)	0	4.333039648	0.230459213	Infinity	Infinity	53.02	0	0.005	0.0001	No	Natural Gas	9836	Measured usage	227			

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: E	Electricity Energy Equ	Energy Cost ($)	Electricity Used	CO2 lbs/MWh	CO2 kg/MWh	CH4 lbs/GWh	CH4 kg/GWh	N2O lbs/GWh	N2O kg/GWh
246093	3770808	2019-Clay-County-Residential-Energy	Emissions from Grid Electricity (USCP Required)	Low	4388588.766	0	1285856509	861.028		55		7	
264325	4091404	2019-Clay-County-Residential-Elec-JEA	Emissions from Grid Electricity (USCP Required)	Low	174704.372	0	51188381	665		66		9	
247898	3801593	2019-Clay-County-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
247899	3801617	2019-Clay-County-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)										
247897	3801569	2019-Clay-County-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
247900	3801641	2019-Clay-County-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
291038	4466735	2019-Clay-Residential-Fuel-NG-TECO	Emissions from Stationary Fuel Combustion (USCP Required)										

Industrial Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Electricity Energy Equivalent (MMBtu)
264451	4093513	2019-Clay-Industrial-JEA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.3.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Industrial Energy	Activity	JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 26 07:35pm	3344.33538	0.331919	0.045261682	3365.623457	37840.27645

Id	Output Record Ids With Co2e	Inventory Record	Calculator	CO2 Emissions	CH4 Emissions Facto	N2O Emissions Factor	Were emissions calculated externally from ClearP	Electricity Used	Data Quality: Activity Data	Data Quality: Emissions Factor	CO2 lbs/MWh	CO2 kg/MWh	CH4 lbs/GWh	CH4 kg/GWh	N2O lbs/GWh	N2O kg/GWh
264451	4093513	2019-Clay-Industrial-JEA	Emissions from Grid Electricity (USCP Required)	0.08838031	8.77158E-06	1.19612E-06	No	11087201	High	Low	665		66		9	

Commercial Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Biogenic CO2 (MT)
246912	3786596	2019-Clay-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.2.2	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Commercial Energy	Activity	The above data is pulled from the United States Census Bu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 07:27pm	245893.0091	15.70694043	1.999065145	246862.5557	2019 Clay Commercial Electricity		
246450	4093491	2019-Clay-Commercial-Elec-JEA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.2.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Commercial Energy	Activity	JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 26 07:34pm	15345.48929	1.523010967	0.207683314	15443.16967			
247098	3789308	2019-Clay-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:37pm	3.9104	0.000577778	3.85185E-05	3.936785185	2019 Clay Commercial fuel	52	0
247099	3789332	2019-Clay-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:38pm	13044.20764	2.0805344	0.1486096	13141.84415	2019 Clay Commercial fuel	185762	0
247096	3789260	2019-Clay-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:36pm	20629.35092	3.560369565	0.356036957	20823.39106	2019 Clay Commercial fuel	327554	0
247100	3789356	2019-Clay-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:39pm	3283.37758	0.587065934	0.058706593	3315.372673	2019 Clay Commercial fuel	53423	0
247097	3789284	2019-Clay-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:36pm	6531.48156	0.959902174	0.063993478	6575.317093	2019 Clay Commercial fuel	88311	0
246935	3787015	2019-Clay-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Census Bu	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 08:32pm	22419.71908	2.11427	0.0422854	22490.12427	2019 Clay Commercial fuel	422854	0
291039	4466758	2019-Clay-Commercial-TECO-Natural-Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	data sent from TECO; included in NG census	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 03:28pm	10948.69893	1.0325065	0.02065013	10983.08139		206501.3	0
291040	4466782	2019-Clay-Government-TECO-Natural-Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	data sent from TECO; included in NG census	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 03:29pm	1.80268	0.00017	0.0000034	1.808341		34	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	MMBtu per 100	MMBtu per Business	CO2e per 1000 SQFT Floor Area (MT)	CO2e per Establishment (MT)	MMBtu per Employee	CO2e per Employee (MT)	CO2 Emissions Factor (kg/MMBtu)	CH4 Emissions	N2O Emissions Factor (kg/MMBtu)	Biogenic CO2 Emissions Fac	Were emissions calculated	Fuel Type	Fuel Use	Data Source	Commercial Floor Area (optional)	Commercial Workforce Size (optional)	Number of Commercial Establishments (optional)
246912	3786596	2019-Clay-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)						4.287967131					No						3993
246450	4093491	2019-Clay-Commercial-Elec-JEA	Emissions from Grid Electricity (USCP Required)						0.268245639					No						3993
247098	3789308	2019-Clay-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	0.01302279	Infinity	0.000985922	0.000903233	6.83814E-05	75.2	0.011111111	0.000740741	0	No	Kerosene	52			57571	3993
247099	3789332	2019-Clay-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	46.52191335	Infinity	3.291220673	3.226659256	0.228271945	70.22	0.0112	0.0008	0	No	Gasoline	185762			57571	3993
247096	3789260	2019-Clay-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	82.0320561	Infinity	5.21497397	5.68956597	0.361699311	62.98	0.010869565	0.001086957	0	No	LPG	327554			57571	3993
247100	3789356	2019-Clay-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	13.37916354	Infinity	0.830296187	0.927949836	0.057587547	61.46	0.010989011	0.001098901	0	No	Propane	53423			57571	3993
247097	3789284	2019-Clay-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	22.11645379	Infinity	1.646711017	1.533949384	0.114212313	73.96	0.010869565	0.000724638	0	No	Distillate Fuel Oil No. 2	88311			57571	3993
246935	3787015	2019-Clay-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	105.8988229	Infinity	5.632387746	7.344913238	0.390650228	53.02	0.005	0.0001	0	No	Natural Gas	422854			57571	3993
291039	4466758	2019-Clay-Commercial-TECO-Natural-Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	1140.89116	Infinity	60.68000769	Infinity	Infinity	53.02	0.005	0.0001	0	No	Natural Gas	2065013	Measured usage			181
291040	4466782	2019-Clay-Government-TECO-Natural-Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	34	Infinity	1.808341	Infinity	Infinity	53.02	0.005	0.0001	0	No	Natural Gas	34	Measured usage			1

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: A	Data Quality: Emissi	Electricity Energy Equivalent (MMBtu)	MMBtu per 1,000 SQFT Floor Area	CO2e per 1,000 SQFT Floo	MMBTU per Employee	MMBtu per Establishment	CO2e per Estal	CO2 Emissions Factor	CH4 Emissions Factor	N2O Emissions Factor	Electricity Used	Commercial Workforce Size (o	Data Quality: Emissions Fa	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh
246912	3786596	2019-Clay-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Low		2148795.222	Infinity	Infinity	37.32426433	538.1405514	61.82383063	0.114432965	7.30965E-06	9.30319E-07	629597	57571	Low	861.028	55	7
246450	4093491	2019-Clay-Commercial-Elec-JEA	Emissions from Grid Electricity (USCP Required)	High		173630.1809	Infinity	Infinity	3.0159313	43.48364159	3.86756065	0.08838031	8.77158E-06	1.19612E-06	50873643	57571	Low	665	66	9
247098	3789308	2019-Clay-Commercial-Fuel-Kerosene-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247099	3789332	2019-Clay-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247096	3789260	2019-Clay-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247100	3789356	2019-Clay-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247097	3789284	2019-Clay-Commercial-Fuel-Distillate Fuel Oil-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
246935	3787015	2019-Clay-Commercial-Fuel-Natural Gas-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
291039	4466758	2019-Clay-Commercial-TECO-Natural-Gas	Emissions from Stationary Fuel Combustion (USCP Required)																	
291040	4466782	2019-Clay-Government-TECO-Natural-Gas	Emissions from Stationary Fuel Combustion (USCP Required)																	

Transportation & Mobile Sources

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	CO2 Emissions Factor
317898	4745864	2019-Clay-Transportation-EV-GEI	On Road Transportation (USCP Required)	Scope 3	II.1.3	FRCC All (FRCC) eGRID 2019 and 2019 US National Defaults (updated 2020)	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Activity	2019 EV VMT for Clay County was back-cast from the cou	FALSE	apolematidis@hanson-inc.com	2025 Sep 21 10:04pm	0	0	0	0			0
246036	3769745	2019-Clay-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.1	FRCC All (FRCC) eGRID 2019 and 2019 US National Defaults (updated 2020)	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	The above data is pulled from Google's Environmental Insi	FALSE	mcoalson@hanson-inc.com	2024 Jan 3 09:21pm	588685.24	28.02826357	15.25266297	593511.9871	2019 Gasoline transportation Clay		0.07024
246127	3771466	2019-Clay-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.1	FRCC All (FRCC) eGRID 2019 and 2019 US National Defaults (updated 2020)	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	The above data is pulled from Google's Environmental Insi	FALSE	mcoalson@hanson-inc.com	2024 Jan 4 10:45pm	219395.6469	0.686013357	0.655316618	219588.5142	2019 Clay transportation Diesel		0.073934483
247842	3800605	2019-Clay-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)	Scope 1	II.2.1	FRCC All (FRCC) eGRID 2019	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	Where available Sustainability or ESG reports were used t	FALSE	mcoalson@hanson-inc.com	2024 Jan 17 05:41pm	6140			6140	2019 Clay Rail Diesel	117788.6095	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Were emission	Location	Rail Type	Local Attribution	Fuel Type	Fuel Quantity	Previously Calculated CO2	CO2 lbs/MWh	CO2 kg/MWh	CH4 lbs/GWh	CH4 kg/GWh	N2O lbs/GWh	On Road VMT	Fossil Fuel Energy Equivale	Biofuel Energy (MMBtu)	Biogenic-CO2 (MT)	Biofuel CH4 (MT)
317898	4745864	2019-Clay-Transportation-EV-GEI	On Road Transportation (USCP Required)					Electric			861.028		55		7	2070082	131.9873038	0	0	0
246036	3769745	2019-Clay-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)					Gasoline			861.028		55		7	1437845303	8381054.1	0	0	0
246127	3771466	2019-Clay-Transportation-Diesel-GEI	On Road Transportation (USCP Required)					Diesel			861.028		55		7	149129124	2967433.31	0	0	0
247842	3800605	2019-Clay-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)	Yes	In-Boundary	Freight	100	Diesel	852952	6140	861.028		55		7					

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Biofuel N2O (M	Emissions per Capita	Miles per person	Emissions per Mile (g CO2e per mile)	Biogenic CO2 Emissions F	CH4 Emissions Factor	N2O Emissions Factor	Calculation Me	VMT Location	Travel Type	Type of VMT or Emissions I	Type of Freight VMT or Emissio	Is this a T&D Loss Record? (Re	VMT	Percent Motorcycles	Percent Passenger Vehicles	Percent Light Trucks
317898	4745864	2019-Clay-Transportation-EV-GEI	On Road Transportation (USCP Required)	0	NaN	Infinity		0		0	Direct Entry	In-Boundary	Passenger		Other	Yes	2070082			
246036	3769745	2019-Clay-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0	2.296926349	Infinity	412.7787501	0.068413598	1.94932E-06	1.0608E-08	VMT & MPG	In-Boundary	Passenger	Origin-Destination			1437845303	0.67	75.91	21.8
246127	3771466	2019-Clay-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0	Infinity	Infinity	1472.472367	0.073773234	4.60013E-09	4.39429E-09	VMT & MPG	In-Boundary	Freight		Origin-Destination		149129124	0	3.46	8.31
247842	3800605	2019-Clay-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)																	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Percent Heavy	Fuel Use	T&D Loss Factor	Percent Biofuel	Population (optional)	Gas Passenger Vehicle Fuel	Gas Passenger Vehicle g CH4/mi	Gas Passenge	Gas Light Truck Fuel Economy (MPG)	Gas Light Truck g CH4/mi	Gas Light Truck g N2O/mi	Gas Heavy Truck Fuel Econom	Gas Heavy Truck g CH4/mi	Gas Heavy Truck g N2O/mi	Gas Transit Bus Fuel Economy (MPG)	Gas Transit Bus g CH4/mi	Gas Transit Bus g N2O/mi
317898	4745864	2019-Clay-Transportation-EV-GEI	On Road Transportation (USCP Required)		758280	5.1	0		24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148
246036	3769745	2019-Clay-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	1.62		0	0	258394	24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148
246127	3771466	2019-Clay-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	88.23		0	0		24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633	17.86788	0.0193	0.0148
247842	3800605	2019-Clay-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)																	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gas Para Trans	Gas Para Transit Bus	Gas Para Transit Bus g N2O/mi	Gas Motorcycle Fuel Economy (MPG)	Gas Motorcycle g CH4/mi	Gas Motorcycle g N2O/mi	Electric Vehicle Fuel Economy (MPGe)	Diesel Passeng	Diesel Passenger Vehicle g CH4/mi	Diesel PassengerVehicle g N	Diesel Light Truck Fuel Eco	Diesel Light Truck g CH4/mi	Diesel Light Truck g N2O/mi	Diesel Heavy Truck Fuel Ec	Diesel Heavy Truck g CH4/mi		Diesel Transit Bus Fuel Economy (MPG)
317898	4745864	2019-Clay-Transportation-EV-GEI	On Road Transportation (USCP Required)	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788
246036	3769745	2019-Clay-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788
246127	3771466	2019-Clay-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005	0.001	17.86788	0.001	0.0015	6.392468	0.0051	0.0048	17.86788
247842	3800605	2019-Clay-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)																	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Diesel Transit E	Diesel Transit Bus g N	Diesel Para Transit Bus Fuel Economy (MPG)	Diesel Para Transit Bus g CH4/mi	Diesel Para Transit Bus g N	Diesel Motorcycle Fuel Econ	Diesel Motorcycle g CH4/mi	Diesel Motorcycle g N2O/mi
317898	4745864	2019-Clay-Transportation-EV-GEI	On Road Transportation (USCP Required)	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001
246036	3769745	2019-Clay-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001
246127	3771466	2019-Clay-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001
247842	3800605	2019-Clay-Rail-Diesel-FDOT	Rail Transportation (USCP Recommended)								

AFOLU

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Land Area (hectares / year)	Net Carbon Flux (MT CO2e / year)	Category
246267	3774039	2019-Clay-County-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (C	TRUE	rvolenec@hans	2024 Jan 5 07:25pm					2019 AFOLU Clay	87997	-463844	Undisturbed Forest
246269	3774047	2019-Clay-County-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (C	TRUE	rvolenec@hans	2024 Jan 5 07:29pm					2019 AFOLU Clay	6501	-81602	Non-Forest to Forest
246268	3774043	2019-Clay-County-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (C	FALSE	rvolenec@hans	2024 Jan 5 07:28pm					2019 AFOLU Clay	2504	73226	Forest to Grassland
246279	3774261	2019-Clay-County-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (C	FALSE	rvolenec@hans	2024 Jan 5 08:23pm					2019 AFOLU Clay	292	17147	Forest to Settlement
246281	3774269	2019-Clay-County-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (C	FALSE	rvolenec@hans	2024 Jan 5 08:27pm					2019 AFOLU Clay	123	5275	Forest to Wetland
246280	3774265	2019-Clay-County-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (C	FALSE	rvolenec@hans	2024 Jan 5 08:27pm					2019 AFOLU Clay	122	15757	Forest to other non-forest
246283	3774303	2019-Clay-County-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (C	TRUE	rvolenec@hans	2024 Jan 5 08:32pm					2019 AFOLU Clay		-126215	
247786	3799793	2019-Clay-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1	IPCC 5th Assessment 100 Year Values	AFOLU	Source	2017 USDA Agricultural Cen	FALSE	rvolenec@hans	2024 Jan 16 09:53pm	0	718.97	0	20131.16	2019 AFOLU Clay			
248454	3811209	x2019-Clay-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1	IPCC 5th Assessment 100 Year Values	AFOLU	Source	2017 USDA Agricultural Cen	TRUE	rvolenec@hans	2024 Jan 22 07:25am	0	20131.3	0	563676.4				

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Land Area (opti	Net Annual Carbon Fl	Emissions per Acre Cultivated (MT CO2e / Acre)	Emissions per Head of Livestock (MT CO2e / Head)	Emissions per Production V	Agricultural Process	CH4 Emissions from Agriculture	N2O Emissions	Data Source	Canopy Area of Trees Outsid	Canopy Area	Emissions from Tree Loss Outs	CO2 Removals from Trees Outside of Forests
246267	3774039	2019-Clay-County-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)	87997	-463844											
246269	3774047	2019-Clay-County-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)	6501	-81602											
246268	3774043	2019-Clay-County-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)	2504	73226											
246279	3774261	2019-Clay-County-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)	292	17147											
246281	3774269	2019-Clay-County-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)	123	5275											
246280	3774265	2019-Clay-County-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)	122	15757											
246283	3774303	2019-Clay-County-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommended)										13091	13091	123605	-249820
247786	3799793	2019-Clay-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)			Infinity	Infinity	Infinity	Enteric Fermentation	718.97	0	US Community Protocol Method A.1 or A.2				
248454	3811209	x2019-Clay-County-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)			Infinity	Infinity	Infinity	Enteric Fermentation	20131.3	0	US Community Protocol Method A.1 or A.2				

Solid Waste

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Waste Generated (wet tons)	Mixed MSW Emissions Factor (MT CH4/wet short ton)
247334	3792537	2019 Clay County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	Scope 1	III.1.1	2019 Clay MSW Factor Set	IPCC 5th Assessment 100 Year Values	Solid Waste	Source		TRUE	avo@hanson-inc.com	2024 Jan 15 04:05pm		4063.985302		113791.5885		228819	0.0648

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Newspaper Em	Office Paper Emissio	Corrugated Cardboard Emissions Factor (MT CH4/wet short ton)	Magazines/Third Class Mail Emissions Factor (MT	Food Scraps Emissions Fa	Grass Emissions Factor (MT	Leaves Emissions Factor (MT CH4/wet short ton)	Branches Emis	Dimensional Lumber Emissions Factor	Mixed MSW LFG Capture Ra	Newspaper LFG Capture R	Office Paper LFG Capture Rate	Corrugated Containers LFG Ca	Magazines/Third Class Mail	Food Scraps LFG Capture Rate (%)	Grass LFG Capture Rate (%)	Leaves LFG Capture Rate (%)
247334	3792537	2019 Clay County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	0.042	0.1556	0.1048	0.0476	0.0648	0.0228	0.026	0.058	0.0068	60	59	58	54	52	50	39	47

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Branches LFG	Dimensional Lumber	Oxidation Rate	Waste per Household	Waste per Business	CO2e per Household	CO2e per Business	Were emission	Total Waste Generated	Landfill Methane Collection S	Landfill Moisture Content	Waste Type to Calculate Emiss	CH4 Released (for Previously C	Disposal Location	Number of Households	Number of Businesses	Notation Keys
247334	3792537	2019 Clay County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	51	57	0.1	2.870859681	53.62526365	1.427677262	26.66782012	No	228819	Typical	Wet	All		Inside the Jurisdiction	79704	4267	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Percentage New	Percentage Office Pap	Percentage Corrugated Cardboard	Percentage Magazines / Third Class Mail	Percentage Food Scraps	Percentage Grass	Percentage Leaves	Percentage Br	Percentage Dimensional Lumber
247334	3792537	2019 Clay County Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	3.01	3.19	14.99	2.37	0.68	16.28	16.28	16.28	0.29

Waste & Wastewater

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	Wastewater Electric Energ	Gallons per Capita	CO2e per Person (MT)	Electricity Energy (MMBtu)	Electric CO2 Emissions Factor	Natural Gas CO2 Emissions Factor	Electric CH4 Emissions Factor
306478	4639318	2023-Clay-Water&Wastewater-CCUA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	Scope 2	I.3.2	FRCC All (FRCC) eGRID 2023	IPCC 5th Assessment 100 Year Values	Water & Wastewater	Activity	Electricity data provided in the form of bar graphs in the att	FALSE	gcafaro@hanson-inc.com	2025 May 27 01:49pm	81365.01365	NaN	NaN	81365.01365	0	0	0
264456	4093587	2019-Clay-Wastewater-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	Scope 3	VI.1	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Water & Wastewater	Activity	JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 26 07:46pm	0	31298.77598	0		0.08838031	0.05302	8.77158E-06
264455	4093565	2019-Clay-Water-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	Scope 1	VI.1	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Water & Wastewater	Activity	JEA provided data	TRUE	cbarsanti@hanson-inc.com	2024 Jun 26 07:45pm			0			0.05302	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Natural Gas CH	Electric N2O Emissior	Natural Gas N2O Emissions Factor	Were emissions calculated externally from ClearP	Electricity Used	Treatment Location	Volume of Water Treated (optional)	Population Serv	Data Quality: Activity Data	Data Quality: Emissions Fac	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh	Gallons per Capita (gallons	Electricity CO2 Emissions Factor	Electricity CH4 Emissions Factor	Electricity N2O Er	Volume of Water Delivered (optional)
306478	4639318	2023-Clay-Water&Wastewater-CCUA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	0		0	Yes	23839949	In Boundary			Medium	Low	801.891	42	5					
264456	4093587	2019-Clay-Wastewater-JEA	Emissions from Wastewater Treatment Energy Use (USCP Recommended)	0.000025	1.19612E-06	0.000001	No			381	12173	High	Low	665	66	9	31352.59357	0.08838031	8.77158E-06	1.19612E-06	382
264455	4093565	2019-Clay-Water-JEA	Emissions from the Supply of Potable Water (USCP Recommended)	0.000005		0.0000001	No				12184	High	Low	665	66	9					

City of Palm Coast

Residential Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Energy Cost
246096	3770865	2019-Palm-Coast-Residential-Energy-FPL	Emissions from Grid Electricity (USCP Required)	Scope 2	I.1.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Residential Energy	Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 4 09:30pm	157661.3093	15.64758859	2.13376208	158664.8887	2019 PalmCoast RESIDENTIAL FPL		
247909	3801850	2019-Palm-Coast-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:55pm	3705.683384	0.3494609	0.006989218	3717.320432	2019 RESIDENTIAL PalmCoast fuel	69892.18	0
247910	3801874	2019-Palm-Coast-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:56pm	30.4071748	0.004468804	0.0029792	30.6112502	2019 RESIDENTIAL PalmCoast fuel	411.13	0
247913	3801937	2019-Palm-Coast-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:58pm	0	0.38975124	0.005180238	12.28579779	2019 RESIDENTIAL PalmCoast fuel	1233.39	0
247912	3801913	2019-Palm-Coast-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.1.1		IPCC 5th Assessment 100 Year Values	Residential Energy	Source and Activity	American Community Survey ACSST5Y2019	FALSE	rvolenec@hanson-inc.com	2024 Jan 17 08:57pm	1631.258836	0.281535	0.0281535	1646.602493	2019 RESIDENTIAL PalmCoast fuel	25901.22	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Biogenic CO2 (	MMBtu per Househol	CO2e per Household (MT)	MMBtu per Person	CO2e per Person (MT)	CO2 Emissions Factor	Biogenic CO2 Emissions Factor	CH4 Emissions	N2O Emissions Factor	Were emissions calculated e	Fuel Type	Fuel Use	Number of Households (optiona	Building Area (optional)	Population (optional)	Data Quality:	Activity Data
246096	3770865	2019-Palm-Coast-Residential-Energy-FPL	Emissions from Grid Electricity (USCP Required)		57.35078944	5.100944823	21.1449808	1.880695652	0.08838031		8.77158E-06	1.19612E-06	No			31105		84365		
247909	3801850	2019-Palm-Coast-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	0	178.2963776	9.482960285	65.74993415	3.497008873	53.02	0	0.005	0.0001	No	Natural Gas	69892.18	392		1063	Low	
247910	3801874	2019-Palm-Coast-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	0	25.695625	1.913203137	9.561162791	0.71188954	73.96	0	0.010869565	0.000724638	No	Distillate Fuel Oil No. 2	411.13	16		43	Low	
247913	3801937	2019-Palm-Coast-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	115.691982	11.97466019	0.11927959	4.420752688	0.044035118	0	93.8	0.316	0.0042	No	Wood	1233.39	103		279	Low	
247912	3801913	2019-Palm-Coast-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	0	386.5853731	24.57615661	142.3143956	9.047266446	62.98	0	0.010869565	0.001086957	No	LPG	25901.22	67		182	Low	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: E	Electricity Energy Equ	Energy Cost ($)	Electricity Used	CO2 lbs/MWh	CO2 kg/MWh	CH4 lbs/GWh	CH4 kg/GWh	N2O lbs/GWh	N2O kg/GWh
246096	3770865	2019-Palm-Coast-Residential-Energy-FPL	Emissions from Grid Electricity (USCP Required)		1783896.306	0	522681617.5	665		66		9	
247909	3801850	2019-Palm-Coast-Residential-Fuel-NGas	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
247910	3801874	2019-Palm-Coast-Residential-Fuel-FuelOil	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
247913	3801937	2019-Palm-Coast-Residential-Fuel-Wood	Emissions from Stationary Fuel Combustion (USCP Required)	Low									
247912	3801913	2019-Palm-Coast-Residential-Fuel-LPG	Emissions from Stationary Fuel Combustion (USCP Required)	Low									

Commercial Energy

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Energy Equivalent (MMBtu)	Biogenic CO2 (MT)
246917	3786738	2019-PalmCoast-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Scope 2	I.2.2	Florida Power and Light 2019 (FPL and eGRID2018 factors)	IPCC 5th Assessment 100 Year Values	Commercial Energy	Activity	The above data is pulled from the United States Cens	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 07:43pm	45802.71884	4.545833749	0.61988642	46094.27208	2019 PalmCoast Commercial Electricity		
247111	3789620	2019-PalmCoast-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Cens	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:58pm	4975.42	0.858695652	0.085869565	5022.218913	2019 PalmCoast Commercial fuel	79000	0
247115	3789716	2019-PalmCoast-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity		FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 02:01pm	791.9121	0.141593407	0.014159341	799.6289407	2019 PalmCoast Commercial fuel	12885	0
247112	3789644	2019-PalmCoast-Commercial-Fuel-Distillate Fuel Oil-Cen	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Cens	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 01:59pm	1575.27404	0.23151087	0.015434058	1585.84637	2019 PalmCoast Commercial fuel	21299	0
246939	3787091	2019-PalmCoast-Commercial-Fuel-Natural Gas-Census-E	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Cens	FALSE	cbarsanti@hanson-inc.com	2024 Jan 10 08:36pm	5407.19168	0.50992	0.0101984	5424.172016	2019 PalmCoast Commercial fuel	101984	0
247114	3789692	2019-PalmCoast-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Cens	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 02:01pm	3145.99644	0.5017824	0.0358416	3169.544371	2019 PalmCoast Commercial fuel	44802	0
247113	3789668	2019-PalmCoast-Commercial-Fuel-Kerosene-Census-EI/	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	The above data is pulled from the United States Cens	FALSE	cbarsanti@hanson-inc.com	2024 Jan 11 02:00pm	0.9776	0.000144444	9.62963E-06	0.984196296	2019 PalmCoast Commercial fuel	13	0
291037	4466710	2019-PalmCoast-Commercial-TECO-Natural-Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Scope 1	I.2.1		IPCC 5th Assessment 100 Year Values	Commercial Energy	Source and Activity	Data sent from TECO; included in NG census	TRUE	apolematidis@hanson-inc.com	2025 Jan 20 03:25pm	2546.805096	0.240174	0.00480348	2554.80289		48034.8	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	MMBtu per 100	MMBtu per Business	CO2e per 1000 SQFT Floor Area (MT)	CO2e per Establishment (MT)	MMBtu per Employee	CO2e per Employee (MT)	CO2 Emissions Factor (kg/MMBtu)	CH4 Emissions	N2O Emissions Factor (kg/MMBtu)	Biogenic CO2 Emissions Fac	Were emissions calculated	Fuel Type	Fuel Use	Data Source	Commercial Workforce Size (optional)	Number of Commercial Establishments (optional)
246917	3786738	2019-PalmCoast-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)						3.319717111					No					1662
247111	3789620	2019-PalmCoast-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	47.53309266	Infinity	3.021792366	5.689593086	0.361701038	62.98	0.010869565	0.001086957	0	No	LPG	79000		13885	1662
247115	3789716	2019-PalmCoast-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	7.752707581	Infinity	0.481124513	0.927979834	0.057589409	61.46	0.010989011	0.001098901	0	No	Propane	12885		13885	1662
247112	3789644	2019-PalmCoast-Commercial-Fuel-Distillate Fuel Oil-Cen	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	12.81528279	Infinity	0.954179524	1.533957508	0.114212918	73.96	0.010869565	0.000724638	0	No	Distillate Fuel Oil No. 2	21299		13885	1662
246939	3787091	2019-PalmCoast-Commercial-Fuel-Natural Gas-Census-E	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	61.3622142	Infinity	3.263641406	7.344904573	0.390649767	53.02	0.005	0.0001	0	No	Natural Gas	101984		13885	1662
247114	3789692	2019-PalmCoast-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	26.9566787	Infinity	1.907066409	3.226647461	0.228271111	70.22	0.0112	0.0008	0	No	Gasoline	44802		13885	1662
247113	3789668	2019-PalmCoast-Commercial-Fuel-Kerosene-Census-EI/	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	0.007821901	Infinity	0.000592176	0.000936262	7.0882E-05	75.2	0.011111111	0.000740741	0	No	Kerosene	13		13885	1662
291037	4466710	2019-PalmCoast-Commercial-TECO-Natural-Gas	Emissions from Stationary Fuel Combustion (USCP Required)	Infinity	814.1491525	Infinity	43.3017439	Infinity	Infinity	53.02	0.005	0.0001	0	No	Natural Gas	480348	Measured usage		59

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: A	Data Quality: Emissic	Electricity Energy Equivalent (MMBtu)	MMBtu per 1,000 SQFT Floor Area	CO2e per 1,000 SQFT Floo	MMBTU per Employee	MMBtu per Establishment	CO2e per Estal	CO2 Emissions Factor	CH4 Emissions Factor	N2O Emissions Factor	Electricity Used	Commercial Workforce Size (o	Data Quality: Emissions Fa	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh
246917	3786738	2019-PalmCoast-Commercial-Elec-Census-EIA	Emissions from Grid Electricity (USCP Required)	Low		518245.7338	Infinity	Infinity	37.32414359	311.8205378	27.73421906	0.08838031	8.77158E-06	1.19612E-06	151846	13885	Low	665	66	9
247111	3789620	2019-PalmCoast-Commercial-Fuel-LPG-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247115	3789716	2019-PalmCoast-Commercial-Fuel-Propane-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247112	3789644	2019-PalmCoast-Commercial-Fuel-Distillate Fuel Oil-Cen	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
246939	3787091	2019-PalmCoast-Commercial-Fuel-Natural Gas-Census-E	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247114	3789692	2019-PalmCoast-Commercial-Fuel-Gasoline-Census-EIA	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
247113	3789668	2019-PalmCoast-Commercial-Fuel-Kerosene-Census-EI/	Emissions from Stationary Fuel Combustion (USCP Required)	Low	Low															
291037	4466710	2019-PalmCoast-Commercial-TECO-Natural-Gas	Emissions from Stationary Fuel Combustion (USCP Required)																	

Transportation & Mobile Sources

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	On Road VMT	Fossil Fuel Energy Equivalent (MMBtu)
246139	3771712	2019-Palm_Coast-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.1	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Natio	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	The above data is pulled from Google's Environmenta	FALSE	mcoalson@hanson-inc.com	2024 Jan 4 11:04pm	148218.4375	0.463454172	0.442716191	148348.734	2019 PalmCoast transportation Diesel	100748059.8	20004726.779
246038	3769795	2019-Palm_Coast-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	Scope 1	II.1.1	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Natio	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Source and Activity	The above data is pulled from Google's Environmenta	FALSE	mcoalson@hanson-inc.com	2024 Jan 3 09:37pm	39740.04128	1.892088124	1.029652886	40065.87776	2019 Gasoline transportation PalmCoast	97063809	565775.0752
317899	4745889	2019-Palm_Coast-Transportation-EV-GEI	On Road Transportation (USCP Required)	Scope 3	II.1.3	Florida Power and Light 2019 (FPL and eGRID2018 factors) and 2019 US Natio	IPCC 5th Assessment 100 Year Values	Transportation & Mobile So	Activity	2019 EV VMT for the City of Palm Coast (Flagler cou	FALSE	mcoalson@hanson-inc.com	2025 Sep 21 10:15pm	0	0	0	0		213511.27	13.61334471

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Emissions per	Miles per person	Emissions per Mile (g CO2e per mile)	CO2 Emissions Factor	Biogenic CO2 Emissions Fa	CH4 Emissions Factor	N2O Emissions Factor	Calculation Me	VMT Location	Travel Type	Type of VMT or Emissions I	Type of Freight VMT or Emissi	Fuel Type	Is this a T&D Loss Record?	VMT	Percent Motorcycles	Percent Passenger Vehicles
246139	3771712	2019-Palm_Coast-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	Infinity	Infinity	1472.472367	0.073934483	0.07377234	4.60013E-09	4.39429E-09	VMT & MPG	In-Boundary	Freight		Origin-Destination	Diesel		100748059.8	0	3.46
246038	3769795	2019-Palm_Coast-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0.282607833	684.6472435	412.7787501	0.07024	0.068413598	1.94932E-08	1.0608E-08	VMT & MPG	In-Boundary	Passenger	Origin-Destination		Gasoline		97063809	0.67	75.91
317899	4745889	2019-Palm_Coast-Transportation-EV-GEI	On Road Transportation (USCP Required)	NaN	Infinity		0	0	0	0	Direct Entry	In-Boundary	Passenger	Origin-Destination		Electric	Yes	213511.27	0.67	75.91

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Percent Light T	Percent Heavy Tucks	Fuel Use	T&D Loss Factor	Population (optional)	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh	Gas Passenger Vehicle Fuel Econ	Gas Passenger Vehicle g CH	Gas PassengerVehicle g N	Gas Light Truck Fuel Econom	Gas Light Truck g CH4/mi	Gas Light Truck g N2O/mi	Gas Heavy Truck Fuel Economy (MPG)	Gas Heavy Truck g CH4/mi	Gas Heavy Truck g N2O/mi
246139	3771712	2019-Palm_Coast-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	8.31	88.23		0		665	66	9	24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633
246038	3769795	2019-Palm_Coast-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	21.8	1.62		0	141772	665	66	9	24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633
317899	4745889	2019-Palm_Coast-Transportation-EV-GEI	On Road Transportation (USCP Required)	21.8	1.62	78210	5.1		665	66	9	24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Percent Light T	Percent Heavy Tucks	Fuel Use	T&D Loss Factor	Population (optional)	CO2 lbs/MWh	CH4 lbs/GWh	N2O lbs/GWh	Gas Passenger Vehicle Fuel Econ	Gas Passenger Vehicle g CH	Gas PassengerVehicle g N	Gas Light Truck Fuel Econom	Gas Light Truck g CH4/mi	Gas Light Truck g N2O/mi	Gas Heavy Truck Fuel Economy (MPG)	Gas Heavy Truck g CH4/mi	Gas Heavy Truck g N2O/mi
246139	3771712	2019-Palm_Coast-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	8.31	88.23		0		665	66	9	24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633
246038	3769795	2019-Palm_Coast-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	21.8	1.62		0	141772	665	66	9	24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633
317899	4745889	2019-Palm_Coast-Transportation-EV-GEI	On Road Transportation (USCP Required)	21.8	1.62	78210	5.1		665	66	9	24.37713	0.0183	0.0083	17.86788	0.0193	0.0148	5.371652	0.0785	0.0633

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gas Transit Bu	Gas Transit Bus g CH	Gas Transit Bus g N2O/mi	Gas Para Transit Bus Fuel Economy (MPG)	Gas Para Transit Bus g CH	Gas Para Transit Bus g N2O	Gas Motorcycle Fuel Economy (MPG)	Gas Motorcycle g CH4	Gas Motorcycle g N2O/mi	Electric Vehicle Fuel Econon	Diesel Passenger Vehicle F	Diesel Passenger Vehicle g C	Diesel PassengerVehicle g N2	Diesel Light Truck Fuel Eco	Diesel Light Truck g CH4/mi	Diesel Light Truck g N2O/mi	Diesel Heavy Truck Fuel Economy (MPG)
246139	3771712	2019-Palm_Coast-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005	0.001	17.86788	0.001	0.0015	6.392468
246038	3769795	2019-Palm_Coast-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005	0.001	17.86788	0.001	0.0015	6.392468
317899	4745889	2019-Palm_Coast-Transportation-EV-GEI	On Road Transportation (USCP Required)	17.86788	0.0193	0.0148	17.86788	0.0193	0.0148	24.37713	0.0183	0.0083		24.37713	0.0005	0.001	17.86788	0.001	0.0015	6.392468

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Diesel Heavy Tr	Diesel Heavy Truck g	Diesel Transit Bus Fuel Economy (MPG)	Diesel Transit Bus g CH4/mi	Diesel Transit Bus g N2O/m	Diesel Para Transit Bus Fuel	Diesel Para Transit Bus g CH4/mi	Diesel Para Tra	Diesel Motorcycle Fuel Economy (	Diesel Motorcycle g CH4/mi	Diesel Motorcycle g N2O/mi
246139	3771712	2019-Palm_Coast-Transportation-Diesel-GEI	On Road Transportation (USCP Required)	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001
246038	3769795	2019-Palm_Coast-Transportation-Gasoline-GEI	On Road Transportation (USCP Required)	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001
317899	4745889	2019-Palm_Coast-Transportation-EV-GEI	On Road Transportation (USCP Required)	0.0051	0.0048	17.86788	0.001	0.0015	17.86788	0.001	0.0015	24.37713	0.0005	0.001

AFOLU

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CH4 (MT)	CO2e (MT)	Tags	Emissions per Acre Cultivated (	Emissions per Head of Live	Emissions per Production Value (MT CO2e /	Agricultural Process	CO2 Emissions From Agriculture
246310	3774507	2019-Palm Coast-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	TRUE	rvolenec@hans	2024 Jan 5 10:08pm			2019 AFOLU Palm Coast					
246313	3774519	2019-Palm Coast-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	TRUE	rvolenec@hans	2024 Jan 5 10:09pm			2019 AFOLU Palm Coast					
246312	3774515	2019-Palm Coast-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 10:09pm			2019 AFOLU Palm Coast					
246315	3774527	2019-Palm Coast-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 10:12pm			2019 AFOLU Palm Coast					
246316	3774531	2019-Palm Coast-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 10:12pm			2019 AFOLU Palm Coast					
246314	3774523	2019-Palm Coast-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	FALSE	rvolenec@hans	2024 Jan 5 10:11pm			2019 AFOLU Palm Coast					
246311	3774513	2019-Palm Coast-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommended)	Scope 1	V.2	IPCC 5th Assessment 100 Year Values	AFOLU		LEARN Report 2016-2019 (G	TRUE	rvolenec@hans	2024 Jan 5 10:09pm			2019 AFOLU Palm Coast					
247839	3800545	2019-Palm Coast-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1	IPCC 5th Assessment 100 Year Values	AFOLU	Source	2017 USDA Agricultural Cens	FALSE	rvolenec@hans	2024 Jan 17 03:57pm	200.07	5601.96	2019 AFOLU Palm Coast	Infinity	Infinity	Infinity	Enteric Fermentation	0
248457	3811251	x2019-Palm Coast-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	Scope 1	V.1	IPCC 5th Assessment 100 Year Values	AFOLU	Source	2017 USDA Agricultural Cens	TRUE	rvolenec@hans	2024 Jan 22 07:32am	5601.82	156850.96		Infinity	Infinity	Infinity	Enteric Fermentation	0

Id	Output Record Ids With Co2e	Inventory Record	Calculator	CH4 Emissions	N2O Emissions from /	Data Source	Land Area (hectares / year)	Net Carbon Flux (MT CO2e	Category	Land Area (optional - needed for forecasting)	Net Annual Car	Data Quality: Emissions or Remov	Canopy Area of Trees Outsid	Canopy Area	Emissions from Tree Loss Ou	CO2 Removals from Trees Outside of Forests
246310	3774507	2019-Palm Coast-AFOLU-Undisturbed Forest	Emissions and Removals from Forests (USCP Recommended)				12355	-61327	Undisturbed Forest	12355	-61327					
246313	3774519	2019-Palm Coast-AFOLU-Non-Forest to Forest	Emissions and Removals from Forests (USCP Recommended)				300	-4491	Non-Forest to Forest	300	-4491					
246312	3774515	2019-Palm Coast-AFOLU-Forest to Grassland	Emissions and Removals from Forests (USCP Recommended)				188	5550	Forest to Grassland	188	5550					
246315	3774527	2019-Palm Coast-AFOLU-Forest to Other Non-Forest	Emissions and Removals from Forests (USCP Recommended)				16	1803	Forest to other non-forest	16	1803					
246316	3774531	2019-Palm Coast-AFOLU-Forest to Wetland	Emissions and Removals from Forests (USCP Recommended)				35	1417	Forest to Wetland	35	1417					
246314	3774523	2019-Palm Coast-AFOLU-Forest to Settlement	Emissions and Removals from Forests (USCP Recommended)				44	3218	Forest to Settlement	44	3218					
246311	3774513	2019-Palm Coast-AFOLU-Outside of Forests	Emissions and Removals from Trees Outside of Forests (USCP Recommended)					-28026					2222	2222	14370	-42396
247839	3800545	2019-Palm Coast-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	200.07	0	US Community Protocol Method A.1 or A.2										
248457	3811251	x2019-Palm Coast-AFOLU-Enteric Fermentation	Emissions from Agricultural Activities (USCP optional) (Obsolete)	5601.82	0	US Community Protocol Method A.1 or A.2										

Solid Waste

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Gpc Scope	GPC Ref Number	Factor Profiles	Global Warming Potential	Category	Activity Source	Notes	Info Only	Created By	Created At	CO2 (MT)	CH4 (MT)	N2O (MT)	CO2e (MT)	Tags	Waste Generated (wet tons)	Mixed MSW Emissions Factor (MT CH4/wet short ton)
247336	3792601	2019 Palm Coast Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	Scope 1	III.1.1	2019 Palm Coast MSW Factor Set	IPCC 5th Assessment 100 Year Values	Solid Waste	Source		FALSE	avo@hanson-inc.com	2024 Jan 15 04:51pm		340.6533998		9538.295194		83502	0.0648

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Newspaper Em	Office Paper Emission	Corrugated Cardboard Emissions Factor (MT CH4/wet short ton)	Magazines/Third Class Mail Emissions Factor (MT	Food Scraps Emissions Fa	Grass Emissions Factor (MT	Leaves Emissions Factor (MT CH4/wet short ton)	Branches Emis	Dimensional Lumber Emissions F	Mixed MSW LFG Capture Ra	Newspaper LFG Capture R	Office Paper LFG Capture Rat	Corrugated Containers LFG Ca	Magazines/Third Class Mail	Food Scraps LFG Capture Rate (%)	Grass LFG Capture Rate (%)	Leaves LFG Capture Rate (%)
247336	3792601	2019 Palm Coast Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	0.042	0.1556	0.1048	0.0476	0.0648	0.0228	0.026	0.058	0.0068	60	59	58	54	52	50	39	47

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Branches LFG	Dimensional Lumber	Oxidation Rate	Waste per Household	Waste per Business	CO2e per Household	CO2e per Business	Were emission	Total Waste Generated	Landfill Methane Collection S	Landfill Moisture Content	Waste Type to Calculate Emis	CH4 Released (for Previously C	Disposal Location	Number of Households	Number of Businesses	Notation Keys
247336	3792601	2019 Palm Coast Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)	51	57	0.1	2.322015517	43.26528497	0.265239988	4.942121862	No	83502	Typical	Wet	All		Inside the Jurisdiction	35961	1930	

Id	Output Record Ids With Co2e	Inventory Record	Calculator	Data Quality: A	Data Quality: Emissic	Percentage Mixed MSW	Percentage Newspaper	Percentage Office Paper	Percentage Corrugated Card	Percentage Magazines / Third Class Mail	Percentage Foc	Percentage Grass	Percentage Leaves	Percentage Branches	Percentage Dimensional Lumber
247336	3792601	2019 Palm Coast Solid Waste Landfill Waste Generator	Landfilled Waste (Obsolete)			0	0.1	0.19	8.1	0.03	0.128	0	0	0	14.99

B

2050 NEFL FORECAST

Year	Category	BAU - CO2e	Forecast - CO2e
2019	Water & Wastewater	386690	367356
2020	Water & Wastewater	391079	371525
2021	Water & Wastewater	395583	375804
2022	Water & Wastewater	400201	360181
2023	Water & Wastewater	404932	364439
2024	Water & Wastewater	409776	368798
2025	Water & Wastewater	414731	373258
2026	Water & Wastewater	416086	374477
2027	Water & Wastewater	417507	334006
2028	Water & Wastewater	418992	335194
2029	Water & Wastewater	420537	336430
2030	Water & Wastewater	422139	337711
2031	Water & Wastewater	429730	343784
2032	Water & Wastewater	437463	349971
2033	Water & Wastewater	445343	356275
2034	Water & Wastewater	453372	362698
2035	Water & Wastewater	461552	369242
2036	Water & Wastewater	468910	351682
2037	Water & Wastewater	476393	357295
2038	Water & Wastewater	484003	363002
2039	Water & Wastewater	491743	368807
2040	Water & Wastewater	499614	349730
2041	Water & Wastewater	506852	354796
2042	Water & Wastewater	514202	359942
2043	Water & Wastewater	521667	365167
2044	Water & Wastewater	529248	344011
2045	Water & Wastewater	536947	349016
2046	Water & Wastewater	544407	353864
2047	Water & Wastewater	551978	233211
2048	Water & Wastewater	559661	335797
2049	Water & Wastewater	567459	340476
2050	Water & Wastewater	575373	345224
2019	Transportation & Mobile Sources	6869804.131	6869804
2020	Transportation & Mobile Sources	6921154.807	6921154
2021	Transportation & Mobile Sources	6973699.824	6973700
2022	Transportation & Mobile Sources	7027471.521	7027471
2023	Transportation & Mobile Sources	7082503.166	7082503
2024	Transportation & Mobile Sources	7138828.981	7138829
2025	Transportation & Mobile Sources	7196484.173	7021646
2026	Transportation & Mobile Sources	7188013.903	6844055
2027	Transportation & Mobile Sources	7179787.607	6672272
2028	Transportation & Mobile Sources	7171805.383	6506146
2029	Transportation & Mobile Sources	7164067.338	6345531
2030	Transportation & Mobile Sources	7156573.594	6190281
2031	Transportation & Mobile Sources	7120714.286	6011649
2032	Transportation & Mobile Sources	7085209.55	5838215
2033	Transportation & Mobile Sources	7050056.15	5669847
2034	Transportation & Mobile Sources	7015250.882	5506407
2035	Transportation & Mobile Sources	6980790.573	5347768
2036	Transportation & Mobile Sources	6926133.098	5173264
2037	Transportation & Mobile Sources	6872030.09	5003525
2038	Transportation & Mobile Sources	6818475.459	4838425
2039	Transportation & Mobile Sources	6765463.188	4677846
2040	Transportation & Mobile Sources	6712987.325	4521670
2041	Transportation & Mobile Sources	6649401.723	4358136
2042	Transportation & Mobile Sources	6586542.824	4198980
2043	Transportation & Mobile Sources	6524401.841	4044086
2044	Transportation & Mobile Sources	6462970.098	3893345
2045	Transportation & Mobile Sources	6402239.026	3746649
2046	Transportation & Mobile Sources	6337896.764	3599588
2047	Transportation & Mobile Sources	6274326.224	3456454
2048	Transportation & Mobile Sources	6211517.675	3317141
2049	Transportation & Mobile Sources	6149461.514	3181552
2050	Transportation & Mobile Sources	6088148.263	3049592
2019	Industrial Energy	1191195.965	1191196
2020	Industrial Energy	1207515.35	1207515
2021	Industrial Energy	1224058.31	1224058
2022	Industrial Energy	1240827.909	1240828
2023	Industrial Energy	1257827.251	1257827
2024	Industrial Energy	1275059.485	1275060
2025	Industrial Energy	1292527.799	1286772
2026	Industrial Energy	1310235.43	1298723
2027	Industrial Energy	1328185.656	1310916
2028	Industrial Energy	1346381.799	1323356
2029	Industrial Energy	1364827.23	1336045
2030	Industrial Energy	1383525.363	1342144
2031	Industrial Energy	1402479.66	1348500
2032	Industrial Energy	1421693.632	1355114
2033	Industrial Energy	1441170.834	1361992
2034	Industrial Energy	1460914.875	1369137
2035	Industrial Energy	1480929.409	1376553
2036	Industrial Energy	1501218.142	1384243
2037	Industrial Energy	1521784.83	1392210
2038	Industrial Energy	1542633.282	1400459
2039	Industrial Energy	1563767.358	1408995
2040	Industrial Energy	1585190.971	1417819
2041	Industrial Energy	1606908.087	1426937
2042	Industrial Energy	1628922.728	1436352
2043	Industrial Energy	1651238.97	1446069
2044	Industrial Energy	1673860.943	1456092
2045	Industrial Energy	1696792.838	1466425
2046	Industrial Energy	1720038.9	1477072
2047	Industrial Energy	1743603.433	1488037
2048	Industrial Energy	1767490.8	1499326
2049	Industrial Energy	1791705.424	1510942
2050	Industrial Energy	1816251.789	1522889
2019	AFOLU	801392	736571
2020	AFOLU	825001.8211	721757
2021	AFOLU	849411.7876	709261
2022	AFOLU	874652.279	698982

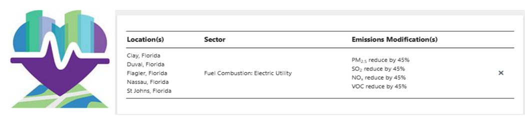
2023	AFOLU	900754.9282	690821
2024	AFOLU	927752.6766	684695
2025	AFOLU	955679.8313	680523
2026	AFOLU	973812.0419	669849
2027	AFOLU	992318.6792	660809
2028	AFOLU	1011208.027	653303
2029	AFOLU	1030488.563	647237
2030	AFOLU	1050168.961	642525
2031	AFOLU	1065314.286	646969
2032	AFOLU	1080699.249	651586
2033	AFOLU	1096327.919	656376
2034	AFOLU	1112204.435	661340
2035	AFOLU	1128333.01	666482
2036	AFOLU	1140608.799	669130
2037	AFOLU	1153030.832	671911
2038	AFOLU	1165600.959	674820
2039	AFOLU	1178321.056	677860
2040	AFOLU	1191193.021	681031
2041	AFOLU	1201505	682815
2042	AFOLU	1211915.691	684715
2043	AFOLU	1222426.102	686732
2044	AFOLU	1233037.256	688864
2045	AFOLU	1243750.183	691111
2046	AFOLU	1253302.598	692742
2047	AFOLU	1262936.54	694480
2048	AFOLU	1272652.753	696322
2049	AFOLU	1282451.988	698271
2050	AFOLU	1292335.004	700323
2019	Residential Energy	3379626.346	3379627
2020	Residential Energy	3202371.197	3202371
2021	Residential Energy	3037991.627	3037992
2022	Residential Energy	2885608.196	2885609
2023	Residential Energy	2744403.41	2744404
2024	Residential Energy	2613617.362	2613617
2025	Residential Energy	2492543.689	2378537
2026	Residential Energy	2360822.272	2148903
2027	Residential Energy	2239921.988	1944017
2028	Residential Energy	2129016.986	1761137
2029	Residential Energy	2027345.506	1597823
2030	Residential Energy	1934204.907	1451901
2031	Residential Energy	1922166.477	1377895
2032	Residential Energy	1910695.277	1306655
2033	Residential Energy	1899785.03	1238065
2034	Residential Energy	1889429.662	1172011
2035	Residential Energy	1879623.304	1108386
2036	Residential Energy	1863175.538	1040540
2037	Residential Energy	1847280.041	975040
2038	Residential Energy	1831926.743	911788
2039	Residential Energy	1817105.817	850691
2040	Residential Energy	1802807.671	791654
2041	Residential Energy	1822781.236	743709
2042	Residential Energy	1845964.044	695911
2043	Residential Energy	1872517.854	647984
2044	Residential Energy	1902615.91	599644
2045	Residential Energy	1936443.668	550589
2046	Residential Energy	1928057.089	492018
2047	Residential Energy	1920313.769	434630
2048	Residential Energy	1913204.209	378344
2049	Residential Energy	1906719.207	323090
2050	Residential Energy	1900849.862	268796
2019	Commercial Energy	3026981.86	3026982
2020	Commercial Energy	2917337.344	2917338
2021	Commercial Energy	2817399.557	2817399
2022	Commercial Energy	2726547.109	2726547
2023	Commercial Energy	2644204.241	2644204
2024	Commercial Energy	2569837.668	2569838
2025	Commercial Energy	2502953.642	2483363
2026	Commercial Energy	2421259.806	2383559
2027	Commercial Energy	2347447.421	2292926
2028	Commercial Energy	2280927.934	2210700
2029	Commercial Energy	2221159.159	2136191
2030	Commercial Energy	2167641.658	2068673
2031	Commercial Energy	2166657.637	2028777
2032	Commercial Energy	2166177.578	1990889
2033	Commercial Energy	2166197.944	1954933
2034	Commercial Energy	2166715.371	1920840
2035	Commercial Energy	2167726.671	1888537
2036	Commercial Energy	2162415.356	1851441
2037	Commercial Energy	2157560.026	1816027
2038	Commercial Energy	2153153.857	1782232
2039	Commercial Energy	2149190.216	1749991
2040	Commercial Energy	2145662.648	1719244
2041	Commercial Energy	2156965.904	1692981
2042	Commercial Energy	2170004.116	1667345
2043	Commercial Energy	2184854.046	1642202
2044	Commercial Energy	2201598.159	1617407
2045	Commercial Energy	2220324.966	1592811
2046	Commercial Energy	2217573.001	1562103
2047	Commercial Energy	2215284.29	1532365
2048	Commercial Energy	2213451.732	1503545
2049	Commercial Energy	2212068.448	1475596
2050	Commercial Energy	2211127.772	1448473
2019	Solid Waste	733305.6019	1406930
2020	Solid Waste	753389.331	1440658
2021	Solid Waste	774146.057	1475331
2022	Solid Waste	795602.3083	1510981
2023	Solid Waste	817785.7693	1547645
2024	Solid Waste	840725.3335	1585354
2025	Solid Waste	864451.1596	1501688
2026	Solid Waste	879280.4958	1518703
2027	Solid Waste	894403.0285	1536055

2028	Solid Waste	909825.3026	1553751
2029	Solid Waste	925554.0215	1571799
2030	Solid Waste	941596.0515	1573236
2031	Solid Waste	953702.2247	1568950
2032	Solid Waste	965991.9488	1565034
2033	Solid Waste	978468.3897	1561482
2034	Solid Waste	991134.7728	1558285
2035	Solid Waste	1003994.384	1555439
2036	Solid Waste	1013455.752	1548281
2037	Solid Waste	1023021.659	1541483
2038	Solid Waste	1032693.411	1535040
2039	Solid Waste	1042472.332	1528940
2040	Solid Waste	1052359.763	1523176
2041	Solid Waste	1060313.676	1514992
2042	Solid Waste	1068339.655	1507150
2043	Solid Waste	1076438.444	1499644
2044	Solid Waste	1084610.797	1492460
2045	Solid Waste	1092857.474	1485597
2046	Solid Waste	1100193.844	1477806
2047	Solid Waste	1107589.903	1470329
2048	Solid Waste	1115046.207	1463158
2049	Solid Waste	1122563.315	1456281
2050	Solid Waste	1130141.794	1449697
2019	Total	16388996	16978466
2020	Total	16217849	16782318
2021	Total	16072290	16613545
2022	Total	15950911	16450599
2023	Total	15852411	16331843
2024	Total	15775598	16236191
2025	Total	15719372	15725787
2026	Total	15549510	15238269
2027	Total	15399572	14751001
2028	Total	15268158	14343587
2029	Total	15153979	13971056
2030	Total	15055850	13606471
2031	Total	15060764	13326524
2032	Total	15067931	13057464
2033	Total	15077350	12798970
2034	Total	15089022	12550718
2035	Total	15102950	12312407
2036	Total	15075916	12018581
2037	Total	15051100	11757491
2038	Total	15028487	11505766
2039	Total	15008063	11263130
2040	Total	14989816	11004324
2041	Total	15004728	10774366
2042	Total	15025891	10550395
2043	Total	15053544	10331884
2044	Total	15087942	10091823
2045	Total	15129356	9882198
2046	Total	15101469	9655193
2047	Total	15076032	0
2048	Total	15053025	9193633
2049	Total	15032429	8986208
2050	Total	15014228	8784994
2019	Reduction from BAU	-589470	
2020	Reduction from BAU	-564469	
2021	Reduction from BAU	-541255	
2022	Reduction from BAU	-499689	
2023	Reduction from BAU	-479432	
2024	Reduction from BAU	-460594	
2025	Reduction from BAU	-6416	
2026	Reduction from BAU	311241	
2027	Reduction from BAU	648571	
2028	Reduction from BAU	924571	
2029	Reduction from BAU	1182923	
2030	Reduction from BAU	1449378	
2031	Reduction from BAU	1734240	
2032	Reduction from BAU	2010467	
2033	Reduction from BAU	2278380	
2034	Reduction from BAU	2538304	
2035	Reduction from BAU	2790543	
2036	Reduction from BAU	3057335	
2037	Reduction from BAU	3293610	
2038	Reduction from BAU	3522720	
2039	Reduction from BAU	3744933	
2040	Reduction from BAU	3985492	
2041	Reduction from BAU	4230361	
2042	Reduction from BAU	4475497	
2043	Reduction from BAU	4721660	
2044	Reduction from BAU	4996118	
2045	Reduction from BAU	5247158	
2046	Reduction from BAU	5446276	
2047	Reduction from BAU	0	
2048	Reduction from BAU	5859392	
2049	Reduction from BAU	6046222	
2050	Reduction from BAU	6229234	

