

STATUS OF INVENTORIES (2015 OZONE NAAQS RR/MP)

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MWAQC-TAC
April 14, 2026

Point & Quasi-Point Source Inventories

Point

2022

All ozone season day inventories are available.

2032/38

DC and VA inventories are available.

Working with MD to finalize these inventories.

Quasi-Point

2022/32/38

Coordination with MDE ongoing to decide the source for GSE emissions for Andrews AFB (EMP or MOVES5 NR Model).

Nonpoint & MAR Source Inventories

Maryland supplied additional nonpoint sources that were missing in EMP 2022v1 database so nonpoint emissions were updated to include this additional data.

A list of proposed growth surrogates was earlier shared with members in the March 2026 meeting. Maryland subsequently made changes to that list for its jurisdictions. Growth factors based on COG Cooperative Forecast Round 10.0, VMT, Lane miles, and Gas sales were developed for those growth surrogates and then used to project nonpoint and MAR source inventories for 2032/38. Control factors are available from the EMP 2022v1 database for a few nonpoint SCCs. They were applied to develop final controlled inventories for those SCCs.

SCC	Description	Control Factor	Jurisdictions (FIPS) Applied to
2102006000	Fuel Comb - Industrial Boilers, ICEs - Natural Gas	0.88	51013, 51059, 51107, 51153, 51610, 51685
2103006000	Fuel Comb - Comm/Institutional - Natural Gas	0.83	11001, 24009, 24017, 24031, 24033, 51107, 51153, 51510, 51600, 51683
2501050120	Bulk Gasoline Terminals: All Evaporative Losses	0.60	51013, 51610, 51685
2501055120	Bulk Gasoline Plants: All Evaporative Losses	0.60	24031, 24033, 51013, 51610, 51685

Onroad/Nonroad Source Inventories

MOVES5 runs are complete for all four milestone years.

MVEBs will be discussed once emissions for all four sources are complete.

DRAFT Point & Quasi-Point Source Inventory (tpd)

Jurisdiction	Point					
	NOx			VOC		
	2022	2032	2038	2022	2032	2038
District of Columbia	0.48	0.48	0.48	0.25	0.25	0.25
Calvert	2.18			0.10		
Charles	9.03			0.34		
Fredrick	1.41			1.35		
Montgomery	8.38			0.29		
Prince George's	15.18			0.81		
Arlington	0.00	0.00	0.00	0.00	0.00	0.00
Fairfax County	9.04	9.45	9.53	0.57	0.52	0.53
Loudoun County	7.36	8.62	9.44	0.44	0.51	0.55
Prince William County	2.94	2.56	2.57	0.45	0.33	0.34
Fairfax City	0.02	0.02	0.03	0.34	0.29	0.29
Falls Church City	0.00	0.00	0.00	0.00	0.00	0.00
Manassas City	0.22	0.26	0.28	0.10	0.11	0.12
Manassas Park City	0.00	0.00	0.00	0.00	0.00	0.00
Alexandria City	0.81	0.81	0.81	0.00	0.00	0.00
NAA Total	57.05			5.02		

Jurisdiction	Quasi-Point					
	NOx			VOC		
	2022	2032	2038	2022	2032	2038
Prince George's	0.83	0.83	0.83	0.41	0.41	0.41



DRAFT Nonpoint Source Inventory (tpd)

COG Cooperative Forecast based emissions

Jurisdiction	Nonpoint					
	NOx			VOC		
	2022	2032	2038	2022	2032	2038
District of Columbia	1.51	1.35	1.35	12.13	12.91	13.32
Calvert	0.21	0.21	0.21	2.04	2.10	2.12
Charles	0.83	0.86	0.88	10.25	10.63	10.79
Fredrick	1.26	1.34	1.38	11.88	12.53	12.93
Montgomery	3.35	3.36	3.46	21.48	22.14	22.57
Prince George's	3.04	3.04	3.12	26.85	27.55	28.13
Arlington	0.88	0.94	0.97	4.33	4.61	4.79
Fairfax County	5.17	5.43	5.54	23.00	24.02	24.50
Loudoun County	2.15	2.14	2.17	9.21	10.23	10.51
Prince William County	1.80	1.79	1.82	10.32	11.03	11.29
Fairfax City	0.62	0.59	0.61	2.99	3.52	3.78
Falls Church City	0.18	0.18	0.18	0.70	0.82	0.85
Manassas City	0.09	0.09	0.10	0.33	0.40	0.42
Manassas Park City	0.24	0.23	0.24	0.98	1.05	1.07
Alexandria City	0.09	0.09	0.09	0.57	0.62	0.64
NAA Total	21.41	21.64	22.10	137.07	144.16	147.72

