STATE OF MAINE OFFICE OF THE ATTORNEY GENERAL

Aaron M. Frey Attorney General



PETROLEUM MARKET SHARE ACT Aggregate Data

pursuant to 10 M.R.S.A. §1677 for the Reporting Period June 1, 2021 – May 31, 2022

Retail Petroleum Outlets Concentration 10 M.R.S.A. § 1677 May 2023

I. INTRODUCTION

This report is provided by the Attorney General to the Legislature pursuant to Maine's Petroleum Market Share Act ("PMSA"), 10 M.R.S.A. § 1677. As required by the statute, the report describes the concentration of retail petroleum outlets. The concentration levels described in this report reflect conditions in Maine as of the end of May 2022. The statute also requires the Attorney General to make "a recommendation to the Legislature as to whether additional legislation is needed to further limit or curtail the activity of refiners operating retail outlets." The Attorney General does not recommend any legislative changes at this point.

The report focuses on markets for home heating oil and motor fuel oil. In general, the geography of petroleum markets is local. In the case of home heating oil, the market may encompass an urban area or a segment of a county. Motor fuel markets tend to be smaller, in some instances limited to a single neighborhood or one side of a busy street. For continuity purposes, our analyses retain the longstanding geographic markets developed by the Attorney General in the 1990s, when the PMSA reporting first began. The state is divided into 33 home heating oil markets and Maine's 16 counties are used as the motor fuel oil markets.

The Maine Attorney General receives data annually from home heating oil and motor fuel oil wholesalers stating the annual gallons supplied to each

home heating oil and motor fuel retailer located in Maine. That data enables us to determine the number of retail competitors and their percentage market shares within the pre-defined geographic markets.¹ 10 M.R.S.A. § 1673. Those figures, in turn, allow us to calculate where each of the home heating oil and motor fuel oil markets falls on a concentration index widely used by federal and state antitrust agencies to assess competitive conditions (usually in the context of proposed mergers and acquisitions). The Appendices to the Report show the concentration levels, and corresponding maps depicting those levels, for each pre-defined market. The tables in the Appendices also show concentration numbers for the same markets for the past ten years for comparison purposes.

II. LEVELS OF CONCENTRATION

A. Methodology

The methodology employed by the Maine Attorney General to assess levels of concentration in Maine's retail petroleum markets, as reflected in this report, is essentially the same methodology used by the U.S. Department of Justice, the Federal Trade Commission, and other state Attorneys General in evaluating the legality of a given merger or acquisition under applicable antitrust law. The Maine Attorney General has employed a similar analysis

¹ It should be noted that the Attorney General collects neither retail nor wholesale price information under the PMSA. Moreover, the data collected from individual wholesalers, which is confidential by statute, is aggregated and not identifiable by wholesaler or retailer in this report. 10 M.R.S.A. § 1675.

enforcing Maine's merger law for more than thirty years. 10 M.R.S.A. § 1102-A.

The most important factor affecting competition in a particular market is the level of concentration (how many sellers and the size of their market shares). The sales volume data the Maine Attorney General receives annually from home heating oil and motor fuel oil wholesalers allows us to calculate market shares of retailers within a defined geographic area.

1. Market Definition. The first step in a concentration analysis is to determine the relevant product and geographic markets. This report focusses on two product markets, home heating oil and motor fuel oil. Home heating oil is defined as "#2 fuel oil sold for heating residential, industrial or commercial space or water." 10 M.R.S.A. § 1672(3). Motor fuel oil "means internal combustion fuel sold for use in motor vehicles," as more fully defined in 29 M.R.S.A. § 101(42). 10 M.R.S.A. § 1672(4).

Determining geographic markets for this report is less straightforward. For the purposes of this report, we are not looking to identify the geographic area within which two merging companies operate, as we would if we were reviewing a proposed merger. Rather, we are attempting to obtain a very broad snapshot of competition in the petroleum industry and trends within each geographic market and across the entire state.

The Maine Attorney General has taken different approaches to defining geographic markets for home heating oil and for motor fuel oil. At the time the Attorney General initially began preparing these reports, we conducted a series

of interviews with people knowledgeable in the petroleum industry in Maine. On that basis, we divided the state into 33 separate geographic markets intended to approximate economic and competitive circumstances relative to home heating oil sales. Motor fuel markets are generally more localized. However, since our task is not to analyze a specific local merger, but rather to portray broad trends in levels of concentration across the state, we use countywide markets. Markets are not static; nonetheless, we have retained the original geographic markets to be able to compare concentration trends over time within consistent geographic areas.