C

CO-POLLUTANT ANALYSIS

COBRA Analysis



	Totals
PM 2.5	0.01 microgram/m3
O3	0.06 microgram/m3

FIPS	State	County	Base PM 2.5	Control PM 2.5	Delta PM 2.5	Base O3	Control O3	Delta O3	$ Total Health Benefits(low estimate)	$ Total Health Benefits(high estimate)	$ PM Total Health Benefits (low estimate)	$ PM Total Health Benefits (high estimate)	$ O3 Total Health Benefits	Total Mortality(low estimate)	$ Total Mortality(low estimate)	Total Mortality(high estimate)	$ Total Mortality(high estimate)
12001	Florida	Alachua	4.87	4.87	0.00	13.44	13.42	0.02	981,314.61	1,639,018.05	587,862.19	1,245,565.62	373,955.79	0.06	902,984.71	0.11	1,560,688.15
12003	Florida	Baker	4.71	4.70	0.01	14.12	14.08	0.04	322,868.93	534,479.13	164,570.99	376,181.19	152,777.64	0.02	301,504.30	0.04	513,114.50
12005	Florida	Bay	3.53	3.53	0.00	13.57	13.57	0.00	240,610.47	364,336.53	98,157.02	221,883.07	138,078.31	0.02	225,150.96	0.02	348,877.02
12007	Florida	Bradford	5.13	5.12	0.01	14.07	14.04	0.03	273,178.28	462,329.84	143,435.82	332,587.38	126,003.40	0.02	258,744.36	0.03	447,895.92
12009	Florida	Brevard	4.23	4.23	0.00	12.93	12.93	0.01	1,004,653.16	1,507,950.11	467,229.08	970,526.02	525,504.16	0.07	959,873.70	0.10	1,463,170.65
12011	Florida	Broward	4.37	4.37	0.00	10.21	10.21	0.00	579,404.65	890,385.04	272,856.69	583,837.08	291,596.90	0.04	525,950.92	0.06	836,931.31
12013	Florida	Calhoun	4.07	4.07	0.00	14.62	14.61	0.01	25,054.84	37,252.37	10,313.24	22,510.77	14,371.67	0.00	23,735.40	0.00	35,932.93
12015	Florida	Charlotte	3.49	3.49	0.00	10.49	10.49	0.00	237,983.30	323,699.35	87,453.61	173,169.66	148,782.45	0.02	231,454.03	0.02	317,170.08
12017	Florida	Citrus	4.79	4.79	0.00	13.22	13.21	0.01	681,164.79	1,028,654.20	336,347.56	683,836.97	340,743.65	0.05	664,299.09	0.07	1,011,788.51
12019	Florida	Clay	5.09	5.09	0.01	14.22	14.18	0.04	2,837,135.44	4,558,435.77	1,496,480.59	3,217,780.92	1,297,122.89	0.18	2,663,876.56	0.30	4,385,176.89
12021	Florida	Collier	3.04	3.04	0.00	9.23	9.23	0.00	176,407.82	255,895.38	82,101.74	161,589.30	91,301.14	0.01	165,807.88	0.02	245,295.44
12023	Florida	Columbia	4.65	4.65	0.00	13.76	13.74	0.02	648,678.25	1,045,789.71	344,563.74	741,675.19	296,290.42	0.04	617,970.36	0.07	1,015,081.81
12027	Florida	De Soto	3.81	3.81	0.00	11.06	11.05	0.00	28,974.23	41,273.40	9,894.61	22,193.79	18,388.55	0.00	26,648.05	0.00	38,947.23
12029	Florida	Dixie	3.18	3.17	0.00	11.84	11.83	0.01	79,650.35	125,734.63	37,361.56	83,445.83	41,494.29	0.01	76,606.62	0.01	122,690.89
12031	Florida	Duval	5.62	5.60	0.02	15.61	15.50	0.12	28,021,359.12	46,450,543.09	14,174,683.10	32,603,867.06	13,227,270.88	1.76	25,726,963.06	3.02	44,156,147.03
12033	Florida	Escambia	4.39	4.39	0.00	16.43	16.42	0.00	208,282.10	314,575.08	87,729.26	194,022.24	116,302.91	0.01	193,240.34	0.02	299,533.33
12035	Florida	Flagler	4.27	4.27	0.00	13.35	13.33	0.02	756,339.78	1,195,150.96	432,010.09	870,821.26	317,957.26	0.05	730,576.24	0.08	1,169,387.41
12037	Florida	Franklin	3.05	3.05	0.00	12.17	12.16	0.01	21,923.18	33,808.68	9,746.44	21,631.94	11,837.02	0.00	20,713.32	0.00	32,598.82
12039	Florida	Gadsden	4.96	4.95	0.00	14.91	14.90	0.01	76,592.32	120,922.21	35,439.77	79,769.67	39,676.61	0.00	71,237.69	0.01	115,567.58
12041	Florida	Gilchrist	3.99	3.98	0.00	12.64	12.62	0.01	96,489.02	152,815.45	49,117.17	105,443.60	46,142.19	0.01	91,663.03	0.01	147,989.47
12043	Florida	Glades	3.37	3.37	0.00	10.96	10.96	0.00	9,585.72	13,138.45	2,888.48	6,441.21	6,521.40	0.00	8,978.17	0.00	12,530.90
12045	Florida	Gulf	3.04	3.04	0.00	12.38	12.37	0.01	28,176.17	42,308.21	11,914.57	26,046.61	15,994.32	0.00	27,123.90	0.00	41,255.95
12047	Florida	Hamilton	4.60	4.59	0.00	14.18	14.16	0.02	69,364.39	118,036.20	37,892.33	86,564.15	30,484.84	0.00	65,370.33	0.01	114,042.15
12049	Florida	Hardee	4.30	4.30	0.00	11.93	11.92	0.00	24,812.04	35,054.02	7,861.24	18,103.22	16,180.49	0.00	22,261.60	0.00	32,503.59
12051	Florida	Hendry	3.64	3.64	0.00	11.15	11.14	0.00	18,996.04	27,069.67	6,343.66	14,417.29	12,046.80	0.00	16,920.05	0.00	24,993.68
12053	Florida	Hernando	5.18	5.18	0.00	14.23	14.22	0.01	533,004.32	814,210.86	268,945.79	550,152.33	258,785.90	0.04	512,908.32	0.05	794,114.85
12055	Florida	Highlands	3.61	3.61	0.00	11.02	11.02	0.00	175,069.57	240,087.66	65,053.53	130,071.61	108,254.23	0.01	168,815.94	0.02	233,834.03
12057	Florida	Hillsborough	6.15	6.15	0.00	15.33	15.32	0.01	1,399,026.17	2,102,798.43	583,345.53	1,287,117.79	775,362.18	0.09	1,258,485.62	0.13	1,962,257.89
12059	Florida	Holmes	4.40	4.40	0.00	15.40	15.40	0.00	27,784.55	41,547.79	11,225.04	24,988.28	16,202.54	0.00	26,505.46	0.00	40,268.69
12061	Florida	Indian River	3.19	3.19	0.00	10.81	10.81	0.00	203,682.42	302,133.27	100,722.09	199,172.94	100,791.81	0.01	195,545.34	0.02	293,996.19
12063	Florida	Jackson	4.69	4.69	0.00	15.43	15.43	0.00	70,568.73	110,313.11	34,547.53	74,291.91	35,036.43	0.00	66,905.77	0.01	106,650.15
12065	Florida	Jefferson	4.75	4.75	0.00	14.20	14.19	0.01	42,707.31	66,227.43	21,209.35	44,729.47	20,987.91	0.00	40,699.25	0.00	64,219.37
12067	Florida	Lafayette	3.66	3.66	0.00	12.91	12.90	0.01	25,926.68	41,933.99	13,140.47	29,147.78	12,235.86	0.00	23,852.24	0.00	39,859.56
12069	Florida	Lake	5.66	5.66	0.00	14.71	14.70	0.01	918,443.46	1,448,059.09	497,303.57	1,026,919.20	408,682.67	0.06	870,408.42	0.10	1,400,024.06
12071	Florida	Lee	3.46	3.46	0.00	9.96	9.96	0.00	437,617.12	632,310.72	184,108.85	378,802.45	244,943.31	0.03	408,147.32	0.04	602,840.92
12073	Florida	Leon	5.08	5.08	0.00	14.53	14.52	0.01	400,241.41	624,492.06	197,354.19	421,604.85	193,336.34	0.02	363,858.39	0.04	588,109.04
12075	Florida	Levy	3.76	3.76	0.00	12.11	12.10	0.01	176,790.37	287,211.23	91,113.76	201,534.62	83,613.72	0.01	168,921.05	0.02	279,341.91
12077	Florida	Liberty	3.78	3.78	0.00	13.75	13.74	0.01	9,822.02	16,407.46	4,588.61	11,174.04	5,009.12	0.00	9,007.05	0.00	15,592.49
12079	Florida	Madison	4.36	4.36	0.00	14.13	14.12	0.01	77,324.42	123,658.20	40,494.73	86,828.51	35,887.88	0.01	73,670.57	0.01	120,004.36
12081	Florida	Manatee	4.41	4.41	0.00	11.93	11.92	0.00	400,140.79	583,358.58	164,161.29	347,379.08	227,875.40	0.03	372,173.95	0.04	555,391.74
12083	Florida	Marion	5.24	5.24	0.00	13.53	13.52	0.01	1,926,878.80	3,058,597.48	1,095,763.30	2,227,481.98	813,096.77	0.13	1,854,623.65	0.20	2,986,342.34
12085	Florida	Martin	3.31	3.31	0.00	10.86	10.86	0.00	153,534.94	218,236.91	66,264.81	130,966.78	85,772.65	0.01	147,927.53	0.01	212,629.50
12086	Florida	Miami-Dade	3.54	3.54	0.00	7.23	7.23	0.00	585,539.18	912,296.97	288,993.02	615,750.81	280,854.76	0.04	528,335.99	0.06	855,093.78
12087	Florida	Monroe	1.93	1.93	0.00	6.03	6.03	0.00	18,285.47	29,630.28	8,368.73	19,713.54	9,540.39	0.00	16,909.16	0.00	28,253.97
12089	Florida	Nassau	4.89	4.87	0.02	15.23	15.12	0.10	3,490,021.04	5,458,142.23	1,756,205.60	3,724,326.79	1,693,675.92	0.23	3,331,146.37	0.36	5,299,267.55
12091	Florida	Okaloosa	4.01	4.01	0.00	15.50	15.49	0.00	153,573.85	224,610.26	62,025.75	133,062.16	88,050.39	0.01	141,409.07	0.01	212,445.48
12093	Florida	Okeechobee	3.32	3.32	0.00	10.75	10.75	0.00	37,376.89	55,613.89	14,636.74	32,873.75	22,037.09	0.00	34,823.33	0.00	53,060.33
12095	Florida	Orange	5.81	5.81	0.00	15.29	15.28	0.01	1,414,098.15	2,261,151.39	689,992.32	1,537,045.56	681,337.08	0.09	1,259,279.51	0.14	2,106,332.75
12097	Florida	Osceola	4.41	4.41	0.00	12.72	12.72	0.00	297,057.06	461,993.40	131,825.90	296,762.23	156,247.43	0.02	264,646.97	0.03	429,583.30
12099	Florida	Palm Beach	4.01	4.01	0.00	11.27	11.27	0.00	728,861.96	1,097,963.19	354,835.65	723,936.88	360,302.66	0.05	679,677.59	0.07	1,048,778.82
12101	Florida	Pasco	5.91	5.91	0.00	15.63	15.62	0.01	973,375.73	1,477,110.40	431,033.13	934,767.80	527,677.70	0.06	919,607.37	0.10	1,423,342.04
12103	Florida	Pinellas	4.53	4.53	0.00	13.31	13.30	0.01	1,339,772.80	1,995,704.44	578,334.69	1,234,266.33	740,610.06	0.09	1,264,884.32	0.13	1,920,815.97
12105	Florida	Polk	5.48	5.48	0.00	14.05	14.04	0.01	886,916.77	1,301,918.44	360,266.41	775,268.08	508,455.65	0.06	823,480.84	0.08	1,238,482.50
12107	Florida	Putnam	4.92	4.92	0.00	13.70	13.68	0.02	667,439.85	1,075,865.16	342,617.81	751,043.12	317,227.47	0.04	637,038.68	0.07	1,045,463.99
12109	Florida	St Johns	4.72	4.71	0.01	13.80	13.76	0.04	3,114,240.24	4,803,069.19	1,609,117.98	3,297,946.93	1,464,096.27	0.20	2,950,004.09	0.32	4,638,833.03
12111	Florida	St Lucie	3.10	3.10	0.00	10.62	10.62	0.00	266,806.68	396,777.09	117,903.75	247,874.15	144,494.01	0.02	250,741.87	0.03	380,712.28
12113	Florida	Santa Rosa	4.34	4.34	0.00	16.34	16.34	0.00	127,682.43	188,990.30	52,201.05	113,508.92	72,902.83	0.01	118,423.33	0.01	179,731.20
12115	Florida	Sarasota	3.50	3.50	0.00	10.40	10.39	0.00	527,783.05	739,634.17	217,215.92	429,067.05	305,015.45	0.03	507,562.04	0.05	719,413.16
12117	Florida	Seminole	6.40	6.40	0.00	16.24	16.23	0.01	779,336.10	1,208,269.87	382,829.67	811,763.44	380,970.22	0.05	721,279.93	0.08	1,150,213.70
12119	Florida	Sumter	5.83	5.83	0.00	14.68	14.67	0.01	512,840.36	765,879.51	293,628.53	546,667.67	217,575.82	0.03	504,366.35	0.05	757,405.49
12121	Florida	Suwannee	4.28	4.28	0.00	13.56	13.54	0.02	315,529.51	490,846.19	162,913.17	338,229.85	148,886.12	0.02	301,097.16	0.03	476,413.84
12123	Florida	Taylor	3.44	3.44	0.00	12.79	12.78	0.01	71,952.50	116,006.15	34,725.50	78,779.15	36,157.02	0.00	68,004.48	0.01	112,058.12
12125	Florida	Union	4.87	4.87	0.01	13.83	13.81	0.03	111,538.75	243,645.72	69,730.63	201,837.60	40,224.95	0.01	105,198.36	0.02	237,305.33
12127	Florida	Volusia	5.07	5.07	0.00	14.33	14.32	0.01	1,861,508.10	2,912,340.43	937,007.22	1,987,839.55	903,689.58	0.12	1,781,358.58	0.19	2,832,190.91
12129	Florida	Wakulla	3.95	3.95	0.00	13.35	13.34	0.01	66,835.20	102,022.08	27,344.53	62,531.41	38,384.56	0.00	62,744.63	0.01	97,931.51
12131	Florida	Walton	3.90	3.90	0.00	14.80	14.80	0.00	70,907.33	107,643.17	30,602.11	67,337.94	39,038.49	0.00	66,407.73	0.01	103,143.56
12133	Florida	Washington	4.20	4.20	0.00	14.97	14.96	0.00	31,842.94	48,080.70	12,658.60	28,896.36	18,739.14	0.00	30,230.52	0.00	46,468.28

County	PM Mortality, All Cause (low)	$ PM Mortality, All Cause (low)	PM Mortality (high)	$ PM Mortality (high)	PM Infant Mortality	$ PM Infant Mortality	Total O3 Mortality	$ Total O3 Mortality	O3 Mortality (Short-term exposure)	$ O3 Mortality (Short-term exposure)
Alachua	0.04	570,069.18	0.08	1,227,772.61	0.00	7,181.17	0.02	332,915.54	0.00	14,348.99
Baker	0.01	159,770.80	0.03	371,381.00	0.00	1,892.49	0.01	141,733.50	0.00	6,081.30
Bay	0.01	95,650.01	0.02	219,376.07	0.00	1,128.88	0.01	129,500.95	0.00	5,551.91
Bradford	0.01	139,919.94	0.02	329,071.50	0.00	1,315.33	0.01	118,824.42	0.00	5,093.52
Brevard	0.03	458,804.68	0.07	962,101.62	0.00	2,135.34	0.03	501,069.03	0.00	21,457.33
Broward	0.02	264,684.47	0.04	575,664.86	0.00	1,966.14	0.02	261,266.45	0.00	11,244.78
Calhoun	0.00	10,083.50	0.00	22,281.03	0.00	60.34	0.00	13,651.90	0.00	584.73
Charlotte	0.01	86,214.11	0.01	171,930.15	0.00	180.50	0.01	145,239.92	0.00	6,210.54
Citrus	0.02	332,004.77	0.05	679,494.18	0.00	991.27	0.02	332,294.32	0.00	14,209.11
Clay	0.10	1,456,359.77	0.22	3,177,660.10	0.00	10,044.13	0.08	1,207,516.79	0.00	51,797.84
Collier	0.01	80,511.27	0.01	159,998.83	0.00	342.53	0.01	85,296.61	0.00	3,658.38
Columbia	0.02	336,958.50	0.05	734,069.96	0.00	3,211.54	0.02	281,011.85	0.00	12,039.55
De Soto	0.00	9,584.78	0.00	21,883.95	0.00	85.73	0.00	17,063.28	0.00	732.26
Dixie	0.00	36,726.79	0.01	82,811.06	0.00	145.37	0.00	39,879.84	0.00	1,706.69
Duval	0.94	13,714,355.94	2.20	32,143,539.90	0.01	216,498.17	0.82	12,012,607.12	0.04	516,671.42
Escambia	0.01	85,560.98	0.01	191,853.96	0.00	850.49	0.01	107,679.37	0.00	4,622.31
Flagler	0.03	425,338.80	0.06	864,149.98	0.00	1,842.49	0.02	305,237.43	0.00	13,069.87
Franklin	0.00	9,533.13	0.00	21,418.62	0.00	52.41	0.00	11,180.19	0.00	479.28
Gadsden	0.00	34,499.32	0.01	78,829.22	0.00	325.39	0.00	36,738.36	0.00	1,575.45
Gilchrist	0.00	48,116.42	0.01	104,442.86	0.00	242.73	0.00	43,546.61	0.00	1,866.03
Glades	0.00	2,791.82	0.00	6,344.55	0.00	27.25	0.00	6,186.35	0.00	265.11
Gulf	0.00	11,705.70	0.00	25,837.74	0.00	35.26	0.00	15,418.20	0.00	660.06
Hamilton	0.00	36,947.00	0.01	85,618.81	0.00	211.16	0.00	28,423.33	0.00	1,219.64
Hardee	0.00	7,556.47	0.00	17,798.45	0.00	93.74	0.00	14,705.14	0.00	631.81
Hendry	0.00	6,077.24	0.00	14,150.87	0.00	75.07	0.00	10,842.81	0.00	465.98
Hernando	0.02	264,790.77	0.04	545,997.31	0.00	1,099.66	0.02	248,117.54	0.00	10,622.56
Highlands	0.00	63,977.79	0.01	128,995.87	0.00	343.04	0.01	104,838.16	0.00	4,485.03
Hillsborough	0.04	563,314.49	0.09	1,267,086.75	0.00	7,409.08	0.05	695,171.13	0.00	29,912.53
Holmes	0.00	11,007.97	0.00	24,771.20	0.00	57.39	0.00	15,497.49	0.00	663.70
Indian River	0.01	99,203.36	0.01	197,654.21	0.00	375.03	0.01	96,341.98	0.00	4,124.82
Jackson	0.00	33,882.73	0.01	73,627.11	0.00	202.63	0.00	33,023.04	0.00	1,415.25
Jefferson	0.00	20,788.57	0.00	44,308.69	0.00	96.91	0.00	19,910.68	0.00	852.80
Lafayette	0.00	12,724.00	0.00	28,731.31	0.00	109.72	0.00	11,128.25	0.00	478.58
Lake	0.03	486,563.36	0.07	1,016,178.99	0.00	3,240.03	0.03	383,845.07	0.00	16,454.21
Lee	0.01	180,071.69	0.03	374,765.29	0.00	1,056.39	0.02	228,075.63	0.00	9,789.96
Leon	0.01	190,500.73	0.03	414,751.38	0.00	2,286.23	0.01	173,357.67	0.00	7,469.74
Levy	0.01	89,381.70	0.01	199,802.56	0.00	436.15	0.01	79,539.35	0.00	3,406.83
Liberty	0.00	4,441.88	0.00	11,027.32	0.00	34.20	0.00	4,565.17	0.00	196.08
Madison	0.00	39,733.89	0.01	86,067.67	0.00	184.30	0.00	33,936.68	0.00	1,453.62
Manatee	0.01	160,286.93	0.02	343,504.72	0.00	963.17	0.01	211,887.03	0.00	9,090.31
Marion	0.07	1,077,304.64	0.15	2,209,023.32	0.00	5,671.30	0.05	777,319.01	0.00	33,281.65
Martin	0.00	65,249.88	0.01	129,951.85	0.00	278.40	0.01	82,677.65	0.00	3,538.06
Miami-Dade	0.02	279,462.24	0.04	606,220.03	0.00	1,978.76	0.02	248,873.75	0.00	10,713.35
Monroe	0.00	8,138.67	0.00	19,483.48	0.00	49.76	0.00	8,770.50	0.00	376.47
Nassau	0.12	1,717,243.83	0.25	3,685,365.02	0.00	12,373.67	0.11	1,613,902.53	0.00	69,136.95
Okaloosa	0.00	60,157.27	0.01	131,193.68	0.00	584.50	0.01	81,251.81	0.00	3,487.46
Okeechobee	0.00	14,146.28	0.00	32,383.28	0.00	147.96	0.00	20,677.05	0.00	886.41
Orange	0.05	662,335.11	0.10	1,509,388.34	0.00	9,241.79	0.04	596,944.41	0.00	25,739.27
Osceola	0.01	126,350.21	0.02	291,286.54	0.00	1,235.59	0.01	138,296.76	0.00	5,955.32
Palm Beach	0.02	347,236.81	0.05	716,338.04	0.00	1,587.36	0.02	332,440.78	0.00	14,269.41
Pasco	0.03	421,510.60	0.06	925,245.27	0.00	2,457.52	0.03	498,096.77	0.00	21,345.60
Pinellas	0.04	566,324.59	0.08	1,222,256.24	0.00	2,766.24	0.05	698,559.73	0.00	29,937.23
Polk	0.02	350,427.68	0.05	765,429.35	0.00	3,565.86	0.03	473,053.15	0.00	20,292.73
Putnam	0.02	335,130.72	0.05	743,556.04	0.00	2,664.43	0.02	301,907.95	0.00	12,928.53
St Johns	0.11	1,571,839.43	0.22	3,260,668.37	0.00	8,361.57	0.09	1,378,164.66	0.00	59,083.07
St Lucie	0.01	115,160.96	0.02	245,131.37	0.00	580.79	0.01	135,580.91	0.00	5,812.34
Santa Rosa	0.00	50,717.87	0.01	112,025.74	0.00	341.08	0.00	67,705.46	0.00	2,904.65
Sarasota	0.01	214,056.11	0.03	425,907.23	0.00	509.15	0.02	293,505.93	0.00	12,561.99
Seminole	0.03	371,997.84	0.05	800,931.61	0.00	2,882.58	0.02	349,282.09	0.00	15,001.69
Sumter	0.02	290,041.35	0.04	543,080.49	0.00	278.13	0.01	214,325.00	0.00	9,159.74
Suwannee	0.01	159,558.67	0.02	334,875.35	0.00	1,085.90	0.01	141,538.49	0.00	6,062.09
Taylor	0.00	33,942.87	0.01	77,996.51	0.00	196.16	0.00	34,061.61	0.00	1,460.10
Union	0.00	68,155.73	0.01	200,262.70	0.00	367.80	0.00	37,042.63	0.00	1,591.44
Volusia	0.06	919,874.00	0.14	1,970,706.33	0.00	2,975.97	0.06	861,484.58	0.00	36,895.10
Wakulla	0.00	26,573.59	0.00	61,760.47	0.00	173.39	0.00	36,171.04	0.00	1,550.43
Walton	0.00	29,822.79	0.00	66,558.63	0.00	373.96	0.00	36,584.94	0.00	1,568.66
Washington	0.00	12,371.79	0.00	28,609.55	0.00	66.28	0.00	17,858.74	0.00	765.05

County	Land Area (sq mi)	Land Area (m²)	Air Volume	PM2.5 (lbs)	O3 (lbs)	$ Total Health Benefits (low estimate)	$ Total Health Benefits (high estimate)	Total Mortality (low estimate)	Total Mortality (high estimate)
Duval	762	1973570856	1,973,570,856,000.00	101.96	519.72	28,021,359.12	46,450,543.09	1.76	3.02
Flagler	485	1256144180	1,256,144,180,000.00	8.11	42.99	756,339.78	1,195,150.96	0.05	0.08
Clay	604	1564352752	1,564,352,752,000.00	30.94	139.62	2,837,135.44	4,558,435.77	0.18	0.30
St. Johns	601	1556582788	1,556,582,788,000.00	26.82	137.36	3,114,240.24	4,803,069.19	0.20	0.32
Nassau	649	1680902212	1,680,902,212,000.00	81.48	388.81	3,490,021.04	5,458,142.23	0.23	0.36
NEFL				**249.31**	**1,228.51**	**38,219,095.63**	**62,465,341.23**	**2.42**	**4.09**

Notes for $PM_{2.5}$ and O_3 Concentration Change Table

This table summarizes projected annual changes in ambient $PM_{2.5}$ and O_3 concentrations (in micrograms per cubic meter, µg/m³) across various Florida counties due to modeled emission reductions, using the **U.S. EPA's Co-Benefits Risk Assessment (COBRA) Screening Model**. The COBRA model applies reduced emission inputs—such as reductions in direct $PM_{2.5}$, SO_2, NO_x, and VOCs—to estimate resulting changes in pollutant concentrations using a reduced-form air quality model based on source-receptor matrices derived from the **EPA's Community Multiscale Air Quality (CMAQ) modeling system**.

Model input scenarios reflect assumptions including a 45% reduction in emissions from electric utility fuel combustion (e.g., SO_2, NO_x, VOCs, and primary $PM_{2.5}$). County-level concentration changes are output by COBRA as annual average values relative to a baseline year.

The highlighted rows represent specific counties of interest (e.g., Duval, Clay, Nassau, St. Johns, and Flagler) where energy transition measures are being evaluated for health and environmental co-benefits. Total concentration changes shown at the top right of the sheet (e.g., $PM_{2.5}$ = 0.07 µg/m³; O_3 = 0.32 µg/m³) represent estimated average reductions across selected regions.

Sources:

U.S. EPA, Community Multiscale Air Quality (CMAQ) Model. https://www.epa.gov/cmaq

O3 Mortality (Long-term exposure)	$ O3 Mortality (Long-term exposure)	Total Asthma Symptoms	$ Total Asthma Symptoms	PM Asthma Symptoms, Albuterol Use	O3 Asthma Symptoms, Chest Tightness	$ O3 Asthma Symptoms, Chest Tightness	O3 Asthma Symptoms, Cough	$ O3 Asthma Symptoms, Cough	O3 Asthma Symptoms, Shortness of Breath	$ O3 Asthma Symptoms, Shortness of Breath	O3 Asthma Symptoms, Wheeze	$ O3 Asthma Symptoms, Wheeze	Total Asthma Onset	$ Total Asthma Onset	PM Asthma Onset	$ PM Asthma Onset	O3 Asthma Onset	$ O3 Asthma Onset	Total Incidence, Hay Fever/Rhinitis	$ Total Incidence, Hay Fever/Rhinitis	PM Incidence, Hay Fever/Rhinitis
0.02	318,566.55	48.40	11,087.93	12.60	7.91	3,051.27	9.33	3,599.39	3.99	1,539.92	7.48	2,884.75	0.29	22,403.45	0.10	7,601.51	0.19	14,801.94	1.97	2,198.10	0.67
0.01	135,652.20	13.68	3,209.83	3.44	2.29	883.33	2.70	1,042.07	1.16	445.83	2.16	835.16	0.08	6,412.11	0.03	2,238.27	0.05	4,173.84	0.53	595.90	0.19
0.01	123,949.04	9.21	2,557.50	1.66	1.83	704.15	2.15	830.62	0.92	355.36	1.73	665.71	0.06	4,424.40	0.01	1,116.22	0.04	3,308.17	0.36	402.60	0.09
0.01	113,730.90	9.02	2,136.33	2.23	1.52	587.94	1.80	693.57	0.77	296.73	1.44	555.86	0.06	4,359.32	0.02	1,531.77	0.04	2,827.55	0.35	390.45	0.12
0.03	479,611.69	25.79	6,996.05	4.91	4.99	1,926.11	5.89	2,272.04	2.52	972.04	4.72	1,820.96	0.16	12,019.62	0.04	3,076.76	0.12	8,942.86	1.03	1,149.92	0.26
0.02	250,021.67	31.33	8,811.53	5.44	6.29	2,426.16	7.42	2,861.86	3.17	1,224.38	5.95	2,293.69	0.19	14,779.10	0.05	3,487.57	0.15	11,291.52	1.25	1,391.70	0.29
0.00	13,067.17	0.78	211.24	0.15	0.15	58.16	0.18	68.60	0.08	29.35	0.14	54.98	0.00	376.61	0.00	98.52	0.00	278.08	0.03	34.37	0.01
0.01	139,029.38	3.40	1,015.49	0.49	0.72	279.64	0.86	329.86	0.37	141.12	0.69	264.37	0.02	1,609.59	0.00	310.45	0.02	1,299.14	0.14	153.85	0.03
0.02	318,085.21	9.41	2,426.27	2.00	1.73	667.90	2.04	787.86	0.87	337.07	1.64	631.44	0.06	4,253.10	0.02	1,228.16	0.04	3,024.94	0.37	413.36	0.11
0.08	1,155,718.94	109.39	25,614.19	27.56	18.27	7,048.85	21.55	8,315.64	9.22	3,557.67	17.27	6,664.48	0.66	50,082.90	0.23	17,285.92	0.43	32,796.98	4.30	4,790.56	1.47
0.01	81,638.23	5.98	1,727.16	0.96	1.23	475.58	1.45	560.99	0.62	240.01	1.17	449.62	0.04	2,909.52	0.01	625.32	0.03	2,284.21	0.24	269.95	0.05
0.02	268,972.31	18.66	4,486.21	4.51	3.20	1,234.70	3.78	1,456.52	1.62	623.14	3.03	1,167.33	0.12	8,911.79	0.04	3,014.29	0.08	5,897.50	0.73	814.18	0.25
0.00	16,331.02	1.30	387.64	0.19	0.28	106.74	0.33	125.92	0.14	53.87	0.26	100.92	0.01	659.85	0.00	131.48	0.01	528.38	0.05	58.79	0.01
0.00	38,173.15	1.82	471.35	0.39	0.34	129.75	0.40	153.06	0.17	65.48	0.32	122.67	0.01	843.60	0.00	245.22	0.01	598.38	0.07	79.56	0.02
0.79	11,495,935.70	1,439.41	358,894.33	326.30	256.01	98,767.42	302.09	116,543.66	129.24	49,861.10	242.09	93,395.86	9.04	689,373.79	2.87	219,174.74	6.16	470,199.05	56.26	62,685.81	17.78
0.01	103,057.06	8.69	2,424.28	1.54	1.73	667.48	2.04	787.36	0.87	336.85	1.64	631.04	0.05	4,194.21	0.01	978.34	0.04	3,215.88	0.36	397.26	0.08
0.02	292,167.56	14.58	3,618.07	3.33	2.58	995.87	3.05	1,174.76	1.30	502.59	2.44	941.52	0.09	6,985.39	0.03	2,155.87	0.06	4,829.52	0.58	650.77	0.18
0.00	10,700.91	0.70	192.60	0.13	0.14	53.03	0.16	62.55	0.07	26.76	0.13	50.13	0.00	341.87	0.00	85.29	0.00	256.58	0.03	30.93	0.01
0.00	35,162.91	3.25	866.95	0.64	0.62	238.68	0.73	281.54	0.31	120.45	0.58	225.65	0.02	1,531.22	0.01	420.96	0.01	1,110.26	0.13	142.20	0.03
0.00	41,680.59	2.98	733.45	0.69	0.52	201.88	0.62	238.14	0.26	101.88	0.49	190.86	0.02	1,344.30	0.01	421.36	0.01	922.94	0.12	131.73	0.04
0.00	5,921.25	0.33	94.29	0.06	0.07	25.96	0.08	30.63	0.03	13.10	0.06	24.55	0.00	174.96	0.00	38.67	0.00	136.30	0.01	15.47	0.00
0.00	14,758.15	0.61	166.53	0.11	0.12	45.85	0.14	54.08	0.06	23.14	0.11	43.34	0.00	260.02	0.00	65.48	0.00	194.55	0.02	26.42	0.01
0.00	27,203.69	2.52	596.48	0.63	0.43	164.16	0.50	193.65	0.21	82.85	0.40	155.20	0.01	1,117.52	0.01	384.08	0.01	733.44	0.10	108.98	0.03
0.00	14,073.32	1.47	431.86	0.22	0.31	118.92	0.36	140.28	0.16	60.01	0.29	112.43	0.01	741.38	0.00	153.47	0.01	587.91	0.06	66.22	0.01
0.00	10,376.83	1.21	350.74	0.19	0.25	96.58	0.30	113.92	0.13	48.74	0.24	91.31	0.01	585.30	0.00	126.02	0.01	459.27	0.05	54.07	0.01
0.02	237,494.99	11.38	3,046.89	2.23	2.17	838.82	2.56	989.48	1.10	423.33	2.06	793.03	0.07	5,393.75	0.02	1,421.23	0.05	3,972.52	0.46	509.39	0.12
0.01	100,353.12	3.47	996.07	0.57	0.71	274.27	0.84	323.52	0.36	138.41	0.67	259.29	0.02	1,715.91	0.01	383.11	0.02	1,332.80	0.14	155.75	0.03
0.05	665,258.61	81.76	23,305.47	13.69	16.63	6,417.05	19.62	7,569.54	8.39	3,238.46	15.73	6,066.73	0.52	39,659.60	0.12	9,004.26	0.40	30,655.34	3.28	3,658.33	0.74
0.00	14,833.79	0.74	204.70	0.14	0.15	56.36	0.17	66.48	0.07	28.44	0.14	53.28	0.00	360.48	0.00	89.69	0.00	270.79	0.03	33.07	0.01
0.01	92,217.16	4.58	1,268.15	0.83	0.91	349.16	1.07	411.86	0.46	176.21	0.86	330.09	0.03	2,146.20	0.01	518.08	0.02	1,628.12	0.18	205.81	0.04
0.00	31,607.80	2.14	580.41	0.41	0.41	159.80	0.49	188.49	0.21	80.64	0.39	151.07	0.01	986.55	0.00	255.30	0.01	731.25	0.09	94.83	0.02
0.00	19,057.88	1.21	307.30	0.26	0.22	84.59	0.26	99.78	0.11	42.69	0.21	79.97	0.01	539.81	0.00	159.64	0.00	380.17	0.05	53.02	0.01
0.00	10,649.66	1.24	311.30	0.28	0.22	85.69	0.26	101.08	0.11	43.24	0.21	81.01	0.01	597.92	0.00	177.05	0.01	420.88	0.05	55.85	0.01
0.03	367,390.86	27.90	7,191.66	5.94	5.13	1,979.71	6.05	2,335.28	2.59	999.10	4.85	1,871.64	0.17	13,260.02	0.05	3,864.89	0.12	9,395.13	1.11	1,234.33	0.32
0.01	218,285.67	16.40	4,877.17	2.41	3.48	1,343.04	4.11	1,584.23	1.76	677.78	3.29	1,269.71	0.11	8,120.34	0.02	1,599.07	0.09	6,521.26	0.67	743.17	0.13
0.01	165,887.93	21.05	5,269.75	4.73	3.76	1,450.54	4.44	1,711.07	1.90	732.04	3.55	1,371.36	0.13	10,152.93	0.04	2,861.57	0.10	7,291.36	0.89	993.08	0.25
0.01	76,132.52	4.70	1,184.49	1.05	0.85	326.04	1.00	384.61	0.43	164.55	0.80	308.25	0.03	2,255.73	0.01	691.92	0.02	1,563.81	0.19	207.04	0.06
0.00	4,369.09	0.48	129.09	0.09	0.09	35.54	0.11	41.92	0.05	17.94	0.09	33.60	0.00	228.94	0.00	60.07	0.00	168.86	0.02	21.23	0.00
0.00	32,483.06	2.28	567.91	0.52	0.41	156.32	0.48	184.40	0.20	78.89	0.38	147.79	0.01	1,019.97	0.00	321.67	0.01	698.30	0.09	98.75	0.03
0.01	202,796.72	15.58	4,625.66	2.30	3.30	1,273.77	3.89	1,502.53	1.67	642.83	3.12	1,204.23	0.10	7,695.47	0.02	1,523.27	0.08	6,172.20	0.63	704.99	0.12
0.05	744,037.36	42.39	10,406.33	9.88	7.42	2,864.26	8.76	3,378.74	3.75	1,445.52	7.02	2,707.93	0.26	19,981.47	0.08	6,445.25	0.18	13,536.22	1.67	1,856.21	0.53
0.01	79,139.60	3.15	880.82	0.56	0.63	242.52	0.74	286.08	0.32	122.39	0.59	229.28	0.02	1,467.24	0.00	343.69	0.01	1,123.55	0.13	141.59	0.03
0.02	238,160.40	33.72	9,275.85	6.20	6.62	2,553.87	7.81	3,012.51	3.34	1,288.84	6.26	2,414.43	0.21	15,767.98	0.05	3,944.28	0.16	11,823.70	1.34	1,492.44	0.33
0.00	8,394.03	0.80	228.43	0.14	0.16	62.90	0.19	74.19	0.08	31.74	0.15	59.46	0.00	367.95	0.00	86.50	0.00	281.45	0.03	34.93	0.01
0.11	1,544,765.58	96.85	23,603.90	22.86	16.84	6,495.56	19.87	7,664.32	8.50	3,279.04	15.92	6,142.12	0.60	45,428.65	0.20	15,132.05	0.40	30,296.61	3.76	4,190.20	1.24
0.01	77,764.35	7.22	2,030.98	1.26	1.45	559.21	1.71	659.64	0.73	282.21	1.37	528.68	0.05	3,512.33	0.01	855.48	0.03	2,656.85	0.28	316.17	0.07
0.00	19,790.64	1.41	392.97	0.25	0.28	108.20	0.33	127.63	0.14	54.60	0.27	102.29	0.01	703.45	0.00	169.96	0.01	533.49	0.06	63.71	0.01
0.04	571,205.14	92.14	24,381.51	18.55	17.40	6,712.16	20.53	7,917.67	8.78	3,387.40	16.45	6,345.74	0.59	44,934.58	0.16	12,310.80	0.43	32,623.78	3.69	4,115.83	1.05
0.01	132,341.44	19.03	5,164.77	3.62	3.69	1,421.94	4.35	1,677.31	1.86	717.60	3.48	1,344.31	0.12	9,149.40	0.03	2,349.77	0.09	6,799.63	0.77	852.59	0.20
0.02	318,171.37	28.31	8,036.87	4.79	5.74	2,212.91	6.77	2,610.32	2.89	1,116.77	5.42	2,092.09	0.18	13,431.91	0.04	3,062.55	0.14	10,369.36	1.14	1,266.79	0.26
0.03	476,751.17	30.97	8,525.46	5.69	6.08	2,347.25	7.18	2,768.82	3.07	1,184.58	5.75	2,219.11	0.19	14,751.75	0.05	3,662.79	0.15	11,088.96	1.24	1,384.50	0.31
0.05	668,622.50	42.35	12,294.50	6.72	8.78	3,385.37	10.35	3,993.38	4.43	1,708.48	8.30	3,200.56	0.26	20,037.67	0.06	4,341.13	0.21	15,696.54	1.69	1,879.54	0.36
0.03	452,760.42	36.67	10,279.14	6.43	7.34	2,830.21	8.65	3,338.51	3.70	1,428.31	6.94	2,675.70	0.24	18,103.88	0.06	4,310.49	0.18	13,793.39	1.48	1,646.30	0.35
0.02	288,979.42	18.80	4,445.91	4.66	3.17	1,223.56	3.74	1,443.37	1.60	617.52	3.00	1,156.80	0.11	8,673.09	0.04	2,983.25	0.07	5,689.84	0.73	816.67	0.25
0.09	1,319,081.59	98.62	23,869.11	23.55	17.03	6,569.20	20.09	7,749.78	8.59	3,315.58	16.10	6,210.99	0.59	45,350.41	0.19	14,353.31	0.41	30,997.09	3.97	4,419.62	1.25
0.01	129,768.57	9.14	2,555.72	1.62	1.82	703.68	2.15	830.05	0.92	355.12	1.72	665.26	0.06	4,359.92	0.01	1,033.14	0.04	3,326.78	0.37	410.98	0.09
0.00	64,800.81	5.39	1,509.71	0.95	1.08	415.68	1.27	490.33	0.54	209.78	1.02	392.98	0.03	2,555.24	0.01	611.04	0.03	1,944.19	0.21	239.44	0.05
0.02	280,943.94	10.99	3,295.71	1.57	2.35	907.56	2.77	1,070.55	1.19	458.01	2.22	858.01	0.07	5,132.19	0.01	972.97	0.05	4,159.21	0.45	496.15	0.08
0.02	316,280.41	34.81	9,080.36	7.22	6.48	2,499.70	7.64	2,948.66	3.27	1,261.52	6.13	2,363.25	0.21	16,373.25	0.06	4,597.28	0.15	11,775.97	1.39	1,547.87	0.39
0.01	205,105.26	3.63	949.39	0.75	0.68	261.36	0.80	308.30	0.34	131.90	0.64	247.09	0.02	1,667.28	0.01	475.54	0.02	1,191.74	0.14	158.41	0.04
0.01	135,476.40	8.70	2,168.31	1.97	1.55	596.83	1.82	704.04	0.78	301.21	1.46	564.26	0.05	4,105.42	0.02	1,303.62	0.04	2,801.80	0.34	377.81	0.11
0.00	32,601.51	2.36	623.90	0.48	0.45	171.76	0.53	202.61	0.22	86.68	0.42	162.38	0.01	1,124.82	0.00	319.13	0.01	805.70	0.09	102.53	0.03
0.00	35,451.19	3.87	910.68	0.97	0.65	250.62	0.77	295.65	0.33	126.49	0.61	236.95	0.02	1,809.27	0.01	620.23	0.02	1,189.05	0.15	170.36	0.05
0.06	824,589.48	46.91	12,255.47	10.04	8.60	3,318.57	10.15	3,914.63	4.34	1,674.79	8.13	3,137.43	0.29	21,995.45	0.08	6,363.52	0.20	15,631.92	1.87	2,086.76	0.54
0.00	34,620.61	2.40	646.38	0.47	0.46	177.95	0.54	209.92	0.23	89.81	0.44	168.24	0.01	1,142.46	0.00	304.50	0.01	837.96	0.10	106.18	0.03
0.00	35,016.28	2.61	725.42	0.47	0.52	199.73	0.61	235.60	0.26	100.80	0.49	188.83	0.01	1,276.61	0.00	317.25	0.01	959.36	0.10	115.11	0.03
0.00	17,093.69	0.93	255.32	0.17	0.18	70.29	0.21	82.92	0.09	35.47	0.17	66.46	0.01	450.98	0.00	114.69	0.00	336.30	0.04	41.70	0.01

$ PM Incidence, Hay Fever/Rhinitis	O3 Incidence, Hay Fever/Rhinitis	$ O3 Incidence, Hay Fever/Rhinitis	Total ER Visits, Respiratory	$ Total ER Visits, Respiratory	PM ER Visits, Respiratory	$ PM ER Visits, Respiratory	O3 ER Visits, Respiratory	$ O3 ER Visits, Respiratory	Total Hospital Admits, All Respiratory	$ Total Hospital Admits All Respiratory	PM Hospital Admits, All Respiratory	$ PM Hospital Admits All Respiratory	O3 Hospital Admits, All Respiratory	$ O3 Hospital Admits All Respiratory	PM Nonfatal Heart Attacks	$ PM Nonfatal Heart Attacks	PM Minor Restricted Activity Days	$ PM Minor Restricted Activity Days	PM Work Loss Days	$ PM Work Loss Days	PM Incidence Lung Cancer	$ PM Incidence Lung Cancer
743.10	1.31	1,455.00	0.11	183.72	0.03	50.86	0.08	132.86	0.01	183.51	0.00	127.94	0.00	55.57	0.02	1,609.30	38.24	4,807.86	6.52	2,063.49	0.00	120.97
206.81	0.35	389.09	0.04	70.72	0.01	20.15	0.03	50.57	0.00	66.06	0.00	42.60	0.00	23.45	0.01	488.33	8.87	1,114.56	1.49	470.90	0.00	33.60
100.73	0.27	301.87	0.03	52.92	0.01	10.59	0.03	42.34	0.00	43.16	0.00	24.56	0.00	18.61	0.00	338.22	4.39	551.56	0.74	234.75	0.00	19.38
136.42	0.23	254.03	0.04	71.86	0.01	20.62	0.03	51.24	0.00	50.32	0.00	32.02	0.00	18.30	0.01	471.04	6.30	792.00	1.06	336.25	0.00	30.82
292.19	0.77	857.73	0.09	151.47	0.02	30.81	0.07	120.66	0.01	138.95	0.00	66.39	0.00	72.56	0.02	1,784.77	14.29	1,797.08	2.38	753.49	0.00	94.59
326.02	0.96	1,065.68	0.09	147.16	0.02	27.45	0.07	119.71	0.00	106.99	0.00	59.00	0.00	47.99	0.01	1,092.82	15.54	1,953.84	2.63	831.88	0.00	67.30
8.94	0.02	25.42	0.00	7.60	0.00	1.59	0.00	6.02	0.00	4.53	0.00	2.28	0.00	2.25	0.00	29.71	0.42	53.23	0.07	22.48	0.00	2.00
29.43	0.11	124.42	0.02	26.38	0.00	3.97	0.01	22.40	0.00	33.67	0.00	12.04	0.00	21.63	0.00	358.67	1.75	219.95	0.29	90.56	0.00	21.04
118.38	0.26	294.98	0.04	64.42	0.01	14.90	0.03	49.53	0.00	75.87	0.00	39.65	0.00	36.23	0.02	1,421.08	6.11	768.13	1.00	316.85	0.00	64.07
1,642.38	2.83	3,148.17	0.31	504.80	0.09	141.90	0.22	362.90	0.02	450.26	0.01	275.20	0.01	175.06	0.07	5,620.96	73.09	9,188.48	12.28	3,885.23	0.01	321.09
57.74	0.19	212.21	0.02	26.23	0.00	4.44	0.01	21.79	0.00	19.98	0.00	8.83	0.00	11.15	0.00	254.92	2.75	346.05	0.46	145.15	0.00	24.38
273.75	0.49	540.44	0.09	146.80	0.02	40.40	0.07	106.41	0.00	122.36	0.00	77.31	0.00	45.05	0.02	1,625.47	11.97	1,505.47	2.02	639.59	0.00	58.74
11.67	0.04	47.12	0.00	6.86	0.00	1.07	0.00	5.78	0.00	5.52	0.00	2.48	0.00	3.04	0.00	49.65	0.53	67.24	0.09	28.66	0.00	2.66
23.00	0.05	56.56	0.00	6.21	0.00	1.45	0.00	4.76	0.00	10.86	0.00	5.81	0.00	5.05	0.00	111.97	1.12	141.18	0.19	58.84	0.00	7.10
19,805.88	38.48	42,879.93	4.68	7,599.73	1.20	1,954.27	3.48	5,645.46	0.23	5,416.53	0.13	3,503.25	0.11	1,913.28	0.59	49,469.97	818.20	102,864.55	140.10	44,315.81	0.07	2,869.11
92.18	0.27	305.08	0.04	57.08	0.01	10.54	0.03	46.54	0.00	31.54	0.00	16.59	0.00	14.95	0.00	241.04	4.00	503.22	0.68	215.83	0.00	16.33
200.06	0.40	450.71	0.05	81.37	0.01	20.31	0.04	61.06	0.00	79.54	0.00	44.27	0.00	35.28	0.02	1,719.54	10.82	1,360.48	1.79	565.15	0.00	91.47
7.66	0.02	23.28	0.00	6.52	0.00	1.29	0.00	5.23	0.00	3.16	0.00	1.56	0.00	1.60	0.00	31.11	0.41	51.06	0.07	21.95	0.00	2.05
38.75	0.09	103.45	0.01	24.19	0.00	5.30	0.01	18.89	0.00	10.77	0.00	6.10	0.00	4.67	0.00	150.29	1.53	192.03	0.25	80.46	0.00	6.98
40.88	0.08	90.84	0.01	9.91	0.00	2.50	0.00	7.41	0.00	15.65	0.00	9.07	0.00	6.58	0.00	156.38	1.72	216.05	0.29	90.40	0.00	9.71
3.43	0.01	12.04	0.00	1.03	0.00	0.18	0.00	0.85	0.00	1.42	0.00	0.72	0.00	0.70	0.00	17.09	0.17	21.21	0.03	9.03	0.00	1.09
6.58	0.02	19.84	0.00	5.28	0.00	1.05	0.00	4.23	0.00	5.29	0.00	2.47	0.00	2.82	0.00	33.10	0.48	59.82	0.08	25.36	0.00	2.20
37.14	0.06	71.85	0.01	16.95	0.00	4.73	0.01	12.22	0.00	13.32	0.00	7.77	0.00	5.55	0.00	122.64	1.89	237.31	0.32	100.89	0.00	7.80
13.64	0.05	52.57	0.01	9.56	0.00	1.56	0.00	8.00	0.00	5.53	0.00	2.62	0.00	2.91	0.00	29.65	0.51	63.64	0.09	27.13	0.00	2.00
11.56	0.04	42.51	0.00	6.57	0.00	1.11	0.00	5.46	0.00	4.49	0.00	2.74	0.00	1.75	0.00	44.23	0.39	49.60	0.07	21.19	0.00	1.47
133.48	0.34	375.91	0.04	64.31	0.01	13.52	0.03	50.79	0.00	71.38	0.00	36.80	0.00	34.58	0.01	1,033.86	6.59	828.81	1.09	345.63	0.00	51.14
34.57	0.11	121.18	0.02	26.42	0.00	4.65	0.01	21.76	0.00	21.09	0.00	9.28	0.00	11.81	0.00	296.96	1.41	177.72	0.24	74.61	0.00	13.82
825.70	2.54	2,832.63	0.23	367.20	0.04	65.84	0.19	301.35	0.01	258.32	0.01	146.23	0.01	112.09	0.03	2,389.84	36.16	4,545.55	6.16	1,948.11	0.00	129.35
8.18	0.02	24.89	0.00	4.28	0.00	0.85	0.00	3.43	0.00	3.38	0.00	1.88	0.00	1.50	0.00	30.82	0.42	52.26	0.07	22.05	0.00	1.98
49.34	0.14	156.47	0.02	26.90	0.00	5.14	0.01	21.75	0.00	22.87	0.00	9.85	0.00	13.02	0.00	385.91	2.27	285.96	0.38	119.37	0.00	21.91
24.31	0.06	70.52	0.01	21.33	0.00	4.38	0.01	16.95	0.00	12.69	0.00	6.43	0.00	6.26	0.00	97.29	1.34	168.75	0.22	71.03	0.00	6.34
15.55	0.03	37.47	0.00	6.71	0.00	1.59	0.00	5.12	0.00	5.71	0.00	3.02	0.00	2.69	0.00	73.42	0.77	97.36	0.13	40.80	0.00	4.55
16.52	0.04	39.33	0.00	3.76	0.00	0.90	0.00	2.86	0.00	3.88	0.00	2.28	0.00	1.60	0.00	43.20	0.89	111.28	0.15	47.51	0.00	3.01
357.55	0.79	876.78	0.11	171.26	0.02	40.09	0.06	131.17	0.01	171.97	0.00	97.54	0.00	74.43	0.03	2,674.05	16.33	2,052.77	2.72	860.14	0.00	113.48
145.59	0.54	597.58	0.05	77.33	0.01	11.94	0.04	65.39	0.00	74.77	0.00	37.07	0.00	37.70	0.01	653.13	6.96	875.50	1.17	369.20	0.00	50.22
279.41	0.64	713.67	0.06	94.66	0.01	21.48	0.05	73.18	0.00	59.24	0.00	37.11	0.00	22.12	0.01	756.22	14.62	1,837.66	2.50	789.92	0.00	41.44
63.18	0.13	143.86	0.02	24.40	0.00	6.04	0.01	18.35	0.00	27.16	0.00	16.35	0.00	10.81	0.00	329.40	2.85	358.72	0.47	149.93	0.00	17.81
5.53	0.01	15.70	0.00	4.48	0.00	0.94	0.00	3.55	0.00	1.41	0.00	0.76	0.00	0.65	0.00	14.83	0.32	40.46	0.05	17.27	0.00	1.06
30.83	0.06	67.92	0.01	19.95	0.00	5.06	0.01	14.88	0.00	10.99	0.00	6.60	0.00	4.39	0.00	107.95	1.36	171.07	0.23	72.44	0.00	6.83
138.83	0.51	566.16	0.05	74.25	0.01	11.53	0.04	62.72	0.00	52.61	0.00	23.35	0.00	29.25	0.01	741.39	6.19	778.59	1.03	326.28	0.00	44.18
595.08	1.13	1,261.13	0.21	338.14	0.05	88.35	0.15	249.79	0.01	249.39	0.01	142.07	0.01	107.33	0.06	4,918.51	26.32	3,308.49	4.39	1,389.15	0.00	213.34
32.94	0.10	108.64	0.01	14.36	0.00	2.66	0.01	11.70	0.00	21.20	0.00	10.15	0.00	11.05	0.00	218.66	1.72	216.79	0.28	90.14	0.00	15.68
370.57	1.01	1,121.86	0.10	167.78	0.02	33.30	0.08	134.49	0.01	139.27	0.00	81.80	0.00	57.47	0.02	1,295.77	17.98	2,260.01	3.04	961.88	0.00	74.65
8.12	0.02	26.81	0.00	4.78	0.00	0.88	0.00	3.89	0.00	2.69	0.00	1.39	0.00	1.30	0.00	35.48	0.46	58.43	0.08	24.48	0.00	2.43
1,384.36	2.52	2,805.85	0.28	461.38	0.08	124.55	0.21	336.83	0.02	488.09	0.01	283.41	0.01	204.68	0.10	8,462.47	62.34	7,837.69	10.40	3,290.42	0.01	377.35
76.47	0.22	239.70	0.02	39.73	0.00	7.67	0.02	32.06	0.00	22.10	0.00	12.21	0.00	9.89	0.00	257.16	3.18	400.40	0.54	172.38	0.00	12.89
15.33	0.04	48.38	0.01	10.15	0.00	1.95	0.01	8.20	0.00	10.03	0.00	5.24	0.00	4.79	0.00	164.64	0.61	77.25	0.10	32.80	0.00	2.91
1,122.27	2.69	2,993.56	0.26	421.48	0.06	92.46	0.20	329.02	0.01	305.13	0.01	194.90	0.01	110.23	0.03	2,702.18	54.73	6,880.81	9.39	2,969.52	0.00	169.54
217.69	0.57	634.90	0.08	126.69	0.02	25.90	0.06	100.78	0.00	64.67	0.00	38.18	0.00	26.49	0.01	813.85	9.88	1,242.36	1.68	531.09	0.00	33.48
286.85	0.88	979.94	0.08	122.39	0.01	22.02	0.06	100.37	0.01	130.67	0.00	69.61	0.00	61.06	0.01	1,201.35	13.67	1,718.09	2.30	728.12	0.00	88.44
341.44	0.94	1,043.06	0.09	150.71	0.02	29.69	0.07	121.02	0.01	134.45	0.00	69.84	0.00	64.61	0.02	1,965.22	16.01	2,013.23	2.67	843.04	0.00	92.91
403.61	1.32	1,475.94	0.12	196.32	0.02	33.39	0.10	162.92	0.01	188.30	0.00	81.02	0.01	107.28	0.03	2,396.02	20.93	2,631.35	3.50	1,107.75	0.00	128.24
389.96	1.13	1,256.34	0.18	289.55	0.03	54.65	0.14	234.90	0.01	175.78	0.00	95.92	0.00	79.87	0.02	1,598.98	15.75	1,980.63	2.66	841.48	0.00	78.78
279.09	0.48	537.58	0.09	141.46	0.02	39.63	0.06	101.83	0.00	106.94	0.00	65.18	0.00	41.75	0.02	1,707.53	10.96	1,378.28	1.83	578.93	0.00	61.99
1,391.74	2.72	3,027.88	0.21	333.71	0.05	85.51	0.15	248.20	0.02	419.10	0.01	235.48	0.01	183.61	0.08	6,435.44	69.24	8,704.52	11.46	3,623.65	0.01	387.05
96.75	0.28	314.23	0.03	53.64	0.01	10.06	0.03	43.58	0.00	45.75	0.00	25.09	0.00	20.66	0.01	592.50	4.39	551.40	0.73	232.37	0.00	27.42
56.84	0.16	182.60	0.02	30.80	0.00	5.83	0.02	24.97	0.00	21.96	0.00	10.84	0.00	11.11	0.00	247.80	2.65	332.92	0.45	141.19	0.00	11.32
93.25	0.36	402.90	0.03	54.80	0.00	8.10	0.03	46.70	0.00	55.50	0.00	20.20	0.00	35.31	0.01	787.74	5.05	635.15	0.83	263.64	0.00	54.16
432.91	1.00	1,115.96	0.08	126.19	0.02	28.38	0.06	97.82	0.01	109.42	0.00	62.66	0.00	46.76	0.01	1,103.88	22.23	2,794.48	3.76	1,190.51	0.00	92.42
44.76	0.10	113.65	0.02	37.51	0.01	8.55	0.02	28.96	0.00	78.86	0.00	38.55	0.00	40.31	0.02	1,911.18	3.03	380.91	0.50	157.76	0.00	82.35
119.20	0.23	258.61	0.04	65.66	0.01	16.86	0.03	48.80	0.00	57.20	0.00	33.02	0.00	24.18	0.01	800.23	4.93	620.20	0.83	262.23	0.00	28.35
28.86	0.07	73.67	0.01	17.76	0.00	4.03	0.01	13.73	0.00	13.73	0.00	8.59	0.00	5.14	0.00	110.18	1.48	186.46	0.25	79.23	0.00	7.01
58.08	0.10	112.28	0.02	32.43	0.01	9.06	0.01	23.37	0.00	19.71	0.00	11.87	0.00	7.84	0.00	178.56	3.45	434.27	0.59	185.36	0.00	11.80
599.88	1.33	1,486.88	0.22	356.29	0.05	82.73	0.17	273.56	0.01	221.83	0.00	121.48	0.01	100.36	0.04	3,485.83	29.40	3,696.25	4.91	1,552.27	0.00	185.81
28.10	0.07	78.08	0.01	10.58	0.00	2.25	0.01	8.33	0.00	8.97	0.00	5.19	0.00	3.78	0.00	122.01	1.52	191.49	0.26	81.20	0.00	5.75
28.40	0.08	86.71	0.01	19.50	0.00	3.84	0.01	15.66	0.00	10.75	0.00	5.47	0.00	5.28	0.00	139.38	1.35	169.84	0.23	71.49	0.00	6.96
10.54	0.03	31.16	0.00	6.54	0.00	1.32	0.00	5.22	0.00	4.60	0.00	2.38	0.00	2.22	0.00	37.33	0.59	74.05	0.10	31.22	0.00	2.54

PM HA Cardio Cerebro and Peripheral Vascular Disease	$ PM HA Cardio Cerebro and Peripheral Vascular Disease	PM HA Alzheimers Disease	$ PM HA Alzheimers Disease	PM HA Parkinsons Disease	$ PM HA Parkinsons Disease	PM Incidence Stroke	$ PM Incidence Stroke	PM Incidence Out of Hospital Cardiac Arrest	$ PM Incidence Out of Hospital Cardiac Arrest	PM ER Visits All Cardiac Outcomes	$ PM ER Visits All Cardiac Outcomes	O3 ER Visits, Asthma	$ O3 ER Visits, Asthma	O3 School Loss Days, All Cause	$ O3 School Loss Days, All Cause
0.01	157.60	0.01	221.31	0.00	55.33	0.00	155.22	0.00	35.97	0.01	29.95	0.00	0.46	19.44	33,015.73
0.00	52.97	0.00	51.85	0.00	14.33	0.00	40.62	0.00	10.01	0.01	11.75	0.00	0.09	5.14	8,720.99
0.00	31.70	0.00	34.61	0.00	8.54	0.00	23.92	0.00	5.39	0.00	5.18	0.00	0.08	3.96	6,725.60
0.00	40.54	0.00	55.52	0.00	13.29	0.00	37.26	0.00	8.18	0.00	7.91	0.00	0.07	3.32	5,632.74
0.00	137.20	0.01	176.75	0.00	43.79	0.00	122.24	0.00	23.71	0.01	19.72	0.00	0.24	11.41	19,369.86
0.00	72.92	0.00	104.26	0.00	29.05	0.00	81.23	0.00	18.74	0.01	14.72	0.00	0.39	14.10	23,950.13
0.00	2.99	0.00	3.40	0.00	0.85	0.00	2.39	0.00	0.55	0.00	0.67	0.00	0.01	0.33	566.82
0.00	28.61	0.01	118.95	0.00	9.91	0.00	27.62	0.00	4.58	0.00	3.22	0.00	0.05	1.65	2,807.12
0.00	96.18	0.01	133.38	0.00	30.07	0.00	84.02	0.00	14.38	0.01	11.55	0.00	0.08	3.94	6,692.88
0.02	499.54	0.02	532.27	0.01	139.32	0.01	393.76	0.00	90.12	0.04	77.08	0.00	0.82	41.85	71,067.50
0.00	21.26	0.00	51.52	0.00	10.98	0.00	30.51	0.00	5.42	0.00	2.98	0.00	0.04	2.80	4,753.87
0.00	117.01	0.00	108.09	0.00	27.32	0.00	76.78	0.00	16.19	0.01	20.32	0.00	0.21	7.08	12,031.36
0.00	4.01	0.00	4.84	0.00	1.21	0.00	3.41	0.00	0.72	0.00	0.54	0.00	0.01	0.62	1,044.56
0.00	11.55	0.00	12.22	0.00	3.26	0.00	9.26	0.00	1.85	0.00	1.68	0.00	0.01	0.75	1,273.23
0.15	4,275.58	0.24	5,382.69	0.05	1,227.19	0.05	3,448.73	0.01	858.30	0.39	850.80	0.02	17.25	562.23	954,845.90
0.00	26.30	0.00	29.82	0.00	7.32	0.00	20.52	0.00	4.54	0.00	4.16	0.00	0.11	4.04	6,868.18
0.00	120.11	0.01	189.13	0.00	42.89	0.00	119.65	0.00	21.49	0.01	17.52	0.00	0.15	5.95	10,100.81
0.00	3.06	0.00	3.53	0.00	0.89	0.00	2.53	0.00	0.53	0.00	0.68	0.00	0.01	0.30	517.38
0.00	10.31	0.00	11.69	0.00	3.26	0.00	9.23	0.00	2.06	0.00	2.37	0.00	0.06	1.36	2,310.54
0.00	13.77	0.00	18.69	0.00	4.39	0.00	12.28	0.00	2.48	0.00	2.10	0.00	0.02	1.22	2,064.67
0.00	0.89	0.00	2.04	0.00	0.48	0.00	1.36	0.00	0.26	0.00	0.15	0.00	0.00	0.16	266.77
0.00	4.09	0.00	3.67	0.00	0.96	0.00	2.71	0.00	0.61	0.00	0.67	0.00	0.01	0.27	455.55
0.00	10.71	0.00	13.40	0.00	3.57	0.00	10.10	0.00	2.22	0.00	2.36	0.00	0.02	0.96	1,629.80
0.00	3.08	0.00	3.41	0.00	0.85	0.00	2.37	0.00	0.56	0.00	0.56	0.00	0.01	0.68	1,162.62
0.00	2.58	0.00	2.47	0.00	0.62	0.00	1.74	0.00	0.42	0.00	0.47	0.00	0.01	0.56	950.01
0.00	73.58	0.00	104.33	0.00	23.38	0.00	65.11	0.00	12.08	0.00	9.84	0.00	0.12	4.98	8,462.40
0.00	20.38	0.00	29.97	0.00	6.40	0.00	17.77	0.00	3.06	0.00	2.86	0.00	0.04	1.59	2,694.80
0.01	167.01	0.02	513.65	0.00	55.87	0.00	157.02	0.00	38.65	0.01	30.26	0.00	0.83	37.28	63,315.48
0.00	1.55	0.00	3.41	0.00	0.89	0.00	2.52	0.00	0.55	0.00	0.31	0.00	0.00	0.33	556.84
0.00	27.59	0.00	47.43	0.00	10.21	0.00	28.33	0.00	4.91	0.00	3.85	0.00	0.04	2.08	3,531.63
0.00	5.60	0.00	11.23	0.00	2.77	0.00	7.77	0.00	1.75	0.00	1.44	0.00	0.03	0.94	1,593.15
0.00	5.93	0.00	8.35	0.00	2.10	0.00	5.92	0.00	1.20	0.00	1.08	0.00	0.01	0.50	854.77
0.00	3.37	0.00	4.79	0.00	1.25	0.00	3.53	0.00	0.90	0.00	0.61	0.00	0.01	0.52	882.27
0.01	200.40	0.01	221.40	0.00	51.79	0.00	145.07	0.00	27.72	0.01	27.39	0.00	0.22	11.56	19,631.37
0.00	60.66	0.01	123.33	0.00	23.37	0.00	65.48	0.00	12.17	0.00	8.02	0.00	0.18	7.85	13,335.77
0.00	56.34	0.00	73.48	0.00	18.55	0.00	52.05	0.00	12.71	0.01	10.79	0.00	0.22	9.52	16,163.98
0.00	24.73	0.00	32.36	0.00	8.29	0.00	23.40	0.00	4.62	0.00	4.26	0.00	0.05	1.89	3,216.92
0.00	1.72	0.00	1.52	0.00	0.44	0.00	1.25	0.00	0.34	0.00	0.44	0.00	0.01	0.21	350.49
0.00	9.73	0.00	12.34	0.00	3.08	0.00	8.67	0.00	1.87	0.00	2.17	0.00	0.02	0.91	1,540.10
0.00	46.96	0.01	140.84	0.00	20.75	0.00	58.22	0.00	10.88	0.00	7.01	0.00	0.14	7.44	12,638.64
0.01	300.75	0.03	579.13	0.00	98.62	0.00	275.93	0.00	49.95	0.02	44.16	0.00	0.44	16.63	28,245.13
0.00	17.37	0.00	33.35	0.00	7.19	0.00	19.93	0.00	3.55	0.00	2.27	0.00	0.02	1.45	2,457.23
0.00	89.91	0.01	260.08	0.00	30.10	0.00	83.91	0.00	20.52	0.01	17.81	0.00	0.36	14.88	25,264.88
0.00	2.70	0.00	4.19	0.00	1.10	0.00	3.09	0.00	0.67	0.00	0.48	0.00	0.01	0.36	604.49
0.02	498.21	0.03	695.04	0.01	177.10	0.01	499.06	0.00	99.09	0.04	77.49	0.00	0.70	36.91	62,687.20
0.00	21.02	0.00	22.57	0.00	5.73	0.00	16.10	0.00	3.68	0.00	3.47	0.00	0.07	3.14	5,327.99
0.00	7.98	0.00	5.23	0.00	1.30	0.00	3.66	0.00	0.80	0.00	1.16	0.00	0.02	0.63	1,075.50
0.01	235.35	0.03	585.53	0.00	72.74	0.00	204.62	0.00	53.09	0.02	44.87	0.00	1.19	39.30	66,740.67
0.00	46.98	0.00	100.46	0.00	13.84	0.00	39.07	0.00	10.05	0.00	9.34	0.00	0.36	8.37	14,211.09
0.00	100.66	0.01	133.01	0.00	38.97	0.00	107.82	0.00	21.16	0.01	15.41	0.00	0.31	12.98	22,042.40
0.00	127.32	0.01	168.17	0.00	41.95	0.00	117.82	0.00	24.13	0.01	19.28	0.00	0.26	13.78	23,408.15
0.01	148.14	0.02	450.46	0.00	59.21	0.00	165.89	0.00	33.08	0.01	24.09	0.00	0.48	19.52	33,147.43
0.00	121.17	0.01	182.92	0.00	35.69	0.00	100.30	0.00	21.14	0.01	20.19	0.00	0.56	16.46	27,959.43
0.00	126.39	0.01	155.15	0.00	29.01	0.00	81.51	0.00	16.56	0.01	19.93	0.00	0.23	7.13	12,101.60
0.02	492.61	0.03	751.70	0.01	174.39	0.01	489.20	0.00	101.85	0.03	68.55	0.00	0.52	40.43	68,654.73
0.00	40.21	0.00	71.88	0.00	12.44	0.00	34.73	0.00	6.84	0.00	6.32	0.00	0.10	4.16	7,062.57
0.00	20.71	0.00	18.58	0.00	4.98	0.00	14.08	0.00	3.24	0.00	2.85	0.00	0.03	2.42	4,104.25
0.01	52.98	0.01	157.13	0.00	25.02	0.00	69.60	0.00	11.85	0.00	6.45	0.00	0.08	5.37	9,122.86
0.00	101.34	0.01	106.22	0.00	39.93	0.00	111.80	0.00	26.15	0.01	17.65	0.00	0.28	14.79	25,114.42
0.00	113.65	0.01	181.44	0.00	42.53	0.00	120.21	0.00	17.13	0.01	11.88	0.00	0.04	1.51	2,563.50
0.00	11.66	0.00	52.56	0.00	12.83	0.00	36.09	0.00	7.33	0.00	8.36	0.00	0.08	3.40	5,778.03
0.00	10.40	0.00	11.99	0.00	3.21	0.00	9.07	0.00	1.96	0.00	2.03	0.00	0.02	0.97	1,643.72
0.00	19.24	0.00	16.90	0.00	5.44	0.00	15.56	0.00	3.82	0.00	3.75	0.00	0.04	1.49	2,523.20
0.01	250.26	0.02	365.25	0.00	87.05	0.00	243.83	0.00	47.45	0.02	41.58	0.00	0.67	19.71	33,477.47
0.00	8.35	0.00	8.69	0.00	2.54	0.00	7.24	0.00	1.78	0.00	1.39	0.00	0.02	1.03	1,745.54
0.00	8.83	0.00	12.07	0.00	3.12	0.00	8.79	0.00	1.89	0.00	1.50	0.00	0.02	1.14	1,928.31
0.00	3.00	0.00	4.07	0.00	1.09	0.00	3.08	0.00	0.71	0.00	0.61	0.00	0.01	0.41	695.55