EPA EMP 2022v1 based emissions

Jurisdiction	Nonpoint					
	NOx			VOC		
	2022	2032	2038	2022	2032	2038
District of Columbia	1.51	1.36	1.29	12.13	13.02	13.41
Calvert	0.21	0.19	0.18	2.04	2.25	2.37
Charles	0.83	0.79	0.77	10.25	10.60	10.82
Fredrick	1.26	1.15	1.10	11.88	12.63	12.98
Montgomery	3.35	3.06	2.92	21.48	22.86	23.70
Prince George's	3.04	2.76	2.64	26.85	27.54	28.00
Arlington	0.88	0.85	0.83	4.33	4.47	4.57
Fairfax County	5.17	5.07	5.02	23.00	25.81	27.70
Loudoun County	2.15	2.14	2.15	9.21	11.23	12.69
Prince William County	1.80	1.80	1.80	10.32	11.62	12.53
Fairfax City	0.62	0.60	0.59	2.99	3.16	3.25
Falls Church City	0.18	0.18	0.17	0.70	0.76	0.81
Manassas City	0.09	0.08	0.08	0.33	0.35	0.36
Manassas Park City	0.24	0.24	0.24	0.98	1.13	1.23
Alexandria City	0.09	0.09	0.09	0.57	0.59	0.62
NAA Total	21.41	20.34	19.87	137.07	148.03	155.04

VMT, Laner miles, and gas sales projections were also used in addition to Coop forecasts. Source (MOVES5 vs EMP 2022v1) for Maryland's Andrews AFB GSE emissions is yet to be decided.

DRAFT MAR Source Inventory (tpd)

COG Cooperative Forecast based emissions

Jurisdiction	MAR					
	NOx			VOC		
	2022	2032	2038	2022	2032	2038
District of Columbia	1.03	1.13	1.17	0.05	0.06	0.06
Calvert	0.60	0.58	0.57	0.02	0.03	0.03
Charles	0.16	0.16	0.16	0.01	0.01	0.01
Fredrick	0.86	0.89	0.94	0.06	0.07	0.07
Montgomery	0.75	0.80	0.85	0.04	0.05	0.05
Prince George's	0.62	1.49	1.54	0.03	0.44	0.44
Arlington	2.62	2.88	3.02	0.41	0.45	0.47
Fairfax County	0.57	0.64	0.67	0.02	0.03	0.03
Loudoun County	3.06	3.53	3.66	0.57	0.66	0.68
Prince William County	0.44	0.52	0.56	0.02	0.02	0.02
Fairfax City	0.29	0.32	0.34	0.01	0.01	0.01
Falls Church City	0.00	0.00	0.00	0.00	0.00	0.00
Manassas City	0.00	0.00	0.00	0.00	0.00	0.00
Manassas Park City	0.11	0.11	0.12	0.05	0.05	0.05
Alexandria City	0.01	0.02	0.02	0.00	0.00	0.00
NAA Total	11.12	13.07	13.62	1.32	1.87	1.93

EPA EMP 2022v1 based emissions

Jurisdiction	MAR					
	NOx			VOC		
	2022	2032	2038	2022	2032	2038
District of Columbia	1.03	1.05	1.10	0.05	0.05	0.05
Calvert	0.60	0.58	0.57	0.02	0.03	0.03
Charles	0.16	0.16	0.16	0.01	0.01	0.01
Fredrick	0.86	0.89	0.94	0.06	0.07	0.07
Montgomery	0.75	0.80	0.85	0.04	0.05	0.05
Prince George's	0.62	1.49	1.54	0.03	0.44	0.44
Arlington	2.62	2.69	2.69	0.41	0.42	0.42
Fairfax County	0.57	0.61	0.65	0.02	0.03	0.03
Loudoun County	3.06	4.84	5.37	0.57	0.84	0.94
Prince William County	0.44	0.46	0.50	0.02	0.02	0.02
Fairfax City	0.29	0.32	0.34	0.01	0.01	0.01
Falls Church City	0.00	0.00	0.00	0.00	0.00	0.00
Manassas City	0.00	0.00	0.00	0.00	0.00	0.00
Manassas Park City	0.11	0.12	0.12	0.05	0.05	0.05
Alexandria City	0.01	0.02	0.02	0.00	0.00	0.00
NAA Total	11.12	14.02	14.85	1.32	2.03	2.13

VMT, Laner miles, and gas sales projections were also used in addition to Coop forecasts. Source (MOVES5 vs EMP 2022v1) for Maryland's Andrews AFB GSE emissions is yet to be decided.

DRAFT Nonroad Model Source Inventory (tpd)

Nonroad Model							
Jurisdiction	NOx			VOC			
	2022	2032	2038	2022	2032	2038	
District of Columbia	1.35	1.01	1.06	1.38	1.34	1.39	
Calvert	0.45	0.37	0.37	0.75	0.59	0.58	
Charles	0.74	0.57	0.57	1.18	0.98	0.98	
Fredrick	1.26	0.99	1.01	2.32	2.41	2.49	
Montgomery	3.62	3.10	3.20	8.60	9.04	9.35	
Prince George's	2.70	2.20	2.27	4.93	5.11	5.29	
Arlington	1.47	0.82	0.78	0.88	0.79	0.78	
Fairfax County	4.72	3.52	3.51	9.28	9.08	9.03	
Loudoun County	3.21	2.02	1.93	4.55	4.36	4.31	
Prince William County	2.05	1.32	1.28	2.79	2.64	2.60	
Fairfax City	0.23	0.22	0.24	0.66	0.66	0.66	
Falls Church City	0.10	0.09	0.09	0.32	0.32	0.32	
Manassas City	0.06	0.05	0.05	0.19	0.19	0.19	
Manassas Park City	0.08	0.09	0.11	0.13	0.14	0.14	
Alexandria City	0.06	0.05	0.05	0.18	0.18	0.18	
NAA Total	22.10	16.43	16.52	38.14	37.83	38.31	

Note: MOVES5 based GSE emissions for Maryland and Virginia are included here. MOVES5 does not contain any GSE emissions for the District.