Importantly, these geographic market depictions are not used to analyze individual mergers or acquisitions in Maine. Each individual merger or acquisition proposal will require an evaluation of the unique competitive and economic circumstances in the areas within which both companies operate.

2. Herfindahl-Hirschman Index. Market concentration is a wellaccepted tool for evaluating competitiveness within identified markets. As a general rule, the fewer the competitors, and the higher those competitors' market shares, the more concentrated (and less competitive) the market. Federal and state antitrust agencies (including the Maine Attorney General) employ the Herfindahl-Hirschman Index ("HHI") to measure market concentration.² The HHI concentration index is arrived at by squaring the market shares of all the competitors in a given market. This simple mathematical device expresses the insight that market power increases

² DOJ/FTC Horizontal Merger Guidelines (rev. ed. 2010) (available at https://www.justice.gov/atr/horizontal-merger-guidelines-08192010).

exponentially in proportion to market share. Federal antitrust guidelines used by the Maine Attorney General in merger enforcement indicate that a market with an index of less than 1000 should be viewed as unconcentrated (and therefore likely to function competitively).³ A market with an index between 1500 and 2500 is described as moderately concentrated; while any index over 2500 is termed highly concentrated.⁴ A market in the highly concentrated category is subject to a high degree of market power, unless the effects of high concentration are mitigated by other factors, such as ease of entry for a new competitor.

Our analysis of levels of concentration in home heating oil markets largely tracks the categories reflected in federal guidelines. Thus, a home heating oil market with an index below 1500 is "unconcentrated," 1500-2499 is "moderately concentrated," and 2500-5000 is "highly concentrated." In addition to the federal benchmarks, this Office deems markets above 5000 points to be "extremely concentrated." ⁵

For our designated motor fuel markets, we have adjusted the concentration index to reflect the fact that the large, county-level geographic markets inevitably understate levels of concentration. Thus, for motor fuel, an index below 500 is "unconcentrated," 500-999 is "moderately concentrated,"

 $^{^3}$ For example, ten firms with market shares of 10% each would yield an index of 1000 (10 squared x 10).

⁴ For example, a market comprising five firms with market shares of 20% each would yield an index of 2000 (20 squared x 5).

⁵ The federal guidelines consider any market registering above 2500 to be highly concentrated.

and 1000-1800 is "highly concentrated." Markets above 1800 points are referred to as "extremely concentrated."

Appendix A lists the geographic markets within which we measure concentration at the retail sales level for both home heating oil and motor fuel oil. The home heating oil markets map depicts the relative concentrations in the 33 designated home heating oil geographic markets, based on the latest analysis of data from wholesalers. The motor fuel oil markets map depicts the relative concentrations based on the latest analysis of county-wide retail motor fuel markets. Again, these geographic market depictions are not used to analyze individual mergers or acquisitions in Maine. The tables in Appendix B contain the latest HHI concentration analyses within both home heating oil and motor fuel markets, as well as concentration comparisons in those markets over the last ten reporting years.

B. Overview - Retail Home Heating Oil Markets.

Overall, concentration levels in Maine's home heating oil markets have remained relatively consistent. We note that some variations from last year's report are due to refinement/corrections made to the database compilation process. Additionally, some smaller home heating oil businesses have either closed their doors or sold to another competitor. In speaking with some of these businesses, it appears that staffing shortages have had an impact on a business's ability to operate.

Areas centered around Augusta, Belfast, Biddeford/Saco, Portland, and Gray are the most competitive. Moderately concentrated markets include:

those that roughly follow I-95 from Millinocket/Medway through Lincoln to Lagrange; areas from Bangor/Old Town then southeast (roughly following Routes 9 and 1A) through Ellsworth to the coast; in the areas along I-95 and I-295; and some markets bordering New Hampshire. Similar to last year's report, Northern and Downeast Maine, as well as the northwestern and southern tip of the state remain among the most concentrated, or least competitive. (Note that we don't collect data pertaining to retailers based in New Hampshire who deliver in Maine.)