Location(s)	Sector	Emissions Modification(s)
Florida - All Counties	Fuel Combustion: Electric Utility	$PM_{2.5}$ reduce by 30% SO_2 reduce by 30% NO_x reduce by 30% VOC reduce by 30%

Totals	
PM2.5	0.01 microgram/m3
O3	0.04 microgram/m3

FIPS	State	County	Base PM 2.5	Control PM 2.5	Delta PM 2.5	Base O3	Control O3	Delta O3	$ Total Health Benefits(low estimate)	$ Total Health Benefits(high estimate)	$ PM Total Health Benefits (low estimate)	$ PM Total Health Benefits (high estimate)	$ O3 Total Health Benefits
12001	Florida	Alachua	4.87	4.87	0.00	13.44	13.43	0.01	654,217.13	1,092,690.22	391,909.78	830,382.86	249,308.97
12003	Florida	Baker	4.71	4.70	0.01	14.12	14.10	0.02	215,252.01	356,328.41	109,715.06	250,791.46	101,856.37
12005	Florida	Bay	3.53	3.53	0.00	13.57	13.57	0.00	160,407.59	242,891.76	65,438.06	147,922.23	92,052.73
12007	Florida	Bradford	5.13	5.12	0.00	14.07	14.05	0.02	182,122.51	308,225.48	95,624.56	221,727.53	84,005.05
12009	Florida	Brevard	4.23	4.23	0.00	12.93	12.93	0.00	669,771.39	1,005,303.35	311,486.32	647,018.28	350,338.34
12011	Florida	Broward	4.37	4.37	0.00	10.21	10.21	0.00	386,270.25	593,590.62	181,904.51	389,224.88	194,398.32
12013	Florida	Calhoun	4.07	4.07	0.00	14.62	14.61	0.00	16,703.30	24,835.00	6,875.50	15,007.21	9,581.17
12015	Florida	Charlotte	3.49	3.49	0.00	10.49	10.49	0.00	158,656.00	215,800.08	58,302.43	115,446.52	99,188.73
12017	Florida	Citrus	4.79	4.79	0.00	13.22	13.21	0.01	454,112.59	685,773.07	224,232.06	455,892.54	227,164.75
12019	Florida	Clay	5.09	5.09	0.01	14.22	14.20	0.03	1,891,480.34	3,039,040.46	997,664.09	2,145,224.21	864,791.59
12021	Florida	Collier	3.04	3.04	0.00	9.23	9.23	0.00	117,605.39	170,597.13	54,734.51	107,726.25	60,867.58
12023	Florida	Columbia	4.65	4.65	0.00	13.76	13.74	0.01	432,459.18	697,203.44	229,710.42	494,454.67	197,532.37
12027	Florida	De Soto	3.81	3.81	0.00	11.06	11.05	0.00	19,316.22	27,515.68	6,596.41	14,795.87	12,259.10
12029	Florida	Dixie	3.18	3.18	0.00	11.84	11.84	0.01	53,100.71	83,823.71	24,907.76	55,630.77	27,663.25
12031	Florida	Duval	5.62	5.61	0.02	15.61	15.54	0.08	18,682,600.37	30,969,440.29	9,450,050.33	21,736,890.25	8,819,471.49
12033	Florida	Escambia	4.39	4.39	0.00	16.43	16.42	0.00	138,855.04	209,717.10	58,486.19	129,348.25	77,535.54
12035	Florida	Flagler	4.27	4.27	0.00	13.35	13.34	0.01	504,231.70	796,774.78	288,007.67	580,550.75	211,975.56
12037	Florida	Franklin	3.05	3.05	0.00	12.17	12.16	0.00	14,615.53	22,539.21	6,497.64	14,421.32	7,891.41
12039	Florida	Gadsden	4.96	4.95	0.00	14.91	14.90	0.00	51,061.79	80,615.13	23,626.54	53,179.88	26,451.27
12041	Florida	Gilchrist	3.99	3.99	0.00	12.64	12.63	0.01	64,326.70	101,877.92	32,744.88	70,296.11	30,762.01
12043	Florida	Glades	3.37	3.37	0.00	10.96	10.96	0.00	6,390.50	8,758.99	1,925.65	4,294.14	4,347.61
12045	Florida	Gulf	3.04	3.04	0.00	12.38	12.37	0.00	18,784.19	28,205.57	7,943.06	17,364.43	10,662.95
12047	Florida	Hamilton	4.60	4.60	0.00	14.18	14.17	0.01	46,243.48	78,691.65	25,261.66	57,709.84	20,323.64
12049	Florida	Hardee	4.30	4.30	0.00	11.93	11.93	0.00	16,541.43	23,369.43	5,240.83	12,068.83	10,787.06
12051	Florida	Hendry	3.64	3.64	0.00	11.15	11.14	0.00	12,664.05	18,046.48	4,229.11	9,611.53	8,031.22
12053	Florida	Hernando	5.18	5.18	0.00	14.23	14.23	0.00	355,338.00	542,809.56	179,297.41	366,768.96	172,525.43
12055	Florida	Highlands	3.61	3.61	0.00	11.02	11.02	0.00	116,713.42	160,058.86	43,369.04	86,714.49	72,169.82
12057	Florida	Hillsborough	6.15	6.15	0.00	15.33	15.32	0.00	932,688.28	1,401,870.60	388,897.33	858,079.64	516,911.56
12059	Florida	Holmes	4.40	4.40	0.00	15.40	15.40	0.00	18,523.09	27,698.60	7,483.37	16,658.87	10,801.74
12061	Florida	Indian River	3.19	3.19	0.00	10.81	10.81	0.00	135,788.63	201,422.62	67,148.10	132,782.08	67,194.84
12063	Florida	Jackson	4.69	4.69	0.00	15.43	15.43	0.00	47,045.99	73,542.29	23,031.71	49,528.01	23,357.76
12065	Florida	Jefferson	4.75	4.75	0.00	14.20	14.19	0.01	28,471.72	44,151.87	14,139.59	29,819.73	13,992.09
12067	Florida	Lafayette	3.66	3.66	0.00	12.91	12.90	0.01	17,284.63	27,956.24	8,760.34	19,431.94	8,157.37
12069	Florida	Lake	5.66	5.66	0.00	14.71	14.71	0.01	612,299.10	965,377.50	331,536.25	684,614.65	272,457.85
12071	Florida	Lee	3.46	3.46	0.00	9.96	9.96	0.00	291,745.40	421,541.23	122,739.27	252,535.11	163,296.10
12073	Florida	Leon	5.08	5.08	0.00	14.53	14.52	0.00	266,829.09	416,329.99	131,569.65	281,070.56	128,892.05
12075	Florida	Levy	3.76	3.76	0.00	12.11	12.11	0.01	117,861.17	191,475.45	60,742.65	134,356.93	55,743.23
12077	Florida	Liberty	3.78	3.78	0.00	13.75	13.75	0.00	6,548.04	10,938.35	3,059.07	7,449.37	3,339.44
12079	Florida	Madison	4.36	4.36	0.00	14.13	14.12	0.01	51,550.03	82,439.39	26,996.55	57,885.91	23,925.58
12081	Florida	Manatee	4.41	4.41	0.00	11.93	11.93	0.00	266,761.57	388,906.92	109,440.92	231,586.28	151,917.83
12083	Florida	Marion	5.24	5.24	0.00	13.53	13.52	0.01	1,284,595.93	2,039,079.75	730,510.79	1,484,994.60	542,072.27
12085	Florida	Martin	3.31	3.31	0.00	10.86	10.86	0.00	102,356.83	145,491.52	44,176.55	87,311.24	57,181.95
12086	Florida	Miami-Dade	3.54	3.54	0.00	7.23	7.23	0.00	390,359.81	608,198.43	192,662.05	410,500.68	187,236.79
12087	Florida	Monroe	1.93	1.93	0.00	6.03	6.03	0.00	12,190.33	19,753.54	5,579.15	13,142.36	6,360.27
12089	Florida	Nassau	4.89	4.88	0.01	15.23	15.16	0.07	2,326,863.83	3,639,019.68	1,170,833.18	2,482,989.02	1,129,262.94
12091	Florida	Okaloosa	4.01	4.01	0.00	15.50	15.49	0.00	102,382.84	149,740.51	41,350.52	88,708.18	58,700.50
12093	Florida	Okeechobee	3.32	3.32	0.00	10.75	10.75	0.00	24,918.00	37,076.01	9,757.83	21,915.85	14,691.46
12095	Florida	Orange	5.81	5.81	0.00	15.29	15.28	0.00	942,736.78	1,507,440.40	459,995.45	1,024,699.07	454,228.30
12097	Florida	Osceola	4.41	4.41	0.00	12.72	12.72	0.00	198,038.82	307,996.57	87,884.01	197,841.76	104,165.57
12099	Florida	Palm Beach	4.01	4.01	0.00	11.27	11.27	0.00	485,908.72	731,976.38	236,557.17	482,624.83	240,202.40
12101	Florida	Pasco	5.91	5.91	0.00	15.63	15.62	0.00	648,920.34	984,744.22	287,355.71	623,179.58	351,787.86
12103	Florida	Pinellas	4.53	4.53	0.00	13.31	13.31	0.00	893,185.80	1,330,474.31	385,556.75	822,845.26	493,743.46
12105	Florida	Polk	5.48	5.48	0.00	14.05	14.05	0.00	591,280.39	867,948.66	240,177.80	516,846.07	338,972.61
12107	Florida	Putnam	4.92	4.92	0.00	13.70	13.68	0.01	444,966.68	717,253.35	228,413.05	500,699.73	211,490.29
12109	Florida	St Johns	4.72	4.72	0.01	13.80	13.78	0.03	2,076,220.91	3,202,130.20	1,072,754.92	2,198,664.21	976,112.20
12111	Florida	St Lucie	3.10	3.10	0.00	10.62	10.62	0.00	177,871.55	264,518.57	78,602.53	165,249.56	96,329.70
12113	Florida	Santa Rosa	4.34	4.34	0.00	16.34	16.34	0.00	85,121.83	125,993.78	34,800.71	75,672.67	48,602.06
12115	Florida	Sarasota	3.50	3.50	0.00	10.40	10.39	0.00	351,856.55	493,090.79	144,810.68	286,044.93	203,344.70
12117	Florida	Seminole	6.40	6.40	0.00	16.24	16.23	0.00	519,560.28	805,517.04	255,220.14	541,176.89	253,982.45
12119	Florida	Sumter	5.83	5.83	0.00	14.68	14.67	0.01	341,895.29	510,588.68	195,752.64	364,446.03	145,051.95
12121	Florida	Suwannee	4.28	4.28	0.00	13.56	13.55	0.01	210,355.47	327,234.22	108,609.17	225,487.93	99,259.37
12123	Florida	Taylor	3.44	3.44	0.00	12.79	12.78	0.01	47,968.73	77,337.95	23,150.38	52,519.61	24,105.00
12125	Florida	Union	4.87	4.87	0.00	13.83	13.81	0.02	74,360.37	162,432.82	46,487.38	134,559.83	26,817.47
12127	Florida	Volusia	5.07	5.07	0.00	14.33	14.32	0.01	1,241,014.30	1,941,572.27	624,672.68	1,325,230.65	602,467.03
12129	Florida	Wakulla	3.95	3.95	0.00	13.35	13.35	0.00	44,557.08	68,015.06	18,229.71	41,687.70	25,589.94
12131	Florida	Walton	3.90	3.90	0.00	14.80	14.80	0.00	47,271.69	71,762.28	20,401.42	44,892.01	26,025.78
12133	Florida	Washington	4.20	4.20	0.00	14.97	14.97	0.00	21,228.70	32,053.89	8,439.07	19,264.27	12,492.83

FIPS	County	Total Mortality(low estimate)	$ Total Mortality(low estimate)	Total Mortality(high estimate)	$ Total Mortality(high estimate)	PM Mortality, All Cause (low)	$ PM Mortality, All Cause (low)	PM Mortality (high)	$ PM Mortality (high)	PM Infant Mortality	$ PM Infant Mortality	Total O3 Mortality	$ Total O3 Mortality	O3 Mortality (Short-term exposure)	$ O3 Mortality (Short-term exposure)
12001	Alachua	0.04	601,995.86	0.07	1,040,468.94	0.03	380,047.58	0.06	818,320.67	0.00	4,787.46	0.02	221,948.27	0.00	9,566.02
12003	Baker	0.01	201,008.10	0.02	342,084.50	0.01	106,514.81	0.02	247,591.21	0.00	1,261.67	0.01	94,493.29	0.00	4,054.22
12005	Bay	0.01	150,101.17	0.02	232,585.35	0.00	63,766.72	0.01	146,250.89	0.00	752.59	0.01	86,334.46	0.00	3,701.28
12007	Bradford	0.01	172,499.49	0.02	298,602.46	0.01	93,280.57	0.02	215,383.54	0.00	876.88	0.01	79,218.92	0.00	3,395.56
12009	Brevard	0.04	639,918.18	0.07	975,450.14	0.02	305,870.03	0.04	641,403.99	0.00	3,423.56	0.02	334,048.16	0.00	14,304.90
12011	Broward	0.02	350,634.33	0.04	557,954.71	0.01	176,456.35	0.03	383,776.73	0.00	1,310.76	0.01	174,177.98	0.00	7,496.52
12013	Calhoun	0.00	15,823.66	0.00	23,955.37	0.00	6,722.34	0.00	14,854.04	0.00	40.23	0.00	9,101.33	0.00	389.82
12015	Charlotte	0.01	154,303.13	0.01	211,447.21	0.00	57,476.09	0.01	114,620.18	0.00	120.34	0.01	96,827.03	0.00	4,140.36
12017	Citrus	0.03	442,868.66	0.05	674,529.14	0.02	221,336.85	0.03	452,997.33	0.00	660.85	0.02	221,531.81	0.00	9,472.75
12019	Clay	0.12	1,775,967.18	0.20	2,923,527.30	0.07	970,915.78	0.15	2,118,475.90	0.00	6,696.15	0.06	805,051.39	0.00	34,532.09
12021	Collier	0.01	110,538.74	0.01	163,530.48	0.00	53,674.19	0.01	106,665.93	0.00	228.36	0.00	56,864.55	0.00	2,438.92
12023	Columbia	0.03	411,986.55	0.05	676,730.80	0.02	224,640.15	0.03	489,384.40	0.00	2,141.03	0.01	187,346.40	0.00	8,026.39
12027	De Soto	0.00	17,765.43	0.00	25,964.89	0.00	6,389.86	0.00	14,589.31	0.00	57.16	0.00	11,375.57	0.00	488.17
12029	Dixie	0.00	51,071.52	0.01	81,794.52	0.00	24,484.58	0.00	55,207.58	0.00	96.91	0.00	26,586.94	0.00	1,137.79
12031	Duval	1.17	17,152,716.23	2.02	29,439,556.15	0.63	9,143,131.65	1.47	21,429,971.57	0.01	144,335.23	0.55	8,009,584.58	0.02	344,453.26
12033	Escambia	0.01	128,827.16	0.01	199,689.22	0.00	57,040.67	0.01	127,902.73	0.00	567.00	0.00	71,786.49	0.00	3,081.54
12035	Flagler	0.03	487,055.61	0.05	779,598.69	0.02	283,560.09	0.04	576,103.17	0.00	3,228.33	0.01	203,495.52	0.00	8,713.27
12037	Franklin	0.00	13,808.95	0.00	21,732.63	0.00	6,355.42	0.00	14,279.11	0.00	34.94	0.00	7,453.52	0.00	319.52
12039	Gadsden	0.00	47,492.00	0.01	77,045.34	0.00	22,999.57	0.00	52,552.91	0.00	216.93	0.00	24,492.43	0.00	1,050.30
12041	Gilchrist	0.00	61,109.30	0.01	98,660.53	0.00	32,077.71	0.00	69,628.93	0.00	161.82	0.00	29,031.60	0.00	1,244.02
12043	Glades	0.00	5,985.46	0.00	8,353.95	0.00	1,861.21	0.00	4,229.70	0.00	18.17	0.00	4,124.25	0.00	176.74
12045	Gulf	0.00	18,082.68	0.00	27,504.06	0.00	7,803.81	0.00	17,225.19	0.00	23.51	0.00	10,278.87	0.00	440.04
12047	Hamilton	0.00	43,580.70	0.01	76,028.88	0.00	24,631.43	0.00	57,079.60	0.00	340.77	0.00	18,949.28	0.00	813.10
12049	Hardee	0.00	14,841.13	0.00	21,669.12	0.00	5,037.65	0.00	11,865.64	0.00	62.49	0.00	9,803.48	0.00	421.21
12051	Hendry	0.00	11,280.06	0.00	16,662.48	0.00	4,051.50	0.00	9,433.92	0.00	50.04	0.00	7,228.56	0.00	310.65
12053	Hernando	0.02	341,940.52	0.04	529,412.08	0.01	176,527.38	0.02	363,998.94	0.00	733.11	0.01	165,413.14	0.00	7,081.71
12055	Highlands	0.01	112,544.31	0.01	155,889.75	0.00	42,651.88	0.01	85,997.32	0.00	228.69	0.00	69,892.43	0.00	2,990.02
12057	Hillsborough	0.06	838,993.79	0.09	1,308,176.10	0.03	375,543.26	0.06	844,725.57	0.00	4,939.39	0.03	463,450.53	0.00	19,941.70
12059	Holmes	0.00	17,670.36	0.00	26,845.86	0.00	7,338.65	0.00	16,514.15	0.00	38.26	0.00	10,331.71	0.00	442.46
12061	Indian River	0.01	130,363.88	0.01	195,997.87	0.00	66,135.61	0.01	131,769.59	0.00	250.02	0.00	64,228.27	0.00	2,749.88
12063	Jackson	0.00	44,604.00	0.00	71,100.30	0.00	22,588.50	0.00	49,084.80	0.00	135.09	0.00	22,015.50	0.00	943.50
12065	Jefferson	0.00	27,133.00	0.00	42,813.14	0.00	13,859.07	0.00	29,539.21	0.00	64.61	0.00	13,273.93	0.00	568.53
12067	Lafayette	0.00	15,901.64	0.00	26,573.25	0.00	8,482.69	0.00	19,154.29	0.00	73.14	0.00	7,418.96	0.00	319.06
12069	Lake	0.04	580,275.35	0.06	933,353.75	0.02	324,376.06	0.05	677,454.47	0.00	2,160.02	0.02	255,899.29	0.00	10,969.48
12071	Lee	0.02	272,098.78	0.03	401,894.61	0.01	120,047.83	0.02	249,843.66	0.00	704.26	0.01	152,050.95	0.00	6,526.64
12073	Leon	0.02	242,573.47	0.03	392,074.37	0.01	127,000.65	0.02	276,501.55	0.00	3,524.15	0.01	115,572.82	0.00	4,979.83
12075	Levy	0.01	112,614.87	0.01	186,229.16	0.00	59,587.93	0.01	133,202.21	0.00	290.76	0.00	53,026.94	0.00	2,271.22
12077	Liberty	0.00	6,004.73	0.00	10,395.03	0.00	2,961.26	0.00	7,351.56	0.00	22.80	0.00	3,043.47	0.00	130.72
12079	Madison	0.00	49,114.09	0.01	80,003.45	0.00	26,489.32	0.00	57,378.68	0.00	122.87	0.00	22,624.77	0.00	969.08
12081	Manatee	0.02	248,116.87	0.03	370,262.22	0.01	106,858.01	0.02	229,003.36	0.00	642.11	0.01	141,258.86	0.00	6,060.21
12083	Marion	0.08	1,236,424.98	0.14	1,990,908.80	0.05	718,204.87	0.10	1,472,688.69	0.00	3,780.88	0.04	518,220.11	0.00	22,187.80
12085	Martin	0.01	98,618.54	0.01	141,753.23	0.00	43,499.93	0.01	86,634.62	0.00	185.60	0.00	55,118.61	0.00	2,358.70
12086	Miami-Dade	0.02	352,224.28	0.04	570,062.90	0.01	186,308.20	0.03	404,146.82	0.00	1,319.57	0.01	165,916.08	0.00	7,142.23
12087	Monroe	0.00	11,272.78	0.00	18,835.99	0.00	5,425.78	0.00	12,988.99	0.00	33.17	0.00	5,847.01	0.00	250.98
12089	Nassau	0.15	2,220,930.28	0.24	3,533,086.12	0.08	1,144,856.01	0.17	2,457,011.85	0.00	8,249.28	0.07	1,076,074.27	0.00	46,091.97
12091	Okaloosa	0.01	94,272.95	0.01	141,630.61	0.00	40,104.86	0.01	87,462.12	0.00	389.67	0.00	54,168.09	0.00	2,324.97
12093	Okeechobee	0.00	23,215.61	0.00	35,373.63	0.00	9,430.86	0.00	21,588.87	0.00	98.64	0.00	13,784.76	0.00	590.94
12095	Orange	0.06	839,523.32	0.10	1,404,226.93	0.03	441,557.22	0.07	1,006,260.84	0.00	6,161.20	0.03	397,966.10	0.00	17,159.53
12097	Osceola	0.01	176,431.93	0.02	286,389.68	0.01	84,233.54	0.01	194,191.29	0.00	823.72	0.01	92,198.39	0.00	3,970.22
12099	Palm Beach	0.03	453,119.04	0.05	699,186.70	0.02	231,491.27	0.03	477,558.93	0.00	3,058.24	0.02	221,627.77	0.00	9,512.94
12101	Pasco	0.04	613,074.43	0.07	948,898.30	0.02	281,007.33	0.04	616,831.20	0.00	1,638.35	0.02	332,067.10	0.00	14,230.41
12103	Pinellas	0.06	843,259.72	0.09	1,280,548.23	0.03	377,549.99	0.06	814,838.50	0.00	1,844.16	0.03	465,709.73	0.00	19,958.17
12105	Polk	0.04	548,989.43	0.06	825,657.70	0.02	233,618.63	0.04	532,286.90	0.00	2,377.24	0.02	315,370.80	0.00	13,528.50
12107	Putnam	0.03	424,698.59	0.05	696,985.27	0.02	223,421.55	0.03	495,708.23	0.00	1,776.29	0.01	201,277.04	0.00	8,619.04
12109	St Johns	0.13	1,966,723.47	0.21	3,092,632.76	0.07	1,047,901.67	0.15	2,173,810.96	0.00	5,574.42	0.06	918,821.80	0.00	39,388.93
12111	St Lucie	0.01	167,161.62	0.02	253,808.65	0.01	76,774.01	0.01	163,421.03	0.00	387.19	0.01	90,387.61	0.00	3,874.89
12113	Santa Rosa	0.01	78,949.07	0.01	119,821.02	0.00	33,811.93	0.01	74,683.88	0.00	227.39	0.00	45,137.14	0.00	1,936.43
12115	Sarasota	0.02	338,375.79	0.03	479,610.03	0.01	142,704.14	0.02	283,938.38	0.00	339.43	0.01	195,671.65	0.00	8,374.66
12117	Seminole	0.03	480,855.73	0.05	766,812.49	0.02	247,998.88	0.04	533,955.63	0.00	1,921.72	0.02	232,856.85	0.00	10,001.53
12119	Sumter	0.02	336,245.89	0.03	504,939.28	0.01	193,361.17	0.03	362,054.50	0.00	185.42	0.01	142,884.72	0.00	6,106.50
12121	Suwannee	0.01	200,733.67	0.02	317,612.42	0.01	106,372.80	0.01	221,251.56	0.00	723.93	0.01	94,360.87	0.00	4,041.40
12123	Taylor	0.00	45,336.67	0.01	74,705.90	0.00	22,628.62	0.00	51,997.85	0.00	130.78	0.00	22,708.04	0.00	973.40
12125	Union	0.00	70,133.28	0.01	158,205.73	0.00	45,437.42	0.00	133,509.87	0.00	245.20	0.00	24,695.86	0.00	1,060.97
12127	Volusia	0.08	1,187,580.49	0.13	1,888,138.46	0.04	613,250.44	0.09	1,313,808.42	0.00	3,983.99	0.04	574,330.05	0.00	24,596.77
12129	Wakulla	0.00	41,830.00	0.00	65,287.98	0.00	17,715.75	0.00	41,173.73	0.00	115.59	0.00	24,114.25	0.00	1,033.62
12131	Walton	0.00	44,271.94	0.00	68,762.53	0.00	19,881.87	0.00	44,372.46	0.00	249.31	0.00	24,300.07	0.00	1,045.78
12133	Washington	0.00	20,153.75	0.00	30,978.94	0.00	8,247.86	0.00	19,075.05	0.00	44.18	0.00	11,905.89	0.00	510.03

County	Land Area (sq mi)	Land Area (m²)	Air Volume	PM2.5 (lbs)	O3 (lbs)	$ Total Health Benefits (low estimate)	$ Total Health Benefits (high estimate)	Total Mortality (low estimate)	Total Mortality (high estimate)
Duval	762	1973579856	1,973,579,856,000.00	67.97	346.48	18,682,600.37	30,969,440.29	1.17	2.02
Flagler	485	1256144180	1,256,144,180,000.00	5.40	28.66	504,231.70	796,774.78	0.03	0.05
Clay	604	1564352752	1,564,352,752,000.00	20.63	93.08	1,891,480.34	3,039,040.46	0.12	0.20
St. Johns	601	1556582788	1,556,582,788,000.00	17.88	91.57	2,076,220.91	3,202,130.20	0.13	0.21
Nassau	649	1680902212	1,680,902,212,000.00	54.32	259.20	2,326,863.83	3,639,019.68	0.15	0.24
NEFL				**166.21**	**819.00**	**25,481,397.16**	**41,646,405.41**	**1.62**	**2.72**

Notes for $PM_{2.5}$ and O_3 Concentration Change Table

his analysis models a **30% reduction in emissions from electricity generation** in Northeast Florida attributable to **residential and commercial building energy efficiency improvements**. The estimate excludes industrial electricity consumption, reflecting only the share of power generation serving the building sector. The 30% assumption is a **conservative estimate** based on state-level energy use data from the **U.S. Energy Information Administration (EIA, 2024)**, which indicates that approximately 50–60% of Florida's electricity consumption occurs in the residential sector and 20–30% in the commercial sector.

Emission reductions were applied to the **Fuel Combustion: Electric Utility** sector in the **EPA Co-Benefits Risk Assessment (COBRA) Tool** to quantify co-pollutant benefits resulting from reduced fossil fuel-based electricity generation. Pollutants included **$PM_{2.5}$, SO_2, NO_x, and VOCs**, each reduced by 30% from baseline values. The modeling assumes no change in industrial output, transportation demand, or other fuel combustion sectors.

The resulting outputs represent **estimated air quality improvements and avoided emissions** associated with energy efficiency measures implemented across residential and commercial buildings in Clay, Duval, Flagler, Nassau, and St. Johns counties. This approach is consistent with the methodology used for the 45% scenario but adjusted downward to reflect a conservative assumption about the portion of total electricity generation affected by building-sector efficiency improvements.

Sources:

U.S. Environmental Protection Agency (EPA), *Co-Benefits Risk Assessment (COBRA) Health Impacts Screening and Mapping Tool* , 2024.

U.S. Energy Information Administration (EIA), *Florida State Energy Profile* , 2024.

National Renewable Energy Laboratory (NREL), *Understanding Commercial Building Energy Use in Florida* , 2024.

O3 Mortality (Long-term exposure)	$ O3 Mortality (Long-term exposure)	Total Asthma Symptoms	$ Total Asthma Symptoms	PM Asthma Symptoms, Albuterol Use	O3 Asthma Symptoms, Chest Tightness	$ O3 Asthma Symptoms, Chest Tightness	O3 Asthma Symptoms, Cough	$ O3 Asthma Symptoms, Cough	O3 Asthma Symptoms, Shortness of Breath	$ O3 Asthma Symptoms, Shortness of Breath	O3 Asthma Symptoms, Wheeze	$ O3 Asthma Symptoms, Wheeze	Total Asthma Onset	$ Total Asthma Onset	PM Asthma Onset	$ PM Asthma Onset	O3 Asthma Onset	$ O3 Asthma Onset	Total Incidence, Hay Fever/Rhinitis	$ Total Incidence, Hay Fever/Rhinitis	PM Incidence, Hay Fever/Rhinitis
0.01	212,382.26	32.26	7,392.05	8.40	5.27	2,034.23	6.22	2,399.61	2.66	1,026.62	4.99	1,923.19	0.20	14,936.32	0.07	5,067.81	0.13	9,868.52	1.32	1,465.42	0.44
0.01	90,439.07	9.12	2,139.95	2.29	1.53	588.92	1.80	694.73	0.77	297.22	1.44	556.79	0.06	4,275.18	0.02	1,492.27	0.04	2,782.91	0.36	397.28	0.12
0.01	82,633.18	6.14	1,705.00	1.10	1.22	469.44	1.44	553.74	0.61	236.91	1.15	443.81	0.04	2,949.64	0.01	744.15	0.03	2,205.48	0.24	268.40	0.06
0.01	75,823.22	6.01	1,424.25	1.49	1.02	391.97	1.20	462.39	0.51	197.82	0.96	370.58	0.04	2,906.43	0.01	1,021.23	0.02	1,885.21	0.23	260.31	0.08
0.02	319,743.26	17.19	4,664.06	3.27	3.33	1,284.08	3.93	1,514.69	1.68	648.03	3.15	1,213.98	0.11	8,013.20	0.03	2,051.19	0.08	5,962.01	0.69	766.62	0.17
0.01	166,681.46	20.89	5,874.36	3.63	4.19	1,617.44	4.95	1,907.91	2.12	816.26	3.96	1,529.13	0.13	9,852.78	0.03	2,325.05	0.10	7,527.72	0.83	927.80	0.20
0.00	8,711.51	0.52	140.83	0.10	0.10	38.77	0.12	45.74	0.05	19.57	0.10	36.66	0.00	251.07	0.00	65.68	0.00	185.39	0.02	22.91	0.01
0.01	92,686.67	2.27	677.00	0.33	0.48	186.43	0.57	219.91	0.24	94.08	0.46	176.25	0.01	1,073.07	0.00	206.96	0.01	866.10	0.09	102.57	0.02
0.01	212,059.06	6.27	1,617.53	1.33	1.15	445.27	1.36	525.24	0.58	224.71	1.09	420.96	0.04	2,835.47	0.01	818.78	0.03	2,016.69	0.25	275.57	0.07
0.05	770,519.31	72.93	17,076.69	18.37	12.18	4,699.50	14.37	5,543.86	6.15	2,371.82	11.52	4,443.13	0.44	33,392.35	0.15	11,524.70	0.29	21,867.65	2.87	3,193.82	0.98
0.00	54,425.63	3.98	1,151.44	0.64	0.82	317.06	0.97	374.00	0.41	160.01	0.78	299.75	0.03	1,939.69	0.01	416.88	0.02	1,522.81	0.16	179.97	0.03
0.01	179,320.01	12.44	2,990.86	3.01	2.13	823.16	2.52	971.03	1.08	415.43	2.02	778.24	0.08	5,941.56	0.03	2,009.60	0.05	3,931.96	0.49	542.80	0.16
0.00	10,887.40	0.87	258.43	0.13	0.18	71.16	0.22	83.94	0.09	35.91	0.17	67.28	0.01	439.91	0.00	87.65	0.00	352.26	0.04	39.19	0.01
0.00	25,449.15	1.22	314.24	0.26	0.22	86.50	0.26	102.04	0.11	43.66	0.21	81.78	0.01	562.42	0.00	163.48	0.01	398.94	0.05	53.04	0.01
0.53	7,665,131.31	959.67	239,285.95	217.53	170.70	65,856.09	201.40	77,700.13	86.17	33,242.50	161.41	62,269.70	6.03	459,734.18	1.92	146,141.41	4.11	313,592.77	37.51	41,795.15	11.85
0.00	68,704.95	5.80	1,616.19	1.03	1.15	444.99	1.36	524.90	0.58	224.57	1.09	420.69	0.04	2,796.16	0.01	652.23	0.03	2,143.94	0.24	264.84	0.06
0.01	194,782.25	9.72	2,412.08	2.22	1.72	663.93	2.03	783.18	0.87	335.07	1.63	627.69	0.06	4,657.12	0.02	1,437.27	0.04	3,219.85	0.39	433.85	0.12
0.00	7,134.00	0.46	128.40	0.08	0.09	35.35	0.11	41.70	0.05	17.84	0.09	33.42	0.00	227.91	0.00	56.86	0.00	171.06	0.02	20.62	0.00
0.00	23,442.13	2.16	577.97	0.43	0.41	159.12	0.49	187.70	0.21	80.30	0.39	150.43	0.01	1,020.83	0.00	280.64	0.01	740.19	0.09	94.80	0.02
0.00	27,787.58	1.98	488.98	0.46	0.35	134.59	0.41	158.76	0.18	67.92	0.33	127.24	0.01	896.24	0.00	280.91	0.01	615.32	0.08	87.82	0.02
0.00	3,947.51	0.22	62.86	0.04	0.04	17.31	0.05	20.42	0.02	8.74	0.04	16.36	0.00	116.64	0.00	25.78	0.00	90.87	0.01	10.31	0.00
0.00	9,838.83	0.41	111.02	0.08	0.08	30.57	0.09	36.05	0.04	15.43	0.07	28.90	0.00	173.35	0.00	43.65	0.00	129.70	0.02	17.61	0.00
0.00	18,136.18	1.68	397.66	0.42	0.28	109.44	0.33	129.10	0.14	55.23	0.27	103.47	0.01	745.05	0.00	256.06	0.01	488.99	0.07	72.66	0.02
0.00	9,382.27	0.98	287.91	0.15	0.21	79.28	0.24	93.52	0.10	40.01	0.19	74.95	0.01	494.26	0.00	102.32	0.01	391.95	0.04	44.15	0.01
0.00	6,917.91	0.81	233.82	0.13	0.17	64.39	0.20	75.95	0.08	32.49	0.16	60.87	0.01	390.20	0.00	84.02	0.00	306.19	0.03	36.05	0.01
0.01	158,331.43	7.59	2,031.27	1.49	1.45	559.22	1.71	659.65	0.73	282.22	1.37	528.69	0.05	3,595.90	0.01	947.49	0.03	2,648.41	0.30	339.59	0.08
0.00	66,902.41	2.31	664.05	0.38	0.47	182.85	0.56	215.68	0.24	92.28	0.45	172.86	0.01	1,143.95	0.00	255.41	0.01	888.55	0.09	103.83	0.02
0.03	443,508.83	54.51	15,537.05	9.12	11.09	4,278.07	13.08	5,046.38	5.60	2,158.98	10.48	4,044.50	0.35	26,440.14	0.08	6,002.87	0.27	20,437.27	2.19	2,438.90	0.49
0.00	9,889.25	0.49	136.47	0.09	0.10	37.57	0.11	44.32	0.05	18.96	0.09	35.52	0.00	240.33	0.00	59.79	0.00	180.53	0.02	22.05	0.00
0.00	61,478.39	3.05	845.44	0.55	0.60	232.77	0.71	274.58	0.30	117.47	0.57	220.06	0.02	1,430.81	0.00	345.39	0.01	1,085.43	0.12	137.21	0.03
0.00	21,072.00	1.43	386.94	0.27	0.28	106.53	0.33	125.66	0.14	53.76	0.26	100.71	0.01	657.71	0.00	170.20	0.01	487.51	0.06	63.22	0.01
0.00	12,705.40	0.81	204.87	0.18	0.15	56.39	0.17	66.52	0.07	28.46	0.14	53.32	0.00	359.88	0.00	106.42	0.00	253.46	0.03	35.35	0.01
0.00	7,099.90	0.83	207.53	0.18	0.15	57.13	0.17	67.39	0.07	28.83	0.14	54.01	0.01	398.63	0.00	118.03	0.00	280.60	0.03	37.24	0.01
0.02	244,929.80	18.60	4,794.47	3.96	3.42	1,319.82	4.04	1,556.86	1.73	666.07	3.23	1,247.77	0.12	8,840.21	0.03	2,576.62	0.08	6,263.59	0.74	822.89	0.21
0.01	145,524.31	10.93	3,251.45	1.61	2.32	895.36	2.74	1,056.16	1.17	451.85	2.19	846.48	0.07	5,413.60	0.01	1,066.05	0.06	4,347.55	0.44	495.45	0.09
0.01	110,592.99	14.03	3,513.19	3.16	2.51	967.04	2.96	1,140.72	1.27	488.03	2.37	914.24	0.09	6,768.76	0.03	1,907.73	0.06	4,861.03	0.59	662.06	0.17
0.00	50,755.72	3.14	789.67	0.70	0.56	217.37	0.66	256.41	0.28	109.70	0.53	205.50	0.02	1,503.87	0.01	461.29	0.01	1,042.58	0.12	138.03	0.04
0.00	2,912.75	0.32	86.06	0.06	0.06	23.69	0.07	27.95	0.03	11.96	0.06	22.40	0.00	152.63	0.00	40.05	0.00	112.58	0.01	14.15	0.00
0.00	21,655.69	1.52	378.61	0.35	0.27	104.21	0.32	122.93	0.14	52.59	0.26	98.53	0.01	680.00	0.00	214.45	0.01	465.55	0.06	65.83	0.02
0.01	135,198.65	10.38	3,083.78	1.53	2.20	849.19	2.60	1,001.69	1.11	428.55	2.08	802.82	0.07	5,130.38	0.01	1,015.52	0.05	4,114.87	0.42	470.00	0.08
0.03	496,032.30	28.26	6,937.62	6.59	4.95	1,909.54	5.84	2,252.51	2.50	963.69	4.68	1,805.30	0.17	13,321.41	0.06	4,296.91	0.12	9,024.50	1.11	1,237.49	0.36
0.00	52,759.91	2.10	587.22	0.37	0.42	161.68	0.49	190.72	0.21	81.59	0.40	152.85	0.01	978.17	0.00	229.13	0.01	749.04	0.08	94.39	0.02
0.01	158,773.85	22.48	6,183.90	4.13	4.41	1,702.58	5.21	2,008.34	2.23	859.22	4.17	1,609.62	0.14	10,512.02	0.03	2,629.52	0.10	7,882.50	0.89	994.96	0.22
0.00	5,596.03	0.54	152.29	0.09	0.11	41.93	0.13	49.46	0.05	21.16	0.10	39.64	0.00	245.30	0.00	57.66	0.00	187.64	0.02	23.28	0.00
0.07	1,029,982.31	64.57	15,737.26	15.24	11.23	4,331.02	13.24	5,109.80	5.67	2,186.13	10.61	4,095.08	0.40	30,294.55	0.13	10,089.64	0.26	20,204.91	2.51	2,793.74	0.83
0.00	51,843.12	4.82	1,353.99	0.84	0.97	372.81	1.14	439.76	0.49	188.14	0.91	352.45	0.03	2,341.57	0.01	570.32	0.02	1,771.25	0.19	210.79	0.05
0.00	13,193.81	0.94	261.98	0.17	0.19	72.13	0.22	85.09	0.09	36.40	0.18	68.19	0.01	468.97	0.00	113.31	0.00	355.66	0.04	42.47	0.01
0.03	380,806.57	61.43	16,254.43	12.36	11.60	4,474.81	13.68	5,278.46	5.85	2,258.28	10.97	4,230.51	0.39	29,956.92	0.11	8,207.26	0.29	21,749.66	2.46	2,743.90	0.67
0.01	88,228.17	12.69	3,443.20	2.41	2.46	947.96	2.90	1,118.21	1.24	478.40	2.32	896.21	0.08	6,099.69	0.02	1,566.52	0.06	4,533.16	0.51	568.40	0.13
0.01	212,114.82	18.87	5,357.92	3.20	3.82	1,475.28	4.51	1,740.21	1.93	744.51	3.62	1,394.73	0.12	8,954.66	0.03	2,041.71	0.09	6,912.96	0.76	844.53	0.17
0.02	317,836.68	20.65	5,683.67	3.79	4.06	1,564.85	4.78	1,845.89	2.05	789.72	3.83	1,479.42	0.13	9,834.68	0.03	2,441.88	0.10	7,392.80	0.83	923.01	0.20
0.03	445,751.56	28.23	8,196.97	4.48	5.85	2,256.93	6.90	2,662.26	2.95	1,138.99	5.53	2,133.71	0.18	13,358.66	0.04	2,894.10	0.14	10,464.56	1.12	1,253.03	0.24
0.02	301,842.30	24.45	6,852.79	4.28	4.89	1,886.82	5.77	2,225.68	2.47	952.21	4.62	1,783.81	0.16	12,069.43	0.04	2,873.67	0.12	9,195.76	0.99	1,097.54	0.23
0.01	192,657.99	12.53	2,963.99	3.11	2.11	815.73	2.49	962.26	1.07	411.68	2.00	771.21	0.08	5,782.39	0.03	1,988.90	0.05	3,793.49	0.49	544.46	0.17
0.06	879,432.88	65.75	15,913.25	15.70	11.35	4,379.72	13.39	5,166.62	5.73	2,210.43	10.73	4,140.79	0.40	30,236.94	0.13	9,569.42	0.27	20,667.52	2.64	2,946.52	0.83
0.01	86,512.72	6.10	1,703.81	1.08	1.22	469.12	1.43	553.37	0.61	236.75	1.15	443.51	0.04	2,906.64	0.01	689.76	0.03	2,217.88	0.25	273.99	0.06
0.00	43,200.71	3.59	1,006.48	0.63	0.72	277.12	0.85	326.89	0.36	139.85	0.68	261.99	0.02	1,703.51	0.01	407.36	0.02	1,296.14	0.14	159.63	0.03
0.01	187,296.99	7.33	2,197.15	1.05	1.57	605.04	1.85	713.70	0.79	305.34	1.48	572.01	0.04	3,421.50	0.01	648.65	0.04	2,772.85	0.30	330.77	0.06
0.02	222,855.72	23.20	6,053.61	4.82	4.32	1,666.49	5.10	1,965.78	2.18	841.02	4.08	1,575.51	0.14	10,915.72	0.04	3,064.88	0.10	7,850.84	0.93	1,031.92	0.26
0.01	136,778.22	2.42	632.93	0.50	0.45	174.24	0.53	205.53	0.23	87.93	0.43	164.73	0.01	1,111.54	0.00	317.03	0.01	794.51	0.09	105.61	0.03
0.01	90,319.46	5.80	1,445.56	1.31	1.03	397.90	1.22	469.36	0.52	200.81	0.98	376.18	0.04	2,737.07	0.01	869.10	0.02	1,867.97	0.23	251.87	0.07
0.00	21,734.64	1.57	415.93	0.32	0.30	114.51	0.35	135.07	0.15	57.79	0.28	108.25	0.01	749.91	0.00	212.75	0.01	537.15	0.06	68.35	0.02
0.00	23,634.89	2.58	607.14	0.63	0.43	167.09	0.51	197.10	0.22	84.33	0.41	157.97	0.02	1,206.27	0.01	413.50	0.01	792.77	0.10	113.58	0.03
0.04	549,733.28	31.27	8,037.04	6.49	5.73	2,212.41	6.76	2,609.77	2.89	1,116.53	5.42	2,091.64	0.19	14,664.03	0.06	4,242.40	0.14	10,421.63	1.25	1,391.19	0.36
0.00	23,080.63	1.60	430.92	0.31	0.31	118.64	0.36	139.94	0.16	59.87	0.29	112.16	0.01	761.65	0.00	203.00	0.01	558.66	0.06	70.79	0.02
0.00	23,344.29	1.74	483.61	0.31	0.35	133.15	0.41	157.07	0.17	67.20	0.33	125.88	0.01	851.08	0.00	211.50	0.01	639.58	0.07	76.74	0.02
0.00	11,395.85	0.62	170.21	0.12	0.12	46.86	0.14	55.28	0.06	23.65	0.11	44.30	0.00	300.66	0.00	76.46	0.00	224.20	0.02	27.80	0.01

$ PM Incidence, Hay Fever/Rhinitis	O3 Incidence, Hay Fever/Rhinitis	$ O3 Incidence, Hay Fever/Rhinitis	Total ER Visits, Respiratory	$ Total ER Visits, Respiratory	PM ER Visits, Respiratory	$ PM ER Visits, Respiratory	O3 ER Visits, Respiratory	$ O3 ER Visits, Respiratory	Total Hospital Admits, All Respiratory	$ Total Hospital Admits All Respiratory	PM Hospital Admits, All Respiratory	$ PM Hospital Admits All Respiratory	O3 Hospital Admits, All Respiratory	$ O3 Hospital Admits All Respiratory	PM Nonfatal Heart Attacks	$ PM Nonfatal Heart Attacks	PM Minor Restricted Activity Days	$ PM Minor Restricted Activity Days	PM Work Loss Days	$ PM Work Loss Days	PM Incidence Lung Cancer	$ PM Incidence Lung Cancer
495.40	0.87	970.02	0.08	122.48	0.02	33.91	0.05	88.57	0.01	122.34	0.00	85.29	0.00	37.04	0.01	1,072.88	25.50	3,205.26	4.35	1,375.66	0.00	80.65
137.88	0.23	259.41	0.03	47.15	0.01	13.43	0.02	33.72	0.00	44.04	0.00	28.40	0.00	15.64	0.00	325.56	5.91	743.05	0.99	313.94	0.00	22.40
67.15	0.18	201.25	0.02	35.28	0.00	7.06	0.02	28.22	0.00	28.77	0.00	16.37	0.00	12.40	0.00	225.48	2.92	367.70	0.49	156.50	0.00	12.92
90.95	0.15	169.36	0.03	47.91	0.01	13.75	0.02	34.16	0.00	33.54	0.00	21.35	0.00	12.20	0.00	314.04	4.20	528.01	0.71	224.17	0.00	20.55
194.79	0.51	571.82	0.06	100.98	0.01	20.54	0.05	80.44	0.00	92.63	0.00	44.26	0.00	48.37	0.01	1,189.85	9.53	1,198.05	1.59	502.33	0.00	63.06
217.34	0.64	710.46	0.06	98.10	0.01	18.30	0.05	79.81	0.00	71.33	0.00	39.33	0.00	31.99	0.01	728.55	10.36	1,302.56	1.75	554.59	0.00	44.87
5.96	0.02	16.95	0.00	5.07	0.00	1.06	0.00	4.01	0.00	3.02	0.00	1.52	0.00	1.50	0.00	19.81	0.28	35.49	0.05	14.99	0.00	1.33
19.62	0.07	82.95	0.01	17.58	0.00	2.65	0.01	14.94	0.00	22.45	0.00	8.03	0.00	14.42	0.00	239.11	1.17	146.64	0.19	60.37	0.00	14.03
78.92	0.18	196.65	0.03	42.95	0.01	9.93	0.02	33.02	0.00	50.58	0.00	26.43	0.00	24.15	0.01	947.39	4.07	512.09	0.67	211.23	0.00	42.71
1,094.95	1.88	2,098.88	0.21	336.53	0.06	94.60	0.15	241.93	0.01	300.17	0.01	183.47	0.01	116.71	0.04	3,747.44	48.73	6,125.72	8.19	2,590.17	0.00	214.07
38.49	0.13	141.48	0.01	17.49	0.00	2.96	0.01	14.53	0.00	13.32	0.00	5.89	0.00	7.43	0.00	169.95	1.84	230.70	0.31	96.76	0.00	16.25
182.50	0.32	360.30	0.06	97.87	0.02	26.93	0.04	70.94	0.00	81.57	0.00	51.54	0.00	30.03	0.01	1,083.67	7.98	1,003.65	1.35	426.39	0.00	39.16
7.78	0.03	31.41	0.00	4.57	0.00	0.72	0.00	3.86	0.00	3.68	0.00	1.66	0.00	2.02	0.00	33.10	0.36	44.82	0.06	19.11	0.00	1.77
15.34	0.03	37.70	0.00	4.14	0.00	0.97	0.00	3.17	0.00	7.24	0.00	3.87	0.00	3.37	0.00	74.65	0.75	94.12	0.12	39.23	0.00	4.73
13,204.73	25.66	28,590.42	3.12	5,066.59	0.80	1,302.85	2.32	3,763.74	0.16	3,611.04	0.08	2,335.51	0.07	1,275.53	0.39	32,983.09	545.48	68,578.35	93.40	29,544.40	0.04	1,913.03
61.46	0.18	203.38	0.02	38.05	0.00	7.03	0.02	31.03	0.00	21.03	0.00	11.06	0.00	9.97	0.00	160.69	2.67	335.48	0.45	143.89	0.00	10.88
133.37	0.27	300.48	0.03	54.25	0.01	13.54	0.03	40.71	0.00	53.03	0.00	29.51	0.00	23.52	0.01	1,146.38	7.21	906.99	1.19	376.77	0.00	60.98
5.11	0.01	15.52	0.00	4.35	0.00	0.86	0.00	3.49	0.00	2.11	0.00	1.04	0.00	1.07	0.00	20.74	0.27	34.04	0.05	14.63	0.00	1.36
25.84	0.06	68.97	0.01	16.13	0.00	3.54	0.01	12.59	0.00	7.18	0.00	4.07	0.00	3.11	0.00	100.20	1.02	128.02	0.17	53.64	0.00	4.65
27.26	0.05	60.56	0.00	6.61	0.00	1.67	0.00	4.94	0.00	10.43	0.00	6.04	0.00	4.39	0.00	104.25	1.15	144.03	0.19	60.27	0.00	6.47
2.29	0.01	8.03	0.00	0.68	0.00	0.12	0.00	0.56	0.00	0.94	0.00	0.48	0.00	0.46	0.00	11.39	0.11	14.14	0.02	6.02	0.00	0.73
4.39	0.01	13.23	0.00	3.52	0.00	0.70	0.00	2.82	0.00	3.52	0.00	1.65	0.00	1.88	0.00	22.07	0.32	39.88	0.05	16.91	0.00	1.47
24.76	0.04	47.90	0.01	11.30	0.00	3.16	0.01	8.14	0.00	8.88	0.00	5.18	0.00	3.70	0.00	81.76	1.26	158.21	0.21	67.26	0.00	5.20
9.10	0.03	35.05	0.00	6.37	0.00	1.04	0.00	5.33	0.00	3.69	0.00	1.75	0.00	1.94	0.00	19.76	0.34	42.43	0.06	18.09	0.00	1.33
7.71	0.03	28.34	0.00	4.38	0.00	0.74	0.00	3.64	0.00	3.00	0.00	1.83	0.00	1.17	0.00	29.49	0.26	33.07	0.04	14.12	0.00	0.98
88.98	0.22	250.61	0.03	42.87	0.01	9.01	0.02	33.86	0.00	47.59	0.00	24.53	0.00	23.06	0.01	689.24	4.40	552.54	0.73	230.42	0.00	34.09
23.05	0.07	80.79	0.01	17.61	0.00	3.10	0.01	14.51	0.00	14.06	0.00	6.19	0.00	7.87	0.00	197.97	0.94	118.48	0.16	49.74	0.00	9.21
550.47	1.69	1,888.43	0.15	244.80	0.03	43.90	0.12	200.90	0.01	172.22	0.00	97.49	0.00	74.73	0.02	1,593.23	24.10	3,030.37	4.11	1,298.74	0.00	86.23
5.46	0.01	16.59	0.00	2.85	0.00	0.56	0.00	2.29	0.00	2.25	0.00	1.26	0.00	1.00	0.00	20.55	0.28	34.84	0.05	14.70	0.00	1.32
32.89	0.09	104.31	0.01	17.93	0.00	3.43	0.01	14.50	0.00	15.25	0.00	6.57	0.00	8.68	0.00	257.28	1.52	190.64	0.25	79.58	0.00	14.61
16.21	0.04	47.01	0.01	14.22	0.00	2.92	0.01	11.30	0.00	8.46	0.00	4.29	0.00	4.17	0.00	64.86	0.89	112.50	0.15	47.35	0.00	4.23
10.37	0.02	24.98	0.00	4.48	0.00	1.06	0.00	3.41	0.00	3.80	0.00	2.01	0.00	1.79	0.00	48.94	0.52	64.91	0.09	27.20	0.00	3.04
11.01	0.02	26.22	0.00	2.51	0.00	0.60	0.00	1.91	0.00	2.58	0.00	1.52	0.00	1.06	0.00	28.80	0.59	74.19	0.10	31.67	0.00	2.01
238.37	0.52	584.52	0.07	114.17	0.02	26.73	0.05	87.45	0.00	114.65	0.00	65.02	0.00	49.62	0.02	1,782.71	10.89	1,368.52	1.81	573.43	0.00	75.65
97.06	0.36	398.39	0.03	51.56	0.00	7.96	0.03	43.60	0.00	49.85	0.00	24.71	0.00	25.13	0.01	435.42	4.64	583.67	0.78	246.13	0.00	33.48
186.27	0.43	475.78	0.04	63.11	0.01	14.32	0.03	48.79	0.00	39.49	0.00	24.74	0.00	14.75	0.01	504.15	9.74	1,225.11	1.66	526.62	0.00	27.63
42.12	0.09	95.91	0.01	16.26	0.00	4.03	0.01	12.24	0.00	18.11	0.00	10.90	0.00	7.21	0.00	219.60	1.90	239.15	0.32	99.95	0.00	11.87
3.69	0.01	10.46	0.00	2.99	0.00	0.62	0.00	2.36	0.00	0.94	0.00	0.51	0.00	0.43	0.00	9.88	0.21	26.97	0.04	11.51	0.00	0.71
20.55	0.04	45.28	0.01	13.30	0.00	3.38	0.01	9.92	0.00	7.33	0.00	4.40	0.00	2.93	0.00	71.97	0.91	114.04	0.15	48.30	0.00	4.55
92.55	0.34	377.44	0.03	49.50	0.00	7.69	0.03	41.82	0.00	35.07	0.00	15.57	0.00	19.50	0.01	494.26	4.13	519.06	0.69	217.52	0.00	29.46
396.73	0.75	840.76	0.14	225.43	0.04	58.90	0.10	166.53	0.01	166.26	0.00	94.71	0.00	71.55	0.04	3,279.04	17.54	2,205.67	2.93	926.10	0.00	142.23
21.96	0.07	72.43	0.01	9.58	0.00	1.77	0.00	7.80	0.00	14.13	0.00	6.77	0.00	7.37	0.00	145.77	1.15	144.52	0.19	60.09	0.00	10.46
247.05	0.67	747.91	0.07	111.86	0.01	22.20	0.06	89.66	0.00	92.84	0.00	54.53	0.00	38.31	0.01	863.85	11.98	1,506.68	2.03	641.25	0.00	49.77
5.41	0.02	17.87	0.00	3.18	0.00	0.59	0.00	2.60	0.00	1.80	0.00	0.93	0.00	0.87	0.00	23.65	0.31	38.95	0.05	16.32	0.00	1.62
922.96	1.68	1,870.78	0.19	307.60	0.05	83.04	0.14	224.56	0.01	325.39	0.01	188.94	0.01	136.45	0.07	5,642.15	41.56	5,225.27	6.93	2,193.65	0.01	251.60
50.98	0.14	159.80	0.02	26.49	0.00	5.11	0.05	21.38	0.00	14.74	0.00	8.14	0.00	6.59	0.00	171.44	2.12	266.93	0.36	114.92	0.00	8.60
10.22	0.03	32.25	0.00	6.77	0.00	1.30	0.00	5.47	0.00	6.69	0.00	3.49	0.00	3.19	0.00	109.76	0.41	51.50	0.07	21.86	0.00	1.94
748.18	1.79	1,995.72	0.17	280.99	0.04	61.64	0.14	219.35	0.01	203.42	0.00	129.93	0.00	73.49	0.02	1,801.46	36.49	4,587.21	6.26	1,979.68	0.00	113.03
145.13	0.38	423.27	0.05	84.46	0.01	17.27	0.04	67.19	0.00	43.11	0.00	25.45	0.00	17.66	0.01	542.57	6.59	828.24	1.12	354.06	0.00	22.32
191.23	0.59	653.30	0.05	81.59	0.01	14.68	0.04	66.91	0.00	87.11	0.00	46.41	0.00	40.71	0.01	800.90	9.11	1,145.39	1.53	485.41	0.00	58.96
227.63	0.62	695.38	0.06	100.47	0.01	19.80	0.05	80.68	0.00	89.64	0.00	46.56	0.00	43.07	0.02	1,310.15	10.68	1,342.16	1.78	562.03	0.00	61.94
269.07	0.88	983.96	0.08	130.88	0.01	22.26	0.07	108.61	0.01	125.53	0.00	54.01	0.00	71.52	0.02	1,597.35	13.95	1,754.23	2.33	738.50	0.00	85.49
259.98	0.75	837.56	0.12	193.03	0.02	36.43	0.10	156.60	0.01	117.19	0.00	63.94	0.00	53.24	0.01	1,065.99	10.50	1,320.42	1.77	560.99	0.00	52.52
186.06	0.32	358.40	0.06	94.30	0.02	26.42	0.04	67.89	0.00	71.29	0.00	43.45	0.00	27.84	0.01	1,138.37	7.31	918.86	1.22	385.95	0.00	41.33
927.85	1.81	2,018.68	0.14	222.48	0.04	57.01	0.10	165.47	0.01	279.40	0.00	156.99	0.01	122.41	0.05	4,290.43	46.16	5,803.07	7.64	2,415.78	0.01	258.04
64.50	0.19	209.49	0.02	35.76	0.00	6.71	0.02	29.06	0.00	30.50	0.00	16.73	0.00	13.78	0.00	395.00	2.92	367.60	0.49	154.91	0.00	18.28
37.89	0.11	121.73	0.01	20.53	0.00	3.88	0.01	16.65	0.00	14.64	0.00	7.23	0.00	7.41	0.00	165.20	1.77	221.95	0.30	94.13	0.00	7.55
62.17	0.24	268.60	0.02	36.53	0.00	5.40	0.02	31.13	0.00	37.00	0.00	13.46	0.00	23.54	0.01	525.16	3.37	423.43	0.56	175.76	0.00	36.11
287.94	0.67	743.98	0.05	84.13	0.01	18.92	0.04	65.21	0.00	72.94	0.00	41.77	0.00	31.17	0.01	735.92	14.80	1,862.99	2.51	793.67	0.00	61.62
29.84	0.07	75.77	0.02	25.01	0.00	5.70	0.01	19.31	0.00	52.57	0.00	25.70	0.00	26.87	0.02	1,274.12	2.02	253.94	0.33	105.17	0.00	54.90
79.47	0.15	172.41	0.03	43.78	0.01	11.24	0.02	32.54	0.00	38.13	0.00	22.01	0.00	16.12	0.01	533.49	3.29	413.47	0.55	174.82	0.00	18.90
19.24	0.04	49.11	0.01	11.84	0.00	2.69	0.01	9.15	0.00	9.15	0.00	5.73	0.00	3.42	0.00	73.45	0.99	124.31	0.17	52.82	0.00	4.67
38.72	0.07	74.85	0.01	21.62	0.00	6.04	0.01	15.58	0.00	13.14	0.00	7.91	0.00	5.23	0.00	119.04	2.30	289.52	0.39	123.57	0.00	7.87
399.92	0.89	991.27	0.15	237.52	0.03	55.15	0.11	182.37	0.01	147.89	0.00	80.98	0.00	66.90	0.03	2,323.90	19.60	2,464.17	3.27	1,034.85	0.00	123.87
18.73	0.05	52.05	0.00	7.05	0.00	1.50	0.00	5.56	0.00	5.98	0.00	3.46	0.00	2.52	0.00	81.34	1.02	127.66	0.17	54.13	0.00	3.83
18.94	0.05	57.80	0.01	13.00	0.00	2.56	0.01	10.44	0.00	7.57	0.00	3.65	0.00	3.52	0.00	92.92	0.90	113.23	0.15	47.66	0.00	4.64
7.03	0.02	20.77	0.00	4.36	0.00	0.88	0.00	3.48	0.00	3.07	0.00	1.59	0.00	1.48	0.00	24.89	0.39	49.37	0.07	20.82	0.00	1.69