Source (MOVES5 vs EMP 2022v1) for Maryland's Andrews AFB GSE emissions is yet to be decided.

DRAFT Onroad Model Source Inventory (tpd)

Onroad Model							
Jurisdiction	NOx			VOC			
	2022	2032	2038	2022	2032	2038	
District of Columbia	3.72	1.47	0.96	2.74	1.75	1.44	
Calvert	1.04	0.41	0.26	0.73	0.45	0.36	
Charles	2.08	0.91	0.62	1.23	0.86	0.70	
Fredrick	5.84	2.42	1.64	2.42	1.57	1.30	
Montgomery	9.17	3.53	2.42	5.61	3.53	2.97	
Prince George's	10.77	3.86	2.57	6.01	3.78	3.17	
Arlington	1.27	0.42	0.27	1.08	0.66	0.56	
Fairfax County	14.42	5.56	3.69	7.31	4.37	3.63	
Loudoun County	4.74	2.00	1.37	2.46	1.60	1.35	
Prince William County	6.58	2.58	1.76	3.51	2.22	1.83	
Fairfax City							
Falls Church City							
Manassas City							
Manassas Park City							
Alexandria City	0.89	0.42	0.29	0.76	0.57	0.49	
NAA Total	60.52	23.56	15.86	33.86	21.36	17.79	
Note: Onroad emissions for Northern Virginia cities are included in their respective counties.							

DRAFT All Sources (Except Point) Inventory (tpd)

COG Cooperative Forecast based emissions

Jurisdiction	Total					
	NOx			VOC		
	2022	2032	2038	2022	2032	2038
District of Columbia	8.09	5.44	5.02	16.56	16.31	16.46
Calvert	4.49	1.56	1.42	3.65	3.17	3.08
Charles	12.85	2.50	2.23	13.01	12.48	12.49
Fredrick	10.63	5.63	4.98	18.04	16.58	16.79
Montgomery	25.27	10.79	9.93	36.03	34.76	34.94
Prince George's	33.12	11.42	10.33	39.04	37.29	37.43
Arlington	6.25	5.05	5.04	6.70	6.51	6.60
Fairfax County	33.92	24.60	22.94	40.18	38.01	37.72
Loudoun County	20.51	18.31	18.56	17.22	17.37	17.41
Prince William County	13.81	8.78	7.98	17.09	16.24	16.09
Fairfax City	1.16	1.16	1.21	4.00	4.48	4.75
Falls Church City	0.28	0.27	0.27	1.02	1.14	1.17
Manassas City	0.37	0.40	0.43	0.62	0.70	0.74
Manassas Park City	0.43	0.44	0.46	1.16	1.24	1.27
Alexandria City	1.86	1.38	1.26	1.51	1.37	1.31
NAA Total	115.98	97.74	92.06	210.80	207.66	208.25

EPA EMP 2022v1 based emissions

Jurisdiction	Total					
	NOx			VOC		
	2022	2032	2038	2022	2032	2038
District of Columbia	8.09	5.36	4.88	16.56	16.42	16.55
Calvert	4.49	1.54	1.38	3.65	3.32	3.34
Charles	12.85	2.43	2.13	13.01	12.45	12.52
Fredrick	10.63	5.45	4.70	18.04	16.68	16.84
Montgomery	25.27	10.48	9.39	36.03	35.48	36.07
Prince George's	33.12	11.14	9.85	39.04	37.28	37.30
Arlington	6.25	4.77	4.57	6.70	6.35	6.33
Fairfax County	33.92	24.21	22.40	40.18	39.80	40.91
Loudoun County	20.51	19.62	20.25	17.22	18.55	19.84
Prince William County	13.81	8.73	7.90	17.09	16.83	17.32
Fairfax City	1.16	1.17	1.20	4.00	4.12	4.22
Falls Church City	0.28	0.27	0.27	1.02	1.08	1.13
Manassas City	0.37	0.39	0.42	0.62	0.65	0.67
Manassas Park City	0.43	0.45	0.47	1.16	1.32	1.42
Alexandria City	1.86	1.39	1.26	1.51	1.35	1.29
NAA Total	115.98	97.39	91.06	210.80	211.68	215.77

Note: Total emissions do not include point sources as Maryland emissions are not final yet. VMT, Laner miles, and gas sales projections were also used in addition to COG Coop forecast round 10.0. Total emissions for Northern Virginia cities do not include onroad emissions as those emissions are included in their respective counties. Source (MOVES5 vs EMP 2022v1) for Maryland's Andrews AFB GSE emissions is yet to be decided.

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