C. Overview - Retail Motor Fuel Oil Markets.

The concentration levels for the county-wide motor fuel markets have not shifted significantly since the last report. The same three counties are extremely concentrated (Knox, Oxford, and Piscataquis). Cumberland, Franklin, Hancock, Kennebec, Sagadahoc, Somerset, and York appear to be among the most competitive counties. In most cases, changes from last year reflect shifts in marketshare between competitors, rather than existing competitors leaving or new competitors entering individual markets.

III. RECOMMENDATION

The Attorney General is required to recommend whether additional legislation is needed to further limit or curtail the activity of refiners operating retail outlets. We do not recommend any changes on that basis, since there are no refiner retail operations in Maine in either home heating oil or motor fuel oil. Further, we recommend no changes to the law because it works relatively well for the Office as a starting point in merger enforcement. The availability of

sales data from wholesalers enables the Attorney General to evaluate competitive conditions surrounding proposed mergers and acquisitions in the petroleum industry much more quickly than we would be able to if the data were not required under the PMSA. This makes merger enforcement in this area more nimble for the Attorney General, and less burdensome for companies wishing to engage in merger or acquisition transactions in the Maine petroleum industry.

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APPENDIX A

HHO MARKETS

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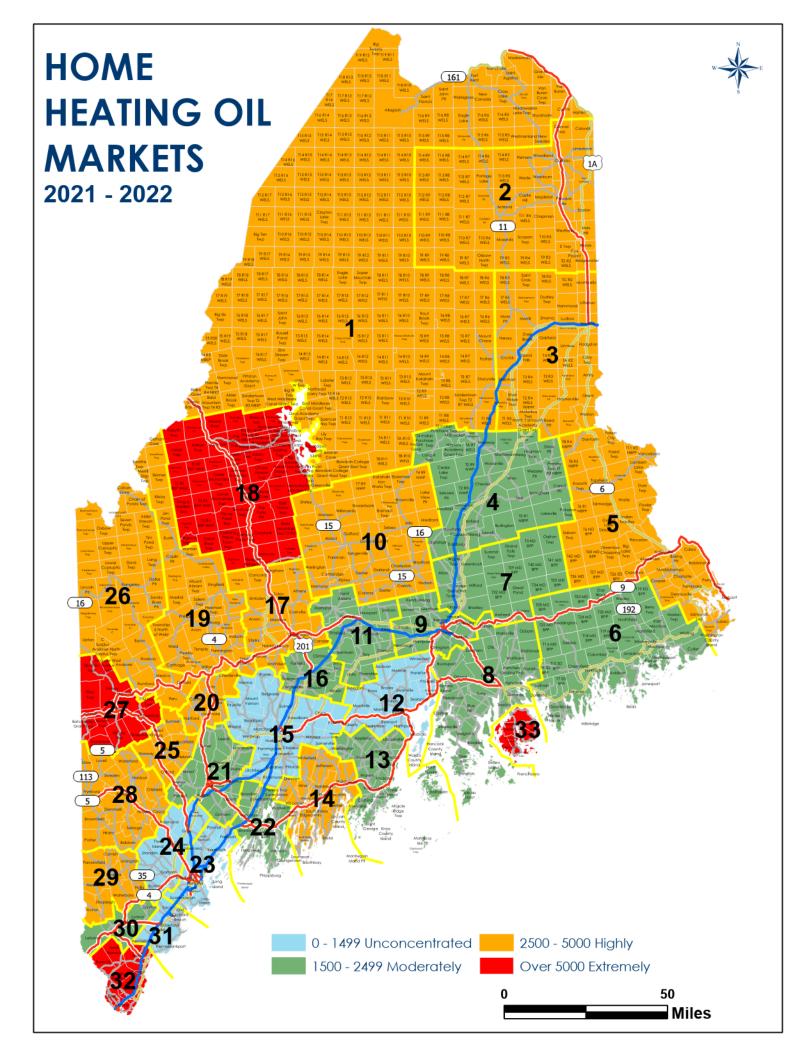
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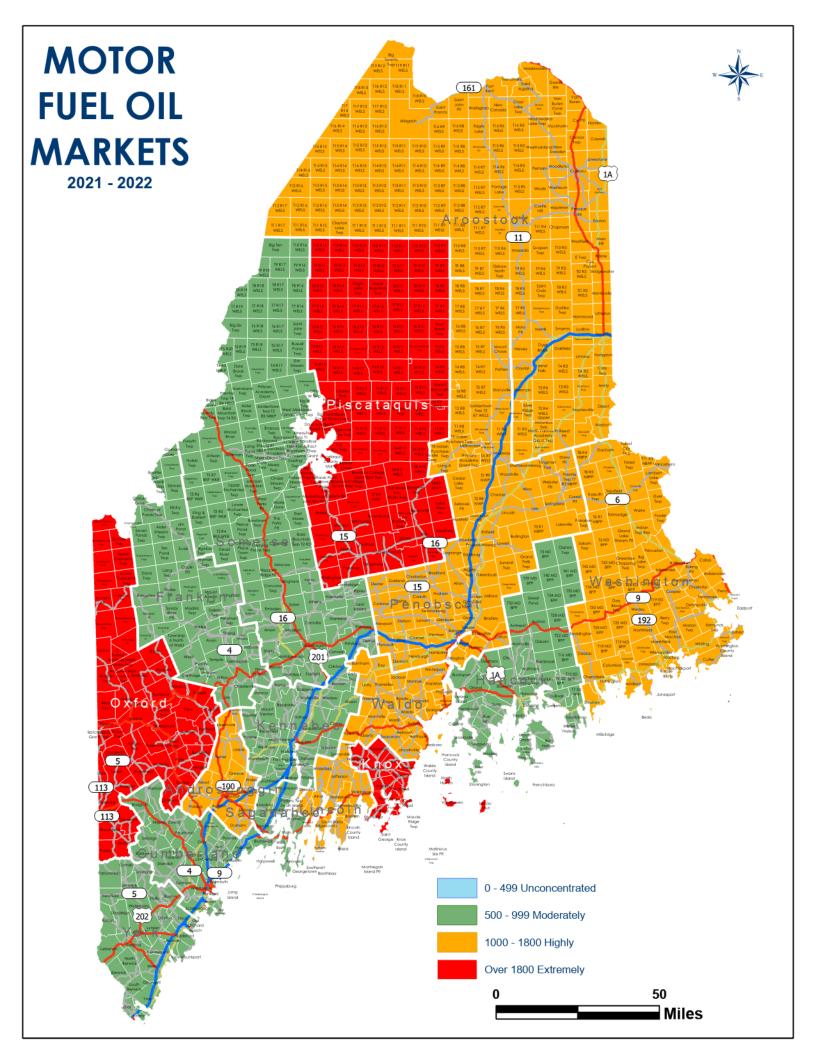
MFO MARKETS