PM HA Cardio Cerebro and Peripheral Vascular Disease	$ PM HA Cardio Cerebro and Peripheral Vascular Disease	PM HA Alzheimers Disease	$ PM HA Alzheimers Disease	PM HA Parkinsons Disease	$ PM HA Parkinsons Disease	PM Incidence Stroke	$ PM Incidence Stroke	PM Incidence Out of Hospital Cardiac Arrest	$ PM Incidence Out of Hospital Cardiac Arrest	PM ER Visits All Cardiac Outcomes	$ PM ER Visits All Cardiac Outcomes	O3 ER Visits, Asthma	$ O3 ER Visits, Asthma	O3 School Loss Days, All Cause	$ O3 School Loss Days, All Cause
0.00	105.07	0.01	147.55	0.00	36.89	0.00	103.48	0.00	23.98	0.01	19.97	0.00	0.31	12.96	22,010.97
0.00	35.31	0.00	34.57	0.00	9.55	0.00	27.08	0.00	6.67	0.00	7.83	0.00	0.06	3.42	5,814.27
0.00	21.13	0.00	23.08	0.00	5.69	0.00	15.95	0.00	3.59	0.00	3.45	0.00	0.05	2.64	4,483.76
0.00	27.03	0.00	37.02	0.00	8.86	0.00	24.84	0.00	5.45	0.00	5.27	0.00	0.05	2.21	3,755.29
0.00	91.46	0.01	117.84	0.00	29.20	0.00	81.49	0.00	15.81	0.01	13.15	0.00	0.16	7.60	12,913.33
0.00	48.61	0.00	69.50	0.00	19.37	0.00	54.15	0.00	12.49	0.00	9.81	0.00	0.26	9.40	15,966.78
0.00	2.00	0.00	2.27	0.00	0.57	0.00	1.60	0.00	0.36	0.00	0.44	0.00	0.00	0.22	377.88
0.00	19.07	0.00	79.30	0.00	6.61	0.00	18.42	0.00	3.06	0.00	2.15	0.00	0.03	1.10	1,871.42
0.00	64.12	0.00	88.92	0.00	20.05	0.00	56.01	0.00	9.59	0.00	7.70	0.00	0.05	2.63	4,461.97
0.01	333.02	0.02	354.92	0.00	92.89	0.00	262.51	0.00	60.08	0.02	51.39	0.00	0.54	27.90	47,380.83
0.00	14.17	0.00	34.35	0.00	7.32	0.00	20.34	0.00	3.62	0.00	1.98	0.00	0.03	1.87	3,169.26
0.00	78.01	0.00	72.07	0.00	18.22	0.00	51.18	0.00	10.79	0.01	13.55	0.00	0.14	4.72	8,021.14
0.00	2.67	0.00	3.22	0.00	0.81	0.00	2.27	0.00	0.48	0.00	0.36	0.00	0.01	0.41	696.38
0.00	7.70	0.00	8.15	0.00	2.17	0.00	6.17	0.00	1.23	0.00	1.12	0.00	0.01	0.50	848.83
0.10	2,850.39	0.16	3,590.42	0.03	818.37	0.04	2,299.18	0.01	572.21	0.26	567.20	0.01	11.50	374.88	636,663.08
0.00	17.54	0.00	19.88	0.00	4.88	0.00	13.68	0.00	3.02	0.00	2.77	0.00	0.07	2.70	4,578.81
0.00	80.08	0.01	126.10	0.00	28.59	0.00	79.77	0.00	14.33	0.01	11.68	0.00	0.10	3.97	6,734.01
0.00	2.04	0.00	2.36	0.00	0.60	0.00	1.69	0.00	0.36	0.00	0.45	0.00	0.00	0.20	344.92
0.00	6.87	0.00	7.79	0.00	2.18	0.00	6.16	0.00	1.37	0.00	1.58	0.00	0.04	0.91	1,540.37
0.00	9.18	0.00	12.46	0.00	2.93	0.00	8.19	0.00	1.65	0.00	1.40	0.00	0.01	0.81	1,376.47
0.00	0.59	0.00	1.36	0.00	0.32	0.00	0.91	0.00	0.18	0.00	0.10	0.00	0.00	0.10	177.85
0.00	2.73	0.00	2.45	0.00	0.64	0.00	1.81	0.00	0.40	0.00	0.45	0.00	0.00	0.18	303.70
0.00	7.14	0.00	8.93	0.00	2.38	0.00	6.73	0.00	1.48	0.00	1.58	0.00	0.01	0.64	1,086.55
0.00	2.06	0.00	2.27	0.00	0.56	0.00	1.58	0.00	0.37	0.00	0.38	0.00	0.01	0.46	775.09
0.00	1.72	0.00	1.65	0.00	0.41	0.00	1.16	0.00	0.28	0.00	0.31	0.00	0.01	0.37	633.34
0.00	49.05	0.00	69.55	0.00	15.59	0.00	43.41	0.00	8.06	0.00	6.56	0.00	0.08	3.32	5,641.65
0.00	13.59	0.00	19.98	0.00	4.27	0.00	11.85	0.00	2.04	0.00	1.91	0.00	0.03	1.06	1,796.54
0.00	111.34	0.02	342.44	0.00	37.25	0.00	104.68	0.00	25.77	0.01	20.17	0.00	0.55	24.85	42,210.62
0.00	1.04	0.00	2.27	0.00	0.59	0.00	1.68	0.00	0.37	0.00	0.20	0.00	0.00	0.22	371.23
0.00	18.39	0.00	31.62	0.00	6.81	0.00	18.89	0.00	3.28	0.00	2.57	0.00	0.03	1.39	2,354.43
0.00	3.73	0.00	7.48	0.00	1.85	0.00	5.18	0.00	1.17	0.00	0.96	0.00	0.02	0.63	1,062.11
0.00	3.96	0.00	5.57	0.00	1.40	0.00	3.95	0.00	0.80	0.00	0.72	0.00	0.01	0.34	569.85
0.00	2.25	0.00	3.19	0.00	0.83	0.00	2.36	0.00	0.60	0.00	0.40	0.00	0.00	0.35	588.19
0.00	133.60	0.01	147.61	0.00	34.53	0.00	96.71	0.00	18.48	0.01	18.26	0.00	0.14	7.71	13,087.72
0.00	40.44	0.00	82.22	0.00	15.58	0.00	43.65	0.00	8.11	0.00	5.34	0.00	0.12	5.23	8,890.55
0.00	37.56	0.00	48.99	0.00	12.37	0.00	34.70	0.00	8.47	0.00	7.20	0.00	0.15	6.35	10,776.09
0.00	16.48	0.00	21.57	0.00	5.53	0.00	15.60	0.00	3.08	0.00	2.84	0.00	0.03	1.26	2,144.65
0.00	1.14	0.00	1.01	0.00	0.29	0.00	0.84	0.00	0.23	0.00	0.29	0.00	0.00	0.14	233.66
0.00	6.48	0.00	8.22	0.00	2.06	0.00	5.78	0.00	1.24	0.00	1.45	0.00	0.01	0.60	1,026.75
0.00	31.31	0.00	93.89	0.00	13.83	0.00	38.81	0.00	7.26	0.00	4.67	0.00	0.09	4.96	8,425.81
0.01	200.50	0.02	386.10	0.00	65.75	0.00	183.95	0.00	33.30	0.01	29.44	0.00	0.29	11.09	18,830.37
0.00	11.58	0.00	22.24	0.00	4.79	0.00	13.29	0.00	2.37	0.00	1.51	0.00	0.01	0.96	1,638.16
0.00	59.94	0.01	173.39	0.00	20.07	0.00	55.94	0.00	13.68	0.01	11.87	0.00	0.24	9.92	16,843.28
0.00	1.80	0.00	2.79	0.00	0.73	0.00	2.06	0.00	0.45	0.00	0.32	0.00	0.01	0.24	403.00
0.01	332.14	0.02	463.60	0.00	118.10	0.01	333.13	0.00	66.06	0.02	51.66	0.00	0.47	24.61	41,797.18
0.00	14.01	0.00	15.05	0.00	3.82	0.00	10.73	0.00	2.46	0.00	2.31	0.00	0.05	2.09	3,552.01
0.00	5.32	0.00	3.48	0.00	0.87	0.00	2.44	0.00	0.53	0.00	0.77	0.00	0.01	0.42	717.00
0.01	156.90	0.02	390.36	0.00	48.50	0.00	136.41	0.00	35.39	0.01	29.91	0.00	0.79	26.20	44,494.15
0.00	31.32	0.00	66.97	0.00	9.23	0.00	26.05	0.00	6.70	0.00	6.23	0.00	0.24	5.58	9,474.12
0.00	67.10	0.00	88.67	0.00	25.98	0.00	71.88	0.00	14.11	0.00	10.27	0.00	0.21	8.65	14,694.97
0.00	84.88	0.01	112.12	0.00	27.97	0.00	78.55	0.00	16.09	0.01	12.85	0.00	0.17	9.19	15,605.56
0.00	98.76	0.01	300.31	0.00	39.47	0.00	110.59	0.00	22.05	0.01	16.06	0.00	0.32	13.01	22,098.45
0.00	80.78	0.01	121.95	0.00	23.79	0.00	66.87	0.00	14.09	0.01	13.46	0.00	0.37	10.98	18,639.74
0.00	84.26	0.00	76.78	0.00	19.34	0.00	54.34	0.00	11.04	0.01	13.29	0.00	0.15	4.75	8,067.95
0.01	328.41	0.02	474.56	0.00	116.27	0.01	326.13	0.00	67.90	0.02	45.70	0.00	0.35	26.95	45,772.21
0.00	26.81	0.00	47.92	0.00	8.30	0.00	23.16	0.00	4.56	0.00	4.21	0.00	0.07	2.77	4,708.40
0.00	13.80	0.00	12.38	0.00	3.32	0.00	9.39	0.00	2.16	0.00	1.90	0.00	0.02	1.61	2,736.18
0.00	35.32	0.00	104.75	0.00	16.68	0.00	46.40	0.00	7.90	0.00	4.30	0.00	0.06	3.58	6,081.94
0.00	67.56	0.01	150.82	0.00	26.62	0.00	74.54	0.00	17.43	0.01	11.77	0.00	0.19	9.86	16,743.11
0.00	75.77	0.01	120.97	0.00	28.35	0.00	80.14	0.00	11.42	0.00	7.92	0.00	0.02	1.01	1,709.02
0.00	34.44	0.00	35.04	0.00	8.55	0.00	24.06	0.00	4.89	0.00	5.57	0.00	0.05	2.27	3,852.10
0.00	6.93	0.00	8.00	0.00	2.14	0.00	6.05	0.00	1.31	0.00	1.35	0.00	0.01	0.65	1,095.83
0.00	12.83	0.00	11.27	0.00	3.63	0.00	10.37	0.00	2.55	0.00	2.50	0.00	0.03	0.99	1,682.19
0.01	166.84	0.01	243.51	0.00	58.04	0.00	162.56	0.00	31.63	0.01	27.72	0.00	0.45	13.14	22,318.60
0.00	5.57	0.00	5.79	0.00	1.70	0.00	4.83	0.00	1.18	0.00	0.93	0.00	0.01	0.69	1,163.70
0.00	5.89	0.00	8.05	0.00	2.08	0.00	5.86	0.00	1.26	0.00	1.00	0.00	0.01	0.76	1,285.55
0.00	2.00	0.00	2.71	0.00	0.72	0.00	2.05	0.00	0.48	0.00	0.41	0.00	0.01	0.27	463.70

Location(s)	Sector	Emissions Modification(s)
Clay, Florida Duval, Florida Flagler, Florida Nassau, Florida St Johns, Florida	Waste Disposal & Recycling	$PM_{2.5}$ reduce by 5% SO_2 reduce by 5% NO_x reduce by 10% VOC reduce by 20%

	Totals
PM2.5	0.000926 microgram/m3
O3	0.007120 microgram/m3

FIPS	State	County	Base PM 2.5	Control PM 2.5	Delta PM 2.5	Base O3	Control O3	Delta O3	$ Total Health Benefits (low estimate)	$ Total Health Benefits(high estimate)	$ PM Total Health Benefits (low estimate)	$ PM Total Health Benefits (high estimate)	$ O3 Total Health Benefits	Total Mortality(low estimate)	$ Total Mortality(low estimate)	Total Mortality(high estimate)	$ Total Mortality(high estimate)	PM Mortality, All Cause (low)	$ PM Mortality, All Cause (low)	PM Mortality (high)	$ PM Mortality (high)	PM Infant Mortality	$ PM Infant Mortality	Total O3 Mortality	$ Total O3 Mortality	O3 Mortality (Short-term exposure)	$ O3 Mortality (Short-term exposure)
12001	Florida	Alachua	4.87	4.87	0.00	13.44	13.44	0.00	88,033.78	137,613.57	44,314.30	93,894.09	41,552.92	0.01	79,965.63	0.01	129,545.42	0.00	42,972.98	0.01	92,552.77	0.00	541.33	0.00	36,992.65	0.00	1,594.34
12003	Florida	Baker	4.71	4.70	0.00	14.12	14.12	0.00	29,733.99	45,348.45	12,143.11	27,757.57	16,977.34	0.00	27,538.97	0.00	43,153.42	0.00	11,788.90	0.00	27,403.35	0.00	139.64	0.00	15,750.07	0.00	675.71
12005	Florida	Bay	3.53	3.53	0.00	13.57	13.57	0.00	24,354.76	35,102.17	8,526.35	19,273.76	15,347.27	0.00	22,697.59	0.00	33,445.20	0.00	8,308.38	0.00	19,055.99	0.00	98.06	0.00	14,389.21	0.00	616.88
12007	Florida	Bradford	5.13	5.12	0.00	14.07	14.07	0.00	25,020.51	39,003.69	10,603.36	24,586.54	14,002.62	0.00	23,547.22	0.00	37,530.50	0.00	10,343.33	0.00	24,326.61	0.00	97.23	0.00	13,203.89	0.00	565.95
12009	Florida	Brevard	4.23	4.23	0.00	12.93	12.93	0.00	95,296.83	133,625.71	35,582.00	73,910.88	58,390.34	0.01	90,615.72	0.01	128,944.60	0.00	34,940.43	0.01	73,269.31	0.00	162.62	0.00	55,675.29	0.00	2,384.15
12011	Florida	Broward	4.37	4.37	0.00	10.21	10.21	0.00	54,442.79	77,672.26	20,381.72	43,611.18	32,399.83	0.00	48,801.02	0.00	72,030.50	0.00	19,771.26	0.00	43,000.74	0.00	146.87	0.00	29,029.76	0.00	1,249.42
12013	Florida	Calhoun	4.07	4.07	0.00	14.62	14.62	0.00	2,524.65	3,573.33	886.67	1,935.34	1,596.88	0.00	2,383.82	0.00	3,432.50	0.00	866.92	0.00	1,915.59	0.00	5.19	0.00	1,516.90	0.00	64.97
12015	Florida	Charlotte	3.49	3.49	0.00	10.49	10.49	0.00	23,265.13	29,674.63	6,539.42	12,948.91	16,531.57	0.00	22,584.69	0.00	28,994.18	0.00	6,446.73	0.00	12,856.23	0.00	13.50	0.00	16,137.96	0.00	690.06
12017	Florida	Citrus	4.79	4.79	0.00	13.22	13.22	0.00	63,953.25	90,441.90	25,639.16	52,127.81	37,861.43	0.01	62,230.71	0.01	88,719.36	0.00	25,308.12	0.00	51,796.77	0.00	75.56	0.00	36,922.60	0.00	1,578.80
12019	Florida	Clay	5.09	5.09	0.00	14.22	14.22	0.00	257,019.85	381,292.60	108,037.60	232,310.35	144,143.87	0.02	239,327.25	0.02	363,600.00	0.01	105,140.85	0.02	229,413.60	0.00	725.13	0.01	134,186.40	0.00	5,755.40
12021	Florida	Collier	3.04	3.04	0.00	9.23	9.23	0.00	16,610.05	22,546.35	6,131.53	12,067.83	10,144.64	0.00	15,490.21	0.00	21,426.51	0.00	6,012.75	0.00	11,949.04	0.00	25.58	0.00	9,477.46	0.00	406.49
12023	Florida	Columbia	4.65	4.65	0.00	13.76	13.76	0.00	59,916.80	90,025.12	26,123.74	56,232.06	32,923.57	0.00	56,772.94	0.01	86,881.26	0.00	25,547.11	0.00	55,655.43	0.00	243.49	0.00	31,225.83	0.00	1,337.74
12027	Florida	De Soto	3.81	3.81	0.00	11.06	11.06	0.00	2,858.67	3,776.87	738.69	1,656.89	2,043.20	0.00	2,611.50	0.00	3,529.70	0.00	715.55	0.00	1,633.75	0.00	6.40	0.00	1,895.94	0.00	81.36
12029	Florida	Dixie	3.18	3.18	0.00	11.84	11.84	0.00	7,671.08	11,337.16	2,972.14	6,638.22	4,610.65	0.00	7,352.91	0.00	11,018.98	0.00	2,921.65	0.00	6,587.72	0.00	11.56	0.00	4,431.26	0.00	189.63
12031	Florida	Duval	5.62	5.62	0.00	15.61	15.60	0.01	2,536,634.59	3,833,614.71	997,478.16	2,294,458.28	1,470,270.60	0.16	2,300,335.85	0.25	3,597,315.97	0.07	965,077.27	0.15	2,262,057.39	0.00	15,224.80	0.09	1,335,258.58	0.00	57,410.45
12033	Florida	Escambia	4.39	4.39	0.00	16.43	16.43	0.00	21,177.86	30,607.74	7,782.97	17,212.85	12,922.66	0.00	19,555.09	0.00	28,984.98	0.00	7,590.61	0.00	17,020.49	0.00	75.45	0.00	11,964.48	0.00	513.59
12035	Florida	Flagler	4.27	4.27	0.00	13.35	13.34	0.00	67,897.83	100,259.12	31,859.32	64,220.60	35,190.38	0.00	65,284.32	0.01	97,645.61	0.00	31,367.32	0.00	63,728.61	0.00	135.88	0.00	33,917.00	0.00	1,452.22
12037	Florida	Franklin	3.05	3.05	0.00	12.17	12.17	0.00	2,183.70	3,196.71	830.70	1,843.71	1,315.25	0.00	2,054.79	0.00	3,067.80	0.00	812.52	0.00	1,825.53	0.00	4.47	0.00	1,242.27	0.00	53.25
12039	Florida	Gadsden	4.96	4.96	0.00	14.91	14.91	0.00	7,537.01	11,245.05	2,964.40	6,672.44	4,408.60	0.00	6,967.86	0.00	10,675.90	0.00	2,885.74	0.00	6,593.78	0.00	27.22	0.00	4,082.12	0.00	175.05
12041	Florida	Gilchrist	3.99	3.99	0.00	12.64	12.63	0.00	9,075.29	13,446.27	3,811.49	8,182.48	5,527.15	0.00	8,572.58	0.00	12,943.56	0.00	3,733.83	0.00	8,104.82	0.00	18.84	0.00	4,838.74	0.00	207.34
12043	Florida	Glades	3.37	3.37	0.00	10.96	10.96	0.00	960.24	1,226.03	216.09	481.88	724.61	0.00	896.24	0.00	1,162.03	0.00	208.86	0.00	474.65	0.00	2.04	0.00	687.38	0.00	29.46
12045	Florida	Gulf	3.04	3.04	0.00	12.38	12.37	0.00	2,834.26	4,052.87	1,027.39	2,245.99	1,777.18	0.00	2,722.54	0.00	3,941.14	0.00	1,009.38	0.00	2,227.98	0.00	3.04	0.00	1,713.16	0.00	73.34
12047	Florida	Hamilton	4.60	4.60	0.00	14.18	14.18	0.00	6,406.43	10,143.45	2,909.33	6,646.36	3,587.39	0.00	5,995.07	0.00	9,732.09	0.00	2,836.75	0.00	6,573.77	0.00	16.21	0.00	3,158.32	0.00	135.52
12049	Florida	Hardee	4.30	4.30	0.00	11.93	11.93	0.00	2,470.26	3,234.77	586.80	1,351.32	1,797.86	0.00	2,197.98	0.00	2,962.50	0.00	564.05	0.00	1,328.57	0.00	7.00	0.00	1,633.93	0.00	70.20
12051	Florida	Hendry	3.64	3.64	0.00	11.15	11.15	0.00	1,878.54	2,480.16	472.71	1,074.33	1,338.54	0.00	1,657.62	0.00	2,259.25	0.00	452.86	0.00	1,054.48	0.00	5.59	0.00	1,204.77	0.00	51.78
12053	Florida	Hernando	5.18	5.18	0.00	14.23	14.23	0.00	49,775.75	71,142.66	20,435.21	41,802.12	28,754.66	0.00	47,688.76	0.00	69,055.67	0.00	20,119.50	0.00	41,486.41	0.00	83.56	0.00	27,569.26	0.00	1,180.29
12055	Florida	Highlands	3.61	3.61	0.00	11.02	11.02	0.00	17,106.43	21,986.04	4,882.27	9,761.88	12,028.40	0.00	16,450.36	0.00	21,329.98	0.00	4,801.53	0.00	9,681.15	0.00	25.75	0.00	11,648.83	0.00	498.34
12057	Florida	Hillsborough	6.15	6.15	0.00	15.33	15.33	0.00	134,675.80	187,811.13	44,042.90	97,178.23	86,152.88	0.01	119,773.16	0.01	172,908.48	0.00	42,530.54	0.01	95,665.86	0.00	559.39	0.01	77,242.62	0.00	3,323.62
12059	Florida	Holmes	4.40	4.40	0.00	15.40	15.40	0.00	2,810.70	4,000.92	970.72	2,160.95	1,800.31	0.00	2,673.92	0.00	3,864.15	0.00	951.95	0.00	2,142.18	0.00	4.96	0.00	1,721.97	0.00	73.74
12061	Florida	Indian River	3.19	3.19	0.00	10.81	10.81	0.00	19,086.64	26,560.70	7,646.46	15,120.52	11,199.22	0.00	18,235.96	0.00	25,710.01	0.00	7,531.17	0.00	15,005.22	0.00	28.47	0.00	10,704.79	0.00	458.31
12063	Florida	Jackson	4.69	4.69	0.00	15.43	15.43	0.00	6,947.96	10,336.59	2,945.54	6,334.17	3,850.00	0.00	6,558.14	0.00	9,946.77	0.00	2,888.85	0.00	6,277.48	0.00	17.28	0.00	3,669.29	0.00	157.25
12065	Florida	Jefferson	4.75	4.75	0.00	14.20	14.20	0.00	4,114.71	6,028.74	1,725.97	3,640.00	2,332.06	0.00	3,904.09	0.00	5,818.12	0.00	1,691.73	0.00	3,605.76	0.00	7.89	0.00	2,212.36	0.00	94.76
12067	Florida	Lafayette	3.66	3.66	0.00	12.91	12.91	0.00	2,462.52	3,731.58	1,041.76	2,310.82	1,359.60	0.00	2,245.27	0.00	3,514.33	0.00	1,008.75	0.00	2,277.80	0.00	8.70	0.00	1,236.53	0.00	53.18
12069	Florida	Lake	5.66	5.66	0.00	14.71	14.71	0.00	84,026.25	123,677.22	37,231.63	76,882.60	45,410.40	0.01	79,078.13	0.01	118,729.09	0.00	36,427.53	0.01	76,078.50	0.00	242.57	0.00	42,650.60	0.00	1,828.25
12071	Florida	Lee	3.46	3.46	0.00	9.96	9.96	0.00	41,934.84	56,493.32	13,766.98	28,325.46	27,216.17	0.00	38,807.07	0.00	53,365.55	0.00	13,465.09	0.00	28,023.58	0.00	78.99	0.00	25,341.97	0.00	1,087.77
12073	Florida	Leon	5.08	5.08	0.00	14.53	14.53	0.00	38,871.18	57,424.06	16,327.58	34,880.46	21,482.33	0.00	35,023.00	0.00	53,575.88	0.00	15,760.57	0.00	34,313.45	0.00	189.15	0.00	19,262.43	0.00	829.97
12075	Florida	Levy	3.76	3.76	0.00	12.11	12.11	0.00	16,572.41	25,119.34	7,052.44	15,599.37	9,290.74	0.00	15,756.39	0.00	24,303.32	0.00	6,918.37	0.00	15,465.30	0.00	33.76	0.00	8,838.02	0.00	378.54
12077	Florida	Liberty	3.78	3.78	0.00	13.75	13.75	0.00	972.70	1,534.14	391.20	952.64	556.58	0.00	885.94	0.00	1,447.38	0.00	378.69	0.00	940.13	0.00	2.92	0.00	507.25	0.00	21.79
12079	Florida	Madison	4.36	4.36	0.00	14.13	14.13	0.00	7,313.37	10,998.88	3,221.03	6,906.53	3,987.69	0.00	6,931.39	0.00	10,616.89	0.00	3,160.51	0.00	6,846.01	0.00	14.66	0.00	3,770.88	0.00	161.51
12081	Florida	Manatee	4.41	4.41	0.00	11.93	11.93	0.00	38,586.82	52,388.83	12,366.44	26,168.45	25,319.89	0.00	35,617.95	0.00	49,419.97	0.00	12,074.58	0.00	25,876.59	0.00	72.56	0.00	23,543.38	0.00	1,010.04
12083	Florida	Marion	5.24	5.24	0.00	13.53	13.53	0.00	174,318.58	258,977.88	81,968.80	166,628.09	90,347.53	0.01	166,960.04	0.02	251,619.33	0.01	80,587.96	0.01	165,247.25	0.00	424.24	0.01	86,372.08	0.00	3,697.98
12085	Florida	Martin	3.31	3.31	0.00	10.86	10.86	0.00	14,681.76	19,549.18	4,984.99	9,852.42	9,530.38	0.00	14,095.12	0.00	18,962.55	0.00	4,908.64	0.00	9,776.06	0.00	20.94	0.00	9,186.48	0.00	393.12
12086	Florida	Miami-Dade	3.54	3.54	0.00	7.23	7.23	0.00	54,488.72	78,842.39	21,539.01	45,892.68	31,206.21	0.00	48,481.41	0.00	72,835.09	0.00	20,828.66	0.00	45,182.34	0.00	147.48	0.00	27,652.75	0.00	1,190.37
12087	Florida	Monroe	1.93	1.93	0.00	6.03	6.03	0.00	1,722.77	2,564.49	620.91	1,462.62	1,060.05	0.00	1,578.34	0.00	2,420.06	0.00	603.84	0.00	1,445.55	0.00	3.69	0.00	974.50	0.00	41.83
12089	Florida	Nassau	4.89	4.89	0.00	15.23	15.22	0.01	317,151.80	456,617.03	124,437.32	263,902.55	188,250.96	0.02	301,060.46	0.03	440,525.69	0.01	121,676.06	0.02	261,141.29	0.00	876.73	0.01	179,384.40	0.00	7,682.18
12091	Florida	Okaloosa	4.01	4.01	0.00	15.50	15.50	0.00	15,615.66	21,850.00	5,443.53	11,677.88	9,783.48	0.00	14,307.63	0.00	20,541.97	0.00	5,279.55	0.00	11,513.89	0.00	51.30	0.00	9,028.08	0.00	387.50
12093	Florida	Okeechobee	3.32	3.32	0.00	10.75	10.75	0.00	3,633.91	5,013.45	1,107.20	2,486.74	2,448.59	0.00	3,367.57	0.00	4,747.11	0.00	1,070.09	0.00	2,449.63	0.00	11.19	0.00	2,297.48	0.00	98.49
12095	Florida	Orange	5.81	5.81	0.00	15.29	15.29	0.00	132,695.83	196,824.60	52,237.80	116,366.57	75,705.71	0.01	116,472.47	0.01	180,601.25	0.00	50,143.91	0.01	114,272.69	0.00	699.67	0.00	66,328.56	0.00	2,859.93
12097	Florida	Osceola	4.41	4.41	0.00	12.72	12.72	0.00	28,380.50	40,918.69	10,021.17	22,559.36	17,361.10	0.00	24,971.46	0.00	37,509.66	0.00	9,604.91	0.00	22,143.11	0.00	93.93	0.00	15,366.55	0.00	661.70
12099	Florida	Palm Beach	4.01	4.01	0.00	11.27	11.27	0.00	68,099.62	95,707.52	26,540.84	54,148.74	40,033.91	0.00	62,910.59	0.01	90,518.49	0.00	25,972.46	0.00	53,580.36	0.00	118.73	0.00	36,938.12	0.00	1,585.49
12101	Florida	Pasco	5.91	5.91	0.00	15.63	15.63	0.00	92,947.80	131,147.28	32,686.22	70,885.70	58,632.07	0.01	87,309.33	0.01	125,508.81	0.00	31,964.10	0.00	70,163.58	0.00	186.36	0.00	55,345.23	0.00	2,371.74
12103	Florida	Pinellas	4.53	4.53	0.00	13.31	13.31	0.00	129,042.47	179,441.41	44,436.61	94,835.55	82,291.53	0.01	121,132.99	0.01	171,531.93	0.00	43,513.80	0.01	93,912.74	0.00	212.54	0.01	77,619.19	0.00	3,326.37
12105	Florida	Polk	5.48	5.48	0.00	14.05	14.05	0.00	85,527.09	116,640.05	27,009.34	58,122.29	56,496.04	0.01	78,834.09	0.01	109,947.04	0.00	26,271.72	0.00	57,384.67	0.00	267.33	0.00	52,562.36	0.00	2,254.75
12107	Florida	Putnam	4.92	4.92	0.00	13.70	13.70	0.00	61,165.53	91,053.35	25,071.70	54,959.52	35,249.86	0.00	58,071.38	0.01	87,959.20	0.00	24,523.80	0.00	54,411.62	0.00	194.97	0.00	33,547.58	0.00	1,436.51
12109	Florida	St Johns	4.72	4.72	0.00	13.80	13.80	0.00	282,495.12	403,444.15	115,236.58	236,185.60	162,698.71	0.02	265,716.26	0.03	386,665.28	0.01	112,566.69	0.02	233,515.71	0.00	598.81	0.01	153,149.57	0.00	6,564.88
12111	Florida	St Lucie	3.10	3.10	0.00	10.62	10.62	0.00	25,442.79	35,251.29	8,897.85	18,706.35	16,055.05	0.00	23,755.55	0.00	33,564.05	0.00	8,690.86	0.00	18,499.36	0.00	43.83	0.00	15,064.70	0.00	645.82
12113	Florida	Santa Rosa	4.34	4.34	0.00	16.34	16.34	0.00	12,990.13	18,396.43	4,603.23	10,009.52	8,100.39	0.00	11,995.34	0.00	17,401.64	0.00	4,472.44	0.00	9,878.73	0.00	30.08	0.00	7,522.90	0.00	322.74
12115	Florida	Sarasota	3.50	3.50	0.00	10.40	10.39	0.00	50,869.61	66,827.20	16,361.66	32,319.24	33,891.08	0.00	48,735.87	0.00	64,693.46	0.00	16,123.65	0.00	32,081.23	0.00	38.35	0.00	32,612.23	0.00	1,395.78
12117	Florida	Seminole	6.40	6.40	0.00	16.24	16.24	0.00	73,075.67	105,588.77	29,018.28	61,531.37	42,331.05	0.00	67,007.29	0.01	99,520.38	0.00	28,197.22	0.00	60,710.32	0.00	218.50	0.00	38,810.07	0.00	1,666.86
12119	Florida	Sumter	5.83	5.83	0.00	14.68	14.68	0.00	46,400.45	65,396.43	22,042.94	41,038.92	24,175.72	0.00	45,588.15	0.00	64,584.13	0.00	21,773.64	0.00	40,769.62	0.00	20.88	0.00	23,814.50	0.00	1,017.75
12121	Florida	Suwannee	4.28	4.28	0.00	13.56	13.56	0.00	29,649.88	43,307.94	12,691.59	26,349.65	16,543.77	0.00	28,157.59	0.00	41,815.64	0.00	12,430.25	0.00	26,088.31	0.00	84.60	0.00	15,727.33	0.00	673.57
12123	Florida	Taylor	3.44	3.44	0.00	12.79	12.79	0.00	6,950.00	10,519.31	2,813.51	6,382.83	4,017.59	0.00	6,534.86	0.00	10,104.17	0.00	2,750.10	0.00	6,319.41	0.00	15.89	0.00	3,784.76	0.00	162.23
12125	Florida	Union	4.87	4.87	0.00	13.83	13.83	0.00	9,867.48	19,760.39	5,221.73	15,114.64	4,469.81	0.00	9,219.98	0.00	19,112.89	0.00	5,103.78	0.00	14,996.70	0.00	27.54	0.00	4,116.19	0.00	176.83
12127	Florida	Volusia	5.07	5.07	0.00	14.33	14.33	0.00	173,059.45	251,937.66	70,333.71	149,211.91	100,413.20	0.01	164,771.25	0.02	243,649.46	0.00	69,047.63	0.01	147,925.84	0.00	223.38	0.01	95,723.62	0.00	4,099.47
12129	Florida	Wakulla	3.95	3.95	0.00	13.35	13.35	0.00	6,679.17	9,627.51	2,291.21	5,239.55	4,265.06	0.00	6,245.72	0.00	9,194.05	0.00	2,226.61	0.00	5,174.95	0.00	14.53	0.00	4,019.10	0.00	172.27
12131	Florida	Walton	3.90	3.90	0.00	14.80	14.80	0.00	7,148.96	10,354.79	2,670.55	5,876.37	4,337.66	0.00	6,667.58	0.00	9,873.41	0.00	2,602.54	0.00	5,808.37	0.00	32.63	0.00	4,065.04	0.00	174.30
12133	Florida	Washington	4.20	4.20	0.00	14.97	14.97	0.00	3,228.75	4,636.09	1,097.13	2,504.47	2,082.16	0.00	3,056.60	0.00	4,463.94	0.00	1,072.27	0.00	2,479.61	0.00	5.74	0.00	1,984.33	0.00	85.01

County	Land Area (sq mi)	Land Area (m²)	Air Volume	PM2.5 (lbs)	O3 (lbs)	$ Total Health Benefits(low estimate)	$ Total Health Benefits (high estimate)	Total Mortality (low estimate)	Total Mortality (high estimate)
Duval	762	1973570856	1,973,570,856,000.00	7.17	57.75	2,536,634.59	3,833,614.71	0.16	0.25
Flagler	485	1256144180	1,256,144,180,000.00	0.60	4.78	67,897.83	100,259.12	0.00	0.01
Clay	604	1564352752	1,564,352,752,000.00	2.23	15.51	257,019.85	381,292.60	0.02	0.02
St. Johns	601	1556582788	1,556,582,788,000.00	1.92	15.26	282,495.12	403,444.15	0.02	0.03
Nassau	649	1680902212	1,680,902,212,000.00	5.77	43.20	317,151.80	456,617.03	0.02	0.03
NEFL				**17.70**	**136.50**	**3,461,199.19**	**5,175,227.61**	**0.22**	**0.33**

Notes for $PM_{2.5}$ and O_3 Concentration Change Table

This scenario represents the air quality and co-pollutant benefits of increased urban vegetation and natural area conservation. While the majority of emissions reductions occur through CO_2 sequestration, additional local air quality improvements result from reduced energy demand, lower surface temperatures, and pollutant uptake by vegetation. COBRA inputs reflect a 1–5% reduction in key combustion-related pollutants ($PM_{2.5}$, SO_2, NO_x, VOC) across the residential and utility sectors, consistent with studies from the U.S. Forest Service and EPA's i-Tree model estimates of urban canopy air quality impacts.

Citations:

U.S. Forest Service, *i-Tree Eco User Manual* , 2023

Nowak et al., *Air pollution removal by urban trees in the United States* , Urban Forestry & Urban Greening (2014)

U.S. EPA, *COBRA Technical Documentation* , 2024

O3 Mortality (Long-term exposure)	$ O3 Mortality (Long-term exposure)	Total Asthma Symptoms	$ Total Asthma Symptoms	PM Asthma Symptoms, Albuterol Use	O3 Asthma Symptoms, Chest Tightness	$ O3 Asthma Symptoms, Chest Tightness	O3 Asthma Symptoms, Cough	$ O3 Asthma Symptoms, Cough	O3 Asthma Symptoms, Shortness of Breath	$ O3 Asthma Symptoms, Shortness of Breath	O3 Asthma Symptoms, Wheeze	$ O3 Asthma Symptoms, Wheeze	Total Asthma Onset	$ Total Asthma Onset	PM Asthma Onset	$ PM Asthma Onset	O3 Asthma Onset	$ O3 Asthma Onset	Total Incidence, Hay Fever/Rhinitis	$ Total Incidence, Hay Fever/Rhinitis	PM Incidence, Hay Fever/Rhinitis
0.00	35,398.31	4.67	1,231.59	0.95	0.88	339.05	1.04	399.94	0.44	171.11	0.83	320.54	0.03	2,217.96	0.01	573.05	0.02	1,644.91	0.20	217.69	0.05
0.00	15,074.37	1.32	356.55	0.25	0.25	98.16	0.30	115.79	0.13	49.54	0.24	92.80	0.01	629.09	0.00	165.18	0.01	463.91	0.05	58.50	0.01
0.00	13,772.33	0.96	284.13	0.14	0.20	78.24	0.24	92.29	0.10	39.48	0.19	73.97	0.01	464.55	0.00	96.96	0.00	367.59	0.04	42.29	0.01
0.00	12,637.93	0.87	237.30	0.17	0.17	65.33	0.20	77.07	0.09	32.97	0.16	61.77	0.01	427.50	0.00	113.25	0.00	314.25	0.03	38.31	0.01
0.00	53,291.13	2.60	777.18	0.37	0.55	214.02	0.65	252.45	0.28	108.01	0.52	202.33	0.02	1,228.01	0.00	234.31	0.01	993.70	0.11	117.56	0.02
0.00	27,780.34	3.17	978.86	0.41	0.70	269.57	0.82	317.99	0.35	136.04	0.66	254.86	0.02	1,515.15	0.00	260.51	0.02	1,254.63	0.13	142.76	0.02
0.00	1,451.93	0.08	23.47	0.01	0.02	6.46	0.02	7.62	0.01	3.26	0.02	6.11	0.00	39.37	0.00	8.47	0.00	30.90	0.00	3.59	0.00
0.00	15,447.89	0.35	112.82	0.04	0.08	31.07	0.10	36.65	0.04	15.68	0.08	29.38	0.00	167.57	0.00	23.21	0.00	144.35	0.01	16.03	0.00
0.00	35,343.80	0.94	269.52	0.15	0.19	74.21	0.23	87.54	0.10	37.45	0.18	70.16	0.01	429.75	0.00	93.62	0.00	336.13	0.04	41.80	0.01
0.01	128,431.00	10.48	2,845.20	1.99	2.03	783.32	2.40	924.01	1.02	395.32	1.92	740.56	0.06	4,893.58	0.02	1,248.14	0.05	3,645.44	0.42	468.41	0.11
0.00	9,070.98	0.61	191.87	0.07	0.14	52.84	0.16	62.33	0.07	26.67	0.13	49.96	0.00	300.51	0.00	46.70	0.00	253.81	0.03	27.89	0.00
0.00	29,888.10	1.82	498.33	0.34	0.36	137.20	0.42	161.84	0.18	69.24	0.34	129.71	0.01	883.96	0.00	228.55	0.01	655.41	0.07	80.81	0.02
0.00	1,814.58	0.13	43.06	0.01	0.03	11.86	0.04	13.99	0.02	5.99	0.03	11.21	0.00	68.53	0.00	9.82	0.00	58.71	0.01	6.11	0.00
0.00	4,241.63	0.18	52.36	0.03	0.04	14.42	0.04	17.01	0.02	7.28	0.04	13.63	0.00	86.00	0.00	19.51	0.00	66.49	0.01	8.11	0.00
0.09	1,277,848.14	139.18	39,874.11	22.96	28.46	10,979.11	33.57	12,951.23	14.36	5,540.91	26.91	10,379.89	0.89	67,730.25	0.20	15,429.56	0.69	52,300.69	5.53	6,160.00	1.25
0.00	11,450.89	0.91	269.33	0.14	0.19	74.17	0.23	87.48	0.10	37.43	0.18	70.12	0.01	444.12	0.00	86.79	0.00	357.33	0.04	42.08	0.01
0.00	32,464.79	1.43	401.90	0.25	0.29	110.66	0.34	130.53	0.14	55.84	0.27	104.62	0.01	695.68	0.00	159.00	0.01	536.69	0.06	64.83	0.01
0.00	1,189.02	0.07	21.40	0.01	0.02	5.89	0.02	6.95	0.01	2.97	0.01	5.57	0.00	35.78	0.00	7.27	0.00	28.51	0.00	3.24	0.00
0.00	3,907.07	0.33	96.31	0.05	0.07	26.52	0.08	31.28	0.03	13.38	0.06	25.07	0.00	158.58	0.00	35.21	0.00	123.37	0.01	14.74	0.00
0.00	4,631.41	0.29	81.47	0.05	0.06	22.43	0.07	26.46	0.03	11.32	0.05	21.21	0.00	135.26	0.00	32.70	0.00	102.56	0.01	13.27	0.00
0.00	657.92	0.03	10.48	0.00	0.01	2.88	0.01	3.40	0.00	1.46	0.01	2.73	0.00	18.04	0.00	2.89	0.00	15.14	0.00	1.59	0.00
0.00	1,639.82	0.06	18.50	0.01	0.01	5.09	0.02	6.01	0.01	2.57	0.01	4.82	0.00	27.26	0.00	5.65	0.00	21.62	0.00	2.77	0.00
0.00	3,022.80	0.25	66.26	0.05	0.05	18.24	0.06	21.52	0.02	9.21	0.04	17.24	0.00	111.00	0.00	29.49	0.00	81.51	0.01	10.83	0.00
0.00	1,563.73	0.15	47.98	0.02	0.03	13.21	0.04	15.59	0.02	6.67	0.03	12.49	0.00	76.78	0.00	11.46	0.00	65.33	0.01	6.86	0.00
0.00	1,152.99	0.12	38.96	0.01	0.03	10.73	0.03	12.66	0.01	5.42	0.03	10.15	0.00	60.42	0.00	9.39	0.00	51.03	0.01	5.58	0.00
0.00	26,388.97	1.14	338.47	0.17	0.24	93.20	0.28	109.94	0.12	47.04	0.23	88.12	0.01	549.41	0.00	107.99	0.01	441.42	0.05	51.91	0.01
0.00	11,150.49	0.35	110.65	0.04	0.08	30.47	0.09	35.95	0.04	15.38	0.07	28.81	0.00	176.85	0.00	28.75	0.00	148.09	0.01	16.06	0.00
0.01	73,919.00	8.32	2,589.04	1.03	1.85	713.02	2.18	841.07	0.93	359.83	1.75	674.09	0.05	4,086.15	0.01	679.83	0.04	3,406.32	0.34	377.08	0.06
0.00	1,648.22	0.08	22.74	0.01	0.02	6.26	0.02	7.39	0.01	3.16	0.02	5.92	0.00	37.85	0.00	7.76	0.00	30.09	0.00	3.47	0.00
0.00	10,246.48	0.46	140.88	0.06	0.10	38.80	0.12	45.76	0.05	19.58	0.10	36.68	0.00	220.24	0.00	39.33	0.00	180.91	0.02	21.13	0.00
0.00	3,512.04	0.22	64.48	0.03	0.05	17.76	0.05	20.94	0.02	8.96	0.04	16.79	0.00	103.02	0.00	21.77	0.00	81.25	0.01	9.91	0.00
0.00	2,117.61	0.12	34.14	0.02	0.02	9.40	0.03	11.09	0.01	4.74	0.02	8.89	0.00	55.24	0.00	12.99	0.00	42.24	0.00	5.43	0.00
0.00	1,183.35	0.12	34.58	0.02	0.02	9.52	0.03	11.23	0.01	4.81	0.02	9.00	0.00	60.81	0.00	14.04	0.00	46.77	0.01	5.68	0.00
0.00	40,822.35	2.76	798.87	0.44	0.57	219.97	0.67	259.48	0.29	111.01	0.54	207.96	0.02	1,333.34	0.00	289.36	0.01	1,043.98	0.11	124.19	0.02
0.00	24,254.20	1.69	541.82	0.18	0.39	149.23	0.46	176.03	0.20	75.31	0.37	141.08	0.01	844.18	0.00	119.57	0.01	724.60	0.07	77.28	0.01
0.00	18,432.45	2.13	585.40	0.39	0.42	161.18	0.49	190.12	0.21	81.34	0.39	152.38	0.01	1,046.95	0.00	236.75	0.01	810.20	0.09	102.41	0.02
0.00	8,459.48	0.47	131.58	0.08	0.09	36.23	0.11	42.73	0.05	18.28	0.09	34.25	0.00	227.33	0.00	53.56	0.00	173.77	0.02	20.88	0.00
0.00	485.46	0.05	14.34	0.01	0.01	3.95	0.01	4.66	0.01	1.99	0.01	3.73	0.00	23.89	0.00	5.12	0.00	18.76	0.00	2.22	0.00
0.00	3,609.37	0.23	63.09	0.04	0.05	17.37	0.05	20.49	0.02	8.77	0.04	16.42	0.00	103.18	0.00	25.59	0.00	77.60	0.01	10.00	0.00
0.00	22,533.34	1.60	513.89	0.17	0.37	141.53	0.43	166.95	0.19	71.43	0.35	133.80	0.01	800.58	0.00	114.75	0.01	685.83	0.07	73.37	0.01
0.01	82,674.11	4.15	1,155.93	0.74	0.82	318.27	0.97	375.42	0.42	160.62	0.78	300.89	0.03	1,986.34	0.01	482.16	0.02	1,504.18	0.17	184.65	0.04
0.00	8,793.37	0.32	97.85	0.04	0.07	26.95	0.08	31.79	0.04	13.60	0.07	25.48	0.00	150.70	0.00	25.86	0.00	124.84	0.01	14.55	0.00
0.00	26,462.38	3.39	1,030.43	0.46	0.74	283.76	0.87	334.72	0.37	143.20	0.70	268.27	0.02	1,607.73	0.00	293.97	0.02	1,313.76	0.14	152.27	0.02
0.00	932.67	0.08	25.38	0.01	0.02	6.99	0.02	8.24	0.01	3.53	0.02	6.61	0.00	37.69	0.00	6.42	0.00	31.27	0.00	3.58	0.00
0.01	171,702.22	9.32	2,622.33	1.62	1.87	722.02	2.21	851.70	0.94	364.38	1.77	682.61	0.06	4,442.07	0.01	1,072.60	0.04	3,369.48	0.37	409.96	0.09
0.00	8,640.58	0.76	225.64	0.11	0.16	62.13	0.19	73.29	0.08	31.36	0.15	58.74	0.00	370.29	0.00	75.08	0.00	295.21	0.03	33.34	0.01
0.00	2,198.98	0.14	43.65	0.02	0.03	12.02	0.04	14.18	0.02	6.07	0.03	11.37	0.00	72.14	0.00	12.86	0.00	59.28	0.01	6.54	0.00
0.00	63,468.64	9.21	2,708.44	1.40	1.93	745.81	2.28	879.75	0.98	376.38	1.83	705.09	0.06	4,557.11	0.01	932.04	0.05	3,625.08	0.37	417.59	0.08
0.00	14,704.85	1.92	573.74	0.27	0.41	158.00	0.48	186.37	0.21	79.73	0.39	149.37	0.01	934.18	0.00	178.63	0.01	755.55	0.08	87.09	0.01
0.00	35,352.63	2.87	892.82	0.36	0.64	245.88	0.75	290.04	0.32	124.09	0.60	232.46	0.02	1,381.25	0.00	229.07	0.02	1,152.17	0.12	130.34	0.02
0.00	52,973.49	3.13	947.09	0.43	0.68	260.81	0.80	307.65	0.34	131.62	0.64	246.57	0.02	1,509.94	0.00	277.76	0.02	1,232.18	0.13	141.79	0.02
0.01	74,292.82	4.35	1,365.84	0.52	0.98	376.16	1.15	443.71	0.49	189.83	0.92	355.62	0.03	2,077.71	0.00	333.56	0.02	1,744.15	0.18	195.01	0.03
0.00	50,307.61	3.71	1,141.91	0.48	0.82	314.47	0.96	370.95	0.41	158.70	0.77	297.30	0.02	1,855.83	0.00	323.16	0.02	1,532.67	0.15	168.83	0.03
0.00	32,111.07	1.81	493.84	0.34	0.35	135.96	0.42	160.38	0.18	68.61	0.33	128.54	0.01	850.64	0.00	218.32	0.01	632.32	0.07	80.16	0.02
0.01	146,584.69	9.50	2,651.42	1.69	1.89	730.02	2.23	861.13	0.95	368.42	1.79	690.17	0.06	4,473.41	0.01	1,028.05	0.05	3,445.36	0.39	436.14	0.09
0.00	14,418.88	0.93	283.91	0.12	0.20	78.19	0.24	92.23	0.10	39.46	0.19	73.92	0.01	447.62	0.00	77.97	0.00	369.65	0.04	42.22	0.01
0.00	7,200.16	0.57	167.72	0.08	0.12	46.19	0.14	54.48	0.06	23.31	0.11	43.66	0.00	269.93	0.00	53.88	0.00	216.05	0.02	25.30	0.00
0.00	31,216.45	1.13	366.14	0.12	0.26	100.84	0.31	118.95	0.13	50.89	0.25	95.34	0.01	535.44	0.00	73.29	0.01	462.15	0.05	51.79	0.01
0.00	37,143.21	3.47	1,008.69	0.55	0.72	277.75	0.85	327.63	0.36	140.17	0.68	262.59	0.02	1,657.01	0.00	348.48	0.02	1,308.53	0.14	156.74	0.03
0.00	22,796.75	0.36	105.46	0.06	0.08	29.04	0.09	34.26	0.04	14.66	0.07	27.45	0.00	168.12	0.00	35.70	0.00	132.42	0.01	15.99	0.00
0.00	15,053.76	0.86	240.87	0.15	0.17	66.32	0.20	78.23	0.09	33.47	0.16	62.70	0.01	412.92	0.00	101.56	0.00	311.36	0.03	38.02	0.01
0.00	3,622.52	0.24	69.31	0.04	0.05	19.08	0.06	22.51	0.02	9.63	0.05	18.04	0.00	115.39	0.00	25.86	0.00	89.53	0.01	10.52	0.00
0.00	3,939.36	0.38	101.16	0.07	0.07	27.85	0.09	32.85	0.04	14.05	0.07	26.33	0.00	178.60	0.00	46.45	0.00	132.15	0.02	16.83	0.00
0.01	91,624.15	4.65	1,339.16	0.75	0.96	368.74	1.13	434.96	0.48	186.09	0.90	348.61	0.03	2,214.71	0.01	477.67	0.02	1,737.03	0.19	210.24	0.04
0.00	3,846.83	0.25	71.81	0.04	0.05	19.77	0.06	23.32	0.03	9.98	0.05	18.69	0.00	118.63	0.00	25.51	0.00	93.11	0.01	11.03	0.00
0.00	3,890.75	0.27	80.59	0.04	0.06	22.19	0.07	26.18	0.03	11.20	0.05	20.98	0.00	134.28	0.00	27.69	0.00	106.60	0.01	12.11	0.00
0.00	1,899.33	0.10	28.36	0.02	0.02	7.81	0.02	9.21	0.01	3.94	0.02	7.38	0.00	47.31	0.00	9.94	0.00	37.37	0.00	4.38	0.00

$ PM Incidence, Hay Fever/Rhinitis	O3 Incidence, Hay Fever/Rhinitis	$ O3 Incidence, Hay Fever/Rhinitis	Total ER Visits, Respiratory	$ Total ER Visits, Respiratory	PM ER Visits, Respiratory	$ PM ER Visits, Respiratory	O3 ER Visits, Respiratory	$ O3 ER Visits, Respiratory	Total Hospital Admits, All Respiratory	$ Total Hospital Admits All Respiratory	PM Hospital Admits, All Respiratory	$ PM Hospital Admits All Respiratory	O3 Hospital Admits, All Respiratory	$ O3 Hospital Admits All Respiratory	PM Nonfatal Heart Attacks	$ PM Nonfatal Heart Attacks	PM Minor Restricted Activity Days	$ PM Minor Restricted Activity Days	PM Work Loss Days	$ PM Work Loss Days	PM Incidence Lung Cancer	$ PM Incidence Lung Cancer
56.02	0.15	161.68	0.01	18.60	0.00	3.83	0.01	14.76	0.00	15.82	0.00	9.64	0.00	6.17	0.00	121.32	2.88	362.43	0.49	155.55	0.00	9.32
15.26	0.04	43.24	0.00	7.11	0.00	1.49	0.00	5.62	0.00	5.75	0.00	3.14	0.00	2.61	0.00	36.03	0.65	82.24	0.11	34.75	0.00	2.48
8.75	0.03	33.54	0.00	5.62	0.00	0.92	0.00	4.70	0.00	4.20	0.00	2.13	0.00	2.07	0.00	29.38	0.38	47.91	0.06	20.39	0.00	1.68
10.08	0.03	28.23	0.00	7.22	0.00	1.52	0.00	5.69	0.00	4.40	0.00	2.37	0.00	2.03	0.00	34.82	0.47	58.55	0.08	24.86	0.00	2.28
22.25	0.09	95.30	0.01	15.75	0.00	2.35	0.01	13.41	0.00	13.12	0.00	5.06	0.00	8.06	0.00	135.92	1.09	136.86	0.18	57.38	0.00	7.20
24.35	0.11	118.41	0.01	15.35	0.00	2.05	0.01	13.30	0.00	9.74	0.00	4.41	0.00	5.33	0.00	81.63	1.16	145.95	0.20	62.14	0.00	5.03
0.77	0.00	2.82	0.00	0.80	0.00	0.14	0.00	0.67	0.00	0.45	0.00	0.20	0.00	0.25	0.00	2.55	0.04	4.58	0.01	1.93	0.00	0.17
2.20	0.01	13.82	0.00	2.79	0.00	0.30	0.00	2.49	0.00	3.30	0.00	0.90	0.00	2.40	0.00	26.82	0.13	16.45	0.02	6.77	0.00	1.57
9.02	0.03	32.78	0.00	6.64	0.00	1.14	0.00	5.50	0.00	7.05	0.00	3.02	0.00	4.03	0.00	108.33	0.47	58.55	0.08	24.15	0.00	4.88
118.58	0.31	349.84	0.03	50.57	0.01	10.24	0.02	40.32	0.00	39.32	0.00	19.87	0.00	19.45	0.00	405.83	5.28	663.36	0.89	280.49	0.00	23.18
4.31	0.02	23.58	0.00	2.75	0.00	0.33	0.00	2.42	0.00	1.90	0.00	0.66	0.00	1.24	0.00	19.04	0.21	25.84	0.03	10.84	0.00	1.82
20.76	0.05	60.05	0.01	14.89	0.00	3.06	0.01	11.82	0.00	10.87	0.00	5.86	0.00	5.01	0.00	123.24	0.91	114.14	0.15	48.49	0.00	4.45
0.87	0.00	5.24	0.00	0.72	0.00	0.08	0.00	0.64	0.00	0.52	0.00	0.19	0.00	0.34	0.00	3.71	0.04	5.02	0.01	2.14	0.00	0.20
1.83	0.01	6.28	0.00	0.64	0.00	0.12	0.00	0.53	0.00	1.02	0.00	0.46	0.00	0.56	0.00	8.91	0.09	11.23	0.01	4.68	0.00	0.56
1,393.88	4.28	4,766.12	0.47	764.83	0.08	137.51	0.39	627.32	0.02	459.10	0.01	246.51	0.01	212.59	0.04	3,481.87	57.58	7,238.65	9.86	3,118.44	0.00	201.97
8.18	0.03	33.90	0.00	6.11	0.00	0.94	0.00	5.17	0.00	3.13	0.00	1.47	0.00	1.66	0.00	21.38	0.36	44.64	0.06	19.15	0.00	1.45
14.75	0.04	50.08	0.01	8.28	0.00	1.50	0.00	6.78	0.00	7.18	0.00	3.26	0.00	3.92	0.00	126.81	0.80	100.33	0.13	41.68	0.00	6.75
0.65	0.00	2.59	0.00	0.69	0.00	0.11	0.00	0.58	0.00	0.31	0.00	0.13	0.00	0.18	0.00	2.65	0.03	4.35	0.01	1.87	0.00	0.17
3.24	0.01	11.49	0.00	2.54	0.00	0.44	0.00	2.10	0.00	1.03	0.00	0.51	0.00	0.52	0.00	12.57	0.13	16.06	0.02	6.73	0.00	0.58
3.17	0.01	10.09	0.00	1.02	0.00	0.19	0.00	0.82	0.00	1.44	0.00	0.70	0.00	0.73	0.00	12.14	0.13	16.77	0.02	7.01	0.00	0.75
0.26	0.00	1.34	0.00	0.11	0.00	0.01	0.00	0.09	0.00	0.13	0.00	0.05	0.00	0.08	0.00	1.28	0.01	1.59	0.00	0.68	0.00	0.08
0.57	0.00	2.20	0.00	0.56	0.00	0.09	0.00	0.47	0.00	0.53	0.00	0.21	0.00	0.31	0.00	2.85	0.04	5.16	0.01	2.19	0.00	0.19
2.85	0.01	7.98	0.00	1.72	0.00	0.36	0.00	1.36	0.00	1.21	0.00	0.60	0.00	0.62	0.00	9.42	0.14	18.22	0.02	7.75	0.00	0.60
1.02	0.01	5.84	0.00	1.01	0.00	0.12	0.00	0.89	0.00	0.52	0.00	0.20	0.00	0.32	0.00	2.21	0.04	4.75	0.01	2.03	0.00	0.15
0.86	0.00	4.72	0.00	0.69	0.00	0.08	0.00	0.61	0.00	0.40	0.00	0.20	0.00	0.19	0.00	3.30	0.03	3.70	0.00	1.58	0.00	0.11
10.14	0.04	41.77	0.00	6.67	0.00	1.03	0.00	5.64	0.00	6.64	0.00	2.80	0.00	3.84	0.00	78.56	0.50	62.98	0.08	26.26	0.00	3.89
2.59	0.01	13.46	0.00	2.77	0.00	0.35	0.00	2.42	0.00	2.01	0.00	0.70	0.00	1.31	0.00	22.29	0.11	13.34	0.02	5.60	0.00	1.04
62.34	0.28	314.74	0.02	38.45	0.00	4.97	0.02	33.48	0.00	23.50	0.00	11.04	0.00	12.45	0.00	180.44	2.73	343.19	0.46	147.08	0.00	9.77
0.71	0.00	2.77	0.00	0.45	0.00	0.07	0.00	0.38	0.00	0.33	0.00	0.16	0.00	0.17	0.00	2.67	0.04	4.52	0.01	1.91	0.00	0.17
3.75	0.02	17.39	0.00	2.81	0.00	0.39	0.00	2.42	0.00	2.19	0.00	0.75	0.00	1.45	0.00	29.30	0.17	21.71	0.03	9.06	0.00	1.66
2.07	0.01	7.84	0.00	2.26	0.00	0.37	0.00	1.88	0.00	1.24	0.00	0.55	0.00	0.70	0.00	8.29	0.11	14.39	0.02	6.06	0.00	0.54
1.27	0.00	4.16	0.00	0.70	0.00	0.13	0.00	0.57	0.00	0.54	0.00	0.25	0.00	0.30	0.00	5.97	0.06	7.92	0.01	3.32	0.00	0.37
1.31	0.00	4.37	0.00	0.39	0.00	0.07	0.00	0.32	0.00	0.36	0.00	0.18	0.00	0.18	0.00	3.42	0.07	8.82	0.01	3.77	0.00	0.24
26.77	0.09	97.42	0.01	17.58	0.00	3.00	0.01	14.57	0.00	15.57	0.00	7.30	0.00	8.27	0.00	200.20	1.22	153.68	0.20	64.40	0.00	8.50
10.89	0.06	66.40	0.01	8.16	0.00	0.89	0.00	7.27	0.00	6.96	0.00	2.77	0.00	4.19	0.00	48.84	0.52	65.47	0.09	27.61	0.00	3.76
23.12	0.07	79.30	0.01	9.91	0.00	1.78	0.01	8.13	0.00	5.53	0.00	3.07	0.00	2.46	0.00	62.56	1.21	152.03	0.21	65.35	0.00	3.43
4.89	0.01	15.98	0.00	2.51	0.00	0.47	0.00	2.04	0.00	2.47	0.00	1.27	0.00	1.20	0.00	25.50	0.22	27.77	0.04	11.61	0.00	1.38
0.47	0.00	1.74	0.00	0.47	0.00	0.08	0.00	0.39	0.00	0.14	0.00	0.07	0.00	0.07	0.00	1.26	0.03	3.45	0.00	1.47	0.00	0.09
2.45	0.01	7.55	0.00	2.06	0.00	0.40	0.00	1.65	0.00	1.01	0.00	0.53	0.00	0.49	0.00	8.59	0.11	13.61	0.02	5.76	0.00	0.54
10.46	0.06	62.91	0.00	7.84	0.00	0.87	0.00	6.97	0.00	5.01	0.00	1.76	0.00	3.25	0.00	55.85	0.47	58.65	0.08	24.58	0.00	3.33
44.52	0.13	140.13	0.02	34.36	0.00	6.61	0.02	27.75	0.00	22.55	0.00	10.63	0.00	11.93	0.00	367.94	1.97	247.49	0.33	103.92	0.00	15.96
2.48	0.01	12.07	0.00	1.50	0.00	0.20	0.00	1.30	0.00	1.99	0.00	0.76	0.00	1.23	0.00	16.45	0.13	16.31	0.02	6.78	0.00	1.18
27.62	0.11	124.65	0.01	17.42	0.00	2.48	0.01	14.94	0.00	12.48	0.00	6.10	0.00	6.39	0.00	96.58	1.34	168.44	0.23	71.69	0.00	5.56
0.60	0.00	2.98	0.00	0.50	0.00	0.07	0.00	0.43	0.00	0.25	0.00	0.10	0.00	0.14	0.00	2.63	0.03	4.33	0.01	1.82	0.00	0.18
98.10	0.28	311.86	0.03	46.25	0.01	8.82	0.02	37.43	0.00	42.82	0.00	20.08	0.00	22.74	0.01	599.72	4.42	555.35	0.74	233.14	0.00	26.75
6.71	0.02	26.63	0.00	4.24	0.00	0.67	0.00	3.56	0.00	2.17	0.00	1.07	0.00	1.10	0.00	22.57	0.28	35.14	0.05	15.13	0.00	1.13
1.16	0.00	5.38	0.00	1.06	0.00	0.15	0.00	0.91	0.00	0.93	0.00	0.40	0.00	0.53	0.00	12.45	0.05	5.84	0.01	2.48	0.00	0.22
84.96	0.30	332.62	0.03	43.56	0.00	7.00	0.02	36.56	0.00	27.00	0.00	14.76	0.00	12.25	0.00	204.58	4.14	520.93	0.71	224.82	0.00	12.84
16.55	0.06	70.55	0.01	13.17	0.00	1.97	0.01	11.20	0.00	5.85	0.00	2.90	0.00	2.94	0.00	61.87	0.75	94.44	0.13	40.37	0.00	2.55
21.46	0.10	108.88	0.01	12.80	0.00	1.65	0.01	11.15	0.00	11.99	0.00	5.21	0.00	6.78	0.00	89.86	1.02	128.51	0.17	54.46	0.00	6.61
25.89	0.10	115.90	0.01	15.70	0.00	2.25	0.01	13.45	0.00	12.48	0.00	5.30	0.00	7.18	0.00	149.03	1.21	152.67	0.20	63.93	0.00	7.05
31.01	0.15	164.00	0.01	20.67	0.00	2.57	0.01	18.10	0.00	18.15	0.00	6.23	0.00	11.92	0.00	184.10	1.61	202.18	0.27	85.11	0.00	9.85
29.24	0.13	139.60	0.02	30.20	0.00	4.10	0.02	26.10	0.00	16.06	0.00	7.19	0.00	8.87	0.00	119.88	1.18	148.49	0.20	63.09	0.00	5.91
20.42	0.05	59.73	0.01	14.21	0.00	2.90	0.01	11.31	0.00	9.41	0.00	4.77	0.00	4.64	0.00	124.96	0.80	100.86	0.13	42.36	0.00	4.54
99.67	0.30	336.47	0.02	33.70	0.00	6.12	0.02	27.58	0.00	37.27	0.00	16.86	0.00	20.40	0.01	460.90	4.96	623.37	0.82	259.50	0.00	27.72
7.30	0.03	34.91	0.00	5.60	0.00	0.76	0.00	4.84	0.00	4.19	0.00	1.89	0.00	2.30	0.00	44.71	0.33	41.61	0.06	17.54	0.00	2.07
5.01	0.02	20.29	0.00	3.29	0.00	0.51	0.00	2.77	0.00	2.19	0.00	0.96	0.00	1.23	0.00	21.85	0.23	29.36	0.04	12.45	0.00	1.00
7.02	0.04	44.77	0.00	5.80	0.00	0.61	0.00	5.19	0.00	5.44	0.00	1.52	0.00	3.92	0.00	59.34	0.38	47.84	0.06	19.86	0.00	4.08
32.74	0.11	124.00	0.01	13.02	0.00	2.15	0.01	10.87	0.00	9.94	0.00	4.75	0.00	5.20	0.00	83.67	1.68	211.82	0.29	90.24	0.00	7.01
3.36	0.01	12.63	0.00	3.86	0.00	0.64	0.00	3.22	0.00	7.37	0.00	2.89	0.00	4.48	0.00	143.48	0.23	28.60	0.04	11.84	0.00	6.18
9.29	0.03	28.74	0.00	6.74	0.00	1.31	0.00	5.42	0.00	5.26	0.00	2.57	0.00	2.69	0.00	62.34	0.38	48.32	0.06	20.43	0.00	2.21
2.34	0.01	8.19	0.00	1.85	0.00	0.33	0.00	1.53	0.00	1.27	0.00	0.70	0.00	0.57	0.00	8.93	0.12	15.11	0.02	6.42	0.00	0.57
4.35	0.01	12.48	0.00	3.28	0.00	0.68	0.00	2.60	0.00	1.76	0.00	0.89	0.00	0.87	0.00	13.37	0.26	32.52	0.04	13.88	0.00	0.88
45.03	0.15	165.21	0.02	36.61	0.00	6.21	0.02	30.40	0.00	20.27	0.00	9.12	0.00	11.15	0.00	261.66	2.21	277.45	0.37	116.52	0.00	13.95
2.35	0.01	8.68	0.00	1.11	0.00	0.19	0.00	0.93	0.00	0.86	0.00	0.44	0.00	0.42	0.00	10.22	0.13	16.04	0.02	6.80	0.00	0.48
2.48	0.01	9.63	0.00	2.07	0.00	0.34	0.00	1.74	0.00	1.06	0.00	0.48	0.00	0.59	0.00	12.16	0.12	14.82	0.02	6.24	0.00	0.61
0.91	0.00	3.46	0.00	0.69	0.00	0.11	0.00	0.58	0.00	0.45	0.00	0.21	0.00	0.25	0.00	3.24	0.05	6.42	0.01	2.71	0.00	0.22

PM HA Cardio Cerebro and Peripheral Vascular Disease	$ PM HA Cardio Cerebro and Peripheral Vascular Disease	PM HA Alzheimers Disease	$ PM HA Alzheimers Disease	PM HA Parkinsons Disease	$ PM HA Parkinsons Disease	PM Incidence Stroke	$ PM Incidence Stroke	PM Incidence Out of Hospital Cardiac Arrest	$ PM Incidence Out of Hospital Cardiac Arrest	PM ER Visits All Cardiac Outcomes	$ PM ER Visits All Cardiac Outcomes	O3 ER Visits, Asthma	$ O3 ER Visits, Asthma	O3 School Loss Days, All Cause	$ O3 School Loss Days, All Cause
0.00	11.88	0.00	16.69	0.00	4.17	0.00	11.70	0.00	2.71	0.00	2.26	0.00	0.05	2.16	3,668.63
0.00	3.91	0.00	3.83	0.00	1.06	0.00	3.00	0.00	0.74	0.00	0.87	0.00	0.01	0.57	969.12
0.00	2.75	0.00	3.01	0.00	0.74	0.00	2.08	0.00	0.47	0.00	0.45	0.00	0.01	0.44	747.30
0.00	3.00	0.00	4.11	0.00	0.98	0.00	2.75	0.00	0.60	0.00	0.58	0.00	0.01	0.37	625.92
0.00	10.45	0.00	13.46	0.00	3.34	0.00	9.31	0.00	1.81	0.00	1.50	0.00	0.03	1.27	2,152.25
0.00	5.45	0.00	7.79	0.00	2.17	0.00	6.07	0.00	1.40	0.00	1.10	0.00	0.04	1.57	2,661.14
0.00	0.26	0.00	0.29	0.00	0.07	0.00	0.21	0.00	0.05	0.00	0.06	0.00	0.00	0.04	62.98
0.00	2.14	0.00	8.90	0.00	0.74	0.00	2.07	0.00	0.34	0.00	0.24	0.00	0.01	0.18	311.91
0.00	7.33	0.00	10.17	0.00	2.29	0.00	6.40	0.00	1.10	0.00	0.88	0.00	0.01	0.44	743.67
0.00	36.06	0.00	38.45	0.00	10.06	0.00	28.43	0.00	6.51	0.00	5.56	0.00	0.09	4.65	7,897.50
0.00	1.59	0.00	3.85	0.00	0.82	0.00	2.28	0.00	0.41	0.00	0.22	0.00	0.00	0.31	528.21
0.00	8.87	0.00	8.20	0.00	2.07	0.00	5.82	0.00	1.23	0.00	1.54	0.00	0.02	0.79	1,336.92
0.00	0.30	0.00	0.36	0.00	0.09	0.00	0.25	0.00	0.05	0.00	0.04	0.00	0.00	0.07	116.06
0.00	0.92	0.00	0.97	0.00	0.26	0.00	0.74	0.00	0.15	0.00	0.13	0.00	0.00	0.08	141.48
0.01	300.85	0.02	379.33	0.00	86.42	0.00	242.68	0.00	60.40	0.03	59.87	0.00	1.92	62.50	106,138.06
0.00	2.33	0.00	2.65	0.00	0.65	0.00	1.82	0.00	0.40	0.00	0.37	0.00	0.01	0.45	763.14
0.00	8.86	0.00	13.95	0.00	3.16	0.00	8.82	0.00	1.58	0.00	1.29	0.00	0.02	0.66	1,122.37
0.00	0.26	0.00	0.30	0.00	0.08	0.00	0.22	0.00	0.05	0.00	0.06	0.00	0.00	0.03	57.49
0.00	0.86	0.00	0.98	0.00	0.27	0.00	0.77	0.00	0.17	0.00	0.20	0.00	0.01	0.15	256.73
0.00	1.07	0.00	1.45	0.00	0.34	0.00	0.95	0.00	0.19	0.00	0.16	0.00	0.00	0.14	229.42
0.00	0.07	0.00	0.15	0.00	0.04	0.00	0.10	0.00	0.02	0.00	0.01	0.00	0.00	0.02	29.64
0.00	0.35	0.00	0.32	0.00	0.08	0.00	0.23	0.00	0.05	0.00	0.06	0.00	0.00	0.03	50.62
0.00	0.82	0.00	1.03	0.00	0.27	0.00	0.78	0.00	0.17	0.00	0.18	0.00	0.00	0.11	181.10
0.00	0.23	0.00	0.25	0.00	0.06	0.00	0.18	0.00	0.04	0.00	0.04	0.00	0.00	0.08	129.18
0.00	0.19	0.00	0.18	0.00	0.05	0.00	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.06	105.56
0.00	5.59	0.00	7.93	0.00	1.78	0.00	4.95	0.00	0.92	0.00	0.75	0.00	0.01	0.55	940.29
0.00	1.53	0.00	2.25	0.00	0.48	0.00	1.33	0.00	0.23	0.00	0.21	0.00	0.00	0.18	299.43
0.00	12.61	0.00	38.78	0.00	4.22	0.00	11.86	0.00	2.92	0.00	2.28	0.00	0.09	4.14	7,035.19
0.00	0.13	0.00	0.29	0.00	0.08	0.00	0.22	0.00	0.05	0.00	0.03	0.00	0.00	0.04	61.87
0.00	2.09	0.00	3.60	0.00	0.77	0.00	2.15	0.00	0.37	0.00	0.29	0.00	0.00	0.23	392.41
0.00	0.48	0.00	0.96	0.00	0.24	0.00	0.66	0.00	0.15	0.00	0.12	0.00	0.00	0.10	177.02
0.00	0.48	0.00	0.68	0.00	0.17	0.00	0.48	0.00	0.10	0.00	0.09	0.00	0.00	0.06	94.98
0.00	0.27	0.00	0.38	0.00	0.10	0.00	0.28	0.00	0.07	0.00	0.05	0.00	0.00	0.06	98.03
0.00	15.00	0.00	16.58	0.00	3.88	0.00	10.86	0.00	2.08	0.00	2.05	0.00	0.02	1.28	2,181.33
0.00	4.54	0.00	9.22	0.00	1.75	0.00	4.90	0.00	0.91	0.00	0.60	0.00	0.02	0.87	1,481.77
0.00	4.66	0.00	6.08	0.00	1.53	0.00	4.31	0.00	1.05	0.00	0.89	0.00	0.02	1.06	1,796.04
0.00	1.91	0.00	2.50	0.00	0.64	0.00	1.81	0.00	0.36	0.00	0.33	0.00	0.01	0.21	357.45
0.00	0.15	0.00	0.13	0.00	0.04	0.00	0.11	0.00	0.03	0.00	0.04	0.00	0.00	0.02	38.94
0.00	0.77	0.00	0.98	0.00	0.25	0.00	0.69	0.00	0.15	0.00	0.17	0.00	0.00	0.10	171.13
0.00	3.54	0.00	10.61	0.00	1.56	0.00	4.39	0.00	0.82	0.00	0.53	0.00	0.02	0.83	1,404.32
0.00	22.50	0.00	43.33	0.00	7.38	0.00	20.64	0.00	3.74	0.00	3.30	0.00	0.05	1.85	3,138.48
0.00	1.31	0.00	2.51	0.00	0.54	0.00	1.50	0.00	0.27	0.00	0.17	0.00	0.00	0.16	273.03
0.00	6.70	0.00	19.38	0.00	2.24	0.00	6.25	0.00	1.53	0.00	1.33	0.00	0.04	1.65	2,807.22
0.00	0.20	0.00	0.31	0.00	0.08	0.00	0.23	0.00	0.05	0.00	0.04	0.00	0.00	0.04	67.17
0.00	35.30	0.00	49.31	0.00	12.56	0.00	35.40	0.00	7.02	0.00	5.49	0.00	0.08	4.10	6,967.79
0.00	1.84	0.00	1.98	0.00	0.50	0.00	1.41	0.00	0.32	0.00	0.30	0.00	0.01	0.35	592.01
0.00	0.60	0.00	0.40	0.00	0.10	0.00	0.28	0.00	0.06	0.00	0.09	0.00	0.00	0.07	119.50
0.00	17.82	0.00	44.33	0.00	5.51	0.00	15.49	0.00	4.02	0.00	3.40	0.00	0.13	4.37	7,415.80
0.00	3.57	0.00	7.64	0.00	1.05	0.00	2.97	0.00	0.76	0.00	0.71	0.00	0.04	0.93	1,579.04
0.00	7.53	0.00	9.95	0.00	2.91	0.00	8.06	0.00	1.58	0.00	1.15	0.00	0.03	1.44	2,449.17
0.00	9.65	0.00	12.75	0.00	3.18	0.00	8.93	0.00	1.83	0.00	1.46	0.00	0.03	1.53	2,600.96
0.00	11.38	0.00	34.61	0.00	4.55	0.00	12.75	0.00	2.54	0.00	1.85	0.00	0.05	2.17	3,683.12
0.00	9.08	0.00	13.71	0.00	2.68	0.00	7.52	0.00	1.58	0.00	1.51	0.00	0.06	1.83	3,106.66
0.00	9.25	0.00	8.43	0.00	2.12	0.00	5.96	0.00	1.21	0.00	1.46	0.00	0.03	0.79	1,344.72
0.00	35.28	0.00	50.99	0.00	12.49	0.00	35.03	0.00	7.29	0.00	4.91	0.00	0.06	4.49	7,629.37
0.00	3.03	0.00	5.42	0.00	0.94	0.00	2.62	0.00	0.52	0.00	0.48	0.00	0.01	0.46	784.74
0.00	1.83	0.00	1.64	0.00	0.44	0.00	1.24	0.00	0.29	0.00	0.25	0.00	0.00	0.27	456.03
0.00	3.99	0.00	11.84	0.00	1.88	0.00	5.24	0.00	0.89	0.00	0.49	0.00	0.01	0.60	1,013.67
0.00	7.68	0.00	17.15	0.00	3.03	0.00	8.47	0.00	1.98	0.00	1.34	0.00	0.03	1.64	2,790.56
0.00	8.53	0.00	13.62	0.00	3.19	0.00	9.02	0.00	1.29	0.00	0.89	0.00	0.00	0.17	284.84
0.00	4.02	0.00	4.10	0.00	1.00	0.00	2.81	0.00	0.57	0.00	0.65	0.00	0.01	0.38	642.04
0.00	0.84	0.00	0.97	0.00	0.26	0.00	0.74	0.00	0.16	0.00	0.16	0.00	0.00	0.11	182.64
0.00	1.44	0.00	1.27	0.00	0.41	0.00	1.17	0.00	0.29	0.00	0.28	0.00	0.00	0.17	280.38
0.00	18.78	0.00	27.42	0.00	6.53	0.00	18.30	0.00	3.56	0.00	3.12	0.00	0.07	2.19	3,719.85
0.00	0.70	0.00	0.73	0.00	0.21	0.00	0.61	0.00	0.15	0.00	0.12	0.00	0.00	0.11	193.95
0.00	0.77	0.00	1.05	0.00	0.27	0.00	0.77	0.00	0.17	0.00	0.13	0.00	0.00	0.13	214.26
0.00	0.26	0.00	0.35	0.00	0.09	0.00	0.27	0.00	0.06	0.00	0.05	0.00	0.00	0.05	77.28

Location(s)	Sector	Emissions Modification(s)
Florida - All Counties	Fuel Combustion: Electric Utility	$PM_{2.5}$ reduced by 30%; SO_2 reduced by 30%; NO_x reduced by 30%; VOC reduced by 30%

	Totals
PM2.5	0.000174 microgram/m3
O3	0.000854 microgram/m3

FIPS	State	County	Base PM 2.5	Control PM 2.5	Delta PM 2.5	Base O3	Control O3	Delta O3	$ Total Health Benefits(low estimate)	$ Total Health Benefits(high estimate)	$ PM Total Health Benefits (low estimate)	$ PM Total Health Benefits (high estimate)	$ O3 Total Health Benefits
12001	Florida	Alachua	4.87	4.87	0.00	13.44	13.44	0.00	13,084.63	21,854.26	7,838.26	16,607.88	4,986.38
12003	Florida	Baker	4.71	4.71	0.00	14.12	14.12	0.00	4,305.28	7,126.92	2,194.34	5,015.99	2,037.31
12005	Florida	Bay	3.53	3.53	0.00	13.57	13.57	0.00	3,208.18	4,857.86	1,308.76	2,958.45	1,841.07
12007	Florida	Bradford	5.13	5.13	0.00	14.07	14.07	0.00	3,642.59	6,164.73	1,912.52	4,434.65	1,680.21
12009	Florida	Brevard	4.23	4.23	0.00	12.93	12.93	0.00	13,395.53	20,106.20	6,229.74	12,940.40	7,006.85
12011	Florida	Broward	4.37	4.37	0.00	10.21	10.21	0.00	7,725.42	11,871.84	3,638.09	7,784.50	3,887.98
12013	Florida	Calhoun	4.07	4.07	0.00	14.62	14.62	0.00	334.07	496.70	137.51	300.14	191.63
12015	Florida	Charlotte	3.49	3.49	0.00	10.49	10.49	0.00	3,173.14	4,316.02	1,166.05	2,308.93	1,983.79
12017	Florida	Citrus	4.79	4.79	0.00	13.22	13.22	0.00	9,082.36	13,715.60	4,484.65	9,117.90	4,543.39
12019	Florida	Clay	5.09	5.09	0.00	14.22	14.22	0.00	37,831.83	60,784.07	19,953.69	42,905.93	17,297.52
12021	Florida	Collier	3.04	3.04	0.00	9.23	9.23	0.00	2,352.11	3,411.95	1,094.69	2,154.53	1,217.36
12023	Florida	Columbia	4.65	4.65	0.00	13.76	13.76	0.00	8,649.46	13,944.47	4,594.26	9,889.27	3,950.86
12027	Florida	De Soto	3.81	3.81	0.00	11.06	11.06	0.00	386.33	550.32	131.93	295.92	245.18
12029	Florida	Dixie	3.18	3.18	0.00	11.84	11.84	0.00	1,062.03	1,676.50	498.16	1,112.62	553.28
12031	Florida	Duval	5.62	5.62	0.00	15.61	15.61	0.00	373,718.44	619,483.36	189,011.26	434,776.18	176,440.05
12033	Florida	Escambia	4.39	4.39	0.00	16.43	16.43	0.00	2,777.11	4,194.36	1,169.72	2,586.97	1,550.72
12035	Florida	Flagler	4.27	4.27	0.00	13.35	13.35	0.00	10,084.84	15,935.79	5,760.19	11,611.14	4,239.67
12037	Florida	Franklin	3.05	3.05	0.00	12.17	12.17	0.00	292.31	450.79	129.95	288.43	157.83
12039	Florida	Gadsden	4.96	4.96	0.00	14.91	14.91	0.00	1,021.25	1,612.32	472.53	1,063.60	529.03
12041	Florida	Gilchrist	3.99	3.99	0.00	12.64	12.64	0.00	1,286.56	2,037.60	654.90	1,405.94	615.26
12043	Florida	Glades	3.37	3.37	0.00	10.96	10.96	0.00	127.81	175.18	38.51	85.88	86.95
12045	Florida	Gulf	3.04	3.04	0.00	12.38	12.38	0.00	375.69	564.12	158.86	347.29	213.26
12047	Florida	Hamilton	4.60	4.60	0.00	14.18	14.18	0.00	924.89	1,573.87	505.24	1,154.21	406.49
12049	Florida	Hardee	4.30	4.30	0.00	11.93	11.93	0.00	330.83	467.39	104.82	241.38	215.74
12051	Florida	Hendry	3.64	3.64	0.00	11.15	11.15	0.00	253.28	360.93	84.58	192.23	160.63
12053	Florida	Hernando	5.18	5.18	0.00	14.23	14.23	0.00	7,106.83	10,856.28	3,585.96	7,335.41	3,450.57
12055	Florida	Highlands	3.61	3.61	0.00	11.02	11.02	0.00	2,334.28	3,201.19	867.38	1,734.29	1,443.41
12057	Florida	Hillsborough	6.15	6.15	0.00	15.33	15.33	0.00	18,653.93	28,037.61	7,777.96	17,161.64	10,338.37
12059	Florida	Holmes	4.40	4.40	0.00	15.40	15.40	0.00	370.46	553.97	149.67	333.18	216.04
12061	Florida	Indian River	3.19	3.19	0.00	10.81	10.81	0.00	2,715.79	4,028.47	1,342.96	2,655.65	1,343.91
12063	Florida	Jackson	4.69	4.69	0.00	15.43	15.43	0.00	940.93	1,470.85	460.63	990.56	467.16
12065	Florida	Jefferson	4.75	4.75	0.00	14.20	14.20	0.00	569.44	883.05	282.79	596.40	279.85
12067	Florida	Lafayette	3.66	3.66	0.00	12.91	12.91	0.00	345.70	559.13	175.21	388.64	163.15
12069	Florida	Lake	5.66	5.66	0.00	14.71	14.71	0.00	12,246.12	19,307.74	6,630.75	13,692.37	5,449.26
12071	Florida	Lee	3.46	3.46	0.00	9.96	9.96	0.00	5,834.93	8,430.85	2,454.79	5,050.71	3,265.94
12073	Florida	Leon	5.08	5.08	0.00	14.53	14.53	0.00	5,336.64	8,326.68	2,631.40	5,621.44	2,577.89
12075	Florida	Levy	3.76	3.76	0.00	12.11	12.11	0.00	2,357.26	3,829.56	1,214.86	2,687.16	1,114.89
12077	Florida	Liberty	3.78	3.78	0.00	13.75	13.75	0.00	130.96	218.77	61.18	148.99	66.79
12079	Florida	Madison	4.36	4.36	0.00	14.13	14.13	0.00	1,031.02	1,648.81	539.93	1,157.73	478.52
12081	Florida	Manatee	4.41	4.41	0.00	11.93	11.93	0.00	5,335.27	7,778.19	2,188.82	4,631.73	3,038.39
12083	Florida	Marion	5.24	5.24	0.00	13.53	13.53	0.00	25,692.31	40,782.17	14,610.29	29,700.15	10,841.75
12085	Florida	Martin	3.31	3.31	0.00	10.86	10.86	0.00	2,047.14	2,909.84	883.53	1,746.23	1,143.65
12086	Florida	Miami-Dade	3.54	3.54	0.00	7.23	7.23	0.00	7,807.21	12,163.99	3,853.24	8,210.02	3,744.75
12087	Florida	Monroe	1.93	1.93	0.00	6.03	6.03	0.00	243.81	395.07	111.58	262.85	127.21
12089	Florida	Nassau	4.89	4.89	0.00	15.23	15.23	0.00	46,544.46	72,790.52	23,417.82	49,663.88	22,590.97
12091	Florida	Okaloosa	4.01	4.01	0.00	15.50	15.50	0.00	2,047.67	2,994.82	827.01	1,774.17	1,174.02
12093	Florida	Okeechobee	3.32	3.32	0.00	10.75	10.75	0.00	498.36	741.52	195.16	438.32	293.83
12095	Florida	Orange	5.81	5.81	0.00	15.29	15.29	0.00	18,854.92	30,149.05	9,199.93	20,494.06	9,084.71
12097	Florida	Osceola	4.41	4.41	0.00	12.72	12.72	0.00	3,960.81	6,159.97	1,757.68	3,956.85	2,083.34
12099	Florida	Palm Beach	4.01	4.01	0.00	11.27	11.27	0.00	9,718.20	14,639.56	4,731.15	9,652.51	4,804.07
12101	Florida	Pasco	5.91	5.91	0.00	15.63	15.63	0.00	12,978.53	19,695.04	5,747.13	12,463.63	7,035.86
12103	Florida	Pinellas	4.53	4.53	0.00	13.31	13.31	0.00	17,863.87	26,609.67	7,711.15	16,456.95	9,875.00
12105	Florida	Polk	5.48	5.48	0.00	14.05	14.05	0.00	11,825.71	17,359.09	4,803.56	10,336.95	6,779.54
12107	Florida	Putnam	4.92	4.92	0.00	13.70	13.70	0.00	8,899.60	14,345.46	4,568.31	10,014.16	4,230.01
12109	Florida	St Johns	4.72	4.72	0.00	13.80	13.80	0.00	41,526.80	64,045.90	21,455.47	43,974.57	19,524.13
12111	Florida	St Lucie	3.10	3.10	0.00	10.62	10.62	0.00	3,557.45	5,290.39	1,572.05	3,305.00	1,926.61
12113	Florida	Santa Rosa	4.34	4.34	0.00	16.34	16.34	0.00	1,702.44	2,519.89	696.01	1,513.46	972.05
12115	Florida	Sarasota	3.50	3.50	0.00	10.40	10.40	0.00	7,037.18	9,861.87	2,896.22	5,720.91	4,066.94
12117	Florida	Seminole	6.40	6.40	0.00	16.24	16.24	0.00	10,391.32	16,110.49	5,104.42	10,823.59	5,079.74
12119	Florida	Sumter	5.83	5.83	0.00	14.68	14.68	0.00	6,837.97	10,211.87	3,915.06	7,288.96	2,901.09
12121	Florida	Suwannee	4.28	4.28	0.00	13.56	13.56	0.00	4,207.21	6,544.82	2,172.20	4,509.81	1,985.26
12123	Florida	Taylor	3.44	3.44	0.00	12.79	12.79	0.00	959.39	1,546.78	463.01	1,050.40	482.11
12125	Florida	Union	4.87	4.87	0.00	13.83	13.83	0.00	1,487.25	3,248.75	929.76	2,691.25	536.38
12127	Florida	Volusia	5.07	5.07	0.00	14.33	14.33	0.00	24,820.63	38,831.92	12,493.50	26,504.78	12,049.63
12129	Florida	Wakulla	3.95	3.95	0.00	13.35	13.35	0.00	891.15	1,360.31	364.60	833.76	511.81
12131	Florida	Walton	3.90	3.90	0.00	14.80	14.80	0.00	945.44	1,435.25	408.03	897.84	520.52
12133	Florida	Washington	4.20	4.20	0.00	14.97	14.97	0.00	424.58	641.08	168.78	385.29	249.86

FIPS	Total Mortality(low estimate)	$ Total Mortality(low estimate)	Total Mortality(high estimate)	$ Total Mortality(high estimate)	PM Mortality, All Cause (low)	$ PM Mortality, All Cause (low)	PM Mortality (high)	$ PM Mortality (high)	PM Infant Mortality	$ PM Infant Mortality	Total O3 Mortality	$ Total O3 Mortality	O3 Mortality (Short-term exposure)	$ O3 Mortality (Short-term exposure)
12001	0.00	12,040.15	0.00	20,809.78	0.00	7,601.01	0.00	16,370.63	0.00	95.75	0.00	4,439.15	0.00	191.32
12003	0.00	4,020.37	0.00	6,842.01	0.00	2,130.33	0.00	4,951.98	0.00	25.23	0.00	1,890.03	0.00	81.09
12005	0.00	3,002.04	0.00	4,651.73	0.00	1,275.34	0.00	2,925.02	0.00	15.05	0.00	1,726.71	0.00	74.03
12007	0.00	3,450.12	0.00	5,972.25	0.00	1,865.64	0.00	4,387.77	0.00	17.54	0.00	1,584.48	0.00	67.91
12009	0.00	12,798.46	0.00	19,509.12	0.00	6,117.41	0.00	12,828.08	0.00	28.47	0.00	6,681.05	0.00	286.10
12011	0.00	7,012.70	0.00	11,159.11	0.00	3,529.13	0.00	7,675.54	0.00	26.22	0.00	3,483.57	0.00	149.93
12013	0.00	316.48	0.00	479.11	0.00	134.45	0.00	297.08	0.00	0.80	0.00	182.03	0.00	7.80
12015	0.00	3,086.08	0.00	4,228.96	0.00	1,149.52	0.00	2,292.41	0.00	2.41	0.00	1,936.56	0.00	82.81
12017	0.00	8,857.47	0.00	13,490.72	0.00	4,426.75	0.00	9,059.99	0.00	13.22	0.00	4,430.72	0.00	189.46
12019	0.00	35,521.28	0.00	58,473.53	0.00	19,418.68	0.00	42,370.92	0.00	133.93	0.00	16,102.60	0.00	690.65
12021	0.00	2,210.78	0.00	3,270.62	0.00	1,073.48	0.00	2,133.32	0.00	4.57	0.00	1,137.30	0.00	48.78
12023	0.00	8,239.98	0.00	13,534.99	0.00	4,492.85	0.00	9,787.86	0.00	42.82	0.00	3,747.13	0.00	160.53
12027	0.00	355.31	0.00	519.30	0.00	127.80	0.00	291.79	0.00	1.14	0.00	227.51	0.00	9.76
12029	0.00	1,021.45	0.00	1,635.91	0.00	489.69	0.00	1,104.16	0.00	1.94	0.00	531.75	0.00	22.76
12031	0.02	343,109.51	0.04	588,874.43	0.01	182,871.56	0.03	428,636.48	0.00	2,886.83	0.01	160,237.95	0.00	6,889.29
12033	0.00	2,576.55	0.00	3,993.80	0.00	1,140.81	0.00	2,558.06	0.00	11.34	0.00	1,435.74	0.00	61.63
12035	0.00	9,741.30	0.00	15,592.25	0.00	5,671.24	0.00	11,522.19	0.00	24.57	0.00	4,070.06	0.00	174.27
12037	0.00	276.18	0.00	434.66	0.00	127.11	0.00	285.58	0.00	0.70	0.00	149.07	0.00	6.39
12039	0.00	949.85	0.00	1,540.92	0.00	459.99	0.00	1,051.06	0.00	4.34	0.00	489.86	0.00	21.01
12041	0.00	1,222.21	0.00	1,973.25	0.00	641.56	0.00	1,392.59	0.00	3.24	0.00	580.65	0.00	24.88
12043	0.00	119.71	0.00	167.08	0.00	37.22	0.00	84.59	0.00	0.36	0.00	82.49	0.00	3.53
12045	0.00	361.66	0.00	550.08	0.00	156.08	0.00	344.50	0.00	0.47	0.00	205.58	0.00	8.80
12047	0.00	871.63	0.00	1,520.61	0.00	492.63	0.00	1,141.61	0.00	2.82	0.00	379.00	0.00	16.26
12049	0.00	296.82	0.00	433.39	0.00	100.75	0.00	237.31	0.00	1.25	0.00	196.07	0.00	8.42
12051	0.00	225.60	0.00	333.25	0.00	81.03	0.00	188.68	0.00	1.00	0.00	144.57	0.00	6.21
12053	0.00	6,838.87	0.00	10,588.33	0.00	3,530.56	0.00	7,280.01	0.00	14.66	0.00	3,308.32	0.00	141.63
12055	0.00	2,250.90	0.00	3,117.81	0.00	853.04	0.00	1,719.95	0.00	4.57	0.00	1,397.86	0.00	59.80
12057	0.00	16,780.01	0.00	26,163.69	0.00	7,510.88	0.00	16,894.55	0.00	98.79	0.00	9,269.13	0.00	398.83
12059	0.00	353.41	0.00	536.92	0.00	146.77	0.00	330.28	0.00	0.77	0.00	206.64	0.00	8.85
12061	0.00	2,607.29	0.00	3,919.97	0.00	1,322.71	0.00	2,635.40	0.00	5.00	0.00	1,284.58	0.00	55.00
12063	0.00	892.09	0.00	1,422.01	0.00	451.77	0.00	981.70	0.00	2.70	0.00	440.32	0.00	18.87
12065	0.00	542.67	0.00	856.27	0.00	277.18	0.00	590.79	0.00	1.29	0.00	265.48	0.00	11.37
12067	0.00	318.04	0.00	531.47	0.00	169.65	0.00	383.09	0.00	1.46	0.00	148.38	0.00	6.38
12069	0.00	11,605.63	0.00	18,667.25	0.00	6,487.54	0.00	13,549.16	0.00	43.20	0.00	5,118.09	0.00	219.39
12071	0.00	5,442.00	0.00	8,037.92	0.00	2,400.96	0.00	4,996.88	0.00	14.09	0.00	3,041.04	0.00	130.53
12073	0.00	4,851.52	0.00	7,841.55	0.00	2,540.02	0.00	5,530.06	0.00	30.48	0.00	2,311.50	0.00	99.60
12075	0.00	2,252.33	0.00	3,724.63	0.00	1,191.76	0.00	2,664.06	0.00	5.82	0.00	1,060.57	0.00	45.42
12077	0.00	120.10	0.00	207.90	0.00	59.23	0.00	147.03	0.00	0.46	0.00	60.87	0.00	2.61
12079	0.00	982.30	0.00	1,600.09	0.00	529.79	0.00	1,147.58	0.00	2.46	0.00	452.51	0.00	19.38
12081	0.00	4,962.37	0.00	7,405.29	0.00	2,137.16	0.00	4,580.08	0.00	12.84	0.00	2,825.21	0.00	121.20
12083	0.00	24,728.86	0.00	39,818.72	0.00	14,364.17	0.00	29,454.03	0.00	75.62	0.00	10,364.69	0.00	443.76
12085	0.00	1,972.38	0.00	2,835.07	0.00	870.00	0.00	1,732.69	0.00	3.71	0.00	1,102.38	0.00	47.17
12086	0.00	7,044.50	0.00	11,401.27	0.00	3,726.17	0.00	8,082.94	0.00	26.38	0.00	3,318.33	0.00	142.84
12087	0.00	225.46	0.00	376.72	0.00	108.52	0.00	259.78	0.00	0.66	0.00	116.94	0.00	5.02
12089	0.00	44,425.12	0.00	70,671.17	0.00	22,898.17	0.00	49,144.23	0.00	164.99	0.00	21,526.95	0.00	921.87
12091	0.00	1,885.47	0.00	2,832.62	0.00	802.10	0.00	1,749.25	0.00	7.79	0.00	1,083.37	0.00	46.50
12093	0.00	464.31	0.00	707.48	0.00	188.62	0.00	431.78	0.00	1.97	0.00	275.70	0.00	11.82
12095	0.00	16,790.61	0.00	28,084.74	0.00	8,831.16	0.00	20,125.29	0.00	123.22	0.00	7,959.45	0.00	343.19
12097	0.00	3,528.66	0.00	5,727.83	0.00	1,684.67	0.00	3,883.84	0.00	16.47	0.00	1,843.99	0.00	79.40
12099	0.00	9,062.41	0.00	13,983.77	0.00	4,629.83	0.00	9,551.19	0.00	21.16	0.00	4,432.58	0.00	190.26
12101	0.00	12,261.60	0.00	18,978.11	0.00	5,620.16	0.00	12,336.66	0.00	32.77	0.00	6,641.44	0.00	284.61
12103	0.00	16,865.33	0.00	25,611.13	0.00	7,551.01	0.00	16,296.81	0.00	36.88	0.00	9,314.32	0.00	399.16
12105	0.00	10,979.87	0.00	16,513.26	0.00	4,672.38	0.00	10,205.76	0.00	47.54	0.00	6,307.50	0.00	270.57
12107	0.00	8,494.21	0.00	13,940.07	0.00	4,468.47	0.00	9,914.33	0.00	35.53	0.00	4,025.74	0.00	172.38
12109	0.00	39,336.59	0.00	61,855.69	0.00	20,958.38	0.00	43,477.48	0.00	111.49	0.00	18,378.21	0.00	787.79
12111	0.00	3,343.25	0.00	5,076.19	0.00	1,535.48	0.00	3,268.43	0.00	7.74	0.00	1,807.77	0.00	77.50
12113	0.00	1,578.99	0.00	2,396.43	0.00	676.24	0.00	1,493.68	0.00	4.55	0.00	902.75	0.00	38.73
12115	0.00	6,767.56	0.00	9,592.25	0.00	2,854.09	0.00	5,678.78	0.00	6.79	0.00	3,913.47	0.00	167.49
12117	0.00	9,617.21	0.00	15,336.38	0.00	4,959.99	0.00	10,679.16	0.00	38.43	0.00	4,657.22	0.00	200.02
12119	0.00	6,724.98	0.00	10,098.88	0.00	3,867.23	0.00	7,241.13	0.00	3.71	0.00	2,857.75	0.00	122.13
12121	0.00	4,014.76	0.00	6,352.37	0.00	2,127.47	0.00	4,465.08	0.00	14.48	0.00	1,887.29	0.00	80.83
12123	0.00	906.75	0.00	1,494.14	0.00	452.57	0.00	1,039.96	0.00	2.62	0.00	454.17	0.00	19.47
12125	0.00	1,402.71	0.00	3,164.20	0.00	908.76	0.00	2,670.25	0.00	4.90	0.00	493.95	0.00	21.22
12127	0.00	23,751.93	0.00	37,763.21	0.00	12,265.05	0.00	26,276.33	0.00	39.68	0.00	11,486.88	0.00	491.94
12129	0.00	836.61	0.00	1,305.77	0.00	354.32	0.00	823.48	0.00	2.31	0.00	482.29	0.00	20.67
12131	0.00	885.44	0.00	1,375.26	0.00	397.64	0.00	887.45	0.00	4.99	0.00	487.81	0.00	20.92
12133	0.00	403.08	0.00	619.58	0.00	164.96	0.00	381.46	0.00	0.88	0.00	238.12	0.00	10.20

County	Land Area (sq mi)	Land Area (m²)	Air Volume	PM2.5 (lbs)	O3 (lbs)	$ Total Health Benefits (low estimate)	$ Total Health Benefits (high estimate)	Total Mortality (low estimate)	Total Mortality (high estimate)
Duval	762	1973570856	1,973,570,856,000.00	1.36	6.93	373,718.44	619,483.36	0.02	0.04
Flagler	485	1256144180	1,256,144,180,000.00	0.11	0.57	10,084.84	15,935.79	0.00	0.00
Clay	604	1564352752	1,564,352,752,000.00	0.41	1.86	37,831.83	60,784.07	0.00	0.00
St. Johns	601	1556582788	1,556,582,788,000.00	0.36	1.83	41,526.80	64,045.90	0.00	0.00
Nassau	649	1680902212	1,680,902,212,000.00	1.09	5.18	46,544.46	72,790.52	0.00	0.00
NEFL				**3.32**	**16.38**	**509,706.37**	**833,039.64**	**0.03**	**0.05**

Notes for $PM_{2.5}$ and O_3 Concentration Change Table

his analysis models a **30% reduction in emissions from electricity generation** in Northeast Florida attributable to **residential and commercial building energy efficiency improvements**. The estimate excludes industrial electricity consumption, reflecting only the share of power generation serving the building sector. The 30% assumption is a **conservative estimate** based on state-level energy use data from the **U.S. Energy Information Administration (EIA, 2024)**, which indicates that approximately 50–60% of Florida's electricity consumption occurs in the residential sector and 20–30% in the commercial sector.

Emission reductions were applied to the **Fuel Combustion: Electric Utility** sector in the **EPA Co-Benefits Risk Assessment (COBRA) Tool** to quantify co-pollutant benefits resulting from reduced fossil fuel-based electricity generation. Pollutants included **$PM_{2.5}$, SO_2, NO_x, and VOCs**, each reduced by 30% from baseline values. The modeling assumes no change in industrial output, transportation demand, or other fuel combustion sectors.

The resulting outputs represent **estimated air quality improvements and avoided emissions** associated with energy efficiency measures implemented across residential and commercial buildings in Clay, Duval, Flagler, Nassau, and St. Johns counties. This approach is consistent with the methodology used for the 45% scenario but adjusted downward to reflect a conservative assumption about the portion of total electricity generation affected by building-sector efficiency improvements.

Sources:

U.S. Environmental Protection Agency (EPA), *Co-Benefits Risk Assessment (COBRA) Health Impacts Screening and Mapping Tool*, 2024.

U.S. Energy Information Administration (EIA), *Florida State Energy Profile*, 2024.

National Renewable Energy Laboratory (NREL), *Understanding Commercial Building Energy Use in Florida*, 2024.

O3 Mortality (Long-term exposure)	$ O3 Mortality (Long-term exposure)	Total Asthma Symptoms	$ Total Asthma Symptoms	PM Asthma Symptoms, Albuterol Use	O3 Asthma Symptoms, Chest Tightness	$ O3 Asthma Symptoms, Chest Tightness	O3 Asthma Symptoms, Cough	$ O3 Asthma Symptoms, Cough	O3 Asthma Symptoms, Shortness of Breath	$ O3 Asthma Symptoms, Shortness of Breath	O3 Asthma Symptoms, Wheeze	$ O3 Asthma Symptoms, Wheeze	Total Asthma Onset	$ Total Asthma Onset	PM Asthma Onset	$ PM Asthma Onset	O3 Asthma Onset	$ O3 Asthma Onset	Total Incidence, Hay Fever/Rhinitis	$ Total Incidence, Hay Fever/Rhinitis	PM Incidence, Hay Fever/Rhinitis
0.00	4,247.82	0.65	147.84	0.17	0.11	40.69	0.12	47.99	0.05	20.53	0.10	38.46	0.00	298.75	0.00	101.36	0.00	197.39	0.03	29.31	0.01
0.00	1,808.95	0.18	42.80	0.05	0.03	11.78	0.04	13.90	0.02	5.94	0.03	11.14	0.00	85.52	0.00	29.85	0.00	55.67	0.01	7.95	0.00
0.00	1,652.68	0.12	34.10	0.02	0.02	9.39	0.03	11.07	0.01	4.74	0.02	8.88	0.00	58.99	0.00	14.88	0.00	44.11	0.00	5.37	0.00
0.00	1,516.57	0.12	28.49	0.03	0.02	7.84	0.02	9.25	0.01	3.96	0.02	7.41	0.00	58.14	0.00	20.43	0.00	37.71	0.00	5.21	0.00
0.00	6,394.95	0.34	93.28	0.07	0.07	25.68	0.08	30.29	0.03	12.96	0.06	24.28	0.00	160.27	0.00	41.02	0.00	119.24	0.01	15.33	0.00
0.00	3,333.64	0.42	117.49	0.07	0.08	32.35	0.10	38.16	0.04	16.33	0.08	30.58	0.00	197.06	0.00	46.50	0.00	150.56	0.02	18.56	0.00
0.00	174.23	0.01	2.82	0.00	0.00	0.78	0.00	0.91	0.00	0.39	0.00	0.73	0.00	5.02	0.00	1.31	0.00	3.71	0.00	0.46	0.00
0.00	1,853.75	0.05	13.54	0.01	0.01	3.73	0.01	4.40	0.00	1.88	0.01	3.53	0.00	21.46	0.00	4.14	0.00	17.32	0.00	2.05	0.00
0.00	4,241.27	0.13	32.35	0.03	0.02	8.91	0.03	10.50	0.01	4.49	0.02	8.42	0.00	56.71	0.00	16.38	0.00	40.34	0.00	5.51	0.00
0.00	15,411.95	1.46	341.56	0.37	0.24	94.00	0.29	110.88	0.12	47.44	0.23	88.87	0.01	667.99	0.00	230.52	0.01	437.47	0.06	63.88	0.02
0.00	1,088.52	0.08	23.03	0.01	0.02	6.34	0.02	7.48	0.01	3.20	0.02	5.99	0.00	38.79	0.00	8.34	0.00	30.46	0.00	3.60	0.00
0.00	3,586.60	0.25	59.82	0.06	0.04	16.46	0.05	19.42	0.02	8.31	0.04	15.57	0.00	118.85	0.00	40.19	0.00	78.65	0.01	10.86	0.00
0.00	217.75	0.02	5.17	0.00	0.00	1.42	0.00	1.68	0.00	0.72	0.00	1.35	0.00	8.80	0.00	1.75	0.00	7.05	0.00	0.78	0.00
0.00	509.00	0.02	6.28	0.01	0.00	1.73	0.01	2.04	0.00	0.87	0.00	1.64	0.00	11.25	0.00	3.27	0.00	7.98	0.00	1.06	0.00
0.01	153,348.67	19.20	4,786.62	4.35	3.42	1,317.56	4.03	1,554.17	1.72	664.92	3.23	1,245.62	0.12	9,200.63	0.04	2,923.81	0.08	6,276.83	0.75	836.08	0.24
0.00	1,374.11	0.12	32.32	0.02	0.02	8.90	0.03	10.50	0.01	4.49	0.02	8.41	0.00	55.92	0.00	13.04	0.00	42.88	0.00	5.30	0.00
0.00	3,895.80	0.19	48.24	0.04	0.03	13.28	0.04	15.66	0.02	6.70	0.03	12.55	0.00	93.15	0.00	28.75	0.00	64.40	0.01	8.68	0.00
0.00	142.68	0.01	2.57	0.00	0.00	0.71	0.00	0.83	0.00	0.36	0.00	0.67	0.00	4.56	0.00	1.14	0.00	3.42	0.00	0.41	0.00
0.00	468.85	0.04	11.56	0.01	0.01	3.18	0.01	3.75	0.00	1.61	0.01	3.01	0.00	20.42	0.00	5.61	0.00	14.80	0.00	1.90	0.00
0.00	555.77	0.04	9.78	0.01	0.01	2.69	0.01	3.18	0.00	1.36	0.01	2.54	0.00	17.93	0.00	5.62	0.00	12.31	0.00	1.76	0.00
0.00	78.95	0.00	1.26	0.00	0.00	0.35	0.00	0.41	0.00	0.17	0.00	0.33	0.00	2.33	0.00	0.52	0.00	1.82	0.00	0.21	0.00
0.00	196.78	0.01	2.22	0.00	0.00	0.61	0.00	0.72	0.00	0.31	0.00	0.58	0.00	3.47	0.00	0.87	0.00	2.59	0.00	0.35	0.00
0.00	362.74	0.03	7.95	0.01	0.01	2.19	0.01	2.58	0.00	1.10	0.01	2.07	0.00	14.90	0.00	5.12	0.00	9.78	0.00	1.45	0.00
0.00	187.65	0.02	5.76	0.00	0.00	1.59	0.00	1.87	0.00	0.80	0.00	1.50	0.00	9.89	0.00	2.05	0.00	7.84	0.00	0.88	0.00
0.00	138.36	0.02	4.68	0.00	0.00	1.29	0.00	1.52	0.00	0.65	0.00	1.22	0.00	7.80	0.00	1.68	0.00	6.12	0.00	0.72	0.00
0.00	3,166.68	0.15	40.63	0.03	0.03	11.18	0.03	13.19	0.01	5.64	0.03	10.57	0.00	71.92	0.00	18.95	0.00	52.97	0.01	6.79	0.00
0.00	1,338.06	0.05	13.28	0.01	0.01	3.66	0.01	4.31	0.00	1.85	0.01	3.46	0.00	22.88	0.00	5.11	0.00	17.77	0.00	2.08	0.00
0.00	8,870.30	1.09	310.74	0.18	0.22	85.56	0.26	100.93	0.11	43.18	0.21	80.89	0.01	528.82	0.00	120.06	0.01	408.76	0.04	48.78	0.01
0.00	197.79	0.01	2.73	0.00	0.00	0.75	0.00	0.89	0.00	0.38	0.00	0.71	0.00	4.81	0.00	1.20	0.00	3.61	0.00	0.44	0.00
0.00	1,229.58	0.06	16.91	0.01	0.01	4.66	0.01	5.49	0.01	2.35	0.01	4.40	0.00	28.62	0.00	6.91	0.00	21.71	0.00	2.74	0.00
0.00	421.45	0.03	7.74	0.01	0.01	2.13	0.01	2.51	0.00	1.08	0.01	2.01	0.00	13.15	0.00	3.40	0.00	9.75	0.00	1.26	0.00
0.00	254.11	0.02	4.10	0.00	0.00	1.13	0.00	1.33	0.00	0.57	0.00	1.07	0.00	7.20	0.00	2.13	0.00	5.07	0.00	0.71	0.00
0.00	142.00	0.02	4.15	0.00	0.00	1.14	0.00	1.35	0.00	0.58	0.00	1.08	0.00	7.97	0.00	2.36	0.00	5.61	0.00	0.74	0.00
0.00	4,898.70	0.37	95.89	0.08	0.07	26.40	0.08	31.14	0.03	13.32	0.06	24.96	0.00	176.81	0.00	51.53	0.00	125.28	0.01	16.46	0.00
0.00	2,910.51	0.22	65.03	0.03	0.05	17.91	0.05	21.12	0.02	9.04	0.04	16.93	0.00	108.27	0.00	21.32	0.00	86.95	0.01	9.91	0.00
0.00	2,211.90	0.28	70.26	0.06	0.05	19.34	0.06	22.81	0.03	9.76	0.05	18.29	0.00	135.38	0.00	38.16	0.00	97.23	0.01	13.24	0.00
0.00	1,015.14	0.06	15.79	0.01	0.01	4.35	0.01	5.13	0.01	2.19	0.01	4.11	0.00	30.08	0.00	9.23	0.00	20.85	0.00	2.76	0.00
0.00	58.26	0.01	1.72	0.00	0.00	0.47	0.00	0.56	0.00	0.24	0.00	0.45	0.00	3.05	0.00	0.80	0.00	2.25	0.00	0.28	0.00
0.00	433.13	0.03	7.57	0.01	0.01	2.08	0.01	2.46	0.00	1.05	0.01	1.97	0.00	13.60	0.00	4.29	0.00	9.31	0.00	1.32	0.00
0.00	2,704.01	0.21	61.68	0.03	0.04	16.98	0.05	20.03	0.02	8.57	0.04	16.06	0.00	102.61	0.00	20.31	0.00	82.30	0.01	9.40	0.00
0.00	9,920.94	0.57	138.75	0.13	0.10	38.19	0.12	45.05	0.05	19.27	0.09	36.11	0.00	266.44	0.00	85.94	0.00	180.50	0.02	24.75	0.01
0.00	1,055.21	0.04	11.74	0.01	0.01	3.23	0.01	3.81	0.00	1.63	0.01	3.06	0.00	19.56	0.00	4.58	0.00	14.98	0.00	1.89	0.00
0.00	3,175.49	0.45	123.68	0.08	0.09	34.05	0.10	40.17	0.04	17.18	0.08	32.19	0.00	210.24	0.00	52.59	0.00	157.65	0.02	19.90	0.00
0.00	111.92	0.01	3.05	0.00	0.00	0.84	0.00	0.99	0.00	0.42	0.00	0.79	0.00	4.91	0.00	1.15	0.00	3.75	0.00	0.47	0.00
0.00	20,605.08	1.29	314.80	0.30	0.22	86.65	0.26	102.21	0.11	43.73	0.21	81.91	0.01	606.24	0.00	201.86	0.01	404.38	0.05	55.89	0.02
0.00	1,036.87	0.10	27.08	0.02	0.02	7.46	0.02	8.80	0.01	3.76	0.02	7.05	0.00	46.83	0.00	11.41	0.00	35.43	0.00	4.22	0.00
0.00	263.88	0.02	5.24	0.00	0.00	1.44	0.00	1.70	0.00	0.73	0.00	1.36	0.00	9.38	0.00	2.27	0.00	7.11	0.00	0.85	0.00
0.00	7,616.25	1.23	325.09	0.25	0.23	89.50	0.27	105.57	0.12	45.17	0.22	84.61	0.01	599.16	0.00	164.15	0.01	435.01	0.05	54.88	0.01
0.00	1,764.59	0.25	68.86	0.05	0.05	18.96	0.06	22.36	0.02	9.57	0.05	17.92	0.00	122.00	0.00	31.33	0.00	90.67	0.01	11.37	0.00
0.00	4,242.32	0.38	107.16	0.06	0.08	29.51	0.09	34.80	0.04	14.89	0.07	27.89	0.00	179.10	0.00	40.83	0.00	138.26	0.02	16.89	0.00
0.00	6,356.83	0.41	113.67	0.08	0.08	31.30	0.10	36.92	0.04	15.79	0.08	29.59	0.00	196.70	0.00	48.84	0.00	147.86	0.02	18.46	0.00
0.00	8,915.16	0.56	163.93	0.09	0.12	45.14	0.14	53.25	0.06	22.78	0.11	42.67	0.00	267.18	0.00	57.88	0.00	209.30	0.02	25.06	0.00
0.00	6,036.93	0.49	137.06	0.09	0.10	37.74	0.12	44.51	0.05	19.04	0.09	35.68	0.00	241.40	0.00	57.47	0.00	183.92	0.02	21.95	0.00
0.00	3,853.36	0.25	59.28	0.06	0.04	16.32	0.05	19.25	0.02	8.23	0.04	15.42	0.00	115.66	0.00	39.78	0.00	75.88	0.01	10.89	0.00
0.00	17,590.43	1.31	318.29	0.31	0.23	87.60	0.27	103.34	0.11	44.21	0.21	82.82	0.01	604.87	0.00	191.41	0.01	413.46	0.05	58.93	0.02
0.00	1,730.27	0.12	34.08	0.02	0.02	9.38	0.03	11.07	0.01	4.73	0.02	8.87	0.00	58.13	0.00	13.78	0.00	44.36	0.00	5.48	0.00
0.00	864.02	0.07	20.13	0.01	0.01	5.54	0.02	6.54	0.01	2.80	0.01	5.24	0.00	34.07	0.00	8.15	0.00	25.92	0.00	3.19	0.00
0.00	3,745.98	0.15	43.94	0.02	0.03	12.10	0.04	14.27	0.02	6.11	0.03	11.44	0.00	68.43	0.00	12.97	0.00	55.46	0.01	6.62	0.00
0.00	4,457.20	0.46	121.07	0.10	0.09	33.33	0.10	39.32	0.04	16.82	0.08	31.51	0.00	218.32	0.00	61.30	0.00	157.02	0.02	20.64	0.01
0.00	2,735.62	0.05	12.66	0.01	0.01	3.48	0.01	4.11	0.00	1.76	0.01	3.29	0.00	22.23	0.00	6.34	0.00	15.89	0.00	2.11	0.00
0.00	1,806.46	0.12	28.91	0.03	0.02	7.96	0.02	9.39	0.01	4.02	0.02	7.52	0.00	54.75	0.00	17.38	0.00	37.36	0.00	5.04	0.00
0.00	434.70	0.03	8.32	0.01	0.01	2.29	0.01	2.70	0.00	1.16	0.01	2.17	0.00	15.00	0.00	4.26	0.00	10.74	0.00	1.37	0.00
0.00	472.73	0.05	12.14	0.01	0.01	3.34	0.01	3.94	0.00	1.69	0.01	3.16	0.00	24.13	0.00	8.27	0.00	15.86	0.00	2.27	0.00
0.00	10,994.94	0.63	160.74	0.13	0.11	44.25	0.14	52.20	0.06	22.33	0.11	41.83	0.00	293.30	0.00	84.85	0.00	208.45	0.02	27.82	0.01
0.00	461.62	0.03	8.62	0.01	0.01	2.37	0.01	2.80	0.00	1.20	0.01	2.24	0.00	15.23	0.00	4.06	0.00	11.17	0.00	1.42	0.00
0.00	466.89	0.03	9.67	0.01	0.01	2.66	0.01	3.14	0.00	1.34	0.01	2.52	0.00	17.02	0.00	4.23	0.00	12.79	0.00	1.53	0.00
0.00	227.92	0.01	3.40	0.00	0.00	0.94	0.00	1.11	0.00	0.47	0.00	0.89	0.00	6.01	0.00	1.53	0.00	4.48	0.00	0.56	0.00

$ PM Incidence, Hay Fever/Rhinitis	O3 Incidence, Hay Fever/Rhinitis	$ O3 Incidence, Hay Fever/Rhinitis	Total ER Visits, Respiratory	$ Total ER Visits, Respiratory	PM ER Visits, Respiratory	$ PM ER Visits, Respiratory	O3 ER Visits, Respiratory	$ O3 ER Visits, Respiratory	Total Hospital Admits, All Respiratory	$ Total Hospital Admits All Respiratory	PM Hospital Admits, All Respiratory	$ PM Hospital Admits All Respiratory	O3 Hospital Admits, All Respiratory	$ O3 Hospital Admits All Respiratory	PM Nonfatal Heart Attacks	$ PM Nonfatal Heart Attacks	PM Minor Restricted Activity Days	$ PM Minor Restricted Activity Days	PM Work Loss Days	$ PM Work Loss Days	PM Incidence Lung Cancer
9.91	0.02	19.40	0.00	2.45	0.00	0.68	0.00	1.77	0.00	2.45	0.00	1.71	0.00	0.74	0.00	21.46	0.51	64.11	0.09	27.51	0.00
2.76	0.00	5.19	0.00	0.94	0.00	0.27	0.00	0.67	0.00	0.88	0.00	0.57	0.00	0.31	0.00	6.51	0.12	14.86	0.02	6.28	0.00
1.34	0.00	4.03	0.00	0.71	0.00	0.14	0.00	0.56	0.00	0.58	0.00	0.33	0.00	0.25	0.00	4.51	0.06	7.35	0.01	3.13	0.00
1.82	0.00	3.39	0.00	0.96	0.00	0.27	0.00	0.68	0.00	0.67	0.00	0.43	0.00	0.24	0.00	6.28	0.08	10.56	0.01	4.48	0.00
3.90	0.01	11.44	0.00	2.02	0.00	0.41	0.00	1.61	0.00	1.85	0.00	0.89	0.00	0.97	0.00	23.80	0.19	23.96	0.03	10.05	0.00
4.35	0.01	14.21	0.00	1.96	0.00	0.37	0.00	1.60	0.00	1.43	0.00	0.79	0.00	0.64	0.00	14.57	0.21	26.05	0.04	11.09	0.00
0.12	0.00	0.34	0.00	0.10	0.00	0.02	0.00	0.08	0.00	0.06	0.00	0.03	0.00	0.03	0.00	0.40	0.01	0.71	0.00	0.30	0.00
0.39	0.00	1.66	0.00	0.35	0.00	0.05	0.00	0.30	0.00	0.45	0.00	0.16	0.00	0.29	0.00	4.78	0.02	2.93	0.00	1.21	0.00
1.58	0.00	3.93	0.00	0.86	0.00	0.20	0.00	0.66	0.00	1.01	0.00	0.53	0.00	0.48	0.00	18.95	0.08	10.24	0.01	4.22	0.00
21.90	0.04	41.98	0.00	6.73	0.00	1.89	0.00	4.84	0.00	6.00	0.00	3.67	0.00	2.33	0.00	74.95	0.97	122.52	0.16	51.80	0.00
0.77	0.00	2.83	0.00	0.35	0.00	0.06	0.00	0.29	0.00	0.27	0.00	0.12	0.00	0.15	0.00	3.40	0.04	4.61	0.01	1.94	0.00
3.65	0.01	7.21	0.00	1.96	0.00	0.54	0.00	1.42	0.00	1.63	0.00	1.03	0.00	0.60	0.00	21.67	0.16	20.07	0.03	8.53	0.00
0.16	0.00	0.63	0.00	0.09	0.00	0.01	0.00	0.08	0.00	0.07	0.00	0.03	0.00	0.04	0.00	0.66	0.01	0.90	0.00	0.38	0.00
0.31	0.00	0.75	0.00	0.08	0.00	0.02	0.00	0.06	0.00	0.14	0.00	0.08	0.00	0.07	0.00	1.49	0.01	1.88	0.00	0.78	0.00
264.13	0.51	571.96	0.06	101.34	0.02	26.06	0.05	75.28	0.00	72.22	0.00	46.71	0.00	25.51	0.01	659.78	10.91	1,371.64	1.87	590.91	0.00
1.23	0.00	4.07	0.00	0.76	0.00	0.14	0.00	0.62	0.00	0.42	0.00	0.22	0.00	0.20	0.00	3.21	0.05	6.71	0.01	2.88	0.00
2.67	0.01	6.01	0.00	1.08	0.00	0.27	0.00	0.81	0.00	1.06	0.00	0.59	0.00	0.47	0.00	22.93	0.14	18.14	0.02	7.54	0.00
0.10	0.00	0.31	0.00	0.09	0.00	0.02	0.00	0.07	0.00	0.04	0.00	0.02	0.00	0.02	0.00	0.41	0.01	0.68	0.00	0.29	0.00
0.52	0.00	1.38	0.00	0.32	0.00	0.07	0.00	0.25	0.00	0.14	0.00	0.08	0.00	0.06	0.00	2.00	0.02	2.56	0.00	1.07	0.00
0.55	0.00	1.21	0.00	0.13	0.00	0.03	0.00	0.10	0.00	0.21	0.00	0.12	0.00	0.09	0.00	2.09	0.02	2.88	0.00	1.21	0.00
0.05	0.00	0.16	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.23	0.00	0.28	0.00	0.12	0.00
0.09	0.00	0.26	0.00	0.07	0.00	0.01	0.00	0.06	0.00	0.07	0.00	0.03	0.00	0.04	0.00	0.44	0.01	0.80	0.00	0.34	0.00
0.50	0.00	0.96	0.00	0.23	0.00	0.06	0.00	0.16	0.00	0.18	0.00	0.10	0.00	0.07	0.00	1.64	0.03	3.16	0.00	1.35	0.00
0.18	0.00	0.70	0.00	0.13	0.00	0.02	0.00	0.11	0.00	0.07	0.00	0.03	0.00	0.04	0.00	0.40	0.01	0.85	0.00	0.36	0.00
0.15	0.00	0.57	0.00	0.09	0.00	0.01	0.00	0.07	0.00	0.06	0.00	0.04	0.00	0.02	0.00	0.59	0.01	0.66	0.00	0.28	0.00
1.78	0.00	5.01	0.00	0.86	0.00	0.18	0.00	0.68	0.00	0.95	0.00	0.49	0.00	0.46	0.00	13.78	0.09	11.05	0.01	4.61	0.00
0.46	0.00	1.62	0.00	0.35	0.00	0.06	0.00	0.29	0.00	0.28	0.00	0.12	0.00	0.16	0.00	3.96	0.02	2.37	0.00	0.99	0.00
11.01	0.03	37.77	0.00	4.90	0.00	0.88	0.00	4.02	0.00	3.44	0.00	1.95	0.00	1.49	0.00	31.86	0.48	60.61	0.08	25.97	0.00
0.11	0.00	0.33	0.00	0.06	0.00	0.01	0.00	0.05	0.00	0.05	0.00	0.03	0.00	0.02	0.00	0.41	0.01	0.70	0.00	0.29	0.00
0.66	0.00	2.09	0.00	0.36	0.00	0.07	0.00	0.29	0.00	0.30	0.00	0.13	0.00	0.17	0.00	5.15	0.03	3.81	0.01	1.59	0.00
0.32	0.00	0.94	0.00	0.28	0.00	0.06	0.00	0.23	0.00	0.17	0.00	0.09	0.00	0.08	0.00	1.30	0.02	2.25	0.00	0.95	0.00
0.21	0.00	0.50	0.00	0.09	0.00	0.02	0.00	0.07	0.00	0.08	0.00	0.04	0.00	0.04	0.00	0.98	0.01	1.30	0.00	0.54	0.00
0.22	0.00	0.52	0.00	0.05	0.00	0.01	0.00	0.04	0.00	0.05	0.00	0.03	0.00	0.02	0.00	0.58	0.01	1.48	0.00	0.63	0.00
4.77	0.01	11.69	0.00	2.28	0.00	0.53	0.00	1.75	0.00	2.29	0.00	1.30	0.00	0.99	0.00	35.65	0.22	27.37	0.04	11.47	0.00
1.94	0.01	7.97	0.00	1.03	0.00	0.16	0.00	0.87	0.00	1.00	0.00	0.49	0.00	0.50	0.00	8.71	0.09	11.67	0.02	4.92	0.00
3.73	0.01	9.52	0.00	1.26	0.00	0.29	0.00	0.98	0.00	0.79	0.00	0.49	0.00	0.29	0.00	10.08	0.19	24.50	0.03	10.53	0.00
0.84	0.00	1.92	0.00	0.33	0.00	0.08	0.00	0.24	0.00	0.36	0.00	0.22	0.00	0.14	0.00	4.39	0.04	4.78	0.01	2.00	0.00
0.07	0.00	0.21	0.00	0.06	0.00	0.01	0.00	0.05	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.20	0.00	0.54	0.00	0.23	0.00
0.41	0.00	0.91	0.00	0.27	0.00	0.07	0.00	0.20	0.00	0.15	0.00	0.09	0.00	0.06	0.00	1.44	0.02	2.28	0.00	0.97	0.00
1.85	0.01	7.55	0.00	0.99	0.00	0.15	0.00	0.84	0.00	0.70	0.00	0.31	0.00	0.39	0.00	9.89	0.08	10.38	0.01	4.35	0.00
7.93	0.02	16.82	0.00	4.51	0.00	1.18	0.00	3.33	0.00	3.33	0.00	1.89	0.00	1.43	0.00	65.58	0.35	44.11	0.06	18.52	0.00
0.44	0.00	1.45	0.00	0.19	0.00	0.04	0.00	0.16	0.00	0.28	0.00	0.14	0.00	0.15	0.00	2.92	0.02	2.89	0.00	1.20	0.00
4.94	0.01	14.96	0.00	2.24	0.00	0.44	0.00	1.79	0.00	1.86	0.00	1.09	0.00	0.77	0.00	17.28	0.24	30.13	0.04	12.83	0.00
0.11	0.00	0.36	0.00	0.06	0.00	0.01	0.00	0.05	0.00	0.04	0.00	0.02	0.00	0.02	0.00	0.47	0.01	0.78	0.00	0.33	0.00
18.46	0.03	37.42	0.00	6.15	0.00	1.66	0.00	4.49	0.00	6.51	0.00	3.78	0.00	2.73	0.00	112.86	0.83	104.51	0.14	43.87	0.00
1.02	0.00	3.20	0.00	0.53	0.00	0.10	0.00	0.43	0.00	0.29	0.00	0.16	0.00	0.13	0.00	3.43	0.04	5.34	0.01	2.30	0.00
0.20	0.00	0.65	0.00	0.14	0.00	0.03	0.00	0.11	0.00	0.13	0.00	0.07	0.00	0.06	0.00	2.20	0.01	1.03	0.00	0.44	0.00
14.96	0.04	39.92	0.00	5.62	0.00	1.23	0.00	4.39	0.00	4.07	0.00	2.60	0.00	1.47	0.00	36.03	0.73	91.74	0.13	39.59	0.00
2.90	0.01	8.47	0.00	1.69	0.00	0.35	0.00	1.34	0.00	0.86	0.00	0.51	0.00	0.35	0.00	10.85	0.13	16.56	0.02	7.08	0.00
3.82	0.01	13.07	0.00	1.63	0.00	0.29	0.00	1.34	0.00	1.74	0.00	0.93	0.00	0.81	0.00	16.02	0.18	22.91	0.03	9.71	0.00
4.55	0.01	13.91	0.00	2.01	0.00	0.40	0.00	1.61	0.00	1.79	0.00	0.93	0.00	0.86	0.00	26.20	0.21	26.84	0.04	11.24	0.00
5.38	0.02	19.68	0.00	2.62	0.00	0.45	0.00	2.17	0.00	2.51	0.00	1.08	0.00	1.43	0.00	31.95	0.28	35.08	0.05	14.77	0.00
5.20	0.02	16.75	0.00	3.86	0.00	0.73	0.00	3.13	0.00	2.34	0.00	1.28	0.00	1.06	0.00	21.32	0.21	26.41	0.04	11.22	0.00
3.72	0.01	7.17	0.00	1.89	0.00	0.53	0.00	1.36	0.00	1.43	0.00	0.87	0.00	0.56	0.00	22.77	0.15	18.38	0.02	7.72	0.00
18.56	0.04	40.38	0.00	4.45	0.00	1.14	0.00	3.31	0.00	5.59	0.00	3.14	0.00	2.45	0.00	85.81	0.92	116.06	0.15	48.32	0.00
1.29	0.00	4.19	0.00	0.72	0.00	0.13	0.00	0.58	0.00	0.61	0.00	0.33	0.00	0.28	0.00	7.90	0.06	7.35	0.01	3.10	0.00
0.76	0.00	2.43	0.00	0.41	0.00	0.08	0.00	0.33	0.00	0.29	0.00	0.14	0.00	0.15	0.00	3.30	0.04	4.44	0.01	1.88	0.00
1.24	0.00	5.37	0.00	0.73	0.00	0.11	0.00	0.62	0.00	0.74	0.00	0.27	0.00	0.47	0.00	10.50	0.07	8.47	0.01	3.52	0.00
5.76	0.01	14.88	0.00	1.68	0.00	0.38	0.00	1.30	0.00	1.46	0.00	0.84	0.00	0.62	0.00	14.72	0.30	37.26	0.05	15.87	0.00
0.60	0.00	3.52	0.00	0.50	0.00	0.11	0.00	0.39	0.00	1.05	0.00	0.51	0.00	0.54	0.00	25.48	0.04	5.08	0.01	2.10	0.00
1.59	0.00	3.45	0.00	0.88	0.00	0.22	0.00	0.65	0.00	0.76	0.00	0.44	0.00	0.32	0.00	10.67	0.07	8.27	0.01	3.50	0.00
0.38	0.00	0.98	0.00	0.24	0.00	0.05	0.00	0.18	0.00	0.18	0.00	0.11	0.00	0.07	0.00	1.47	0.02	2.49	0.00	1.06	0.00
0.77	0.00	1.50	0.00	0.43	0.00	0.12	0.00	0.31	0.00	0.26	0.00	0.16	0.00	0.10	0.00	2.38	0.05	5.79	0.01	2.47	0.00
8.00	0.02	19.83	0.00	4.75	0.00	1.10	0.00	3.65	0.00	2.96	0.00	1.62	0.00	1.34	0.00	46.48	0.39	49.28	0.07	20.70	0.00
0.37	0.00	1.04	0.00	0.14	0.00	0.03	0.00	0.11	0.00	0.12	0.00	0.07	0.00	0.05	0.00	1.63	0.02	2.55	0.00	1.08	0.00
0.38	0.00	1.16	0.00	0.26	0.00	0.05	0.00	0.21	0.00	0.14	0.00	0.07	0.00	0.07	0.00	1.86	0.02	2.26	0.00	0.95	0.00
0.14	0.00	0.42	0.00	0.09	0.00	0.02	0.00	0.07	0.00	0.06	0.00	0.03	0.00	0.03	0.00	0.50	0.01	0.99	0.00	0.42	0.00