St. John Valley	Androscogg
Ashland/Presque Isle	Aroostook
Houlton	Cumberlan
Lincoln	Franklin
Woodland/Calais	Hancock
Cherryfield/Machias	Kennebec
Old Town	Knox
Ellsworth	Lincoln
Bangor	Oxford
Dover-Foxcroft	Penobscot
Pittsfield/Newport	Piscataquis
Belfast	Sagadahoc
Rockland	Somerset
Mid Coast	Waldo
Augusta	Washingtor
Waterville	York
Skowhegan	
Jackman/Greenville	
Farmington	
Jay	
Lewiston/Auburn	
Bath/Brunswick	
Portland	
Gray	
Paris	
Rumford/Rangeley	
Bethel	
Bridgton	
Limerick	
Sanford	
Diddeferrd/Case	

- 31. **Biddeford/Saco**
- 32. York
- 33. Mt. Desert

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APPENDIX B

HHI DATA TABLES

HHO & MFO Concentration by Market Area 2012 to 2022

HHO MARKET CONCENTRATION Home Heating Oil by HHO Market										
Market Area	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021- 2022
01. St. John Valley	3834	4134	3434	3242	3391	3455	3764	4526	3402	3314
02. Ashland /Presque Isle	3618	3707	3348	3351	3751	3808	3760	3786	3594	3558
03. Houlton	6568	3917	3725	3168	3194	4092	3542	3032	3503	3729
04. Lincoln	1776	1594	1584	1490	1316	1593	1877	1848	1907	1820
05. Woodland /Calais	4491	3167	3071	3154	3103	2821	2752	2845	2581	3022
06. Cherryfield / Machias	2568	3198	2444	2625	2012	2544	3238	2886	4630	4209
07. Old Town	2680	1725	1564	3822	4439	1952	2159	2180	2225	2085
08. Ellsworth	1812	1664	1536	1487	1446	1817	1874	1911	2243	1812
09. Bangor	4153	1701	1063	1741	1538	1831	1582	1645	1357	1978
10. Dover-Foxcroft	3838	3680	3791	2819	3242	3399	3168	3395	4023	3842
11. Pittsfield / Newport	2167	2216	3687	1947	2172	2394	2458	1917	1830	1657
12. Belfast	1230	1100	1398	1007	1486	1109	1227	1441	1621	1347
13. Rockland	2088	1728	1721	2647	2157	2104	2109	1745	1777	1939
14. Midcoast	2886	3366	3163	2755	1972	1880	2319	2789	2368	4007
15. Augusta	995	849	857	911	850	1370	1392	1257	1046	1297
16. Waterville	1881	2190	1950	2231	2275	2311	2528	2516	2579	2351
17. Skowhegan	2485	1863	2162	2525	2688	2724	2789	2827	3197	4351
18. Jackman /Greenville	5441	5450	8681	8002	8214	8305	8797	9036	5889	5035
19. Farmington	2305	2531	2702	1654	2404	2110	2288	2311	2981	2851
20. Jay	5128	5913	5190	3282	4137	4436	4544	4674	4689	4798
21. Lewiston /Auburn	2013	1846	2212	2247	1574	1553	1693	1698	1492	1700
22. Bath / Brunswick	2361	4064	2258	2214	2138	1918	1788	1617	1572	2138
23. Portland	1234	1420	1772	1520	1250	1186	1567	1449	1052	1472
24. Gray	3922	1585	3061	3429	4043	2018	1511	1948	1481	1358
25. South Paris	3958	1684	3982	3492	3498	3532	3483	3330	2723	2769
26. Rumford /Rangeley	1861	2295	1541	2565	2638	2016	1999	2319	2327	2605
27. Bethel	4550	2330	8022	10000	10000	10000	10000	10000	10000	10000
28. Bridgton	2123	2550	2297	1182	1132	1936	1570	2492	2858	2541
29. Limerick	2953	2833	2760	2237	2813	2543	2567	2259	2463	2959
30. Sanford	4146	3102	2999	3377	3191	2485	2557	2633	1996	2409
31. Biddeford /Saco	1582	3805	1204	1601	1236	915	805	727	898	821
32. York	7906	4574	7654	4428	5420	5071	9050	4356	5212	5137
33. Mt. Desert	3664	9234	3635	3030	2714	3554	3215	3054	3853	6842
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ННІ	Concentration									
0 - 1499	Unconcentrated									
1500 - 2499	Moderately									
2500 - 5000	, Highly									
over 5000	Extreme									

MFO MARKET CONCENTRATION Motor Fuel Oil by County										
Market Area	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Androscoggin	897	2051	872	1399	989	1528	1119	1742	1000	1017
Aroostook	1285	1137	1021	1301	1480	1642	1479	1366	1681	1684
Cumberland	697	693	644	1103	748	874	1116	1080	780	873
Franklin	1027	988	874	819	840	944	953	990	828	726
Hancock	797	661	640	925	915	830	850	916	888	680
Kennebec	767	709	768	895	889	1093	1051	753	739	675
Knox	2256	2020	2279	2417	2319	3102	3129	2611	2813	2961
Lincoln	858	816	762	1966	1459	1579	1435	1466	1552	1166
Oxford	2014	1724	1702	2012	1815	1995	2095	2645	1876	2059
Penobscot	804	591	824	1148	959	1045	1059	1354	820	1149
Piscataquis	4552	3868	3387	5516	5599	3038	2949	4430	3301	3717
Sagadahoc	998	991	992	1027	929	966	978	920	919	802
Somerset	440	436	577	1576	1314	1097	1099	1112	981	805
Waldo	775	548	590	1461	1125	1200	1148	1061	1474	1089
Washington	621	617	610	1455	1299	1222	1180	1474	1288	1037
York	774	878	768	1135	1058	871	851	795	648	908
НН	Concentration									
0 - 499	Unconcentrated									
500 - 999	Moderately									
1000 - 1800	Highly									
over 1800	Extreme									