$ PM Incidence Lung Cancer	PM HA Cardio Cerebro and Peripheral Vascular Disease	$ PM HA Cardio Cerebro and Peripheral Vascular Disease	PM HA Alzheimers Disease	$ PM HA Alzheimers Disease	PM HA Parkinsons Disease	$ PM HA Parkinsons Disease	PM Incidence Stroke	$ PM Incidence Stroke	PM Incidence Out of Hospital Cardiac Arrest	$ PM Incidence Out of Hospital Cardiac Arrest	PM ER Visits All Cardiac Outcomes	$ PM ER Visits All Cardiac Outcomes	O3 ER Visits, Asthma	$ O3 ER Visits, Asthma	O3 School Loss Days, All Cause	$ O3 School Loss Days, All Cause
1.61	0.00	2.10	0.00	2.95	0.00	0.74	0.00	2.07	0.00	0.48	0.00	0.40	0.00	0.01	0.26	440.24
0.45	0.00	0.71	0.00	0.69	0.00	0.19	0.00	0.54	0.00	0.13	0.00	0.16	0.00	0.00	0.07	116.30
0.26	0.00	0.42	0.00	0.46	0.00	0.11	0.00	0.32	0.00	0.07	0.00	0.07	0.00	0.00	0.05	89.68
0.41	0.00	0.54	0.00	0.74	0.00	0.18	0.00	0.50	0.00	0.11	0.00	0.11	0.00	0.00	0.04	75.11
1.26	0.00	1.83	0.00	2.36	0.00	0.58	0.00	1.63	0.00	0.32	0.00	0.26	0.00	0.00	0.15	258.27
0.90	0.00	0.97	0.00	1.39	0.00	0.39	0.00	1.08	0.00	0.25	0.00	0.20	0.00	0.01	0.19	319.34
0.03	0.00	0.04	0.00	0.05	0.00	0.01	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	7.56
0.28	0.00	0.38	0.00	1.59	0.00	0.13	0.00	0.37	0.00	0.06	0.00	0.04	0.00	0.00	0.02	37.43
0.85	0.00	1.28	0.00	1.78	0.00	0.40	0.00	1.12	0.00	0.19	0.00	0.15	0.00	0.00	0.05	89.24
4.28	0.00	6.66	0.00	7.10	0.00	1.86	0.00	5.25	0.00	1.20	0.00	1.03	0.00	0.01	0.56	947.71
0.33	0.00	0.28	0.00	0.69	0.00	0.15	0.00	0.41	0.00	0.07	0.00	0.04	0.00	0.00	0.04	63.39
0.78	0.00	1.56	0.00	1.44	0.00	0.36	0.00	1.02	0.00	0.22	0.00	0.27	0.00	0.00	0.09	160.43
0.04	0.00	0.05	0.00	0.06	0.00	0.02	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.01	13.93
0.09	0.00	0.15	0.00	0.16	0.00	0.04	0.00	0.12	0.00	0.02	0.00	0.02	0.00	0.00	0.01	16.98
38.27	0.00	57.01	0.00	71.89	0.00	16.38	0.00	45.98	0.00	11.44	0.01	11.34	0.00	0.23	7.50	12,737.15
0.22	0.00	0.35	0.00	0.40	0.00	0.10	0.00	0.27	0.00	0.06	0.00	0.06	0.00	0.00	0.05	91.58
1.22	0.00	1.60	0.00	2.52	0.00	0.57	0.00	1.60	0.00	0.29	0.00	0.23	0.00	0.00	0.08	134.69
0.03	0.00	0.04	0.00	0.05	0.00	0.01	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.00	6.90
0.09	0.00	0.14	0.00	0.16	0.00	0.04	0.00	0.12	0.00	0.03	0.00	0.03	0.00	0.00	0.02	30.81
0.13	0.00	0.18	0.00	0.25	0.00	0.06	0.00	0.16	0.00	0.03	0.00	0.03	0.00	0.00	0.02	27.53
0.01	0.00	0.01	0.00	0.03	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.56
0.03	0.00	0.05	0.00	0.05	0.00	0.01	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	6.07
0.10	0.00	0.14	0.00	0.18	0.00	0.05	0.00	0.13	0.00	0.03	0.00	0.03	0.00	0.00	0.01	21.73
0.03	0.00	0.04	0.00	0.05	0.00	0.01	0.00	0.03	0.00	0.01	0.00	0.01	0.00	0.00	0.01	15.50
0.02	0.00	0.03	0.00	0.03	0.00	0.01	0.00	0.02	0.00	0.01	0.00	0.01	0.00	0.00	0.01	12.67
0.68	0.00	0.98	0.00	1.39	0.00	0.31	0.00	0.87	0.00	0.16	0.00	0.13	0.00	0.00	0.07	112.84
0.18	0.00	0.27	0.00	0.40	0.00	0.09	0.00	0.24	0.00	0.04	0.00	0.04	0.00	0.00	0.02	35.93
1.72	0.00	2.23	0.00	6.85	0.00	0.74	0.00	2.09	0.00	0.52	0.00	0.40	0.00	0.01	0.50	844.22
0.03	0.00	0.02	0.00	0.05	0.00	0.01	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.00	0.00	7.42
0.29	0.00	0.37	0.00	0.63	0.00	0.14	0.00	0.38	0.00	0.07	0.00	0.05	0.00	0.00	0.03	47.09
0.08	0.00	0.07	0.00	0.15	0.00	0.04	0.00	0.10	0.00	0.02	0.00	0.02	0.00	0.00	0.01	21.24
0.06	0.00	0.08	0.00	0.11	0.00	0.03	0.00	0.08	0.00	0.02	0.00	0.01	0.00	0.00	0.01	11.40
0.04	0.00	0.04	0.00	0.06	0.00	0.02	0.00	0.05	0.00	0.01	0.00	0.01	0.00	0.00	0.01	11.76
1.51	0.00	2.67	0.00	2.95	0.00	0.69	0.00	1.93	0.00	0.37	0.00	0.37	0.00	0.00	0.15	261.76
0.67	0.00	0.81	0.00	1.64	0.00	0.31	0.00	0.87	0.00	0.16	0.00	0.11	0.00	0.00	0.10	177.81
0.55	0.00	0.75	0.00	0.98	0.00	0.25	0.00	0.69	0.00	0.17	0.00	0.14	0.00	0.00	0.13	215.53
0.24	0.00	0.33	0.00	0.43	0.00	0.11	0.00	0.31	0.00	0.06	0.00	0.06	0.00	0.00	0.03	42.89
0.01	0.00	0.02	0.00	0.02	0.00	0.01	0.00	0.02	0.00	0.00	0.00	0.01	0.00	0.00	0.00	4.67
0.09	0.00	0.13	0.00	0.16	0.00	0.04	0.00	0.12	0.00	0.02	0.00	0.03	0.00	0.00	0.01	20.54
0.59	0.00	0.63	0.00	1.88	0.00	0.28	0.00	0.78	0.00	0.15	0.00	0.09	0.00	0.00	0.10	168.52
2.84	0.00	4.01	0.00	7.72	0.00	1.32	0.00	3.68	0.00	0.67	0.00	0.59	0.00	0.01	0.22	376.62
0.21	0.00	0.23	0.00	0.44	0.00	0.10	0.00	0.27	0.00	0.05	0.00	0.03	0.00	0.00	0.02	32.76
1.00	0.00	1.20	0.00	3.47	0.00	0.40	0.00	1.12	0.00	0.27	0.00	0.24	0.00	0.00	0.20	336.87
0.03	0.00	0.04	0.00	0.06	0.00	0.01	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.00	8.06
5.03	0.00	6.64	0.00	9.28	0.00	2.36	0.00	6.66	0.00	1.32	0.00	1.03	0.00	0.01	0.49	836.17
0.17	0.00	0.28	0.00	0.30	0.00	0.08	0.00	0.21	0.00	0.05	0.00	0.05	0.00	0.00	0.04	71.04
0.04	0.00	0.11	0.00	0.07	0.00	0.02	0.00	0.05	0.00	0.01	0.00	0.02	0.00	0.00	0.01	14.34
2.26	0.00	3.14	0.00	7.81	0.00	0.97	0.00	2.73	0.00	0.71	0.00	0.60	0.00	0.02	0.52	889.90
0.45	0.00	0.63	0.00	1.34	0.00	0.18	0.00	0.52	0.00	0.13	0.00	0.12	0.00	0.00	0.11	189.48
1.18	0.00	1.34	0.00	1.77	0.00	0.52	0.00	1.44	0.00	0.28	0.00	0.21	0.00	0.00	0.17	293.90
1.24	0.00	1.70	0.00	2.24	0.00	0.56	0.00	1.57	0.00	0.32	0.00	0.26	0.00	0.00	0.18	312.12
1.71	0.00	1.98	0.00	6.01	0.00	0.79	0.00	2.21	0.00	0.44	0.00	0.32	0.00	0.01	0.26	441.98
1.05	0.00	1.62	0.00	2.44	0.00	0.48	0.00	1.34	0.00	0.28	0.00	0.27	0.00	0.01	0.22	372.80
0.83	0.00	1.69	0.00	1.54	0.00	0.39	0.00	1.09	0.00	0.22	0.00	0.27	0.00	0.00	0.10	161.37
5.16	0.00	6.57	0.00	9.49	0.00	2.33	0.00	6.52	0.00	1.36	0.00	0.91	0.00	0.01	0.54	915.54
0.37	0.00	0.54	0.00	0.96	0.00	0.17	0.00	0.46	0.00	0.09	0.00	0.08	0.00	0.00	0.06	94.17
0.15	0.00	0.28	0.00	0.25	0.00	0.07	0.00	0.19	0.00	0.04	0.00	0.04	0.00	0.00	0.03	54.72
0.72	0.00	0.71	0.00	2.10	0.00	0.33	0.00	0.93	0.00	0.16	0.00	0.09	0.00	0.00	0.07	121.64
1.23	0.00	1.35	0.00	3.02	0.00	0.53	0.00	1.49	0.00	0.35	0.00	0.24	0.00	0.00	0.20	334.87
1.10	0.00	1.52	0.00	2.42	0.00	0.57	0.00	1.60	0.00	0.23	0.00	0.16	0.00	0.00	0.02	34.18
0.38	0.00	0.69	0.00	0.70	0.00	0.17	0.00	0.48	0.00	0.10	0.00	0.11	0.00	0.00	0.05	77.05
0.09	0.00	0.14	0.00	0.16	0.00	0.04	0.00	0.12	0.00	0.03	0.00	0.03	0.00	0.00	0.01	21.92
0.16	0.00	0.26	0.00	0.23	0.00	0.07	0.00	0.21	0.00	0.05	0.00	0.05	0.00	0.00	0.02	33.65
2.48	0.00	3.34	0.00	4.87	0.00	1.16	0.00	3.25	0.00	0.63	0.00	0.55	0.00	0.01	0.26	446.38
0.08	0.00	0.11	0.00	0.12	0.00	0.03	0.00	0.10	0.00	0.02	0.00	0.02	0.00	0.00	0.01	23.27
0.09	0.00	0.12	0.00	0.16	0.00	0.04	0.00	0.12	0.00	0.03	0.00	0.02	0.00	0.00	0.02	25.71
0.03	0.00	0.04	0.00	0.05	0.00	0.01	0.00	0.04	0.00	0.01	0.00	0.01	0.00	0.00	0.01	9.27

DIVERT ORGANIC WASTE, FOOD WASTE, AND RECYCLABLES FROM LANDFILLS

Location(s)	Sector	Emissions Modification(s)
Clay, Florida		
Duval, Florida		
Flagler, Florida	Waste Disposal & Recycling	
Nassau, Florida		
St Johns, Florida		

Totals		
PM 2.5	0.010792	microgram/m3
O3	0.006821	microgram/m3

FIPS	State	County	Base PM 2.5	Control PM 2.5	Delta PM 2.5	Base O3	Control O3	Delta O3	$ Total Health Benefits(low estimate)	$ Total Health Benefits(high estimate)	$ PM Total Health Benefits (low estimate)	$ PM Total Health Benefits (high estimate)	$ O3 Total Health Benefits
12001	Florida	Alachua	4.87	4.87	0.00	13.44	13.44	0.00	304,106.57	592,740.08	257,983.09	546,618.50	43,837.88
12003	Florida	Baker	4.71	4.70	0.00	14.12	14.12	0.00	77,752.14	159,188.08	63,331.33	144,766.27	13,918.81
12005	Florida	Bay	3.53	3.53	0.00	13.57	13.57	0.00	35,115.90	62,569.55	21,780.07	49,233.72	12,926.24
12007	Florida	Bradford	5.13	5.12	0.00	14.07	14.07	0.00	90,019.89	186,099.88	74,858.59	175,466.78	14,765.88
12009	Florida	Brevard	4.23	4.23	0.00	12.93	12.93	0.00	245,679.77	448,425.63	188,216.06	390,961.92	56,189.16
12011	Florida	Broward	4.37	4.37	0.00	10.21	10.21	0.00	122,042.92	228,553.68	93,453.34	199,964.09	27,195.20
12013	Florida	Calhoun	4.07	4.07	0.00	14.62	14.62	0.00	3,685.73	6,384.52	2,285.26	4,988.05	1,361.43
12015	Florida	Charlotte	3.49	3.49	0.00	10.49	10.49	0.00	46,927.22	78,105.88	31,810.66	62,989.32	14,941.10
12017	Florida	Citrus	4.79	4.79	0.00	13.22	13.22	0.00	172,402.25	310,015.34	133,200.15	270,813.24	38,738.96
12019	Florida	Clay	5.09	5.09	0.01	14.22	14.22	0.01	1,493,121.52	3,000,609.94	1,310,588.50	2,818,076.91	176,605.07
12021	Florida	Collier	3.04	3.04	0.00	9.23	9.23	0.00	37,130.74	64,167.53	27,925.95	54,962.74	8,911.49
12023	Florida	Columbia	4.65	4.65	0.00	13.76	13.76	0.00	137,579.01	263,671.76	109,406.00	235,498.76	27,448.12
12027	Florida	De Soto	3.81	3.81	0.00	11.06	11.06	0.00	5,455.31	9,910.64	3,584.28	8,039.61	1,803.25
12029	Florida	Dixie	3.18	3.18	0.00	11.84	11.84	0.00	15,911.04	30,053.81	11,465.79	25,608.56	4,361.73
12031	Florida	Duval	5.62	5.60	0.02	15.61	15.60	0.01	12,956,554.23	28,145,941.22	11,682,625.84	26,872,012.83	1,216,912.37
12033	Florida	Escambia	4.39	4.39	0.00	16.43	16.43	0.00	29,572.43	51,927.41	18,450.73	40,805.70	10,729.62
12035	Florida	Flagler	4.27	4.27	0.00	13.35	13.34	0.00	661,788.68	1,269,676.19	598,469.09	1,206,356.60	62,075.41
12037	Florida	Franklin	3.05	3.05	0.00	12.17	12.17	0.00	3,453.72	6,265.47	2,305.71	5,117.45	1,115.99
12039	Florida	Gadsden	4.96	4.95	0.00	14.91	14.91	0.00	11,879.40	21,885.97	7,999.78	18,006.34	3,740.48
12041	Florida	Gilchrist	3.99	3.99	0.00	12.63	12.63	0.00	21,757.45	40,857.80	16,672.98	35,793.32	4,933.00
12043	Florida	Glades	3.37	3.37	0.00	10.96	10.96	0.00	1,716.81	3,003.97	1,046.50	2,333.65	652.72
12045	Florida	Gulf	3.04	3.04	0.00	12.38	12.37	0.00	4,271.24	7,512.03	2,732.27	5,973.06	1,513.67
12047	Florida	Hamilton	4.60	4.60	0.00	14.18	14.18	0.00	12,839.67	25,760.75	10,059.30	22,980.37	2,693.56
12049	Florida	Hardee	4.30	4.30	0.00	13.93	13.93	0.00	4,496.20	8,240.51	2,873.95	6,618.25	1,548.53
12051	Florida	Hendry	3.64	3.64	0.00	11.15	11.15	0.00	3,533.13	6,437.42	2,281.98	5,186.27	1,195.26
12053	Florida	Hernando	5.18	5.18	0.00	14.23	14.23	0.00	133,981.54	244,227.58	105,438.94	215,684.98	27,972.65
12055	Florida	Highlands	3.61	3.61	0.00	11.02	11.02	0.00	34,368.61	57,975.43	23,619.65	47,226.47	10,576.82
12057	Florida	Hillsborough	6.15	6.15	0.00	15.33	15.33	0.00	296,776.09	557,594.70	216,187.99	477,006.61	76,604.60
12059	Florida	Holmes	4.40	4.40	0.00	15.40	15.40	0.00	3,965.25	6,932.93	2,423.64	5,395.32	1,506.46
12061	Florida	Indian River	3.19	3.19	0.00	10.81	10.81	0.00	46,416.65	81,997.70	36,401.85	71,982.90	9,803.87
12063	Florida	Jackson	4.69	4.69	0.00	15.43	15.43	0.00	10,881.49	19,556.36	7,540.55	16,215.41	3,249.61
12065	Florida	Jefferson	4.75	4.75	0.00	14.20	14.20	0.00	7,084.54	12,711.49	5,074.09	10,701.04	1,962.75
12067	Florida	Lafayette	3.66	3.66	0.00	12.91	12.91	0.00	5,036.69	9,656.37	3,792.29	8,411.97	1,190.84
12069	Florida	Lake	5.66	5.66	0.00	14.71	14.71	0.00	300,246.45	567,227.75	250,691.87	517,673.16	48,088.72
12071	Florida	Lee	3.46	3.46	0.00	9.96	9.96	0.00	91,441.74	160,807.75	65,594.79	134,960.81	24,973.67
12073	Florida	Leon	5.08	5.08	0.00	14.53	14.53	0.00	65,020.73	117,200.97	45,921.60	98,101.85	18,200.01
12075	Florida	Levy	3.76	3.76	0.00	12.11	12.11	0.00	43,266.10	83,760.84	33,414.04	73,908.78	9,614.83
12077	Florida	Liberty	3.78	3.78	0.00	13.75	13.75	0.00	1,541.50	3,042.01	1,045.52	2,546.03	474.72
12079	Florida	Madison	4.36	4.36	0.00	14.13	14.13	0.00	13,509.91	25,069.47	10,102.73	21,662.29	3,320.04
12081	Florida	Manatee	4.41	4.41	0.00	11.93	11.93	0.00	81,455.21	146,980.40	58,709.83	124,235.03	21,964.23
12083	Florida	Marion	5.24	5.24	0.00	13.53	13.53	0.00	646,482.95	1,209,040.84	544,488.50	1,106,846.40	99,978.75
12085	Florida	Martin	3.31	3.31	0.00	10.86	10.86	0.00	31,425.94	54,052.60	23,573.17	45,799.83	8,111.16
12086	Florida	Miami-Dade	3.54	3.54	0.00	7.23	7.23	0.00	124,164.46	235,346.42	96,563.30	205,745.26	26,140.67
12087	Florida	Monroe	1.93	1.93	0.00	6.03	6.03	0.00	3,735.63	7,547.98	2,812.26	6,624.61	888.34
12089	Florida	Nassau	4.89	4.88	0.01	15.23	15.22	0.01	1,010,458.62	2,006,361.95	888,628.17	1,884,531.50	119,008.64
12091	Florida	Okaloosa	4.01	4.01	0.00	15.50	15.50	0.00	21,736.95	36,945.23	13,279.16	28,487.43	8,134.65
12093	Florida	Okeechobee	3.32	3.32	0.00	10.75	10.75	0.00	7,477.05	14,039.32	5,266.80	11,829.10	2,141.88
12095	Florida	Orange	5.81	5.81	0.00	15.29	15.29	0.00	386,531.79	762,006.32	305,853.23	681,327.77	75,913.21
12097	Florida	Osceola	4.41	4.41	0.00	12.72	12.72	0.00	68,609.72	133,107.67	51,550.11	116,048.06	16,132.04
12099	Florida	Palm Beach	4.01	4.01	0.00	11.27	11.27	0.00	160,167.12	290,360.41	125,161.29	255,354.58	33,721.40
12101	Florida	Pasco	5.91	5.91	0.00	15.63	15.63	0.00	222,320.36	415,972.21	165,702.64	359,354.49	50,086.74
12103	Florida	Pinellas	4.53	4.53	0.00	13.31	13.31	0.00	277,632.28	508,320.17	203,397.06	434,084.95	72,204.57
12105	Florida	Polk	5.48	5.48	0.00	14.05	14.05	0.00	192,683.38	353,833.33	139,895.37	301,045.32	50,964.26
12107	Florida	Putnam	4.92	4.92	0.00	13.70	13.70	0.00	302,429.75	605,777.75	254,469.86	557,817.90	46,838.42
12109	Florida	St Johns	4.72	4.71	0.01	13.80	13.80	0.01	2,661,320.86	5,169,902.49	2,390,220.16	4,898,801.80	263,709.99
12111	Florida	St Lucie	3.10	3.10	0.00	10.62	10.62	0.00	55,938.49	101,921.42	41,713.76	87,696.69	13,803.54
12113	Florida	Santa Rosa	4.34	4.34	0.00	16.34	16.34	0.00	18,047.88	31,054.27	11,074.38	24,080.77	6,735.27
12115	Florida	Sarasota	3.50	3.50	0.00	10.40	10.39	0.00	107,809.58	183,487.59	77,532.82	153,150.83	29,794.45
12117	Florida	Seminole	6.40	6.40	0.00	16.24	16.24	0.00	231,444.42	439,312.02	185,524.38	393,391.98	44,120.71
12119	Florida	Sumter	5.83	5.83	0.00	14.68	14.68	0.00	151,733.70	261,257.41	127,091.65	236,615.36	24,458.13
12121	Florida	Suwannee	4.28	4.28	0.00	13.56	13.56	0.00	61,311.94	111,948.42	47,053.52	97,689.99	13,909.90
12123	Florida	Taylor	3.44	3.44	0.00	12.79	12.79	0.00	12,680.22	24,272.03	9,137.25	20,729.06	3,441.13
12125	Florida	Union	4.87	4.87	0.00	13.83	13.83	0.00	33,372.56	88,297.02	28,990.70	83,915.16	4,215.92
12127	Florida	Volusia	5.07	5.07	0.00	14.33	14.33	0.00	772,457.33	1,498,465.46	647,366.16	1,373,374.29	122,275.15
12129	Florida	Wakulla	3.95	3.95	0.00	13.35	13.35	0.00	10,164.62	18,503.09	6,478.44	14,816.92	3,582.92
12131	Florida	Walton	3.90	3.90	0.00	14.80	14.80	0.00	10,366.03	18,321.48	6,627.12	14,582.56	3,625.40
12133	Florida	Washington	4.20	4.20	0.00	14.97	14.97	0.00	4,546.24	8,075.70	2,751.49	6,280.95	1,710.10

FIPS	County	Total Mortality(low estimate)	$ Total Mortality(low estimate)	Total Mortality(high estimate)	$ Total Mortality(high estimate)	PM Mortality, All Cause (low)	$ PM Mortality, All Cause (low)	PM Mortality (high)	$ PM Mortality (high)	PM Infant Mortality	$ PM Infant Mortality	Total O3 Mortality	$ Total O3 Mortality	O3 Mortality (Short-term exposure)	$ O3 Mortality (Short-term exposure)
12001	Alachua	0.02	289,201.33	0.04	577,836.74	0.02	250,174.48	0.04	538,809.89	0.00	3,151.45	0.00	39,026.85	0.00	1,682.01
12003	Baker	0.01	74,396.62	0.01	155,831.56	0.00	61,483.98	0.01	142,918.93	0.00	728.28	0.00	12,912.64	0.00	553.98
12005	Bay	0.00	33,347.06	0.00	60,800.70	0.00	21,223.79	0.00	48,677.43	0.00	250.49	0.00	12,123.27	0.00	519.74
12007	Bradford	0.01	86,910.17	0.01	185,577.36	0.00	72,985.56	0.01	171,652.75	0.00	686.11	0.00	13,924.61	0.00	596.84
12009	Brevard	0.02	238,398.85	0.03	441,144.71	0.01	184,822.40	0.03	387,568.26	0.00	860.19	0.00	53,576.45	0.00	2,294.28
12011	Broward	0.01	115,020.84	0.02	221,531.59	0.01	90,654.35	0.01	197,165.10	0.00	673.40	0.00	24,366.49	0.00	1,048.72
12013	Calhoun	0.00	3,527.59	0.00	6,230.38	0.00	2,234.35	0.00	4,937.14	0.00	13.37	0.00	1,293.24	0.00	55.39
12015	Charlotte	0.00	45,945.14	0.01	77,123.80	0.00	31,359.79	0.00	62,538.46	0.00	65.66	0.00	14,585.35	0.00	623.67
12017	Citrus	0.01	169,258.67	0.02	306,871.76	0.01	131,480.31	0.02	269,093.40	0.00	392.56	0.00	37,778.37	0.00	1,615.39
12019	Clay	0.10	1,439,856.24	0.20	2,947,344.66	0.09	1,275,451.07	0.19	2,782,939.48	0.00	8,796.45	0.01	164,405.17	0.00	7,051.54
12021	Collier	0.00	35,710.38	0.00	62,747.17	0.00	27,384.97	0.00	54,421.76	0.00	116.51	0.00	8,325.41	0.00	357.08
12023	Columbia	0.01	133,023.83	0.02	259,116.59	0.01	106,991.10	0.02	233,083.86	0.00	1,019.73	0.00	26,032.73	0.00	1,115.26
12027	De Soto	0.00	5,145.34	0.00	9,600.67	0.00	3,472.05	0.00	7,927.38	0.00	31.06	0.00	1,673.29	0.00	71.81
12029	Dixie	0.00	15,463.01	0.00	29,605.78	0.00	11,270.99	0.00	25,413.75	0.00	44.61	0.00	4,192.03	0.00	179.39
12031	Duval	0.85	12,408,378.23	1.89	27,597,765.22	0.77	11,303,212.43	1.81	26,492,599.42	0.01	178,434.96	0.08	1,105,165.80	0.00	47,517.08
12033	Escambia	0.00	27,928.76	0.00	50,283.73	0.00	17,994.70	0.00	40,349.68	0.00	178.87	0.00	9,934.05	0.00	426.43
12035	Flagler	0.04	648,819.49	0.09	1,256,707.00	0.04	589,227.39	0.08	1,197,114.89	0.00	2,552.42	0.00	59,592.10	0.00	2,551.55
12037	Franklin	0.00	3,309.30	0.00	6,121.05	0.00	2,255.24	0.00	5,066.99	0.00	12.40	0.00	1,054.06	0.00	45.19
12039	Gadsden	0.00	11,250.97	0.00	21,257.53	0.00	7,787.49	0.00	17,794.06	0.00	73.45	0.00	3,463.48	0.00	148.52
12041	Gilchrist	0.00	20,988.78	0.00	40,109.12	0.00	16,333.27	0.00	35,453.61	0.00	82.40	0.00	4,655.51	0.00	199.49
12043	Glades	0.00	1,630.66	0.00	2,917.81	0.00	1,011.48	0.00	2,298.63	0.00	9.87	0.00	619.18	0.00	26.53
12045	Gulf	0.00	4,143.52	0.00	7,384.32	0.00	2,684.37	0.00	5,925.16	0.00	8.09	0.00	1,459.15	0.00	62.47
12047	Hamilton	0.00	12,319.37	0.00	25,240.44	0.00	9,808.33	0.00	22,729.40	0.00	56.06	0.00	2,511.03	0.00	107.74
12049	Hardee	0.00	4,169.86	0.00	7,914.17	0.00	2,762.52	0.00	6,506.83	0.00	34.27	0.00	1,407.33	0.00	60.47
12051	Hendry	0.00	3,258.35	0.00	6,162.64	0.00	2,186.14	0.00	5,090.43	0.00	27.00	0.00	1,072.21	0.00	46.08
12053	Hernando	0.01	130,629.46	0.02	240,875.51	0.01	103,809.98	0.01	214,056.02	0.00	431.12	0.00	26,819.49	0.00	1,148.19
12055	Highlands	0.00	33,472.13	0.00	57,078.94	0.00	23,229.07	0.00	46,835.89	0.00	124.55	0.00	10,243.06	0.00	438.20
12057	Hillsborough	0.02	277,446.30	0.04	538,264.92	0.01	208,764.45	0.03	469,583.06	0.00	2,745.80	0.00	68,681.85	0.00	2,955.26
12059	Holmes	0.00	3,815.77	0.00	6,787.45	0.00	2,376.77	0.00	5,348.45	0.00	12.39	0.00	1,438.99	0.00	61.63
12061	Indian River	0.00	45,224.01	0.01	80,805.06	0.00	35,852.97	0.00	71,434.02	0.00	135.54	0.00	9,371.04	0.00	401.21
12063	Jackson	0.00	10,458.31	0.00	19,133.17	0.00	7,395.44	0.00	16,070.31	0.00	44.23	0.00	3,062.87	0.00	131.26
12065	Jefferson	0.00	6,835.43	0.00	12,462.38	0.00	4,973.43	0.00	10,600.37	0.00	23.19	0.00	1,862.01	0.00	79.75
12067	Lafayette	0.00	4,755.14	0.00	9,374.82	0.00	3,672.09	0.00	8,291.77	0.00	31.66	0.00	1,083.04	0.00	46.58
12069	Lake	0.02	290,443.81	0.04	557,425.10	0.02	245,277.66	0.04	512,258.96	0.00	1,633.30	0.00	45,166.15	0.00	1,936.08
12071	Lee	0.01	87,410.32	0.01	156,776.33	0.00	64,156.42	0.01	133,522.44	0.00	376.37	0.00	23,253.90	0.00	998.15
12073	Leon	0.00	60,646.17	0.01	112,826.41	0.00	44,326.88	0.01	96,507.13	0.00	531.97	0.00	16,319.29	0.00	703.16
12075	Levy	0.00	41,925.16	0.01	82,419.89	0.00	32,778.84	0.01	73,273.58	0.00	159.95	0.00	9,146.32	0.00	391.74
12077	Liberty	0.00	1,444.74	0.00	2,945.25	0.00	1,012.09	0.00	2,512.60	0.00	7.79	0.00	432.65	0.00	18.58
12079	Madison	0.00	13,052.45	0.00	24,612.01	0.00	9,912.92	0.00	21,472.48	0.00	45.98	0.00	3,139.53	0.00	134.47
12081	Manatee	0.01	77,747.38	0.01	143,272.57	0.00	57,324.22	0.01	122,849.42	0.00	344.46	0.00	20,423.16	0.00	876.18
12083	Marion	0.04	630,895.72	0.08	1,193,253.61	0.04	535,316.21	0.08	1,097,674.11	0.00	2,818.09	0.01	95,579.51	0.00	4,092.19
12085	Martin	0.00	30,636.72	0.00	53,263.38	0.00	22,818.24	0.00	45,444.90	0.00	97.36	0.00	7,818.48	0.00	334.58
12086	Miami-Dade	0.01	116,542.73	0.02	225,724.69	0.01	93,378.71	0.01	202,560.67	0.00	661.18	0.00	23,164.03	0.00	997.15
12087	Monroe	0.00	3,551.59	0.00	7,363.94	0.00	2,734.94	0.00	6,547.29	0.00	16.72	0.00	816.65	0.00	35.05
12089	Nassau	0.07	982,314.90	0.14	1,978,218.23	0.06	868,911.52	0.13	1,864,814.85	0.00	6,260.95	0.01	113,403.38	0.00	4,856.46
12091	Okaloosa	0.00	20,385.68	0.00	35,593.96	0.00	12,879.13	0.00	28,087.41	0.00	125.14	0.00	7,506.55	0.00	322.19
12093	Okeechobee	0.00	7,100.00	0.00	13,662.31	0.00	5,090.31	0.00	11,652.62	0.00	53.24	0.00	2,009.69	0.00	86.15
12095	Orange	0.02	360,103.89	0.05	735,578.43	0.02	293,593.53	0.05	669,068.07	0.00	4,096.61	0.00	66,510.36	0.00	2,867.76
12097	Osceola	0.00	63,687.55	0.01	128,185.50	0.00	49,408.85	0.01	113,906.80	0.00	483.17	0.00	14,278.70	0.00	614.86
12099	Palm Beach	0.01	153,594.70	0.02	283,787.99	0.01	122,480.94	0.02	252,674.23	0.00	559.91	0.00	31,113.76	0.00	1,335.49
12101	Pasco	0.01	214,040.52	0.03	407,692.36	0.01	162,041.87	0.02	355,693.71	0.00	944.75	0.00	51,998.65	0.00	2,228.33
12103	Pinellas	0.01	267,278.10	0.03	497,966.00	0.01	199,173.15	0.03	429,861.05	0.00	972.87	0.00	68,104.95	0.00	2,918.63
12105	Polk	0.01	183,490.61	0.02	344,640.56	0.01	136,074.86	0.02	297,224.81	0.00	1,384.66	0.00	47,415.75	0.00	2,033.98
12107	Putnam	0.02	293,485.48	0.04	596,833.52	0.02	248,908.96	0.04	552,257.00	0.00	1,978.93	0.00	44,576.51	0.00	1,908.78
12109	St Johns	0.18	2,583,080.17	0.35	5,091,661.81	0.16	2,334,847.90	0.33	4,843,429.53	0.00	12,420.50	0.02	248,232.28	0.00	10,640.78
12111	St Lucie	0.00	53,695.44	0.01	99,678.38	0.00	40,743.37	0.01	86,726.30	0.00	205.48	0.00	12,952.07	0.00	555.25
12113	Santa Rosa	0.00	17,014.82	0.00	30,021.22	0.00	10,759.72	0.00	23,766.11	0.00	72.36	0.00	6,255.10	0.00	268.35
12115	Sarasota	0.01	105,075.14	0.01	180,693.15	0.01	76,404.96	0.01	152,022.97	0.00	181.74	0.00	28,670.18	0.00	1,227.06
12117	Seminole	0.01	220,725.97	0.03	428,593.57	0.01	180,275.09	0.03	388,142.70	0.00	1,396.94	0.00	40,450.87	0.00	1,737.33
12119	Sumter	0.01	149,631.70	0.02	259,155.41	0.01	125,539.00	0.02	235,062.71	0.00	120.38	0.00	24,092.70	0.00	1,029.64
12121	Suwannee	0.00	59,308.06	0.01	109,944.54	0.00	46,084.63	0.01	96,721.10	0.00	313.63	0.00	13,223.44	0.00	566.33
12123	Taylor	0.00	12,173.02	0.00	23,764.83	0.00	8,931.32	0.00	20,523.13	0.00	51.62	0.00	3,241.70	0.00	138.96
12125	Union	0.00	32,218.29	0.01	87,142.75	0.00	28,335.91	0.01	83,260.37	0.00	152.91	0.00	3,882.38	0.00	166.78
12127	Volusia	0.05	752,093.52	0.10	1,478,101.65	0.04	635,528.97	0.09	1,361,537.10	0.00	2,056.06	0.01	116,564.55	0.00	4,992.01
12129	Wakulla	0.00	9,672.10	0.00	18,008.57	0.00	6,295.79	0.00	14,632.27	0.00	41.08	0.00	3,376.31	0.00	144.72
12131	Walton	0.00	9,852.15	0.00	17,807.59	0.00	6,458.35	0.00	14,413.80	0.00	80.98	0.00	3,393.80	0.00	145.52
12133	Washington	0.00	4,359.88	0.00	7,889.35	0.00	2,689.14	0.00	6,218.61	0.00	14.41	0.00	1,670.74	0.00	71.57

County	Land Area (sq mi)	Land Area (m²)	Air Volume	PM2.5 (lbs)	O3 (lbs)	$ Total Health Benefits (low estimate)	$ Total Health Benefits (high estimate)	Total Mortality (low estimate)	Total Mortality (high estimate)
Duval	762	1973570856	1,973,570,856,000.00	84.03	47.80	12,956,554.23	28,145,941.22	0.85	1.89
Flagler	485	1256144180	1,256,144,180,000.00	11.23	8.39	661,788.68	1,269,676.19	0.04	0.09
Clay	604	1564352752	1,564,352,752,000.00	27.10	19.01	1,493,121.52	3,000,609.94	0.10	0.20
St. Johns	601	1556582788	1,556,582,788,000.00	39.84	24.74	2,661,320.86	5,169,902.49	0.18	0.35
Nassau	649	1680902212	1,680,902,212,000.00	41.23	27.31	1,010,458.62	2,006,361.95	0.07	0.14
NEFL				**203.43**	**127.24**	**18,783,243.91**	**39,592,491.78**	**1.24**	**2.66**

Notes for $PM_{2.5}$ and O_3 Concentration Change Table

This COBRA scenario models co-pollutant reductions resulting from organic waste diversion and increased recycling in Northeast Florida. The measure reduces landfill methane generation and associated VOC and NO_x emissions from decomposition and equipment operation. Scenario inputs assume 10% diversion of organic waste by 2030 and 40% by 2050, along with an increase in recycling from 30% to 60%. Pollutant reductions are proportional to landfill activity decreases and consistent with EPA's Waste Reduction Model (WARM) and NEI waste-sector emissions patterns.

Sources:

U.S. EPA, *COBRA Technical Documentation* (2024)

U.S. EPA, *WARM (Waste Reduction Model)* , 2023

U.S. EPA, *Inventory of U.S. Greenhouse Gas Emissions and Sinks* , 2024

O3 Mortality (Long-term exposure)	$ O3 Mortality (Long-term exposure)	Total Asthma Symptoms	$ Total Asthma Symptoms	PM Asthma Symptoms, Albuterol Use	O3 Asthma Symptoms, Chest Tightness	$ O3 Asthma Symptoms, Chest Tightness	O3 Asthma Symptoms, Cough	$ O3 Asthma Symptoms, Cough	O3 Asthma Symptoms, Shortness of Breath	$ O3 Asthma Symptoms, Shortness of Breath	O3 Asthma Symptoms, Wheeze	$ O3 Asthma Symptoms, Wheeze	Total Asthma Onset	$ Total Asthma Onset	PM Asthma Onset	$ PM Asthma Onset	O3 Asthma Onset	$ O3 Asthma Onset	Total Incidence, Hay Fever/Rhinitis	$ Total Incidence, Hay Fever/Rhinitis	PM Incidence, Hay Fever/Rhinitis
0.00	37,344.83	12.01	1,303.84	5.53	0.93	357.70	1.09	421.93	0.47	180.51	0.88	338.17	0.07	5,071.40	0.04	3,336.05	0.02	1,735.36	0.45	496.68	0.29
0.00	12,358.66	2.82	293.43	1.32	0.21	80.48	0.25	94.93	0.11	40.61	0.20	76.08	0.02	1,241.77	0.01	861.43	0.00	380.34	0.10	115.04	0.07
0.00	11,603.53	1.19	239.63	0.37	0.17	65.92	0.20	77.76	0.09	33.27	0.16	62.32	0.01	557.39	0.00	247.68	0.00	309.70	0.05	50.61	0.02
0.00	13,327.77	2.47	251.24	1.16	0.18	68.90	0.21	81.27	0.09	34.77	0.17	65.14	0.01	1,130.46	0.01	799.05	0.00	331.40	0.09	100.93	0.06
0.00	51,282.18	5.03	749.50	1.98	0.53	205.95	0.63	242.93	0.27	103.93	0.50	194.70	0.03	2,195.67	0.02	1,239.44	0.01	956.24	0.19	209.42	0.11
0.00	23,317.77	5.04	823.14	1.86	0.59	226.27	0.69	266.90	0.30	114.19	0.55	213.92	0.03	2,247.59	0.02	1,194.50	0.01	1,053.09	0.19	211.05	0.10
0.00	1,237.85	0.10	20.03	0.03	0.01	5.51	0.02	6.50	0.01	2.78	0.01	5.21	0.00	48.17	0.00	21.83	0.00	26.34	0.00	4.39	0.00
0.00	13,961.68	0.54	102.11	0.18	0.07	28.08	0.09	33.13	0.04	14.17	0.07	26.55	0.00	243.39	0.00	112.92	0.00	130.47	0.02	23.20	0.01
0.00	36,162.98	1.95	276.40	0.79	0.20	75.93	0.23	89.57	0.10	38.32	0.19	71.79	0.01	830.30	0.01	486.38	0.00	343.92	0.07	80.42	0.04
0.01	157,353.63	46.75	3,507.64	24.13	2.49	959.73	2.93	1,132.10	1.26	484.34	2.35	907.34	0.26	19,605.34	0.20	15,138.98	0.06	4,466.36	1.68	1,867.00	1.29
0.00	7,968.34	0.95	168.81	0.33	0.12	46.42	0.14	54.76	0.06	23.43	0.11	43.89	0.01	435.65	0.00	212.70	0.00	222.95	0.04	40.35	0.02
0.00	24,917.47	3.31	416.60	1.43	0.30	114.38	0.35	134.92	0.15	57.72	0.28	108.14	0.02	1,503.57	0.01	957.16	0.01	546.41	0.12	136.99	0.08
0.00	1,601.49	0.21	38.06	0.07	0.03	10.47	0.03	12.35	0.01	5.28	0.03	9.90	0.00	99.44	0.00	47.63	0.00	51.82	0.01	8.85	0.00
0.00	4,012.63	0.31	49.62	0.12	0.04	13.64	0.04	16.09	0.02	6.88	0.03	12.89	0.00	138.16	0.00	75.26	0.00	62.90	0.01	13.00	0.01
0.07	1,057,648.72	505.81	33,252.79	268.93	23.55	9,087.19	27.79	10,719.41	11.89	4,586.07	22.27	8,591.20	2.94	223,943.98	2.37	180,655.15	0.57	43,288.83	18.19	20,268.91	14.65
0.00	9,507.62	1.09	223.84	0.32	0.16	61.58	0.19	72.64	0.08	31.08	0.15	58.22	0.01	502.45	0.00	205.76	0.00	296.69	0.04	47.53	0.02
0.00	57,040.55	9.05	710.32	4.62	0.50	194.43	0.59	229.34	0.25	98.12	0.48	183.81	0.05	3,929.44	0.04	2,986.49	0.01	942.95	0.33	365.14	0.25
0.00	1,008.88	0.09	18.18	0.03	0.01	5.00	0.02	5.90	0.01	2.52	0.01	4.73	0.00	44.37	0.00	20.18	0.00	24.19	0.00	4.01	0.00
0.00	3,314.96	0.44	81.81	0.14	0.06	22.50	0.07	26.54	0.03	11.36	0.06	21.27	0.00	199.70	0.00	95.02	0.00	104.67	0.02	18.50	0.01
0.00	4,456.03	0.57	78.57	0.23	0.06	21.58	0.07	25.46	0.03	10.89	0.05	20.40	0.00	241.72	0.00	143.04	0.00	98.68	0.02	23.59	0.01
0.00	592.65	0.06	9.45	0.02	0.01	2.60	0.01	3.07	0.00	1.31	0.01	2.46	0.00	27.65	0.00	14.01	0.00	13.64	0.00	2.45	0.00
0.00	1,396.69	0.08	15.77	0.03	0.01	4.34	0.01	5.12	0.01	2.19	0.01	4.10	0.00	33.43	0.00	15.02	0.00	18.41	0.00	3.39	0.00
0.00	2,403.29	0.40	52.81	0.17	0.04	14.50	0.04	17.11	0.02	7.32	0.04	13.71	0.00	166.77	0.00	101.97	0.00	64.80	0.01	16.21	0.01
0.00	1,346.87	0.23	41.39	0.08	0.03	11.38	0.03	13.42	0.01	5.74	0.03	10.76	0.00	112.37	0.00	56.11	0.00	56.27	0.01	10.02	0.00
0.00	1,026.13	0.20	34.73	0.07	0.02	9.55	0.03	11.27	0.01	4.82	0.02	9.03	0.00	90.75	0.00	45.33	0.00	45.42	0.01	8.36	0.00
0.00	25,671.30	2.22	329.98	0.88	0.24	90.67	0.28	106.95	0.12	45.76	0.22	85.72	0.01	986.61	0.01	557.19	0.01	429.41	0.08	92.96	0.05
0.00	9,804.86	0.57	97.47	0.21	0.07	26.80	0.08	31.61	0.04	13.52	0.07	25.33	0.00	269.32	0.00	139.10	0.00	130.22	0.02	24.39	0.01
0.00	65,726.59	13.89	2,306.25	5.07	1.64	634.00	1.94	747.85	0.83	319.95	1.55	599.38	0.08	6,365.80	0.04	3,337.01	0.04	3,028.80	0.53	585.87	0.27
0.00	1,377.37	0.10	19.02	0.03	0.01	5.23	0.02	6.17	0.01	2.64	0.01	4.95	0.00	44.51	0.00	19.37	0.00	25.14	0.00	4.08	0.00
0.00	8,969.83	0.79	123.57	0.30	0.09	33.96	0.10	40.06	0.04	17.14	0.08	32.11	0.00	345.61	0.00	187.24	0.00	158.37	0.03	33.05	0.02
0.00	2,931.60	0.28	53.88	0.09	0.04	14.82	0.05	17.48	0.02	7.48	0.04	14.01	0.00	123.55	0.00	55.72	0.00	67.82	0.01	11.85	0.00
0.00	1,782.26	0.17	28.78	0.06	0.02	7.91	0.02	9.33	0.01	3.99	0.02	7.48	0.00	73.75	0.00	38.19	0.00	35.55	0.01	7.22	0.00
0.00	1,036.47	0.20	30.35	0.08	0.02	8.34	0.03	9.84	0.01	4.21	0.02	7.88	0.00	92.06	0.00	51.10	0.00	40.96	0.01	8.60	0.00
0.00	43,230.06	6.87	848.51	2.99	0.60	232.95	0.71	274.78	0.30	117.56	0.57	220.23	0.04	3,053.88	0.03	1,948.33	0.01	1,105.55	0.25	283.41	0.16
0.00	22,255.75	2.63	497.87	0.86	0.35	136.93	0.42	161.52	0.18	69.10	0.34	129.46	0.02	1,234.62	0.01	569.72	0.01	664.90	0.10	112.80	0.05
0.00	15,616.13	3.01	496.73	1.10	0.35	136.55	0.42	161.07	0.18	68.91	0.33	129.09	0.02	1,352.27	0.01	665.86	0.01	686.41	0.12	132.20	0.06
0.00	8,754.57	0.95	136.47	0.38	0.10	37.49	0.11	44.23	0.05	18.92	0.09	35.45	0.01	433.59	0.00	253.75	0.00	179.84	0.04	39.71	0.02
0.00	414.07	0.06	12.25	0.02	0.01	3.37	0.01	3.97	0.00	1.70	0.01	3.18	0.00	29.69	0.00	13.69	0.00	16.00	0.00	2.75	0.00
0.00	3,005.06	0.34	52.62	0.13	0.04	14.46	0.04	17.06	0.02	7.30	0.04	13.67	0.00	144.86	0.00	80.25	0.00	64.61	0.01	13.98	0.01
0.00	19,546.98	2.44	446.45	0.82	0.32	122.78	0.38	144.82	0.16	61.96	0.30	116.07	0.01	1,139.71	0.01	544.78	0.01	594.94	0.09	104.22	0.04
0.01	91,487.32	10.99	1,283.25	4.91	0.91	352.19	1.08	415.44	0.46	177.74	0.86	332.96	0.06	4,867.27	0.04	3,202.74	0.02	1,664.53	0.40	450.77	0.27
0.00	7,483.90	0.52	83.44	0.19	0.06	22.93	0.07	27.05	0.03	11.57	0.06	21.68	0.00	226.44	0.00	120.19	0.00	106.25	0.02	21.79	0.01
0.00	22,166.88	5.47	864.85	2.07	0.62	237.70	0.73	280.39	0.31	119.96	0.58	224.72	0.03	2,418.44	0.02	1,317.93	0.01	1,100.50	0.20	228.24	0.11
0.00	781.59	0.13	21.30	0.05	0.02	5.86	0.02	6.91	0.01	2.96	0.01	5.54	0.00	55.27	0.00	29.07	0.00	26.21	0.00	5.22	0.00
0.01	108,546.93	22.37	1,668.32	11.56	1.18	456.45	1.40	538.43	0.60	230.35	1.12	431.53	0.13	9,788.42	0.10	7,658.24	0.03	2,130.18	0.81	897.66	0.63
0.00	7,184.36	0.91	187.79	0.27	0.13	51.66	0.16	60.94	0.07	26.07	0.13	48.84	0.01	428.61	0.00	183.15	0.00	245.46	0.03	38.52	0.01
0.00	1,923.54	0.24	38.26	0.09	0.03	10.52	0.03	12.40	0.01	5.31	0.03	9.94	0.00	113.01	0.00	61.16	0.00	51.85	0.01	10.22	0.00
0.00	63,642.60	19.89	2,722.67	8.22	1.94	747.86	2.29	882.16	0.98	377.41	1.83	707.02	0.12	9,092.08	0.07	5,457.07	0.05	3,635.01	0.75	831.01	0.45
0.00	13,663.84	3.59	534.28	1.41	0.38	146.81	0.45	173.18	0.19	74.09	0.36	138.79	0.02	1,620.94	0.01	918.88	0.01	702.06	0.14	150.68	0.08
0.00	29,778.26	4.59	753.43	1.69	0.54	207.11	0.63	244.30	0.27	104.52	0.51	195.80	0.03	2,050.76	0.01	1,080.26	0.01	970.50	0.17	192.90	0.09
0.00	49,770.33	5.72	891.60	2.19	0.64	245.04	0.75	289.05	0.32	123.66	0.60	231.66	0.03	2,565.78	0.02	1,408.11	0.02	1,157.67	0.22	240.15	0.12
0.00	65,186.32	6.80	1,200.33	2.36	0.86	330.05	1.01	389.32	0.43	166.56	0.81	312.03	0.04	3,057.12	0.02	1,526.76	0.02	1,530.36	0.26	285.84	0.13
0.00	45,381.77	6.57	1,032.16	2.50	0.74	283.68	0.87	334.63	0.37	143.16	0.70	268.19	0.04	3,056.42	0.02	1,673.82	0.02	1,382.60	0.25	277.35	0.14
0.00	42,667.73	7.11	659.20	3.46	0.47	180.66	0.55	213.10	0.24	91.17	0.44	170.80	0.04	3,055.97	0.03	2,215.77	0.01	840.20	0.26	286.66	0.19
0.02	237,591.50	65.81	4,329.82	34.98	3.07	1,183.25	3.62	1,395.77	1.55	597.15	2.90	1,118.66	0.35	26,903.56	0.28	21,319.25	0.07	5,584.31	2.34	2,612.66	1.86
0.00	12,396.82	1.53	244.56	0.57	0.17	67.22	0.21	79.29	0.09	33.92	0.16	63.55	0.01	683.33	0.00	365.52	0.00	317.81	0.06	64.25	0.03
0.00	5,986.75	0.68	139.59	0.20	0.10	38.40	0.12	45.30	0.05	19.38	0.09	36.31	0.00	309.25	0.00	129.63	0.00	179.62	0.03	28.93	0.01
0.00	27,443.12	1.71	322.34	0.56	0.23	88.65	0.27	104.57	0.12	44.74	0.22	83.81	0.01	753.58	0.00	347.29	0.01	406.29	0.07	72.64	0.03
0.00	38,713.54	8.19	1,054.26	3.50	0.75	289.50	0.89	341.48	0.38	146.10	0.71	273.69	0.05	3,591.78	0.03	2,227.93	0.02	1,363.85	0.30	338.55	0.19
0.00	23,063.06	0.78	106.96	0.32	0.08	29.38	0.09	34.66	0.04	14.83	0.07	27.78	0.00	339.80	0.00	205.83	0.00	133.97	0.03	32.15	0.02
0.00	12,657.10	1.42	202.96	0.57	0.14	55.76	0.17	65.77	0.07	28.14	0.14	52.72	0.01	638.32	0.00	376.53	0.00	261.79	0.05	58.59	0.03
0.00	3,102.75	0.35	59.46	0.13	0.04	16.35	0.05	19.28	0.02	8.25	0.04	15.45	0.00	160.66	0.00	83.97	0.00	76.68	0.01	14.61	0.01
0.00	3,715.60	0.88	95.75	0.40	0.07	26.27	0.08	30.99	0.03	13.26	0.06	24.83	0.01	382.52	0.00	257.88	0.00	124.64	0.03	35.92	0.02
0.01	111,572.54	15.06	1,636.74	6.93	1.16	449.03	1.37	529.67	0.59	226.61	1.10	424.51	0.09	6,511.74	0.06	4,396.52	0.03	2,115.22	0.55	615.63	0.37
0.00	3,231.59	0.33	60.40	0.11	0.04	16.61	0.05	19.59	0.02	8.38	0.04	15.70	0.00	150.36	0.00	72.14	0.00	78.22	0.01	13.95	0.01
0.00	3,248.28	0.33	67.35	0.10	0.05	18.53	0.06	21.86	0.02	9.35	0.05	17.52	0.00	157.70	0.00	68.70	0.00	89.00	0.01	14.19	0.01
0.00	1,599.17	0.12	23.91	0.04	0.02	6.58	0.02	7.76	0.01	3.32	0.02	6.22	0.00	56.39	0.00	24.93	0.00	31.46	0.00	5.21	0.00

$ PM Incidence, Hay Fever/Rhinitis	O3 Incidence, Hay Fever/Rhinitis	$ O3 Incidence, Hay Fever/Rhinitis	Total ER Visits, Respiratory	$ Total ER Visits, Respiratory	PM ER Visits, Respiratory	$ PM ER Visits, Respiratory	O3 ER Visits, Respiratory	$ O3 ER Visits, Respiratory	Total Hospital Admits, All Respiratory	$ Total Hospital Admits All Respiratory	PM Hospital Admits, All Respiratory	$ PM Hospital Admits All Respiratory	O3 Hospital Admits, All Respiratory	$ O3 Hospital Admits All Respiratory	PM Nonfatal Heart Attacks	$ PM Nonfatal Heart Attacks	PM Minor Restricted Activity Days	$ PM Minor Restricted Activity Days	PM Work Loss Days	$ PM Work Loss Days	PM Incidence Lung Cancer	$ PM Incidence Lung Cancer
326.11	0.15	170.57	0.02	37.89	0.01	22.32	0.01	15.57	0.00	62.66	0.00	56.15	0.00	6.51	0.01	706.25	16.78	2,109.93	2.86	905.56	0.00	53.09
79.59	0.03	35.45	0.01	12.36	0.00	7.75	0.00	4.61	0.00	18.53	0.00	16.39	0.00	2.14	0.00	187.93	3.41	428.91	0.57	181.21	0.00	12.93
22.35	0.03	28.26	0.00	6.31	0.00	2.35	0.00	3.96	0.00	7.19	0.00	5.45	0.00	1.74	0.00	75.05	0.97	122.38	0.16	52.09	0.00	4.30
71.16	0.03	29.77	0.01	16.76	0.01	10.76	0.00	6.00	0.00	18.85	0.00	16.70	0.00	2.14	0.00	245.71	3.29	413.13	0.55	175.39	0.00	16.08
117.71	0.08	91.71	0.02	25.31	0.01	12.41	0.01	12.90	0.00	34.50	0.00	26.74	0.00	7.76	0.01	718.97	5.76	723.93	0.96	303.53	0.00	38.11
111.66	0.09	99.39	0.01	20.57	0.01	9.40	0.01	11.16	0.00	24.68	0.00	20.21	0.00	4.48	0.00	374.29	5.32	669.19	0.90	284.92	0.00	23.05
1.98	0.00	2.41	0.00	0.92	0.00	0.35	0.00	0.57	0.00	0.72	0.00	0.51	0.00	0.21	0.00	6.58	0.09	11.80	0.02	4.98	0.00	0.44
10.70	0.01	12.49	0.00	3.69	0.00	1.44	0.00	2.25	0.00	6.55	0.00	4.38	0.00	2.17	0.00	130.46	0.64	80.01	0.10	32.94	0.00	7.65
46.88	0.03	33.54	0.01	11.53	0.00	5.90	0.00	5.63	0.00	19.82	0.00	15.70	0.00	4.12	0.01	562.78	2.42	304.19	0.40	125.48	0.00	25.37
1,438.37	0.38	428.62	0.11	173.68	0.08	124.27	0.03	49.40	0.01	264.85	0.01	241.02	0.00	23.83	0.06	4,922.78	64.01	8,047.10	10.76	3,402.60	0.01	281.21
19.64	0.02	20.71	0.00	3.64	0.00	1.51	0.00	2.13	0.00	4.09	0.00	3.00	0.00	1.09	0.00	86.71	0.94	117.71	0.16	49.37	0.00	8.29
86.92	0.04	50.07	0.01	22.68	0.01	12.83	0.01	9.86	0.00	28.72	0.00	24.55	0.00	4.17	0.01	516.13	3.80	478.02	0.64	203.08	0.00	18.65
4.23	0.00	4.62	0.00	0.96	0.00	0.39	0.00	0.57	0.00	1.20	0.00	0.90	0.00	0.30	0.00	17.99	0.19	24.36	0.03	10.38	0.00	0.96
7.06	0.01	5.94	0.00	0.95	0.00	0.45	0.00	0.50	0.00	2.31	0.00	1.78	0.00	0.53	0.00	34.36	0.34	43.33	0.06	18.06	0.00	2.18
16,324.09	3.54	3,944.82	1.31	2,129.88	0.99	1,610.67	0.32	519.22	0.11	3,063.26	0.10	2,887.31	0.01	175.96	0.48	40,774.06	674.36	84,779.95	115.47	36,524.44	0.05	2,364.84
19.39	0.03	28.14	0.00	6.51	0.00	2.22	0.00	4.29	0.00	4.87	0.00	3.49	0.00	1.38	0.00	50.69	0.84	105.83	0.14	45.39	0.00	3.43
277.15	0.08	87.99	0.02	40.06	0.02	28.14	0.01	11.92	0.00	68.21	0.00	61.32	0.00	6.89	0.03	2,382.08	14.99	1,884.69	2.48	782.92	0.00	126.71
1.81	0.00	2.19	0.00	0.80	0.00	0.31	0.00	0.49	0.00	0.52	0.00	0.37	0.00	0.15	0.00	7.36	0.10	12.08	0.02	5.19	0.00	0.48
8.75	0.01	9.75	0.00	2.98	0.00	1.20	0.00	1.78	0.00	1.82	0.00	1.38	0.00	0.44	0.00	33.93	0.34	43.35	0.06	18.16	0.00	1.58
13.88	0.01	9.71	0.00	1.64	0.00	0.85	0.00	0.79	0.00	3.78	0.00	3.08	0.00	0.70	0.00	53.08	0.58	73.34	0.10	30.69	0.00	3.30
1.24	0.00	1.21	0.00	0.15	0.00	0.07	0.00	0.08	0.00	0.33	0.00	0.26	0.00	0.07	0.00	6.19	0.06	7.68	0.01	3.27	0.00	0.40
1.51	0.00	1.88	0.00	0.64	0.00	0.24	0.00	0.40	0.00	0.83	0.00	0.57	0.00	0.27	0.00	7.59	0.11	13.72	0.02	5.82	0.00	0.50
9.86	0.01	6.35	0.00	2.34	0.00	1.26	0.00	1.08	0.00	2.55	0.00	2.06	0.00	0.49	0.00	32.56	0.50	63.00	0.08	26.78	0.00	2.07
4.99	0.00	5.03	0.00	1.33	0.00	0.57	0.00	0.77	0.00	1.24	0.00	0.96	0.00	0.28	0.00	10.84	0.19	23.27	0.03	9.92	0.00	0.73
4.16	0.00	4.20	0.00	0.94	0.00	0.40	0.00	0.54	0.00	1.16	0.00	0.99	0.00	0.17	0.00	15.91	0.14	17.84	0.02	7.62	0.00	0.53
52.33	0.04	40.63	0.01	10.79	0.00	5.30	0.00	5.49	0.00	18.16	0.00	14.43	0.00	3.74	0.00	405.32	2.58	324.93	0.43	135.50	0.00	20.05
12.55	0.01	11.84	0.00	3.82	0.00	1.69	0.00	2.13	0.00	4.52	0.00	3.37	0.00	1.15	0.00	107.82	0.51	64.53	0.09	27.09	0.00	5.02
306.01	0.25	279.86	0.03	54.17	0.02	24.40	0.02	29.77	0.00	65.27	0.00	54.19	0.00	11.07	0.01	885.68	13.40	1,684.58	2.28	721.97	0.00	47.94
1.77	0.00	2.31	0.00	0.50	0.00	0.18	0.00	0.32	0.00	0.55	0.00	0.41	0.00	0.14	0.00	6.65	0.09	11.28	0.02	4.76	0.00	0.43
17.83	0.01	15.22	0.00	3.97	0.00	1.86	0.00	2.12	0.00	4.83	0.00	3.56	0.00	1.27	0.00	139.47	0.82	103.35	0.14	43.14	0.00	7.92
5.31	0.01	6.54	0.00	2.53	0.00	0.96	0.00	1.57	0.00	1.98	0.00	1.40	0.00	0.58	0.00	21.23	0.29	36.83	0.05	15.50	0.00	1.38
3.72	0.00	3.50	0.00	0.86	0.00	0.38	0.00	0.48	0.00	0.97	0.00	0.72	0.00	0.25	0.00	17.56	0.19	23.29	0.03	9.76	0.00	1.09
4.77	0.00	3.83	0.00	0.54	0.00	0.26	0.00	0.28	0.00	0.81	0.00	0.66	0.00	0.16	0.00	12.47	0.26	32.12	0.04	13.71	0.00	0.87
180.24	0.09	103.17	0.02	35.65	0.01	20.21	0.01	15.43	0.00	57.93	0.00	49.17	0.00	8.76	0.02	1,348.00	8.23	1,034.81	1.37	433.60	0.00	57.21
51.87	0.05	60.93	0.01	10.92	0.00	4.25	0.00	6.67	0.00	17.05	0.00	13.21	0.00	3.84	0.00	232.70	2.48	311.93	0.42	131.54	0.00	17.89
65.01	0.06	67.18	0.01	11.89	0.00	5.00	0.00	6.89	0.00	10.72	0.00	8.64	0.00	2.08	0.00	175.96	3.40	427.60	0.58	183.80	0.00	9.64
23.17	0.01	16.54	0.00	4.33	0.00	2.22	0.00	2.11	0.00	7.24	0.00	6.00	0.00	1.24	0.00	120.80	1.05	131.55	0.17	54.98	0.00	6.53
1.26	0.00	1.49	0.00	0.55	0.00	0.21	0.00	0.34	0.00	0.24	0.00	0.17	0.00	0.06	0.00	3.38	0.07	9.22	0.01	3.94	0.00	0.24
7.69	0.01	6.28	0.00	2.64	0.00	1.26	0.00	1.38	0.00	2.05	0.00	1.65	0.00	0.41	0.00	26.93	0.34	42.68	0.06	18.07	0.00	1.70
49.65	0.05	54.57	0.01	10.17	0.00	4.12	0.00	6.05	0.00	11.17	0.00	8.35	0.00	2.82	0.00	265.15	2.21	278.45	0.37	116.69	0.00	15.80
295.70	0.14	155.07	0.05	74.61	0.03	43.90	0.02	30.71	0.00	83.79	0.00	70.59	0.00	13.20	0.03	2,444.05	13.08	1,644.00	2.18	690.27	0.00	106.01
11.52	0.01	10.27	0.00	2.04	0.00	0.93	0.00	1.11	0.00	4.59	0.00	3.55	0.00	1.05	0.00	76.47	0.60	75.81	0.10	31.52	0.00	5.48
123.82	0.09	104.42	0.01	23.64	0.01	11.13	0.01	12.52	0.00	32.68	0.00	27.33	0.00	5.35	0.01	432.97	6.01	755.15	1.02	321.40	0.00	24.94
2.73	0.00	2.50	0.00	0.66	0.00	0.30	0.00	0.36	0.00	0.59	0.00	0.47	0.00	0.12	0.00	11.92	0.16	19.63	0.03	8.23	0.00	0.82
700.51	0.18	197.15	0.05	86.68	0.04	63.02	0.01	23.66	0.00	157.78	0.00	143.40	0.00	14.38	0.05	4,282.35	31.54	3,965.83	5.26	1,664.91	0.00	190.97
16.37	0.02	22.14	0.00	4.60	0.00	1.64	0.00	2.96	0.00	3.53	0.00	2.61	0.00	0.91	0.00	55.06	0.68	85.72	0.12	36.91	0.00	2.76
5.52	0.00	4.70	0.00	1.50	0.00	0.70	0.00	0.80	0.00	2.35	0.00	1.89	0.00	0.47	0.00	59.24	0.22	27.80	0.04	11.80	0.00	1.05
497.47	0.30	333.54	0.05	77.64	0.03	40.98	0.02	36.66	0.00	98.67	0.00	86.39	0.00	12.28	0.01	1,197.80	24.26	3,050.06	4.16	1,316.30	0.00	75.15
85.13	0.06	65.55	0.01	20.53	0.01	10.13	0.01	10.41	0.00	17.66	0.00	14.93	0.00	2.73	0.00	318.25	3.86	485.82	0.66	207.68	0.00	13.09
101.18	0.08	91.71	0.01	17.16	0.00	7.77	0.01	9.39	0.00	30.27	0.00	24.55	0.00	5.71	0.01	423.75	4.82	606.02	0.81	256.83	0.00	31.19
131.26	0.10	108.89	0.01	24.05	0.01	11.41	0.01	12.63	0.00	33.59	0.00	26.85	0.00	6.75	0.01	755.50	6.16	773.95	1.02	324.09	0.00	35.72
141.95	0.13	143.89	0.02	27.63	0.01	11.74	0.01	15.88	0.00	38.95	0.00	28.49	0.00	10.46	0.01	842.67	7.36	925.43	1.23	389.59	0.00	45.10
151.43	0.11	125.93	0.03	44.77	0.01	21.22	0.01	23.54	0.00	45.25	0.00	37.25	0.00	8.01	0.01	620.90	6.12	769.10	1.03	326.76	0.00	30.59
207.28	0.07	79.37	0.03	44.47	0.02	29.43	0.01	15.03	0.00	54.58	0.00	48.41	0.00	6.16	0.02	1,268.23	8.14	1,023.68	1.36	429.98	0.00	46.04
2,067.29	0.49	545.37	0.11	171.72	0.08	127.02	0.03	44.70	0.01	382.87	0.01	349.80	0.00	33.07	0.11	9,559.04	102.85	12,929.88	17.02	5,382.68	0.01	574.89
34.23	0.03	30.02	0.00	7.72	0.00	3.56	0.00	4.16	0.00	10.85	0.00	8.88	0.00	1.97	0.00	209.62	1.55	195.08	0.26	82.21	0.00	9.70
12.06	0.02	16.87	0.00	3.54	0.00	1.24	0.00	2.31	0.00	3.33	0.00	2.30	0.00	1.03	0.00	52.57	0.56	70.63	0.09	29.95	0.00	2.40
33.29	0.04	39.36	0.00	7.45	0.00	2.89	0.00	4.56	0.00	10.66	0.00	7.21	0.00	3.45	0.00	281.18	1.80	226.71	0.30	94.10	0.00	19.33
209.31	0.12	129.24	0.02	25.08	0.01	13.75	0.01	11.33	0.00	35.78	0.00	30.36	0.00	5.42	0.01	534.96	10.77	1,354.24	1.82	576.93	0.00	44.79
19.37	0.01	12.78	0.00	6.96	0.00	3.70	0.00	3.26	0.00	21.22	0.00	16.69	0.00	4.53	0.01	827.22	1.31	164.87	0.22	68.28	0.00	35.64
34.43	0.02	24.16	0.01	9.43	0.00	4.87	0.00	4.56	0.00	11.80	0.00	9.54	0.00	2.26	0.00	231.13	1.42	179.13	0.24	75.74	0.00	8.19
7.59	0.01	7.01	0.00	2.37	0.00	1.06	0.00	1.31	0.00	2.75	0.00	2.26	0.00	0.49	0.00	28.99	0.39	49.06	0.07	20.85	0.00	1.84
24.15	0.01	11.77	0.00	6.22	0.00	3.77	0.00	2.45	0.00	5.75	0.00	4.93	0.00	0.82	0.00	74.24	1.44	180.55	0.24	77.06	0.00	4.91
414.45	0.18	201.18	0.06	94.17	0.04	57.15	0.02	37.01	0.00	97.50	0.00	83.93	0.00	13.58	0.03	2,408.32	20.31	2,553.69	3.39	1,072.45	0.00	128.37
6.66	0.01	7.29	0.00	1.31	0.00	0.53	0.00	0.78	0.00	1.58	0.00	1.23	0.00	0.35	0.00	28.91	0.36	45.37	0.06	19.24	0.00	1.36
6.15	0.01	8.04	0.00	2.28	0.00	0.83	0.00	1.45	0.00	1.67	0.00	1.19	0.00	0.49	0.00	30.18	0.29	36.78	0.05	15.48	0.00	1.51
2.29	0.00	2.92	0.00	0.78	0.00	0.29	0.00	0.49	0.00	0.73	0.00	0.52	0.00	0.21	0.00	8.11	0.13	16.10	0.02	6.79	0.00	0.55

PM HA Cardio Cerebro and Peripheral Vascular Disease	$ PM HA Cardio Cerebro and Peripheral Vascular Disease	PM HA Alzheimers Disease	$ PM HA Alzheimers Disease	PM HA Parkinsons Disease	$ PM HA Parkinsons Disease	PM Incidence Stroke	$ PM Incidence Stroke	PM Incidence Out of Hospital Cardiac Arrest	$ PM Incidence Out of Hospital Cardiac Arrest	PM ER Visits All Cardiac Outcomes	$ PM ER Visits All Cardiac Outcomes	O3 ER Visits, Asthma	$ O3 ER Visits, Asthma	O3 School Loss Days, All Cause	$ O3 School Loss Days, All Cause
0.00	69.16	0.00	97.14	0.00	24.28	0.00	68.12	0.00	15.79	0.01	13.14	0.00	0.05	2.28	3,870.36
0.00	20.38	0.00	19.96	0.00	5.52	0.00	15.63	0.00	3.85	0.00	4.52	0.00	0.01	0.47	794.53
0.00	7.03	0.00	7.68	0.00	1.89	0.00	5.31	0.00	1.20	0.00	1.15	0.00	0.01	0.37	629.62
0.00	21.15	0.00	28.97	0.00	6.94	0.00	19.43	0.00	4.27	0.00	4.13	0.00	0.01	0.39	660.08
0.00	55.27	0.00	71.21	0.00	17.64	0.00	49.24	0.00	9.55	0.00	7.94	0.00	0.03	1.22	2,071.11
0.00	24.97	0.00	35.71	0.00	9.95	0.00	27.82	0.00	6.42	0.00	5.04	0.00	0.04	1.32	2,233.66
0.00	0.66	0.00	0.75	0.00	0.19	0.00	0.53	0.00	0.12	0.00	0.15	0.00	0.00	0.03	53.70
0.00	10.41	0.00	43.27	0.00	3.60	0.00	10.05	0.00	1.67	0.00	1.17	0.00	0.00	0.17	281.90
0.00	38.09	0.00	52.82	0.00	11.91	0.00	33.27	0.00	5.69	0.00	4.57	0.00	0.01	0.45	760.91
0.02	437.48	0.02	466.19	0.01	122.02	0.01	344.85	0.00	78.93	0.03	67.50	0.00	0.11	5.70	9,676.02
0.00	7.23	0.00	17.53	0.00	3.74	0.00	10.38	0.00	1.85	0.00	1.01	0.00	0.00	0.27	464.00
0.00	37.15	0.00	34.33	0.00	8.68	0.00	24.38	0.00	5.14	0.00	6.45	0.00	0.02	0.66	1,114.58
0.00	1.45	0.00	1.75	0.00	0.44	0.00	1.24	0.00	0.26	0.00	0.20	0.00	0.00	0.06	102.43
0.00	3.55	0.00	3.75	0.00	1.00	0.00	2.84	0.00	0.57	0.00	0.52	0.00	0.00	0.08	133.84
0.12	3,523.84	0.20	4,437.56	0.04	1,011.58	0.05	2,842.38	0.01	707.39	0.33	701.21	0.00	1.59	51.73	87,848.31
0.00	5.53	0.00	6.27	0.00	1.54	0.00	4.32	0.00	0.95	0.00	0.88	0.00	0.01	0.37	633.63
0.01	166.40	0.01	261.99	0.00	59.41	0.00	165.75	0.00	29.77	0.01	24.27	0.00	0.03	1.16	1,972.01
0.00	0.72	0.00	0.84	0.00	0.21	0.00	0.60	0.00	0.13	0.00	0.16	0.00	0.00	0.03	48.78
0.00	2.33	0.00	2.64	0.00	0.74	0.00	2.08	0.00	0.47	0.00	0.54	0.00	0.01	0.13	217.82
0.00	4.67	0.00	6.35	0.00	1.49	0.00	4.17	0.00	0.84	0.00	0.71	0.00	0.00	0.13	220.73
0.00	0.32	0.00	0.74	0.00	0.17	0.00	0.49	0.00	0.10	0.00	0.05	0.00	0.00	0.02	26.70
0.00	0.94	0.00	0.84	0.00	0.22	0.00	0.62	0.00	0.14	0.00	0.15	0.00	0.00	0.03	43.11
0.00	2.84	0.00	3.56	0.00	0.95	0.00	2.68	0.00	0.59	0.00	0.63	0.00	0.00	0.08	143.98
0.00	1.13	0.00	1.25	0.00	0.31	0.00	0.87	0.00	0.21	0.00	0.21	0.00	0.00	0.07	111.27
0.00	0.93	0.00	0.89	0.00	0.22	0.00	0.62	0.00	0.15	0.00	0.17	0.00	0.00	0.06	93.94
0.00	28.85	0.00	40.90	0.00	9.17	0.00	25.53	0.00	4.74	0.00	3.86	0.00	0.01	0.54	914.72
0.00	7.40	0.00	10.88	0.00	2.32	0.00	6.45	0.00	1.11	0.00	1.04	0.00	0.00	0.16	263.29
0.00	61.89	0.01	190.36	0.00	20.71	0.00	58.19	0.00	14.32	0.01	11.21	0.00	0.08	3.68	6,255.48
0.00	0.34	0.00	0.74	0.00	0.19	0.00	0.54	0.00	0.12	0.00	0.07	0.00	0.00	0.03	51.70
0.00	9.97	0.00	17.14	0.00	3.69	0.00	10.24	0.00	1.78	0.00	1.39	0.00	0.00	0.20	343.52
0.00	1.22	0.00	2.45	0.00	0.60	0.00	1.70	0.00	0.38	0.00	0.32	0.00	0.00	0.09	147.76
0.00	1.42	0.00	2.00	0.00	0.50	0.00	1.42	0.00	0.29	0.00	0.26	0.00	0.00	0.05	79.94
0.00	0.97	0.00	1.38	0.00	0.36	0.00	1.02	0.00	0.26	0.00	0.18	0.00	0.00	0.05	85.87
0.00	101.02	0.00	111.61	0.00	26.11	0.00	73.13	0.00	13.97	0.01	13.80	0.00	0.03	1.36	2,309.98
0.00	21.61	0.00	43.94	0.00	8.33	0.00	23.33	0.00	4.33	0.00	2.86	0.00	0.02	0.80	1,359.68
0.00	13.11	0.00	17.10	0.00	4.32	0.00	12.11	0.00	2.96	0.00	2.51	0.00	0.02	0.90	1,521.62
0.00	9.07	0.00	11.87	0.00	3.04	0.00	8.58	0.00	1.69	0.00	1.56	0.00	0.01	0.22	369.92
0.00	0.39	0.00	0.35	0.00	0.10	0.00	0.29	0.00	0.08	0.00	0.10	0.00	0.00	0.02	33.22
0.00	2.43	0.00	3.08	0.00	0.77	0.00	2.16	0.00	0.47	0.00	0.54	0.00	0.00	0.08	142.48
0.00	16.79	0.00	50.37	0.00	7.42	0.00	20.82	0.00	3.89	0.00	2.51	0.00	0.01	0.72	1,218.20
0.01	149.45	0.01	287.79	0.00	49.01	0.00	137.11	0.00	24.82	0.01	21.94	0.00	0.05	2.04	3,473.04
0.00	6.07	0.00	11.66	0.00	2.51	0.00	6.97	0.00	1.24	0.00	0.79	0.00	0.00	0.14	232.37
0.00	30.04	0.00	86.90	0.00	10.06	0.00	28.04	0.00	6.86	0.00	5.95	0.00	0.03	1.38	2,351.54
0.00	0.91	0.00	1.41	0.00	0.37	0.00	1.04	0.00	0.22	0.00	0.16	0.00	0.00	0.03	56.29
0.01	252.08	0.02	351.94	0.00	89.64	0.00	252.83	0.00	50.14	0.02	39.21	0.00	0.05	2.59	4,404.90
0.00	4.50	0.00	4.83	0.00	1.23	0.00	3.45	0.00	0.79	0.00	0.74	0.00	0.01	0.29	492.23
0.00	2.87	0.00	1.88	0.00	0.47	0.00	1.32	0.00	0.29	0.00	0.42	0.00	0.00	0.06	104.53
0.00	104.32	0.01	259.56	0.00	32.25	0.00	90.70	0.00	23.53	0.01	19.89	0.00	0.13	4.38	7,436.12
0.00	18.37	0.00	39.28	0.00	5.41	0.00	15.28	0.00	3.93	0.00	3.65	0.00	0.04	0.86	1,467.25
0.00	35.50	0.00	46.92	0.00	13.75	0.00	38.03	0.00	7.46	0.00	5.43	0.00	0.03	1.21	2,062.99
0.00	48.95	0.00	64.65	0.00	16.13	0.00	45.29	0.00	9.28	0.00	7.41	0.00	0.03	1.44	2,443.69
0.00	52.10	0.01	158.43	0.00	20.82	0.00	58.34	0.00	11.63	0.00	8.47	0.00	0.05	1.90	3,231.66
0.00	47.05	0.00	71.03	0.00	13.86	0.00	38.95	0.00	8.21	0.00	7.84	0.00	0.06	1.65	2,802.47
0.00	93.87	0.00	85.53	0.00	21.55	0.00	60.54	0.00	12.30	0.01	14.80	0.00	0.03	1.05	1,786.80
0.03	731.74	0.05	1,056.91	0.01	259.01	0.01	726.67	0.00	151.29	0.05	101.82	0.00	0.09	7.28	12,366.04
0.00	14.23	0.00	25.43	0.00	4.40	0.00	12.29	0.00	2.42	0.00	2.24	0.00	0.01	0.40	674.69
0.00	4.39	0.00	3.94	0.00	1.06	0.00	2.99	0.00	0.69	0.00	0.61	0.00	0.00	0.22	379.18
0.00	18.91	0.00	56.09	0.00	8.93	0.00	24.84	0.00	4.23	0.00	2.30	0.00	0.01	0.52	891.14
0.00	49.11	0.00	109.63	0.00	19.35	0.00	54.18	0.00	12.67	0.00	8.55	0.00	0.03	1.71	2,908.54
0.00	49.19	0.00	78.54	0.00	18.41	0.00	52.03	0.00	7.42	0.00	5.14	0.00	0.00	0.17	288.17
0.00	14.92	0.00	15.18	0.00	3.71	0.00	10.42	0.00	2.12	0.00	2.45	0.00	0.01	0.32	539.82
0.00	2.74	0.00	3.16	0.00	0.84	0.00	2.39	0.00	0.52	0.00	0.53	0.00	0.00	0.09	156.44
0.00	8.00	0.00	7.03	0.00	2.26	0.00	6.47	0.00	1.59	0.00	1.56	0.00	0.00	0.16	264.45
0.01	172.90	0.01	252.36	0.00	60.15	0.00	168.46	0.00	32.78	0.01	28.73	0.00	0.09	2.67	4,529.73
0.00	1.98	0.00	2.06	0.00	0.60	0.00	1.72	0.00	0.42	0.00	0.33	0.00	0.00	0.10	162.93
0.00	1.91	0.00	2.61	0.00	0.68	0.00	1.90	0.00	0.41	0.00	0.32	0.00	0.00	0.11	178.88
0.00	0.65	0.00	0.88	0.00	0.24	0.00	0.67	0.00	0.16	0.00	0.13	0.00	0.00	0.04	65.07

Location(s)	Sector	Emissions Modification(s)
Clay, Florida Duval, Florida Flagler, Florida Nassau, Florida St Johns, Florida	Fuel Combustion: Industrial Gas	$PM_{2.5}$ reduce by 5% SO_2 reduce by 5% NO_x reduce by 0 tons VOC reduce by 0 tons
Clay, Florida Duval, Florida Flagler, Florida Nassau, Florida St Johns, Florida	Fuel Combustion: Electric Utility	$PM_{2.5}$ reduce by 1% SO_2 reduce by 1% NO_x reduce by 1% VOC reduce by 1 tons
Clay, Florida Duval, Florida Flagler, Florida Nassau, Florida St Johns, Florida	Fuel Combustion: Industrial Oil	$PM_{2.5}$ reduce by 5% SO_2 reduce by 5% NO_x reduce by 0 tons VOC reduce by 0 tons
Clay, Florida Duval, Florida Flagler, Florida Nassau, Florida St Johns, Florida	Waste Disposal & Recycling	NO_x reduce by 30% VOC reduce by 5%

	Totals	
PM2.5	0.00170	microgram/m3
O3	0.03282	microgram/m3

FIPS	State	County	Base PM 2.5	Control PM 2.5	Delta PM 2.5	Base O3	Control O3	Delta O3	$ Total Health Benefits(low estimate)	$ Total Health Benefits(high estimate)	$ PM Total Health Benefits (low estimate)	$ PM Total Health Benefits (high estimate)	$ O3 Total Health Benefits	Total Mortality(low estimate)	$ Total Mortality(low estimate)	Total Mortality(high estimate)	$ Total Mortality(high estimate)	PM Mortality, All Cause (low)	$ PM Mortality, All Cause (low)	PM Mortality (high)	$ PM Mortality (high)	PM Infant Mortality	$ PM Infant Mortality	Total O3 Mortality	$ Total O3 Mortality	O3 Mortality (Short-term exposure)	$ O3 Mortality (Short-term exposure)
12001	Florida	Alachua	4.87	4.87	0.00	13.44	13.43	0.01	359,677.65	475,038.04	103,108.99	218,469.38	243,854.64	0.02	317,080.60	0.03	432,440.99	0.01	99,988.07	0.01	215,348.46	0.00	1,259.55	0.01	217,092.53	0.00	9,356.72
12003	Florida	Baker	4.71	4.70	0.00	14.12	14.10	0.02	91,452.44	119,849.03	22,083.62	50,480.21	66,949.49	0.01	83,549.25	0.01	111,945.84	0.00	21,439.44	0.00	49,836.03	0.00	253.95	0.00	62,109.81	0.00	2,664.74
12005	Florida	Bay	3.53	3.53	0.00	13.57	13.57	0.00	90,262.42	119,368.82	23,091.27	52,197.67	65,108.11	0.01	83,565.13	0.01	112,671.53	0.00	22,501.50	0.00	51,607.90	0.00	265.57	0.00	61,063.63	0.00	2,617.87
12007	Florida	Bradford	5.13	5.12	0.00	14.07	14.05	0.02	104,620.46	135,044.29	23,070.27	53,494.10	79,199.88	0.01	97,192.26	0.01	127,616.10	0.00	22,504.74	0.00	52,928.57	0.00	211.56	0.01	74,687.52	0.00	3,201.45
12009	Florida	Brevard	4.23	4.23	0.00	12.93	12.93	0.00	443,825.72	550,436.83	98,970.75	205,581.86	337,206.11	0.03	418,712.79	0.04	525,323.90	0.01	97,186.24	0.01	203,797.35	0.00	452.32	0.02	321,526.55	0.00	13,768.68
12011	Florida	Broward	4.37	4.37	0.00	10.21	10.21	0.00	214,027.54	286,520.79	63,606.12	136,099.37	143,084.99	0.01	189,903.08	0.02	262,396.33	0.00	61,701.07	0.01	134,194.32	0.00	458.33	0.01	128,202.01	0.00	5,517.74
12013	Florida	Calhoun	4.07	4.07	0.00	14.62	14.61	0.00	9,478.88	12,206.64	2,306.37	5,034.13	6,992.52	0.00	8,897.31	0.00	11,625.07	0.00	2,254.99	0.00	4,982.75	0.00	13.49	0.00	6,642.32	0.00	284.50
12015	Florida	Charlotte	3.49	3.49	0.00	10.49	10.49	0.00	96,245.03	116,407.22	20,570.87	40,733.06	74,795.78	0.01	93,294.20	0.01	113,456.39	0.00	20,279.31	0.00	40,441.50	0.00	42.46	0.01	73,014.89	0.00	3,122.14
12017	Florida	Citrus	4.79	4.79	0.00	13.22	13.21	0.01	301,592.86	375,866.51	71,891.77	146,165.42	226,987.43	0.02	292,322.41	0.03	366,596.05	0.00	70,963.52	0.01	145,237.17	0.00	211.88	0.02	221,358.89	0.00	9,465.36
12019	Florida	Clay	5.09	5.09	0.00	14.22	14.19	0.03	1,213,862.99	1,488,160.12	238,463.40	512,760.53	943,726.06	0.08	1,110,602.68	0.09	1,384,899.81	0.02	232,069.67	0.03	506,366.81	0.00	1,600.52	0.06	878,533.00	0.00	37,684.33
12021	Florida	Collier	3.04	3.04	0.00	9.23	9.23	0.00	66,861.61	85,702.98	19,461.01	38,302.39	45,890.23	0.00	61,956.22	0.01	80,797.59	0.00	19,084.01	0.00	37,925.39	0.00	81.19	0.00	42,872.20	0.00	1,838.79
12023	Florida	Columbia	4.65	4.65	0.00	13.76	13.75	0.01	196,350.90	254,443.21	50,404.36	108,496.68	142,191.49	0.01	184,151.03	0.02	242,243.34	0.00	49,291.79	0.01	107,384.10	0.00	469.80	0.01	134,859.24	0.00	5,777.63
12027	Florida	De Soto	3.81	3.81	0.00	11.06	11.05	0.00	11,707.63	14,464.19	2,217.63	4,974.19	9,146.27	0.00	10,635.28	0.00	13,391.84	0.00	2,148.19	0.00	4,904.75	0.00	19.22	0.00	8,487.09	0.00	364.22
12029	Florida	Dixie	3.18	3.18	0.00	11.84	11.84	0.01	31,742.86	40,570.25	7,156.51	15,983.90	24,124.41	0.00	30,220.71	0.00	39,048.10	0.00	7,034.92	0.00	15,862.31	0.00	27.84	0.00	23,185.79	0.00	992.24
12031	Florida	Duval	5.62	5.62	0.00	15.61	15.57	0.04	6,256,806.93	8,305,010.26	1,575,232.89	3,623,436.21	4,472,074.33	0.38	5,585,475.52	0.52	7,633,678.84	0.10	1,524,065.42	0.24	3,572,268.75	0.00	24,059.05	0.28	4,061,410.10	0.01	174,638.94
12033	Florida	Escambia	4.39	4.39	0.00	16.43	16.43	0.00	77,866.65	104,879.06	22,294.75	49,307.16	53,612.77	0.00	71,381.26	0.01	98,393.67	0.00	21,743.72	0.00	48,756.13	0.00	216.14	0.00	49,637.53	0.00	2,130.76
12035	Florida	Flagler	4.27	4.27	0.00	13.35	13.32	0.02	620,085.82	741,868.49	119,893.98	241,676.65	490,364.47	0.04	588,789.96	0.05	710,572.63	0.01	118,042.49	0.02	239,825.16	0.00	511.34	0.03	470,747.47	0.00	20,157.36
12037	Florida	Franklin	3.05	3.05	0.00	12.17	12.17	0.00	8,162.68	10,838.02	2,193.84	4,869.18	5,802.31	0.00	7,626.18	0.00	10,301.51	0.00	2,145.83	0.00	4,821.17	0.00	11.80	0.00	5,480.35	0.00	234.93
12039	Florida	Gadsden	4.96	4.95	0.00	14.91	14.90	0.00	27,454.45	36,421.97	7,169.11	16,136.63	19,557.79	0.00	25,088.31	0.00	34,055.83	0.00	6,978.86	0.00	15,946.39	0.00	65.82	0.00	18,109.44	0.00	776.58
12041	Florida	Gilchrist	3.99	3.99	0.00	12.64	12.63	0.01	36,543.95	46,548.65	8,724.10	18,728.80	27,097.70	0.00	34,119.75	0.00	44,124.45	0.00	8,546.34	0.00	18,551.04	0.00	43.11	0.00	25,573.41	0.00	1,095.83
12043	Florida	Glades	3.37	3.37	0.00	10.96	10.96	0.00	4,267.90	5,062.59	646.11	1,440.80	3,526.70	0.00	3,969.99	0.00	4,764.68	0.00	624.49	0.00	1,419.17	0.00	6.10	0.00	3,345.51	0.00	143.37
12045	Florida	Gulf	3.04	3.04	0.00	12.38	12.37	0.00	10,652.14	13,950.13	2,780.49	6,078.48	7,742.26	0.00	10,195.13	0.00	13,493.12	0.00	2,731.75	0.00	6,029.74	0.00	8.23	0.00	7,463.38	0.00	319.51
12047	Florida	Hamilton	4.60	4.60	0.00	14.18	14.17	0.01	20,448.78	27,445.78	5,447.28	12,444.28	14,530.92	0.00	18,859.66	0.00	25,856.65	0.00	5,311.38	0.00	12,308.38	0.00	30.36	0.00	13,548.28	0.00	581.34
12049	Florida	Hardee	4.30	4.30	0.00	11.93	11.93	0.00	10,237.29	12,453.93	1,701.38	3,918.03	8,147.99	0.00	9,040.47	0.00	11,257.12	0.00	1,635.42	0.00	3,852.07	0.00	20.29	0.00	7,405.05	0.00	318.16
12051	Florida	Hendry	3.64	3.64	0.00	11.15	11.14	0.00	8,109.70	9,969.94	1,461.64	3,321.88	6,329.86	0.00	7,097.49	0.00	8,957.74	0.00	1,400.25	0.00	3,260.50	0.00	17.30	0.00	5,697.24	0.00	244.84
12053	Florida	Hernando	5.18	5.18	0.00	14.23	14.23	0.00	223,293.64	285,742.40	59,725.73	122,174.49	160,301.80	0.01	212,496.43	0.02	274,945.19	0.00	58,803.01	0.01	121,251.76	0.00	244.21	0.01	153,693.42	0.00	6,579.96
12055	Florida	Highlands	3.61	3.61	0.00	11.02	11.02	0.00	72,826.56	86,788.99	13,970.02	27,932.45	57,914.00	0.01	69,825.47	0.01	83,787.90	0.00	13,739.00	0.00	27,701.43	0.00	73.67	0.00	56,086.47	0.00	2,399.40
12057	Florida	Hillsborough	6.15	6.15	0.00	15.33	15.32	0.00	566,975.42	725,410.60	131,324.10	289,759.28	414,117.16	0.03	498,102.18	0.04	656,537.36	0.01	126,814.64	0.02	285,249.82	0.00	1,667.95	0.03	371,287.54	0.00	15,976.00
12059	Florida	Holmes	4.40	4.40	0.00	15.40	15.40	0.00	10,245.95	13,467.39	2,627.34	5,848.78	7,454.38	0.00	9,706.54	0.00	12,927.97	0.00	2,576.53	0.00	5,797.97	0.00	13.43	0.00	7,130.01	0.00	305.35
12061	Florida	Indian River	3.19	3.19	0.00	10.81	10.81	0.00	79,099.85	100,541.54	21,936.31	43,378.00	55,959.57	0.01	75,094.57	0.01	96,536.26	0.00	21,605.54	0.00	43,047.23	0.00	81.68	0.00	53,489.03	0.00	2,290.09
12063	Florida	Jackson	4.69	4.69	0.00	15.43	15.43	0.00	24,355.10	33,098.89	7,600.46	16,344.25	16,296.59	0.00	22,814.30	0.00	31,558.08	0.00	7,454.20	0.00	16,197.99	0.00	44.58	0.00	15,360.10	0.00	658.27
12065	Florida	Jefferson	4.75	4.75	0.00	14.20	14.19	0.00	14,992.74	19,258.16	3,846.33	8,111.75	10,880.95	0.00	14,093.44	0.00	18,358.86	0.00	3,770.02	0.00	8,035.44	0.00	17.58	0.00	10,323.42	0.00	442.16
12067	Florida	Lafayette	3.66	3.66	0.00	12.91	12.90	0.01	9,504.42	11,906.23	2,300.00	4,701.81	6,511.53	0.00	8,149.20	0.00	10,951.01	0.00	2,227.10	0.00	5,028.91	0.00	19.20	0.00	5,922.10	0.00	254.68
12069	Florida	Lake	5.66	5.66	0.00	14.71	14.70	0.01	405,773.24	516,473.65	103,946.01	214,646.43	292,899.15	0.03	376,799.35	0.03	487,499.76	0.01	101,701.08	0.01	212,401.49	0.00	677.23	0.02	275,098.27	0.00	11,792.49
12071	Florida	Lee	3.46	3.46	0.00	9.96	9.96	0.00	174,594.31	221,032.39	43,913.37	90,351.45	126,265.76	0.01	160,521.08	0.01	206,959.16	0.00	42,950.43	0.01	89,388.51	0.00	251.97	0.01	117,570.65	0.00	5,046.60
12073	Florida	Leon	5.08	5.08	0.00	14.53	14.52	0.01	141,151.95	184,550.98	38,193.63	81,592.67	98,111.49	0.01	124,840.29	0.01	168,239.33	0.00	36,867.28	0.01	80,266.32	0.00	442.45	0.01	87,973.01	0.00	3,790.59
12075	Florida	Levy	3.76	3.76	0.00	12.11	12.11	0.00	74,598.03	96,596.35	18,151.79	40,150.11	55,087.13	0.01	70,209.54	0.01	92,207.86	0.00	17,806.72	0.00	39,805.04	0.00	86.89	0.00	52,402.82	0.00	2,244.49
12077	Florida	Liberty	3.78	3.78	0.00	13.75	13.75	0.00	3,587.00	5,021.58	999.58	2,434.16	2,476.52	0.00	3,224.65	0.00	4,659.23	0.00	967.62	0.00	2,402.20	0.00	7.45	0.00	2,257.03	0.00	96.94
12079	Florida	Madison	4.36	4.36	0.00	14.13	14.12	0.01	25,798.41	33,454.06	6,690.81	14,346.46	18,618.97	0.00	24,171.77	0.00	31,827.41	0.00	6,565.10	0.00	14,220.74	0.00	30.45	0.00	17,606.67	0.00	754.14
12081	Florida	Manatee	4.41	4.41	0.00	11.93	11.93	0.00	152,008.95	194,695.45	38,246.61	80,933.11	109,855.42	0.01	139,491.61	0.01	182,178.12	0.00	37,343.95	0.01	80,030.45	0.00	224.40	0.01	102,147.66	0.00	4,382.27
12083	Florida	Marion	5.24	5.24	0.00	13.53	13.52	0.01	823,483.03	1,046,372.15	215,805.94	438,695.06	594,502.36	0.05	780,513.68	0.07	1,003,402.80	0.01	212,170.51	0.03	435,059.63	0.00	1,116.94	0.04	568,343.17	0.00	24,333.90
12085	Florida	Martin	3.31	3.31	0.00	10.86	10.86	0.00	59,085.22	73,535.32	14,799.12	29,249.22	43,526.19	0.00	56,528.05	0.00	70,978.15	0.00	14,572.45	0.00	29,022.55	0.00	62.18	0.00	41,955.60	0.00	1,795.41
12086	Florida	Miami-Dade	3.54	3.54	0.00	7.23	7.23	0.00	215,525.63	293,259.94	68,750.20	146,484.51	139,008.96	0.01	189,662.83	0.02	267,397.15	0.00	66,482.86	0.01	144,217.18	0.00	470.74	0.01	123,179.97	0.00	5,302.56
12087	Florida	Monroe	1.93	1.93	0.00	6.03	6.03	0.00	6,778.36	9,496.74	2,005.27	4,723.64	4,591.95	0.00	6,171.52	0.00	8,889.90	0.00	1,950.14	0.00	4,668.52	0.00	11.92	0.00	4,221.38	0.00	181.20
12089	Florida	Nassau	4.89	4.89	0.00	15.23	15.20	0.03	706,348.85	902,907.06	175,378.81	371,937.01	518,673.29	0.05	665,731.01	0.06	862,289.22	0.01	171,487.18	0.03	368,045.39	0.00	1,235.65	0.03	494,243.83	0.00	21,167.53
12091	Florida	Okaloosa	4.01	4.01	0.00	15.50	15.50	0.00	57,325.04	74,741.16	15,206.94	32,623.07	40,508.91	0.00	52,129.96	0.00	69,546.09	0.00	14,748.84	0.00	32,164.97	0.00	143.30	0.00	37,381.12	0.00	1,604.45
12093	Florida	Okeechobee	3.32	3.32	0.00	10.75	10.75	0.00	15,646.53	19,630.38	3,197.38	7,181.23	12,064.26	0.00	14,409.94	0.00	18,393.79	0.00	3,090.24	0.00	7,074.09	0.00	32.32	0.00	11,319.70	0.00	485.27
12095	Florida	Orange	5.81	5.81	0.00	15.29	15.28	0.00	632,535.19	808,377.99	143,237.51	319,080.32	460,397.40	0.04	540,867.10	0.05	716,709.91	0.01	137,496.02	0.02	313,338.83	0.00	1,918.53	0.03	403,371.08	0.00	17,392.58
12097	Florida	Osceola	4.41	4.41	0.00	12.72	12.72	0.00	129,889.74	164,286.24	27,491.45	61,887.96	96,830.77	0.01	112,055.79	0.01	146,452.29	0.00	26,349.53	0.00	60,746.03	0.00	257.67	0.01	85,706.26	0.00	3,690.65
12099	Florida	Palm Beach	4.01	4.01	0.00	11.27	11.27	0.00	266,121.69	350,736.42	81,344.34	165,959.08	177,997.52	0.02	243,835.48	0.02	328,450.22	0.01	79,602.34	0.01	164,217.08	0.00	363.89	0.01	164,233.14	0.00	7,049.38
12101	Florida	Pasco	5.91	5.91	0.00	15.63	15.62	0.00	414,807.57	527,820.66	96,702.18	209,715.27	309,503.73	0.03	386,719.16	0.03	499,732.24	0.01	94,565.79	0.01	207,578.88	0.00	551.34	0.02	292,153.37	0.00	12,519.93
12103	Florida	Pinellas	4.53	4.53	0.00	13.31	13.31	0.00	522,568.83	679,376.16	138,256.66	295,063.99	373,799.72	0.03	487,961.66	0.04	644,768.99	0.01	135,385.51	0.02	292,192.84	0.00	661.30	0.02	352,576.14	0.00	15,109.74
12105	Florida	Polk	5.48	5.48	0.00	14.05	14.05	0.00	383,894.63	470,626.29	75,292.31	162,023.97	297,940.62	0.02	350,431.86	0.03	437,163.53	0.01	73,236.09	0.01	159,967.76	0.00	745.23	0.02	277,195.77	0.00	11,890.88
12107	Florida	Putnam	4.92	4.92	0.00	13.70	13.68	0.02	355,614.51	434,207.88	65,929.00	144,522.36	282,912.39	0.02	333,738.24	0.03	412,331.61	0.00	64,488.22	0.01	143,081.59	0.00	512.71	0.02	269,250.02	0.00	11,529.94
12109	Florida	St Johns	4.72	4.72	0.00	13.80	13.77	0.04	1,735,090.28	2,049,126.62	299,205.55	613,241.89	1,396,745.64	0.11	1,607,040.43	0.13	1,921,076.77	0.02	292,273.39	0.04	606,309.72	0.00	1,554.78	0.09	1,314,767.04	0.00	56,364.82
12111	Florida	St Lucie	3.10	3.10	0.00	10.62	10.62	0.00	104,147.79	132,889.70	26,073.42	54,815.33	75,762.62	0.01	96,556.09	0.01	125,297.99	0.00	25,466.88	0.00	54,208.78	0.00	128.44	0.00	71,089.21	0.00	3,047.57
12113	Florida	Santa Rosa	4.34	4.34	0.00	16.34	16.34	0.00	47,876.13	63,164.01	13,016.96	28,304.83	33,668.33	0.00	43,915.16	0.00	59,203.04	0.00	12,647.11	0.00	27,934.99	0.00	85.05	0.00	31,268.05	0.00	1,341.43
12115	Florida	Sarasota	3.50	3.50	0.00	10.40	10.39	0.00	201,768.97	253,245.70	52,780.22	104,256.96	146,325.41	0.01	192,816.37	0.02	244,293.10	0.00	52,012.43	0.01	103,489.17	0.00	123.72	0.01	140,803.94	0.00	6,026.33
12117	Florida	Seminole	6.40	6.40	0.00	16.24	16.23	0.01	364,539.36	455,398.96	81,093.19	171,952.80	272,339.86	0.02	328,486.04	0.03	419,345.65	0.01	78,798.71	0.01	169,658.31	0.00	610.60	0.02	249,687.33	0.00	10,724.01
12119	Florida	Sumter	5.83	5.83	0.00	14.68	14.67	0.01	205,435.15	257,960.31	60,950.26	113,475.41	143,406.57	0.01	201,469.55	0.02	253,994.70	0.00	60,205.64	0.01	112,730.79	0.00	57.73	0.01	141,263.92	0.00	6,037.23
12121	Florida	Suwannee	4.28	4.28	0.00	13.56	13.55	0.01	103,550.30	131,503.32	25,975.06	53,928.08	75,679.09	0.01	97,384.48	0.01	125,337.51	0.00	25,440.20	0.00	53,393.22	0.00	173.14	0.00	71,944.28	0.00	3,081.29
12123	Florida	Taylor	3.44	3.44	0.00	12.79	12.78	0.01	25,834.26	33,995.79	6,433.33	14,594.86	18,843.29	0.00	24,039.60	0.00	32,201.13	0.00	6,288.33	0.00	14,449.87	0.00	36.34	0.00	17,751.27	0.00	760.92
12125	Florida	Union	4.87	4.87	0.00	13.83	13.82	0.01	33,648.18	54,151.88	10,822.38	31,326.09	21,961.39	0.00	30,801.91	0.00	51,305.61	0.00	10,577.94	0.00	31,081.64	0.00	57.08	0.00	20,223.96	0.00	868.84
12127	Florida	Volusia	5.07	5.07	0.00	14.33	14.32	0.01	1,076,497.71	1,318,907.17	216,150.67	458,560.13	840,979.84	0.07	1,013,901.87	0.09	1,256,311.33	0.01	212,198.29	0.03	454,607.75	0.00	686.50	0.05	801,703.58	0.00	34,334.76
12129	Florida	Wakulla	3.95	3.95	0.00	13.35	13.35	0.00	25,184.08	32,351.25	5,569.75	12,736.92	19,064.94	0.00	23,378.24	0.00	30,545.41	0.00	5,412.72	0.00	12,579.89	0.00	35.32	0.00	17,965.52	0.00	770.06
12131	Florida	Walton	3.90	3.90	0.00	14.80	14.80	0.00	25,949.60	34,753.58	7,333.98	16,137.96	18,030.55	0.00	24,044.55	0.00	32,848.53	0.00	7,147.21	0.00	15,951.20	0.00	89.62	0.00	16,897.34	0.00	724.51
12133	Florida	Washington	4.20	4.20	0.00	14.97	14.97	0.00	11,943.18	15,707.69	2,934.73	6,699.24	8,799.40	0.00	11,254.22	0.00	15,018.73	0.00	2,868.23	0.00	6,632.75	0.00	15.37	0.00	8,385.99	0.00	359.24

County	Land Area (sq mi)	Land Area (m²)	Air Volume	PM2.5 (lbs)	O3 (lbs)	$ Total Health Benefits (low estimate)	$ Total Health Benefits (high estimate)	Total Mortality (low estimate)	Total Mortality (high estimate)
Duval	762	1973570856	1,973,570,856,000.00	11.33	175.66	6,256,806.93	8,305,010.26	0.38	0.52
Flagler	485	1256144180	1,256,144,180,000.00	2.25	66.31	620,085.82	741,868.49	0.04	0.05
Clay	604	1564352752	1,564,352,752,000.00	4.93	101.58	1,213,862.99	1,488,160.12	0.08	0.09
St. Johns	601	1556582788	1,556,582,788,000.00	4.99	131.04	1,735,090.28	2,049,126.62	0.11	0.13
Nassau	649	1680902212	1,680,902,212,000.00	8.14	119.04	706,348.85	902,907.06	0.05	0.06
NEFL				**31.63**	**593.63**	**10,532,194.88**	**13,487,072.55**	**0.65**	**0.86**

Notes for $PM_{2.5}$ and O_3 Concentration Change Table

This COBRA scenario models the co-pollutant benefits of improved landfill gas capture, anaerobic digestion of organic waste, and renewable natural gas (RNG) utilization in Northeast Florida. The measure assumes 10% methane capture by 2030 and 30% by 2050, with a proportional reduction in co-pollutants ($PM_{2.5}$, SO_2, NO_x, VOC, NH_3) from landfill flaring and waste decomposition. RNG use is modeled as a secondary benefit reducing fossil natural gas combustion emissions.

Sources:

U.S. EPA, COBRA Technical Documentation (2024); U.S. EPA Landfill Methane Outreach Program.

O3 Mortality (Long-term exposure)	$ O3 Mortality (Long-term exposure)	Total Asthma Symptoms	$ Total Asthma Symptoms	PM Asthma Symptoms, Albuterol Use	O3 Asthma Symptoms, Chest Tightness	$ O3 Asthma Symptoms, Chest Tightness	O3 Asthma Symptoms, Cough	$ O3 Asthma Symptoms, Cough	O3 Asthma Symptoms, Shortness of Breath	$ O3 Asthma Symptoms, Shortness of Breath	O3 Asthma Symptoms, Wheeze	$ O3 Asthma Symptoms, Wheeze	Total Asthma Onset	$ Total Asthma Onset	PM Asthma Onset	$ PM Asthma Onset	O3 Asthma Onset	$ O3 Asthma Onset	Total Incidence, Hay Fever/Rhinitis	$ Total Incidence, Hay Fever/Rhinitis	PM Incidence, Hay Fever/Rhinitis
0.01	207,735.81	22.17	7,224.32	2.21	5.16	1,989.72	6.08	2,347.11	2.60	1,004.16	4.88	1,881.12	0.14	10,985.98	0.02	1,333.35	0.13	9,652.63	0.97	1,079.14	0.12
0.00	59,445.07	4.36	1,405.52	0.46	1.00	387.10	1.18	456.63	0.51	195.36	0.95	365.97	0.03	2,129.68	0.00	300.39	0.02	1,829.29	0.18	198.26	0.02
0.00	58,445.76	3.73	1,205.54	0.39	0.86	332.03	1.02	391.66	0.43	167.56	0.81	313.90	0.02	1,822.52	0.00	262.59	0.02	1,559.93	0.15	166.04	0.02
0.00	71,486.08	4.04	1,341.74	0.36	0.96	369.55	1.13	435.94	0.48	186.51	0.91	349.38	0.03	2,023.78	0.00	246.39	0.02	1,777.38	0.16	181.62	0.02
0.02	307,757.86	13.25	4,487.12	1.04	3.20	1,235.95	3.78	1,457.92	1.62	623.74	3.03	1,168.47	0.08	6,390.28	0.01	651.74	0.08	5,738.53	0.55	612.28	0.06
0.01	122,684.27	13.18	4,322.36	1.27	3.09	1,190.50	3.64	1,404.30	1.56	600.80	2.92	1,125.50	0.08	6,353.72	0.01	813.00	0.07	5,540.72	0.54	598.92	0.07
0.00	6,357.82	0.32	102.74	0.03	0.07	28.30	0.09	33.38	0.04	14.28	0.07	26.75	0.00	157.34	0.00	22.03	0.00	135.30	0.01	14.37	0.00
0.00	69,892.75	1.50	510.37	0.12	0.36	140.58	0.43	165.83	0.18	70.95	0.34	132.91	0.01	726.13	0.00	73.02	0.01	653.11	0.06	69.47	0.01
0.01	211,893.53	4.85	1,615.36	0.43	1.15	444.93	1.36	524.83	0.58	224.54	1.09	420.64	0.03	2,277.63	0.00	262.52	0.03	2,015.11	0.20	221.80	0.02
0.06	840,848.67	55.12	18,619.77	4.39	13.29	5,128.44	15.68	6,049.92	6.71	2,588.33	12.57	4,848.69	0.35	26,618.14	0.04	2,754.88	0.31	23,863.25	2.29	2,552.18	0.23
0.00	41,033.42	2.60	867.86	0.23	0.62	239.04	0.73	281.97	0.31	120.63	0.59	225.99	0.02	1,296.33	0.00	148.22	0.02	1,148.11	0.11	120.35	0.01
0.01	129,081.61	6.61	2,151.42	0.66	1.54	592.54	1.81	698.97	0.78	299.04	1.45	560.20	0.04	3,271.43	0.01	440.98	0.04	2,830.46	0.27	299.40	0.04
0.00	8,122.88	0.57	192.75	0.04	0.14	53.09	0.16	62.63	0.07	26.79	0.13	50.19	0.00	292.28	0.00	29.47	0.00	262.81	0.02	26.05	0.00
0.00	22,193.55	0.83	273.89	0.07	0.20	75.44	0.23	88.99	0.10	38.07	0.18	71.32	0.01	394.88	0.00	46.97	0.00	347.91	0.03	37.29	0.00
0.27	3,886,771.15	370.88	121,254.31	36.26	86.56	33,394.29	102.12	39,395.77	43.69	16,854.66	81.84	31,573.33	2.40	183,419.56	0.32	24,366.18	2.09	159,053.39	14.99	16,698.32	1.98
0.00	47,506.77	3.51	1,117.21	0.39	0.80	307.69	0.94	362.95	0.40	155.28	0.75	290.89	0.02	1,731.08	0.00	248.63	0.02	1,482.45	0.15	164.06	0.02
0.03	450,590.12	15.90	5,575.76	0.93	3.98	1,535.85	4.70	1,811.79	2.01	775.13	3.76	1,452.06	0.11	8,046.18	0.01	598.33	0.10	7,447.85	0.67	750.62	0.05
0.00	5,245.41	0.29	94.37	0.03	0.07	25.99	0.08	30.66	0.03	13.12	0.06	24.57	0.00	144.97	0.00	19.20	0.00	125.77	0.01	13.13	0.00
0.00	17,332.87	1.31	427.16	0.13	0.30	117.65	0.36	138.78	0.15	59.37	0.29	111.23	0.01	632.45	0.00	85.16	0.01	547.29	0.05	58.83	0.01
0.00	24,477.57	1.31	430.45	0.12	0.31	118.56	0.36	139.85	0.16	59.83	0.29	112.09	0.01	616.88	0.00	74.84	0.01	542.03	0.05	60.61	0.01
0.00	3,202.14	0.15	50.98	0.01	0.04	14.04	0.04	16.56	0.02	7.09	0.03	13.27	0.00	82.36	0.00	8.65	0.00	73.71	0.01	7.28	0.00
0.00	7,143.88	0.25	80.58	0.03	0.06	22.19	0.07	26.18	0.03	11.20	0.05	20.98	0.00	109.45	0.00	15.28	0.00	94.17	0.01	11.14	0.00
0.00	12,966.94	0.88	284.11	0.09	0.20	78.25	0.24	92.30	0.10	39.49	0.19	73.98	0.01	404.84	0.00	55.22	0.00	349.62	0.04	39.58	0.00
0.00	7,086.89	0.64	217.41	0.05	0.16	59.88	0.18	70.64	0.08	30.22	0.15	56.61	0.00	329.27	0.00	33.22	0.00	296.06	0.03	29.43	0.00
0.00	5,452.40	0.55	184.23	0.04	0.13	50.75	0.16	59.86	0.07	25.61	0.12	47.98	0.00	270.36	0.00	29.04	0.00	241.32	0.02	25.00	0.00
0.01	147,113.47	5.66	1,886.47	0.50	1.35	519.60	1.59	612.92	0.68	262.22	1.27	491.23	0.04	2,776.40	0.00	315.62	0.03	2,460.77	0.24	262.50	0.03
0.00	53,687.07	1.57	532.69	0.12	0.38	146.73	0.45	173.08	0.19	74.05	0.36	138.72	0.01	795.30	0.00	82.27	0.01	713.03	0.06	72.25	0.01
0.02	355,311.53	37.06	12,443.07	3.08	8.88	3,427.32	10.48	4,042.83	4.48	1,729.64	8.40	3,240.20	0.24	18,400.22	0.03	2,027.08	0.21	16,373.14	1.52	1,698.78	0.17
0.00	6,824.66	0.29	94.15	0.03	0.07	25.93	0.08	30.59	0.03	13.09	0.06	24.51	0.00	145.58	0.00	20.99	0.00	124.59	0.01	13.37	0.00
0.00	51,198.94	2.11	703.80	0.18	0.50	193.85	0.59	228.67	0.25	97.83	0.48	183.27	0.01	1,016.77	0.00	112.83	0.01	903.94	0.09	97.62	0.01
0.00	14,701.82	0.84	269.87	0.09	0.19	74.33	0.23	87.67	0.10	37.51	0.18	70.27	0.01	396.30	0.00	56.17	0.00	340.13	0.03	38.15	0.00
0.00	9,881.26	0.49	159.24	0.05	0.11	43.86	0.13	51.74	0.06	22.13	0.11	41.46	0.00	226.07	0.00	28.95	0.00	197.12	0.02	22.25	0.00
0.00	5,667.42	0.50	165.56	0.05	0.12	45.60	0.14	53.79	0.06	23.01	0.11	43.11	0.00	254.98	0.00	30.99	0.00	223.99	0.02	23.82	0.00
0.02	263,305.78	15.29	5,151.17	1.24	3.68	1,418.84	4.34	1,673.66	1.86	716.04	3.48	1,341.38	0.10	7,541.36	0.01	807.85	0.09	6,733.50	0.63	703.11	0.07
0.01	112,524.05	7.41	2,513.46	0.57	1.79	692.32	2.12	816.65	0.91	349.39	1.70	654.52	0.05	3,743.08	0.01	381.41	0.04	3,361.67	0.31	342.77	0.03
0.01	84,182.43	8.36	2,672.72	0.92	1.91	736.10	2.25	868.30	0.96	371.48	1.80	695.91	0.06	4,254.00	0.01	553.81	0.05	3,700.20	0.37	416.24	0.05
0.00	50,158.33	2.35	779.89	0.21	0.56	214.81	0.66	253.39	0.28	108.41	0.53	203.08	0.02	1,168.16	0.00	137.85	0.01	1,030.31	0.10	107.37	0.01
0.00	2,160.09	0.20	63.79	0.02	0.05	17.57	0.05	20.73	0.02	8.87	0.04	16.61	0.00	96.57	0.00	13.09	0.00	83.49	0.01	8.97	0.00
0.00	16,852.53	0.90	294.45	0.09	0.21	81.10	0.25	95.67	0.11	40.93	0.20	76.67	0.01	415.45	0.00	53.15	0.00	362.30	0.04	40.33	0.00
0.01	97,765.39	6.61	2,229.38	0.54	1.59	614.07	1.88	724.35	0.80	309.90	1.50	580.54	0.04	3,330.47	0.00	354.90	0.04	2,975.58	0.27	305.28	0.03
0.04	544,009.27	22.74	7,603.37	1.95	5.43	2,094.23	6.40	2,470.38	2.74	1,056.90	5.13	1,979.92	0.15	11,166.73	0.02	1,269.41	0.13	9,897.32	0.93	1,039.28	0.11
0.00	40,160.19	1.35	446.82	0.12	0.32	123.07	0.38	145.17	0.16	62.11	0.30	116.35	0.01	646.92	0.00	76.76	0.01	570.16	0.06	62.49	0.01
0.01	117,877.41	14.20	4,589.48	1.47	3.28	1,264.04	3.86	1,491.04	1.65	637.91	3.10	1,195.02	0.09	6,790.49	0.01	938.33	0.08	5,852.16	0.58	643.42	0.08
0.00	4,040.19	0.34	109.91	0.03	0.08	30.27	0.09	35.71	0.04	15.28	0.07	28.62	0.00	156.19	0.00	20.73	0.00	135.47	0.01	14.85	0.00
0.03	473,076.30	22.28	7,223.10	2.28	5.16	1,989.29	6.08	2,346.74	2.60	1,004.00	4.88	1,880.79	0.14	10,794.11	0.02	1,511.67	0.12	9,282.43	0.90	997.50	0.12
0.00	35,776.67	2.90	934.11	0.31	0.67	257.27	0.79	303.47	0.34	129.83	0.63	243.22	0.02	1,432.08	0.00	209.74	0.02	1,222.34	0.12	129.02	0.02
0.00	10,834.43	0.64	215.05	0.06	0.15	59.23	0.18	69.87	0.08	29.89	0.15	56.00	0.00	329.19	0.00	37.13	0.00	292.06	0.03	29.84	0.00
0.03	385,978.49	48.69	16,466.51	3.85	11.76	4,535.59	13.87	5,350.15	5.93	2,288.95	11.11	4,287.97	0.32	24,600.72	0.03	2,555.67	0.29	22,045.05	2.02	2,255.80	0.21
0.01	82,015.61	9.47	3,199.26	0.75	2.28	881.21	2.69	1,039.47	1.15	444.71	2.16	833.10	0.06	4,704.00	0.01	490.04	0.06	4,213.97	0.39	438.86	0.04
0.01	157,183.76	12.00	3,969.12	1.10	2.83	1,093.23	3.34	1,289.55	1.43	551.71	2.68	1,033.54	0.08	5,824.81	0.01	702.08	0.07	5,122.73	0.49	549.87	0.06
0.02	279,633.44	14.95	4,998.44	1.28	3.57	1,376.76	4.21	1,624.01	1.80	694.80	3.37	1,301.59	0.10	7,325.98	0.01	821.76	0.09	6,504.22	0.62	688.40	0.07
0.02	337,466.40	18.58	6,203.46	1.61	4.43	1,708.66	5.22	2,015.52	2.24	862.30	4.19	1,615.37	0.12	8,960.28	0.01	1,037.80	0.10	7,922.48	0.76	841.42	0.09
0.02	265,304.89	17.70	6,020.85	1.34	4.30	1,658.42	5.07	1,956.26	2.17	836.94	4.06	1,567.88	0.12	8,983.51	0.01	900.86	0.11	8,082.65	0.73	817.68	0.07
0.02	257,720.08	11.67	3,961.72	0.90	2.83	1,091.21	3.34	1,287.23	1.43	550.72	2.67	1,031.66	0.07	5,648.53	0.01	574.10	0.07	5,074.43	0.48	533.13	0.05
0.09	1,258,402.23	65.81	22,752.95	4.38	16.24	6,267.02	19.16	7,393.25	8.20	3,163.05	15.36	5,925.26	0.42	32,240.75	0.03	2,669.22	0.39	29,571.53	2.82	3,147.38	0.23
0.00	68,041.64	4.03	1,339.55	0.36	0.96	368.96	1.13	435.22	0.48	186.20	0.90	348.81	0.03	1,972.82	0.00	228.47	0.02	1,744.35	0.17	186.16	0.02
0.00	29,926.62	2.18	697.02	0.24	0.50	191.97	0.59	226.44	0.25	96.88	0.47	181.49	0.01	1,050.26	0.00	152.37	0.01	897.89	0.09	98.50	0.01
0.01	134,777.60	4.69	1,580.68	0.38	1.13	435.39	1.33	513.57	0.57	219.72	1.07	411.61	0.03	2,231.75	0.00	236.42	0.03	1,995.33	0.19	215.94	0.02
0.02	238,963.32	19.20	6,487.52	1.53	4.63	1,786.94	5.46	2,107.87	2.34	901.80	4.38	1,689.38	0.12	9,392.11	0.01	973.84	0.11	8,418.27	0.80	889.24	0.08
0.01	135,226.69	1.86	625.41	0.16	0.45	172.26	0.53	203.20	0.23	86.94	0.42	162.86	0.01	884.21	0.00	98.71	0.01	785.50	0.08	84.20	0.01
0.00	68,862.99	3.35	1,101.46	0.31	0.79	303.37	0.93	357.86	0.40	153.10	0.74	286.81	0.02	1,632.09	0.00	207.86	0.02	1,424.23	0.14	150.46	0.02
0.00	16,990.35	0.98	324.98	0.09	0.23	89.51	0.27	105.59	0.12	45.17	0.22	84.62	0.01	479.03	0.00	59.12	0.01	419.90	0.04	43.74	0.00
0.00	19,355.12	1.52	496.82	0.15	0.35	136.83	0.42	161.41	0.18	69.06	0.34	129.36	0.01	745.49	0.00	96.27	0.01	649.23	0.06	70.31	0.01
0.05	767,368.81	32.67	11,211.87	2.32	8.01	3,088.29	9.44	3,642.98	4.04	1,558.57	7.57	2,919.71	0.21	16,015.23	0.02	1,467.99	0.19	14,547.24	1.37	1,522.09	0.12
0.00	17,195.46	0.98	320.91	0.09	0.23	88.39	0.27	104.26	0.12	44.61	0.22	83.56	0.01	478.23	0.00	62.02	0.01	416.21	0.04	44.50	0.01
0.00	16,172.83	1.04	334.94	0.11	0.24	92.25	0.28	108.82	0.12	46.55	0.23	87.21	0.01	519.13	0.00	76.03	0.01	443.10	0.04	46.85	0.01
0.00	8,026.74	0.37	119.85	0.04	0.09	33.01	0.10	38.94	0.04	16.66	0.08	31.21	0.00	184.51	0.00	26.59	0.00	157.92	0.02	17.08	0.00

$ PM Incidence, Hay Fever/Rhinitis	O3 Incidence, Hay Fever/Rhinitis	$ O3 Incidence, Hay Fever/Rhinitis	Total ER Visits, Respiratory	$ Total ER Visits, Respiratory	PM ER Visits, Respiratory	$ PM ER Visits, Respiratory	O3 ER Visits, Respiratory	$ O3 ER Visits, Respiratory	Total Hospital Admits, All Respiratory	$ Total Hospital Admits All Respiratory	PM Hospital Admits, All Respiratory	$ PM Hospital Admits All Respiratory	O3 Hospital Admits, All Respiratory	$ O3 Hospital Admits All Respiratory	PM Nonfatal Heart Attacks	$ PM Nonfatal Heart Attacks	PM Minor Restricted Activity Days	$ PM Minor Restricted Activity Days	PM Work Loss Days	$ PM Work Loss Days	PM Incidence Lung Cancer	$ PM Incidence Lung Cancer
130.34	0.85	948.80	0.06	95.55	0.01	8.92	0.05	86.63	0.00	58.67	0.00	22.44	0.00	36.23	0.00	282.27	6.71	843.28	1.14	361.93	0.00	21.22
27.75	0.15	170.50	0.02	24.86	0.00	2.70	0.01	22.16	0.00	15.99	0.00	5.72	0.00	10.28	0.00	65.53	1.19	149.56	0.20	63.19	0.00	4.51
23.70	0.13	142.34	0.01	22.45	0.00	2.49	0.01	19.96	0.00	14.55	0.00	5.78	0.00	8.77	0.00	79.57	1.03	129.75	0.17	55.23	0.00	4.56
21.94	0.14	159.67	0.02	35.52	0.00	3.32	0.02	32.20	0.00	16.65	0.00	5.15	0.00	11.50	0.00	75.77	1.01	127.39	0.17	54.08	0.00	4.96
61.89	0.49	550.39	0.05	83.95	0.00	6.53	0.05	77.42	0.00	60.62	0.00	14.06	0.00	46.56	0.00	378.06	3.03	380.67	0.50	159.61	0.00	20.04
76.00	0.47	522.92	0.04	65.14	0.00	6.40	0.04	58.74	0.00	37.30	0.00	13.75	0.00	23.55	0.00	254.75	3.62	455.46	0.61	193.92	0.00	15.69
2.00	0.01	12.37	0.00	3.28	0.00	0.35	0.00	2.93	0.00	1.60	0.00	0.51	0.00	1.09	0.00	6.64	0.09	11.90	0.02	5.03	0.00	0.45
6.92	0.06	62.55	0.01	12.20	0.00	0.93	0.01	11.26	0.00	13.71	0.00	2.83	0.00	10.87	0.00	84.37	0.41	51.74	0.07	21.30	0.00	4.95
25.30	0.18	196.50	0.02	36.18	0.00	3.18	0.02	32.99	0.00	32.61	0.00	8.47	0.00	24.13	0.00	303.75	1.31	164.18	0.21	67.72	0.00	13.69
261.72	2.06	2,290.45	0.18	286.63	0.01	22.61	0.16	264.02	0.01	171.21	0.00	43.85	0.01	127.36	0.01	895.76	11.65	1,464.18	1.96	619.10	0.00	51.17
13.69	0.10	106.66	0.01	12.01	0.00	1.05	0.01	10.95	0.00	7.70	0.00	2.09	0.00	5.60	0.00	60.43	0.65	82.03	0.11	34.40	0.00	5.78
40.05	0.23	259.36	0.04	56.97	0.00	5.91	0.03	51.06	0.00	32.93	0.00	11.31	0.00	21.62	0.00	237.79	1.75	220.23	0.30	93.56	0.00	8.59
2.62	0.02	23.44	0.00	3.12	0.00	0.24	0.00	2.88	0.00	2.07	0.00	0.56	0.00	1.51	0.00	11.13	0.12	15.07	0.02	6.42	0.00	0.60
4.41	0.03	32.88	0.00	3.05	0.00	0.28	0.00	2.77	0.00	4.05	0.00	1.11	0.00	2.94	0.00	21.45	0.22	27.04	0.04	11.27	0.00	1.36
2,201.23	13.01	14,497.10	1.31	2,125.41	0.13	217.16	1.17	1,908.25	0.05	1,035.99	0.01	389.29	0.04	646.69	0.07	5,498.57	90.93	11,431.38	15.57	4,924.69	0.01	318.95
23.43	0.13	140.63	0.01	24.13	0.00	2.68	0.01	21.45	0.00	11.11	0.00	4.22	0.00	6.89	0.00	61.26	1.02	127.88	0.17	54.85	0.00	4.15
55.52	0.62	695.10	0.06	99.81	0.00	5.64	0.06	94.17	0.00	66.69	0.00	12.29	0.00	54.41	0.01	477.23	3.00	377.57	0.50	156.84	0.00	25.39
1.72	0.01	11.41	0.00	2.86	0.00	0.29	0.00	2.56	0.00	1.14	0.00	0.35	0.00	0.79	0.00	7.00	0.09	11.49	0.02	4.94	0.00	0.46
7.84	0.05	50.99	0.01	10.38	0.00	1.07	0.01	9.31	0.00	3.53	0.00	1.23	0.00	2.30	0.00	30.40	0.31	38.85	0.05	16.28	0.00	1.41
7.26	0.05	53.35	0.00	4.80	0.00	0.44	0.00	4.35	0.00	5.48	0.00	1.61	0.00	3.87	0.00	27.78	0.31	38.37	0.05	16.06	0.00	1.72
0.77	0.01	6.51	0.00	0.50	0.00	0.04	0.00	0.46	0.00	0.54	0.00	0.16	0.00	0.38	0.00	3.82	0.04	4.74	0.01	2.02	0.00	0.24
1.54	0.01	9.60	0.00	2.29	0.00	0.25	0.00	2.05	0.00	1.94	0.00	0.58	0.00	1.36	0.00	7.73	0.11	13.96	0.02	5.92	0.00	0.51
5.34	0.03	34.25	0.00	6.50	0.00	0.68	0.00	5.82	0.00	3.76	0.00	1.12	0.00	2.65	0.00	17.63	0.27	34.11	0.05	14.50	0.00	1.12
2.95	0.02	26.47	0.00	4.37	0.00	0.34	0.00	4.03	0.00	2.03	0.00	0.57	0.00	1.46	0.00	6.42	0.11	13.77	0.02	5.87	0.00	0.43
2.66	0.02	22.34	0.00	3.13	0.00	0.26	0.00	2.87	0.00	1.55	0.00	0.63	0.00	0.92	0.00	10.19	0.09	11.43	0.02	4.88	0.00	0.34
29.64	0.21	232.85	0.02	34.46	0.00	3.00	0.02	31.46	0.00	29.59	0.00	8.17	0.00	21.42	0.00	229.59	1.46	184.06	0.24	76.75	0.00	11.36
7.42	0.06	64.83	0.01	12.64	0.00	1.00	0.01	11.64	0.00	8.31	0.00	1.99	0.00	6.32	0.00	63.77	0.30	38.16	0.05	16.02	0.00	2.97
185.88	1.36	1,512.89	0.11	175.77	0.01	14.82	0.10	160.95	0.00	92.79	0.00	32.92	0.00	59.87	0.01	538.01	8.14	1,023.31	1.39	438.56	0.00	29.12
1.92	0.01	11.45	0.00	1.78	0.00	0.20	0.00	1.58	0.00	1.13	0.00	0.44	0.00	0.69	0.00	7.21	0.10	12.23	0.02	5.16	0.00	0.46
10.75	0.08	86.87	0.01	13.20	0.00	1.12	0.01	12.08	0.00	9.37	0.00	2.15	0.00	7.23	0.00	84.05	0.50	62.28	0.08	26.00	0.00	4.77
5.35	0.03	32.80	0.01	8.85	0.00	0.96	0.00	7.89	0.00	4.33	0.00	1.41	0.00	2.91	0.00	21.40	0.30	37.13	0.05	15.63	0.00	1.40
2.82	0.02	19.43	0.00	2.94	0.00	0.29	0.00	2.66	0.00	1.94	0.00	0.55	0.00	1.39	0.00	13.31	0.14	17.66	0.02	7.40	0.00	0.83
2.89	0.02	20.93	0.00	1.68	0.00	0.16	0.00	1.52	0.00	1.25	0.00	0.40	0.00	0.85	0.00	7.56	0.15	19.48	0.03	8.32	0.00	0.53
74.74	0.56	628.38	0.06	102.39	0.01	8.38	0.06	94.01	0.00	73.73	0.00	20.39	0.00	53.35	0.01	558.93	3.41	429.07	0.57	179.78	0.00	23.72
34.73	0.28	308.05	0.02	36.56	0.00	2.85	0.02	33.71	0.00	28.27	0.00	8.84	0.00	19.43	0.00	155.78	1.66	208.82	0.28	88.06	0.00	11.98
54.07	0.33	362.16	0.03	41.29	0.00	4.16	0.02	37.14	0.00	18.41	0.00	7.18	0.00	11.23	0.00	146.35	2.83	355.64	0.48	152.87	0.00	8.02
12.59	0.09	94.78	0.01	13.30	0.00	1.20	0.01	12.09	0.00	10.38	0.00	3.26	0.00	7.12	0.00	65.62	0.57	71.46	0.09	29.87	0.00	3.55
1.21	0.01	7.76	0.00	1.96	0.00	0.20	0.00	1.75	0.00	0.49	0.00	0.17	0.00	0.32	0.00	3.23	0.07	8.81	0.01	3.76	0.00	0.23
5.09	0.03	35.24	0.01	8.56	0.00	0.84	0.00	7.72	0.00	3.37	0.00	1.09	0.00	2.28	0.00	17.84	0.22	28.26	0.04	11.97	0.00	1.13
32.34	0.24	272.94	0.02	32.92	0.00	2.69	0.02	30.24	0.00	19.54	0.00	5.44	0.00	14.10	0.00	172.73	1.44	181.40	0.24	76.02	0.00	10.29
117.20	0.83	922.08	0.12	200.03	0.01	17.40	0.11	182.63	0.01	106.45	0.00	27.98	0.00	78.47	0.01	968.70	5.18	651.59	0.86	273.59	0.00	42.02
7.36	0.05	55.13	0.00	6.53	0.00	0.59	0.00	5.94	0.00	7.88	0.00	2.27	0.00	5.61	0.00	48.83	0.39	48.42	0.06	20.13	0.00	3.50
88.16	0.50	555.27	0.05	74.49	0.00	7.92	0.04	66.56	0.00	47.90	0.00	19.46	0.00	28.44	0.00	308.26	4.28	537.65	0.72	228.83	0.00	17.76
1.95	0.01	12.90	0.00	2.09	0.00	0.21	0.00	1.87	0.00	0.96	0.00	0.33	0.00	0.63	0.00	8.50	0.11	14.00	0.02	5.87	0.00	0.58
138.26	0.77	859.24	0.07	115.57	0.01	12.44	0.06	103.13	0.00	90.97	0.00	28.30	0.00	62.66	0.01	845.23	6.23	782.69	1.04	328.58	0.00	37.70
18.75	0.10	110.28	0.01	16.63	0.00	1.88	0.01	14.75	0.00	7.54	0.00	2.99	0.00	4.55	0.00	63.05	0.78	98.17	0.13	42.26	0.00	3.16
3.35	0.02	26.49	0.00	4.91	0.00	0.43	0.00	4.49	0.00	3.77	0.00	1.15	0.00	2.62	0.00	35.97	0.13	16.88	0.02	7.16	0.00	0.64
232.98	1.82	2,022.83	0.15	241.52	0.01	19.19	0.14	222.33	0.01	114.94	0.00	40.46	0.00	74.48	0.01	560.96	11.36	1,428.41	1.95	616.45	0.00	35.20
45.40	0.35	393.46	0.04	67.86	0.00	5.40	0.04	62.46	0.00	24.38	0.00	7.96	0.00	16.42	0.00	169.72	2.06	259.09	0.35	110.75	0.00	6.98
65.76	0.43	484.11	0.03	54.63	0.00	5.05	0.03	49.58	0.00	46.12	0.00	15.96	0.00	30.17	0.00	275.40	3.13	393.86	0.53	166.92	0.00	20.27
76.60	0.55	611.80	0.05	77.64	0.00	6.66	0.04	70.98	0.00	53.57	0.00	15.67	0.00	37.90	0.01	440.90	3.59	451.67	0.60	189.14	0.00	20.84
96.49	0.67	744.93	0.06	90.21	0.00	7.98	0.05	82.23	0.00	73.51	0.00	19.37	0.00	54.15	0.01	572.80	5.00	629.05	0.84	264.82	0.00	30.66
81.50	0.66	736.18	0.09	149.07	0.01	11.42	0.08	137.64	0.00	66.84	0.00	20.05	0.00	46.80	0.00	334.17	3.29	413.93	0.56	175.86	0.00	16.46
53.70	0.43	479.43	0.06	98.44	0.00	7.62	0.06	90.82	0.00	49.78	0.00	12.54	0.00	37.24	0.00	328.59	2.11	265.22	0.35	111.40	0.00	11.93
258.79	2.59	2,888.59	0.16	252.68	0.01	15.90	0.15	236.78	0.01	218.95	0.00	43.79	0.01	175.17	0.01	1,196.70	12.87	1,618.55	2.13	673.79	0.00	71.98
21.40	0.15	164.76	0.02	25.08	0.00	2.22	0.01	22.85	0.00	16.38	0.00	5.55	0.00	10.84	0.00	131.03	0.97	121.94	0.16	51.39	0.00	6.06
14.17	0.08	84.33	0.01	12.99	0.00	1.45	0.01	11.53	0.00	7.84	0.00	2.70	0.00	5.13	0.00	61.79	0.66	83.02	0.11	35.21	0.00	2.82
22.66	0.17	193.28	0.02	24.37	0.00	1.97	0.01	22.40	0.00	21.84	0.00	4.91	0.00	16.94	0.00	191.41	1.23	154.33	0.20	64.06	0.00	13.16
91.49	0.72	797.75	0.05	75.94	0.00	6.01	0.04	69.93	0.00	46.70	0.00	13.27	0.00	33.43	0.00	233.83	4.71	591.94	0.80	252.18	0.00	19.58
9.29	0.07	74.91	0.01	20.86	0.00	1.77	0.01	19.09	0.00	34.57	0.00	8.00	0.00	26.57	0.00	396.72	0.63	79.07	0.10	32.75	0.00	17.09
19.01	0.12	131.45	0.02	27.49	0.00	2.69	0.02	24.81	0.00	17.55	0.00	5.26	0.00	12.29	0.00	127.59	0.79	98.89	0.13	41.81	0.00	4.52
5.35	0.03	38.39	0.00	7.90	0.00	0.75	0.00	7.15	0.00	4.27	0.00	1.59	0.00	2.68	0.00	20.41	0.27	34.54	0.05	14.68	0.00	1.30
9.01	0.06	61.30	0.01	14.17	0.00	1.41	0.01	12.76	0.00	6.12	0.00	1.84	0.00	4.28	0.00	27.71	0.54	67.40	0.09	28.77	0.00	1.83
138.38	1.24	1,383.70	0.17	273.66	0.01	19.08	0.16	254.58	0.01	121.41	0.00	28.02	0.01	93.39	0.01	804.13	6.78	852.66	1.13	358.08	0.00	42.86
5.72	0.03	38.78	0.00	4.60	0.00	0.46	0.00	4.14	0.00	2.94	0.00	1.06	0.00	1.88	0.00	24.85	0.31	39.00	0.05	16.54	0.00	1.17
6.81	0.04	40.05	0.01	8.15	0.00	0.92	0.00	7.23	0.00	3.75	0.00	1.31	0.00	2.44	0.00	33.40	0.32	40.70	0.05	17.13	0.00	1.67
2.44	0.01	14.63	0.00	2.76	0.00	0.31	0.00	2.45	0.00	1.60	0.00	0.55	0.00	1.04	0.00	8.65	0.14	17.17	0.02	7.24	0.00	0.59

PM HA Cardio Cerebro and Peripheral Vascular Disease	$ PM HA Cardio Cerebro and Peripheral Vascular Disease	PM HA Alzheimers Disease	$ PM HA Alzheimers Disease	PM HA Parkinsons Disease	$ PM HA Parkinsons Disease	PM Incidence Stroke	$ PM Incidence Stroke	PM Incidence Out of Hospital Cardiac Arrest	$ PM Incidence Out of Hospital Cardiac Arrest	PM ER Visits All Cardiac Outcomes	$ PM ER Visits All Cardiac Outcomes	O3 ER Visits, Asthma	$ O3 ER Visits, Asthma	O3 School Loss Days, All Cause	$ O3 School Loss Days, All Cause
0.00	27.64	0.00	38.83	0.00	9.71	0.00	27.22	0.00	6.31	0.00	5.25	0.00	0.30	12.68	21,529.42
0.00	7.11	0.00	6.96	0.00	1.92	0.00	5.45	0.00	1.34	0.00	1.58	0.00	0.04	2.25	3,821.09
0.00	7.46	0.00	8.14	0.00	2.01	0.00	5.63	0.00	1.27	0.00	1.22	0.00	0.04	1.87	3,171.33
0.00	6.52	0.00	8.93	0.00	2.14	0.00	5.99	0.00	1.32	0.00	1.27	0.00	0.04	2.08	3,540.49
0.00	29.06	0.00	37.44	0.00	9.28	0.00	25.89	0.00	5.02	0.00	4.18	0.00	0.15	7.32	12,429.28
0.00	17.00	0.00	24.30	0.00	6.77	0.00	18.94	0.00	4.37	0.00	3.43	0.00	0.19	6.92	11,752.20
0.00	0.67	0.00	0.76	0.00	0.19	0.00	0.54	0.00	0.12	0.00	0.15	0.00	0.00	0.16	275.79
0.00	6.73	0.00	27.98	0.00	2.33	0.00	6.50	0.00	1.08	0.00	0.76	0.00	0.02	0.83	1,411.20
0.00	20.56	0.00	28.51	0.00	6.43	0.00	17.96	0.00	3.07	0.00	2.47	0.00	0.05	2.63	4,458.49
0.00	79.60	0.00	84.86	0.00	22.21	0.00	62.74	0.00	14.36	0.01	12.28	0.00	0.59	30.45	51,705.52
0.00	5.04	0.00	12.21	0.00	2.60	0.00	7.23	0.00	1.29	0.00	0.71	0.00	0.02	1.41	2,389.41
0.00	17.12	0.00	15.82	0.00	4.00	0.00	11.23	0.00	2.37	0.00	2.97	0.00	0.10	3.40	5,773.93
0.00	0.90	0.00	1.08	0.00	0.27	0.00	0.76	0.00	0.16	0.00	0.12	0.00	0.00	0.31	519.56
0.00	2.21	0.00	2.34	0.00	0.62	0.00	1.77	0.00	0.35	0.00	0.32	0.00	0.01	0.44	740.24
0.02	475.11	0.03	599.00	0.01	136.48	0.01	383.24	0.00	95.38	0.04	94.54	0.01	5.83	190.09	322,834.64
0.00	6.68	0.00	7.58	0.00	1.86	0.00	5.22	0.00	1.15	0.00	1.06	0.00	0.05	1.86	3,166.06
0.00	33.33	0.00	52.50	0.00	11.90	0.00	33.21	0.00	5.96	0.00	4.86	0.00	0.22	9.17	15,577.79
0.00	0.69	0.00	0.80	0.00	0.20	0.00	0.57	0.00	0.12	0.00	0.15	0.00	0.00	0.15	253.61
0.00	2.09	0.00	2.36	0.00	0.66	0.00	1.87	0.00	0.42	0.00	0.48	0.00	0.03	0.67	1,138.94
0.00	2.45	0.00	3.32	0.00	0.78	0.00	2.18	0.00	0.44	0.00	0.37	0.00	0.01	0.71	1,212.51
0.00	0.20	0.00	0.46	0.00	0.11	0.00	0.30	0.00	0.06	0.00	0.03	0.00	0.00	0.08	144.27
0.00	0.96	0.00	0.86	0.00	0.22	0.00	0.63	0.00	0.14	0.00	0.16	0.00	0.00	0.13	220.51
0.00	1.54	0.00	1.93	0.00	0.51	0.00	1.45	0.00	0.32	0.00	0.34	0.00	0.01	0.46	776.86
0.00	0.67	0.00	0.74	0.00	0.18	0.00	0.51	0.00	0.12	0.00	0.12	0.00	0.01	0.34	585.46
0.00	0.59	0.00	0.57	0.00	0.14	0.00	0.40	0.00	0.10	0.00	0.11	0.00	0.01	0.29	499.17
0.00	16.34	0.00	23.17	0.00	5.19	0.00	14.46	0.00	2.68	0.00	2.19	0.00	0.08	3.09	5,241.93
0.00	4.38	0.00	6.44	0.00	1.37	0.00	3.82	0.00	0.66	0.00	0.61	0.00	0.02	0.85	1,441.67
0.00	37.60	0.01	115.64	0.00	12.58	0.00	35.35	0.00	8.70	0.00	6.81	0.00	0.44	19.91	33,816.51
0.00	0.36	0.00	0.80	0.00	0.21	0.00	0.59	0.00	0.13	0.00	0.07	0.00	0.00	0.15	256.19
0.00	6.01	0.00	10.33	0.00	2.22	0.00	6.17	0.00	1.07	0.00	0.84	0.00	0.02	1.15	1,960.76
0.00	1.23	0.00	2.47	0.00	0.61	0.00	1.71	0.00	0.39	0.00	0.32	0.00	0.01	0.44	741.03
0.00	1.08	0.00	1.51	0.00	0.38	0.00	1.07	0.00	0.22	0.00	0.20	0.00	0.01	0.26	443.19
0.00	0.59	0.00	0.84	0.00	0.22	0.00	0.62	0.00	0.16	0.00	0.11	0.00	0.00	0.28	469.52
0.00	41.89	0.00	46.28	0.00	10.82	0.00	30.32	0.00	5.79	0.00	5.72	0.00	0.15	8.28	14,069.63
0.00	14.47	0.00	29.42	0.00	5.57	0.00	15.62	0.00	2.90	0.00	1.91	0.00	0.09	4.05	6,874.46
0.00	10.90	0.00	14.22	0.00	3.59	0.00	10.07	0.00	2.46	0.00	2.09	0.00	0.11	4.83	8,202.66
0.00	4.93	0.00	6.45	0.00	1.65	0.00	4.66	0.00	0.92	0.00	0.85	0.00	0.03	1.25	2,119.40
0.00	0.37	0.00	0.33	0.00	0.10	0.00	0.27	0.00	0.07	0.00	0.10	0.00	0.00	0.10	173.28
0.00	1.61	0.00	2.04	0.00	0.51	0.00	1.43	0.00	0.31	0.00	0.36	0.00	0.01	0.47	799.02
0.00	10.94	0.00	32.81	0.00	4.83	0.00	13.56	0.00	2.54	0.00	1.63	0.00	0.07	3.59	6,092.91
0.00	59.23	0.01	114.07	0.00	19.42	0.00	54.34	0.00	9.84	0.00	8.70	0.00	0.32	12.16	20,651.68
0.00	3.88	0.00	7.45	0.00	1.61	0.00	4.45	0.00	0.79	0.00	0.51	0.00	0.01	0.73	1,246.95
0.00	21.39	0.00	61.87	0.00	7.16	0.00	19.96	0.00	4.88	0.00	4.24	0.00	0.18	7.36	12,504.84
0.00	0.65	0.00	1.00	0.00	0.26	0.00	0.74	0.00	0.16	0.00	0.12	0.00	0.00	0.17	290.95
0.00	49.75	0.00	69.50	0.00	17.70	0.00	49.90	0.00	9.90	0.00	7.74	0.00	0.22	11.30	19,197.71
0.00	5.15	0.00	5.53	0.00	1.40	0.00	3.95	0.00	0.90	0.00	0.85	0.00	0.03	1.44	2,451.22
0.00	1.74	0.00	1.14	0.00	0.28	0.00	0.80	0.00	0.17	0.00	0.25	0.00	0.01	0.35	588.79
0.00	48.86	0.01	121.56	0.00	15.10	0.00	42.48	0.00	11.02	0.00	9.31	0.00	0.80	26.55	45,098.45
0.00	9.80	0.00	20.95	0.00	2.89	0.00	8.15	0.00	2.10	0.00	1.95	0.00	0.22	5.19	8,807.00
0.00	23.07	0.00	30.49	0.00	8.93	0.00	24.72	0.00	4.85	0.00	3.53	0.00	0.15	6.41	10,889.44
0.00	28.56	0.00	37.73	0.00	9.41	0.00	26.43	0.00	5.41	0.00	4.32	0.00	0.15	8.08	13,729.81
0.00	35.41	0.00	107.69	0.00	14.15	0.00	39.66	0.00	7.91	0.00	5.76	0.00	0.24	9.85	16,730.14
0.00	25.32	0.00	38.23	0.00	7.46	0.00	20.96	0.00	4.42	0.00	4.22	0.00	0.33	9.65	16,383.44
0.00	24.32	0.00	22.16	0.00	5.58	0.00	15.68	0.00	3.19	0.00	3.83	0.00	0.20	6.35	10,792.55
0.00	91.60	0.01	132.39	0.00	32.43	0.00	90.96	0.00	18.94	0.01	12.75	0.00	0.50	38.57	65,496.54
0.00	8.89	0.00	15.90	0.00	2.75	0.00	7.68	0.00	1.51	0.00	1.40	0.00	0.05	2.18	3,703.12
0.00	5.16	0.00	4.63	0.00	1.24	0.00	3.51	0.00	0.81	0.00	0.71	0.00	0.02	1.12	1,895.45
0.00	12.87	0.00	38.18	0.00	6.08	0.00	16.91	0.00	2.88	0.00	1.57	0.00	0.04	2.58	4,376.52
0.00	21.47	0.00	47.92	0.00	8.46	0.00	23.68	0.00	5.54	0.00	3.74	0.00	0.20	10.57	17,953.27
0.00	23.59	0.00	37.67	0.00	8.83	0.00	24.95	0.00	3.56	0.00	2.47	0.00	0.02	0.99	1,689.63
0.00	8.24	0.00	8.38	0.00	2.05	0.00	5.75	0.00	1.17	0.00	1.33	0.00	0.04	1.73	2,936.99
0.00	1.93	0.00	2.22	0.00	0.59	0.00	1.68	0.00	0.36	0.00	0.38	0.00	0.01	0.50	856.63
0.00	2.99	0.00	2.62	0.00	0.84	0.00	2.41	0.00	0.59	0.00	0.58	0.00	0.02	0.81	1,377.58
0.00	57.73	0.00	84.26	0.00	20.08	0.00	56.25	0.00	10.95	0.00	9.59	0.00	0.62	18.34	31,154.37
0.00	1.70	0.00	1.77	0.00	0.52	0.00	1.48	0.00	0.36	0.00	0.28	0.00	0.01	0.51	866.98
0.00	2.12	0.00	2.89	0.00	0.75	0.00	2.11	0.00	0.45	0.00	0.36	0.00	0.01	0.52	890.62
0.00	0.70	0.00	0.94	0.00	0.25	0.00	0.71	0.00	0.17	0.00	0.14	0.00	0.00	0.19	326.61

CMAQ Analysis

Applicant	Clean Air Northeast Florida
Service Area (County)	NEFL TOTAL
Date	2019

Projected Annual Emissions Reduction - BUILD CONNECTED COMMUNITIES - Transit Svc Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	Pollutant	Emissions Rate/mile	*Unit*	Total Annual Pollution Reduction	*Unit*
SOV Trips Avoided per Day	7,629	*trips*	Hydrocarbons	2.8	*grams*	171,737	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	1,281,890	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	85,255	*lbs*
Total Yearly Miles Avoided	27,845,850	*miles*	CO2	0.916	*lbs*	25,506,799	*lbs*
			Gasoline	0.0465	*gals*	1,294,832	*gals*

Notes:

Projected Annual Emissions Reduction - BUILD CONNECTED COMMUNITIES - Transit Coverage Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	Pollutant	Emissions Rate/mile	*Unit*	Total Annual Pollution Reduction	*Unit*
SOV Trips Avoided per Day	16,341	*trips*	Hydrocarbons	2.8	*grams*	171,737	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	1,281,890	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	85,255	*lbs*
Total Yearly Miles Avoided	59,644,650	*miles*	CO2	0.916	*lbs*	25,506,799	*lbs*
			Gasoline	0.0465	*gals*	1,294,832	*gals*

Notes:

Projected Annual Emissions Reduction -BUILD CONNECTED COMMUNITIES - Bike Ped

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	Pollutant	Emissions Rate/mile	*Unit*	Total Annual Pollution Reduction	*Unit*
SOV Trips Avoided per Day	5,396	*trips*	Hydrocarbons	2.8	*grams*	171,737	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	1,281,890	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	85,255	*lbs*
Total Yearly Miles Avoided	19,695,400	*miles*	CO2	0.916	*lbs*	25,506,799	*lbs*
			Gasoline	0.0465	*gals*	1,294,832	*gals*

Notes:

Projected Annual Emissions Reduction - ENCOURAGE DEPLOYMENT OF HIGHER FUEL EFFICIENCY VEHICLES - Gas to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	Pollutant	Emissions Rate/mile	Unit	Total Annual Pollution Reduction	Unit
SOV Trips Avoided per Day	73,498	*trips*	Hydrocarbons	2.8	*grams*	171,737	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	1,281,890	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	85,255	*lbs*
Total Yearly Miles Avoided	268,267,700	*miles*	CO2	0.916	*lbs*	25,506,799	*lbs*
			Gasoline	0.0465	*gals*	1,294,832	*gals*

Notes:

Projected Annual Emissions Reduction -ENCOURAGE DEPLOYMENT OF HIGHER FUEL EFFICIENCY VEHICLES - Diesel to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	Pollutant	Emissions Rate/mile	Unit	Total Annual Pollution Reduction	Unit
SOV Trips Avoided per Day	6,113	*trips*	Hydrocarbons	0.34	*grams*	20,854	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	1.59	*grams*	97,522	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	31.4	*grams*	1,925,902	*lbs*
Total Yearly Miles Avoided	22,312,450	*miles*	CO2	1.63	*lbs*	45,388,736	*lbs*
			Diesel	0.053	*gals*	1,475,830	*gals*

Notes:

Projected Annual Emissions Reduction -ENCOURAGE DEPLOYMENT OF HIGHER FUEL EFFICIENCY VEHICLES - Aviation Emissions Reduction

Location / Flight Type	Fuel Type		*Fuel Loading (gal)*	CO (g/gal)	*HC (g/gal)*	CO (lbs)	HC (lbs)	CH_4 (lbs)	N_2O (lbs)	50% reduction CH_4 (lbs)	50% reduction N_2O (lbs)	50% reduction CO (lbs)	50% reduction HC (lbs)
JIA Domestic Freight	Jet Kerosene		42,145.78	4.15	0.72	91.26	66.7	380.94	74.33	190.47	37.165	45.63	33.34
Cecil Domestic Passenger	Aviation Gas		42,154,578.10	16	6	1485712.4	####			0	0	742856.2	278571
Herlong Domestic Passenger	Jet Kerosene		153,800.04	4.15	0.72	333.09	244	1075.36	419.51	537.68	209.755	166.545	121.815
JIA Domestic Passenger	Jet Kerosene		4,045,411.46	4.15	0.72	8769.47	6412	23124.43	9020.39	11562.22	4510.195	4384.735	3205.75
JaxEx Domestic Passenger	Jet Kerosene		933,812.01	4.15	0.72	2025.73	1481	5334.57	2080.12	2667.285	1040.06	1012.865	740.59
JIA International Passenger	Jet Kerosene		843,091.56	4.15	0.72	1827.49	1337	380.94	74.33	190.47	37.165	913.745	668.415
JIA International Freight	Jet Kerosene		42,145.78	4.15	0.72	91.26	66.7	45.63	33.34	22.815	16.67	45.63	33.34

Notes: The projected annual aviation emissions reductions shown in the table are based on fuel usage data from the 2019 Jacksonville Aviation Authority (JAA) Fuel Reports. Emissions were calculated for both domestic and international flights (passenger and freight) at various airports in the Jacksonville area. Two fuel types were considered: Jet Kerosene and Aviation Gasoline (AvGas). Emission factors for carbon monoxide (CO) and

Projected Annual Emissions Reduction - BUILD CONNECTED COMMUNITIES

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	Pollutant	Emissions Rate/mile	Unit	Total Annual Pollution Reduction	Unit
SOV Trips Avoided per Day	29,366	*trips*	Hydrocarbons	2.8	*grams*	171,737	*lbs*

Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	1,281,890	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	85,255	*lbs*
Total Yearly Miles Avoided	107,185,900	*miles*	CO2	0.916	*lbs*	25,506,799	*lbs*
			Gasoline	0.0465	*gals*	1,294,832	*gals*

Notes:

Projected Annual Emissions Reduction - ENCOURAGE DEPLOYMENT OF HIGHER FUEL EFFICIENCY VEHICLES

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	Pollutant	Emissions Rate/mile	*Unit*	Total Annual Pollution Reduction	*Unit*
SOV Trips Avoided per Day	79,611	*trips*	Hydrocarbons		*grams*	475,964	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO		*grams*	2,128,838	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen		*grams*	2,017,008	*lbs*
Total Yearly Miles Avoided	290,580,150	*miles*	CO2		*lbs*	70,895,534	*lbs*
			Gasoline		*gals*	2,770,662	*gals*

Notes:

Applicant	
Service Area (County)	Clay County
Date	2019

Projected Annual Emissions Reduction - Transit Svc Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit
SOV Trips Avoided per Day	898	*trips*
Average Avoided Trip Length	10.0	*miles*
Operating Days per Year	365	*days*
Total Yearly Miles Avoided	3,277,700	*miles*

Pollutant	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
Hydrocarbons	2.8	*grams*	20,215	*lbs*
CO	20.9	*grams*	150,890	*lbs*
Oxides of Nitrogen	1.39	*grams*	10,035	*lbs*
CO2	0.916	*lbs*	3,002,373	*lbs*
Gasoline	0.0465	*gals*	152,413	*gals*

Notes: Inputs represent anticipated single-occupancy-vehicle (SOV) trip reductions resulting from a 30 % increase in transit route miles and improved multimodal access within Clay County.
Baseline VMT and mode-share data come from 2019 Google Insights. FHWA default emission rates were applied (2.8 g/mi HC, 20.9 g/mi CO, 1.39 g/mi NO_x, 0.916 lb/mi CO_2, 0.0465 gal/mi gasoline).
Annual reductions assume 365 operating days and provide comparative regional estimates of fuel savings and emission benefits from expanded transit coverage.

Projected Annual Emissions Reduction - Transit Coverage Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit
SOV Trips Avoided per Day	1,242	*trips*
Average Avoided Trip Length	10.0	*miles*
Operating Days per Year	365	*days*
Total Yearly Miles Avoided	4,533,300	*miles*

Pollutant	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
Hydrocarbons	2.8	*grams*	20,215	*lbs*
CO	20.9	*grams*	150,890	*lbs*
Oxides of Nitrogen	1.39	*grams*	10,035	*lbs*
CO2	0.916	*lbs*	3,002,373	*lbs*
Gasoline	0.0465	*gals*	152,413	*gals*

Notes: Inputs represent projected single-occupancy vehicle (SOV) trips replaced through enhanced active transportation and transit network expansion within Clay County.
Baseline VMT and mode share data are from 2019 Google Insights. Default CMAQ emission factors were applied (2.8 g/mi hydrocarbons, 20.9 g/mi carbon monoxide, 1.39 g/mi oxides of nitrogen, 0.916 lb/mi carbon dioxide, and 0.0465 gal/mi gasoline).
Annual totals assume 365 operating days per year and are intended to estimate comparative regional benefits of mode shift and connectivity improvements.

Projected Annual Emissions Reduction - Bike Ped

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit
SOV Trips Avoided per Day	806	*trips*
Average Avoided Trip Length	10.0	*miles*

Pollutant	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
Hydrocarbons	2.8	*grams*	20,215	*lbs*
CO	20.9	*grams*	150,890	*lbs*

Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	10,035	*lbs*
Total Yearly Miles Avoided	2,941,900	*miles*	CO2	0.916	*lbs*	3,002,373	*lbs*
			Gasoline	0.0465	*gals*	152,413	*gals*

Notes: Calculated with FHWA's CMAQ Emissions Calculator Toolkit – Bicycle, Pedestrian, and Shared Micromobility. Scenario assumes bike/ped buildout phased over 5 years; diesel share = 0%. Average avoided trip length set to 10 miles for regional consistency. Population context: Clay County density ≈ 361 people/sq mi (2020 Census).

Projected Annual Emissions Reduction - Gas to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
SOV Trips Avoided per Day	9,104	*trips*	Hydrocarbons	2.8	*grams*	20,215	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	150,890	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	10,035	*lbs*
Total Yearly Miles Avoided	33,229,600	*miles*	CO2	0.916	*lbs*	3,002,373	*lbs*
			Gasoline	0.0465	*gals*	152,413	*gals*

Notes: SOV trips/day derived from Annual Change to Gasoline VMT assuming a 10-mile average avoided trip and 365

operating days. Scenario parameters: 60% of VMT electric by 2050, EV efficiency 92 MPGe, 80% residential charging.

Projected Annual Emissions Reduction - Diesel to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit
SOV Trips Avoided per Day	1,006	*trips*
Average Avoided Trip Length	10.0	*miles*
Operating Days per Year	365	*days*
Total Yearly Miles Avoided	3,671,900	*miles*

Pollutant	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
Hydrocarbons	0.34	*grams*	2,455	*lbs*
CO	1.59	*grams*	11,479	*lbs*
Oxides of Nitrogen	31.4	*grams*	226,696	*lbs*
CO2	1.63	*lbs*	5,342,651	*lbs*
Diesel	0.053	*gals*	173,718	*gals*

Notes: SOV trips/day derived from Annual Change to Gasoline VMT assuming a 10-mile average avoided trip and 365 operating days. Scenario parameters: 60% of VMT electric by 2050, EV efficiency 92 MPGe, 80% residential charging. Diesel emission factors are sourced from FHWA's SAFETEA-LU Phase 1 Appendix C: Diesel Emissions Reduction and represent average heavy-duty vehicle fleet conditions.
CO_2 and fuel use factors reflect typical diesel energy intensity (≈10.2 kg CO_2 per gallon, 6.3 mpg fleet average).
Values are expressed per mile of vehicle travel and can be used interchangeably with CMAQ gasoline-based emission tables for comparative reductions.

Applicant	
Service Area (County)	Duval County
Date	2019

Projected Annual Emissions Reduction - Transit Svc Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
SOV Trips Avoided per Day	4,200	*trips*	Hydrocarbons	2.8	*grams*	94,546	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	705,720	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	46,935	*lbs*
Total Yearly Miles Avoided	15,330,000	*miles*	CO2	0.916	*lbs*	14,042,280	*lbs*
			Gasoline	0.0465	*gals*	712,845	*gals*

Notes: Inputs represent anticipated reductions in single-occupancy vehicle (SOV) travel through expanded transit frequency and improved multimodal connectivity within Duval County.
Baseline VMT and mode share data are sourced from 2019 Google Insights. CMAQ default emission factors were applied (2.8 g/mi hydrocarbons, 20.9 g/mi carbon monoxide, 1.39 g/mi oxides of nitrogen, 0.916 lb/mi carbon dioxide, and 0.0465

Projected Annual Emissions Reduction - Transit Coverage Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
SOV Trips Avoided per Day	5,808	*trips*	Hydrocarbons	2.8	*grams*	94,546	*lbs*

Gasoline	0.0465	*gals*	712,845	*gals*

Notes: Inputs represent projected single-occupancy-vehicle (SOV) trips replaced through expanded transit routes and improved multimodal connectivity within Duval County.
Baseline VMT and mode-share data are from 2019 Google Insights. FHWA default emission rates were applied: 2.8 g/mi hydrocarbons, 20.9 g/mi carbon monoxide, 1.39 g/mi oxides of nitrogen, 0.916 lb/mi carbon dioxide, and 0.0465 gal/mi

Projected Annual Emissions Reduction - Bike Ped

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit
SOV Trips Avoided per Day	2,866	*trips*
Average Avoided Trip Length	10.0	*miles*
Operating Days per Year	365	*days*
Total Yearly Miles Avoided	10,460,900	*miles*

Pollutant	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
Hydrocarbons	2.8	*grams*	94,546	*lbs*
CO	20.9	*grams*	705,720	*lbs*
Oxides of Nitrogen	1.39	*grams*	46,935	*lbs*
CO2	0.916	*lbs*	14,042,280	*lbs*
Gasoline	0.0465	*gals*	712,845	*gals*

Notes: This analysis models the combined impact of adding 125 miles of protected bike lanes and 100 miles of multi-use trails throughout Duval County by 2050, with an interim buildout of 25 miles of bike lanes and 40 miles of trails by 2030. The measure assumes residents in low- to medium-density areas increase bicycle mode share from 0.3% to 2.7%, consistent with Level B infrastructure standards.

Projected Annual Emissions Reduction - Gas to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	705,720	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	46,935	*lbs*
Total Yearly Miles Avoided	133,141,050	*miles*	CO2	0.916	*lbs*	14,042,280	*lbs*
			Gasoline	0.0465	*gals*	712,845	*gals*

Notes:SOV trips/day derived from Annual Change to Gasoline VMT assuming 10-mile average trip length and 365 operating days per year.
Scenario applies a 60% electric VMT share by 2050, with 92 MPGe vehicle efficiency and 80% residential charging.

Projected Annual Emissions Reduction - Diesel to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
SOV Trips Avoided per Day	4,040	*trips*	Hydrocarbons	0.34	*grams*	11,481	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	1.59	*grams*	53,689	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	31.4	*grams*	1,060,269	*lbs*
Total Yearly Miles Avoided	14,746,000	*miles*	CO2	1.63	*lbs*	24,987,900	*lbs*
			Diesel	0.053	*gals*	812,490	*gals*

Notes: OV trips/day derived from the Annual Change to Diesel VMT assuming a 10-mile average avoided trip and 365 operating days. Scenario parameters: 60% EV VMT by 2050, EV efficiency 92 MPGe, 80% residential charging. Use diesel emission factors in the worksheet (HC 0.34 g/mi, CO 1.59 g/mi, NO_x 31.4 g/mi, CO_2 1.63 lb/mi, Diesel 0.053 gal/mi).

Location / Flight Type	Fuel Type		*Fuel Loading (gal)*	CO (g/gal)	*HC (g/gal)*	CO (lbs)	HC (lbs)	CH_4 (lbs)	N_2O (lbs)	50% reduction CH_4 (lbs)	50% reduct N_2O (l
JIA Domestic Freight	Jet Kerosene		42,145.78	4.15	0.72	91.26	66.68	380.94	74.33	190.47	3
Cecil Domestic Passenger	Aviation Gas		42,154,578.10	16	6	1485712.4	6E+05			0	
Herlong Domestic Passenger	Jet Kerosene		153,800.04	4.15	0.72	333.09	243.6	1075.36	419.51	537.68	20
JIA Domestic Passenger	Jet Kerosene		4,045,411.46	4.15	0.72	8769.47	6412	23124.43	9020.39	11562.22	451
JaxEx Domestic Passenger	Jet Kerosene		933,812.01	4.15	0.72	2025.73	1481	5334.57	2080.12	2667.285	10
JIA International Passenger	Jet Kerosene		843,091.56	4.15	0.72	1827.49	1337	380.94	74.33	190.47	3
JIA International Freight	Jet Kerosene		42,145.78	4.15	0.72	91.26	66.68	45.63	33.34	22.815	

Notes: The projected annual aviation emissions reductions shown in the table are based on fuel usage data from the 2019 Jacksonville Aviation Authority (JAA) Fuel Reports. Emissions were calculated for both domestic and international flights (passenger and freight) at various airports in the Jacksonville area. Two fuel types were considered: Jet Kerosene and Aviation Gasoline (AvGas). Emission factors for carbon monoxide (CO) and hydrocarbons (HC) were sourced from the EPA's AP-42, Chapter 3 (Aircraft Engines), with values of 4.15 g/gal for CO and 0.72 g/gal for HC for Jet Kerosene, and 16.0 g/gal for CO and 6.0 g/gal for HC for AvGas.

All emissions were calculated based on fuel consumption in gallons. Emissions in pounds (lbs) were derived using the formula:
Emissions (lbs) = (Fuel gallons × Emission Factor in g/gal) ÷ 453.592.
Methane (CH_4) and nitrous oxide (N_2O) emissions were taken from reported values in metric tons (MT) from ClearPath or local inventories and converted to pounds using the standard conversion:
1 MT = 2,204.62 lbs.

The "50% Reduction" columns represent estimated emissions avoided under a scenario where aviation fuel use is reduced by 50%. For CH_4 and N_2O, original emissions values were halved and then converted to pounds. For CO and HC, the same emission factors were applied to 50% of the original fuel consumption volumes.

All emissions fall under Scope 3 of the Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), covering out-of-boundary emissions from aircraft departures.

Applicant	
Service Area (County)	Nassau
Date	2019

Projected Annual Emissions Reduction - Transit Svc Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit
SOV Trips Avoided per Day	492	*trips*
Average Avoided Trip Length	10.0	*miles*
Operating Days per Year	365	*days*
Total Yearly Miles Avoided	1,795,800	*miles*

Pollutant	Emissions Rate/mile	*Unit*	Total Annual Pollution Reduction	*Unit*
Hydrocarbons	2.8	*grams*	11,075	*lbs*
CO	20.9	*grams*	82,670	*lbs*
Oxides of Nitrogen	1.39	*grams*	5,498	*lbs*
CO2	0.916	*lbs*	1,644,953	*lbs*
Gasoline	0.0465	*gals*	83,505	*gals*

Notes:
Inputs reflect estimated single-occupancy vehicle (SOV) trips replaced by active transportation and transit connectivity improvements within each county. Baseline VMT and mode share assumptions are drawn from 2019 Google Mobility and county-specific datasets.
Emission factors are consistent with FHWA defaults: 2.8 g/mi hydrocarbons, 20.9 g/mi CO, 1.39 g/mi NO_x, and 0.916 lb/mi CO_2, with fuel consumption of 0.0465 gal/mi.
Results are expressed as annual reductions in pollutants and fuel use based on 365 operating days per year. Actual benefits will vary depending on realized trip mode shifts and average avoided trip lengths.

Projected Annual Emissions Reduction - Transit Coverage Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	*Unit*	**Total Annual Pollution Reduction**	*Unit*
SOV Trips Avoided per Day	680	*trips*	Hydrocarbons	2.8	*grams*	11,075	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	82,670	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	5,498	*lbs*
Total Yearly Miles Avoided	2,482,000	*miles*	CO2	0.916	*lbs*	1,644,953	*lbs*
			Gasoline	0.0465	*gals*	83,505	*gals*

Notes: Inputs reflect projected single-occupancy vehicle (SOV) trips replaced through expansion of transit routes and active mobility options within Nassau County.
Baseline VMT and mode share data are from 2019 Google Insights. FHWA default emission rates were applied: 2.8 g/mi hydrocarbons, 20.9 g/mi carbon monoxide, 1.39 g/mi oxides of nitrogen, 0.916 lb/mi carbon dioxide, and 0.0465 gal/mi gasoline.
Results represent annual totals assuming 365 operating days per year and are intended to show relative regional benefits of mode shift and transit expansion.

Projected Annual Emissions Reduction - Bike Ped

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

Unit	**Pollutant**	**Emissions Rate/mile**	*Unit*	**Total Annual Pollution Reduction**	*Unit*

SOV Trips Avoided per Day	260	*trips*	Hydrocarbons	2.8	*grams*	11,075	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	82,670	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	5,498	*lbs*
Total Yearly Miles Avoided	949,000	*miles*	CO2	0.916	*lbs*	1,644,953	*lbs*
			Gasoline	0.0465	*gals*	83,505	*gals*

Notes: This measure models the addition of 125 miles of protected bike lanes and 100 miles of multi-use trails across Nassau County by 2050, with an interim buildout of 25 miles of bike lanes and 40 miles of trails by 2030.
The scenario assumes residents in low-density areas increase bicycle mode share from 0.3% to 2.7%, consistent with Level B infrastructure standards.
The projected change corresponds to an annual reduction of approximately 4.7 million vehicle miles traveled (VMT), phased over five years, resulting in 949,780 gasoline VMT reduced per year.
All reductions are modeled as cumulative over a 50-year effective life and assume 0% diesel VMT.

Population context: Nassau County population density = 139.3 people per square mile, derived from the 2020 U.S. Census.

Projected Annual Emissions Reduction - Gas to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
SOV Trips Avoided per Day	8,977	*trips*	Hydrocarbons	2.8	*grams*	11,075	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	82,670	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	5,498	*lbs*

Total Yearly Miles Avoided	32,766,050	*miles*	CO2	0.916	*lbs*	1,644,953	*lbs*
			Gasoline	0.0465	*gals*	83,505	*gals*

Notes:Inputs reflect annualized avoided gasoline VMT due to passenger vehicle electrification and travel demand reduction assumptions for 2025–2050.
Each county's SOV trips per day is derived from total annual gasoline VMT reduced, assuming 10-mile average avoided trip length and 365 operating days per year.

Emission rates are based on gasoline vehicle factors (HC = 2.8 g/mi, CO = 20.9 g/mi, NO_x = 1.39 g/mi, CO_2 = 0.916 lb/mi, Gasoline = 0.0465 gal/mi).
Diesel adjustments are unnecessary unless a measurable share of diesel VMT is reduced (none in these scenarios).

Projected Annual Emissions Reduction - Diesel to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
SOV Trips Avoided per Day	870	*trips*	Hydrocarbons	0.34	*grams*	1,345	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	1.59	*grams*	6,289	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	31.4	*grams*	124,203	*lbs*
Total Yearly Miles Avoided	3,175,500	*miles*	CO2	1.63	*lbs*	2,927,154	*lbs*
			Diesel	0.053	*gals*	95,177	*gals*

Notes:SOV trips/day derived from the Annual Change to Diesel VMT, assuming a 10-mile average avoided trip and 365 operating days.
Scenario assumes 60% EV VMT by 2050, 92 MPGe efficiency, and 80% residential charging.

Applicant	
Service Area (County)	City of Palm Coast
Date	2019

Projected Annual Emissions Reduction - Transit Svc Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
SOV Trips Avoided per Day	550	*trips*	Hydrocarbons	2.8	*grams*	12,381	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	92,416	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	6,146	*lbs*
Total Yearly Miles Avoided	2,007,500	*miles*	CO2	0.916	*lbs*	1,838,870	*lbs*
			Gasoline	0.0465	*gals*	93,349	*gals*

Notes: Inputs represent projected single-occupancy vehicle (SOV) trips avoided through expansion of the transit route network and enhanced multimodal connectivity within the City of Palm Coast.
Baseline VMT and mode share data are derived from 2019 Google Insights. FHWA default emission factors were applied (2.8 g/mi hydrocarbons, 20.9 g/mi carbon monoxide, 1.39 g/mi oxides of nitrogen, 0.916 lb/mi carbon dioxide, and 0.0465 gal/mi gasoline).
Annual results assume 365 operating days per year and represent regional-scale estimates of emission and fuel-use reduction potential associated with increased active transportation and transit accessibility.

Projected Annual Emissions Reduction - Transit Coverage Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	Pollutant	Emissions Rate/mile	Unit	Total Annual Pollution Reduction	Unit
SOV Trips Avoided per Day	760	*trips*	Hydrocarbons	2.8	*grams*	12,381	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	92,416	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	6,146	*lbs*
Total Yearly Miles Avoided	2,774,000	*miles*	CO2	0.916	*lbs*	1,838,870	*lbs*
			Gasoline	0.0465	*gals*	93,349	*gals*

Notes: Inputs represent projected single-occupancy vehicle (SOV) trips avoided through expansion of the transit route network and enhanced multimodal connectivity within the City of Palm Coast.
Baseline VMT and mode share data are derived from 2019 Google Insights. FHWA default emission factors were applied (2.8 g/mi hydrocarbons, 20.9 g/mi carbon monoxide, 1.39 g/mi oxides of nitrogen, 0.916 lb/mi carbon dioxide, and 0.0465 gal/mi gasoline).
Annual results assume 365 operating days per year and represent regional-scale estimates of emission and fuel-use reduction potential associated with increased active transportation and transit accessibility.

Projected Annual Emissions Reduction - Bike Ped

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	Pollutant	Emissions Rate/mile	Unit	Total Annual Pollution Reduction	Unit
SOV Trips Avoided per Day	257	*trips*	Hydrocarbons	2.8	*grams*	12,381	*lbs*

Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	92,416	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	6,146	*lbs*
Total Yearly Miles Avoided	938,050	*miles*	CO2	0.916	*lbs*	1,838,870	*lbs*
			Gasoline	0.0465	*gals*	93,349	*gals*

Notes: Annual values are annualized over a 5-year implementation (per the sheet) with 0% diesel share, so all reduced VMT is attributed to gasoline. Average avoided trip length assumed 10 miles for consistency with regional reporting.

Projected Annual Emissions Reduction - Gas to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
SOV Trips Avoided per Day	6,151	*trips*	Hydrocarbons	2.8	*grams*	12,381	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	92,416	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	6,146	*lbs*
Total Yearly Miles Avoided	22,451,150	*miles*	CO2	0.916	*lbs*	1,838,870	*lbs*
			Gasoline	0.0465	*gals*	93,349	*gals*

Notes: SOV trips/day derived from Annual Change to Gasoline VMT assuming a 10-mile average avoided trip and 365

operating days. Scenario uses EV assumptions shown in the module (60% of VMT electric by 2050, EV efficiency 92 MPGe, 80% residential charging). Annual Change to Diesel VMT = 0, so gasoline emission factors are applied.

Projected Annual Emissions Reduction - Diesel to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit
SOV Trips Avoided per Day	679	*trips*
Average Avoided Trip Length	10.0	*miles*
Operating Days per Year	365	*days*
Total Yearly Miles Avoided	2,478,350	*miles*

Pollutant	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
Hydrocarbons	0.34	*grams*	1,503	*lbs*
CO	1.59	*grams*	7,031	*lbs*
Oxides of Nitrogen	31.4	*grams*	138,845	*lbs*
CO2	1.63	*lbs*	3,272,225	*lbs*
Diesel	0.053	*gals*	106,398	*gals*

Notes:SOV trips/day derived from the Annual Change to Diesel VMT, assuming a 10-mile average avoided trip and 365 operating days.
Scenario assumes 60% EV VMT by 2050, 92 MPGe efficiency, and 80% residential charging.

Applicant	
Service Area (County)	St Johns County
Date	2019

Projected Annual Emissions Reduction - Transit Svc Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	*Unit*	**Total Annual Pollution Reduction**	*Unit*
SOV Trips Avoided per Day	1,782	*trips*	Hydrocarbons	2.8	*grams*	40,115	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	299,427	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	19,914	*lbs*
Total Yearly Miles Avoided	6,504,300	*miles*	CO2	0.916	*lbs*	5,957,939	*lbs*
			Gasoline	0.0465	*gals*	302,450	*gals*

Notes: Inputs reflect projected single-occupancy vehicle (SOV) trips replaced through improved active transportation and transit connectivity within St. Johns County.
Baseline VMT and mode share data are from 2019 Google Insights. Default CMAQ emission rates were applied (2.8 g/mi HC, 20.9 g/mi CO, 1.39 g/mi NO_x, 0.916 lb/mi CO_2, 0.0465 gal/mi gasoline).
Reductions represent annual totals assuming 365 operating days per year and are intended for comparative planning purposes.

Projected Annual Emissions Reduction - Transit Coverage Area

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per

		Unit	**Pollutant**	**Emissions Rate/mile**	*Unit*	**Total Annual Pollution Reduction**	*Unit*
SOV Trips Avoided per Day	2,460	*trips*	Hydrocarbons	2.8	*grams*	40,115	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	299,427	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	19,914	*lbs*
Total Yearly Miles Avoided	8,979,000	*miles*	CO2	0.916	*lbs*	5,957,939	*lbs*
			Gasoline	0.0465	*gals*	302,450	*gals*

Notes: Inputs represent projected single-occupancy-vehicle (SOV) trips replaced through expanded transit routes and improved active-transportation connectivity within St. Johns County.

Projected Annual Emissions Reduction - Bike Ped

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit	**Pollutant**	**Emissions Rate/mile**	*Unit*	**Total Annual Pollution Reduction**	*Unit*
SOV Trips Avoided per Day	785	*trips*	Hydrocarbons	2.8	*grams*	40,115	*lbs*
Average Avoided Trip Length	10.0	*miles*	CO	20.9	*grams*	299,427	*lbs*
Operating Days per Year	365	*days*	Oxides of Nitrogen	1.39	*grams*	19,914	*lbs*
Total Yearly Miles Avoided	2,865,250	*miles*	CO2	0.916	*lbs*	5,957,939	*lbs*

Gasoline	0.0465	*gals*	302,450	*gals*

Notes: This scenario models the addition of 125 miles of protected bike lanes and 100 miles of multi-use trails across St. Johns County by 2050, with an initial buildout of 25 miles of bike lanes and 40 miles of trails by 2030.
The measure assumes residents in low- to medium-density areas increase bicycle mode share from 0.3 % to 2.7 %, consistent with Level B infrastructure standards.
Implementation is phased over five years, yielding an annual reduction of ≈ 14.4 million VMT, including 2.9 million gasoline VMT and 13 k diesel VMT reduced each year.
All reductions are modeled as cumulative over a 50-year effective life.

Population context: St. Johns County population density = 455.2 people per square mile (2020 Census).
The percent of reduced VMT attributable to diesel (0.47 %) is derived from NEFL CPRG Transportation Implementation Plan calculations.

Projected Annual Emissions Reduction - Gas to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit
SOV Trips Avoided per Day	18,940	*trips*
Average Avoided Trip Length	10.0	*miles*
Operating Days per Year	365	*days*
Total Yearly Miles Avoided	69,131,000	*miles*

Pollutant	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
Hydrocarbons	2.8	*grams*	40,115	*lbs*
CO	20.9	*grams*	299,427	*lbs*
Oxides of Nitrogen	1.39	*grams*	19,914	*lbs*
CO2	0.916	*lbs*	5,957,939	*lbs*
Gasoline	0.0465	*gals*	302,450	*gals*

Notes:SSOV trips/day are derived from the Annual Change to Gasoline VMT, assuming a 10-mile average trip and 365 operating days per year.
The scenario assumes a 60% EV VMT share by 2050, 92 MPGe fuel economy, and 80% residential charging.

Gasoline emission factors are applied (HC = 2.8 g/mi, CO = 20.9 g/mi, NO_x = 1.39 g/mi, CO_2 = 0.916 lb/mi, Gasoline = 0.0465 gal/mi).

Projected Annual Emissions Reduction - Diesel to EV

Instructions: Fill in the blank fields next to SOV Trips Avoided per Day, Average Avoided Trip Length, and Operating Days Per Year to calculate emissions and VMT reductions.

		Unit
SOV Trips Avoided per Day	197	*trips*
Average Avoided Trip Length	10.0	*miles*
Operating Days per Year	365	*days*
Total Yearly Miles Avoided	719,050	*miles*

Pollutant	**Emissions Rate/mile**	***Unit***	**Total Annual Pollution Reduction**	***Unit***
Hydrocarbons	0.34	*grams*	4,871	*lbs*
CO	1.59	*grams*	22,779	*lbs*
Oxides of Nitrogen	31.4	*grams*	449,857	*lbs*
CO2	1.63	*lbs*	10,602,009	*lbs*
Diesel	0.053	*gals*	344,728	*gals*

Notes: SOV trips/day derived from the Annual Change to Diesel VMT assuming a 10-mile average avoided trip and 365

operating days. Scenario uses: 60% EV VMT by 2050, 92 MPGe EV efficiency, 80% residential charging. Apply diesel emission factors in the worksheet (HC 0.34 g/mi, CO 1.59 g/mi, NO_x 31.4 g/mi, CO_2 1.63 lb/mi, Diesel 0.053 gal/mi).

Field
SOV Trips Avoided per Day
Average Avoided Trip Length
Operating Days per Year
Total Yearly Miles Avoided

Definition
Actual or estimated number of passenger trips per day that replace a single occupant vehicle (SOV) trip. The percentage of passenger trips that replace an SOV trip will vary based on the type of service.
Length of a typical SOV trip being replaced by a shuttle trip. This may be longer than the shuttle trip if the service enables linked transit trip.
Number of operating days per year.
Calculated automatically, estimated SOV Vehicle Miles Traveled reduced by the shuttle service in one year.

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SCAN ME

Clean Air Northeast Florida Regional Comprehensive Climate Action Plan Appendix
February 2026