Iowa Department of REVENUE

2016 Retailers Fuel Gallons Annual Report

April 2017

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Introduction

In 2006 the Iowa General Assembly enacted H.F. 2754, an act pertaining to the regulation of renewable fuels and energy and providing incentives for the installation of biofuels infrastructure and the promotion of biofuels sales. This legislation established a goal that 25 percent of all petroleum used in the formulation of gasoline be replaced by biofuels by the year 2020.

To measure the State's progress toward achieving this goal, new reporting requirements for fuel retailers, administered by the Department of Revenue, were established in 2007 (Iowa Code section 452A.33). In consultation with the Renewable Fuels Infrastructure Board, motor fuel retailers, and other interested parties, the Department established an annual reporting requirement by administrative rule (701 IAC 67.27).

The Retailers Fuel Gallons Annual Report is due to the Department by January 31st in the following year. Despite a requirement for retailers to complete the report, the participation rate for retail locations across the state has typically been under 90 percent. Fuel retailers filed the first annual report for sales made during calendar year 2007.

In response to the changing patterns of sales and recent law changes, during 2015 the Retailers Fuel Gallons Annual Report was updated for the first time since 2007. Originally, for biodiesel the report asked for sales of specific blends: B2, B5, B10, B20, B50, and B100. For sales of blends that did not equal one of the specified blends, sales were grouped in an "Other" category. The Department had no way to identify what the biodiesel blend was for gallons reported in the "Other" category so had to make assumptions. On the current report, all biodiesel blends must be reported in one of several blend amount groupings, such as B5-B10 or B20-B49. The "Other" category has been eliminated. In addition, with Iowa's lower fuel excise tax rate for B11 plus blends effective July 1, 2015, there is an interest in tracking those sales which the prior report did not allow.

The ethanol blended gasoline reporting requirements were also changed to better account for the growing E15 market. Ethanol blended gasoline comprised of 15 percent ethanol is now reported as one of two types. Registered E15 is sold by those retailers that have registered with the U.S. Environmental Protection Agency to sell E15 to all 2001 and newer vehicles. However, during June 1st through September 15th, retailers can only continue to sell Registered E15 if they obtain low volatile gasoline for blending which is not piped into Iowa. In 2014, the E15 Plus Gasoline Promotion Tax Credit rate was increased for sales during the summer months to encourage retailers to take the additional steps needed to continue to sell E15 through registered pumps. Without those steps, registered retailers can only sell E15 fuel as a Flex Fuel. Flex Fuel E15 (15% to 19% ethanol) also includes gallons sold by retailers through a blender pump at

any time during the year. E20 is any ethanol blended gasoline with 20% to 69% ethanol. E85 continues to be defined as any ethanol blended gasoline with 70% to 85% ethanol.

Along with the report redesign, the Department transformed it to a webform that allows retailers to electronically report their sales by station. Once the report is successfully submitted online, the retailer receives an email confirmation that the Department received their report. For any retailer using the webform, the need for data entry by the Department is eliminated, which increases the accuracy and efficiency of reporting. Large retailers continue to have the option of completing a spreadsheet for all retail locations using a redesigned document to match the report changes noted above. In 2016 the Department mailed 150 paper reports to retailers that indicated they don't have a computer. The Department mailed postcards to 1,154 retailers noting the reporting requirement for 2016 and the link for the webform.

Reporting Requirements

Fuel retailers were directed to complete the Department's webform to report 2016 annual fuel sales. Those retailers indicating lack of technology, they could report annual sales by returning the paper form. Retailers with a large number of locations could securely email an electronic file with annual fuel sales by location for calendar year 2016. The Retailers Fuel Gallons Annual Report requires retailers to provide information on retail gasoline gallons sold for the following fuel types:

- Gasoline (non-ethanol blend)
- Ethanol E10 blend (10% to 14% ethanol)
- Ethanol Registered E15 blend (15% ethanol)
- Ethanol Flex Fuel E15 blend (15% to 19% ethanol)
- Ethanol E20 blend (20% to 69% ethanol)
- Ethanol E85 blend (70% to 85% ethanol)

Gallons of clear and dyed diesel sales are also required. The distinction between clear diesel and dyed diesel reflects whether the fuel is subject to State and federal fuel excise taxes. Dyed diesel fuel is not subject to fuel excise taxes and is sold for use in farm, construction, and other types of equipment that do not travel under their own power on public roads, except for short distances such as between farm fields.

For biodiesel, additional detailed information is required:

- Clear Biodiesel (1% to 4% biodiesel) B1-B4
- Clear Biodiesel (5% to 10% biodiesel) B5-B10
- Clear Biodiesel (11% to 19% biodiesel) B11-B19
- Clear Biodiesel (20% to 49% biodiesel) B20-B49
- Clear Biodiesel (50% to 100% biodiesel) B50-B100
- Dyed Biodiesel (1% to 4% biodiesel) D1-D4
- Dyed Biodiesel (5% to 10% biodiesel) D5-D10
- Dyed Biodiesel (11% to 19% biodiesel) D11-D19
- Dyed Biodiesel (20% to 49% biodiesel) D20-D49
- Dyed Biodiesel (50% to 100% biodiesel) D50-D100

Statistical Summary for 2016

The Department identified 2,359 potential retail locations at which fuel may have been sold at retail during 2016. Paper reports were mailed to 150 locations and post cards were mailed to 1,154 retailers identified using Department of Agriculture and Land Stewardship motor fuel license information and the Department of Revenue eligible purchaser's database. Electronic files were emailed to seventeen large fuel retailers with 1,055 locations.

The Department received webform reports, paper forms, or electronic files representing 2,162 (91.6%) of the locations compared to 93.2% in 2015. Additional replies from 69 locations indicated that no retail sales of any type of fuel were made during 2016; a handful of reports were completed by stations that were not contacted and the rest of the retailers did not respond to the Department's notice. The 2,162 locations reported 2.43 billion gallons of retail fuel sales (see Table 1).

Of the reporting 2,162 Iowa retail locations, 2,040 (94.4%) reported selling E10 fuel, 249 (11.5%) reported selling E15 Registered, E15 Flex Fuel, and/or E20, 257 (11.9%) reported selling E85, and 514 (23.8%) reported selling one or more of the various blends of clear or dyed biodiesel. Biofuel sales by these locations are summarized below and in Table 1.

Gasoline Fuel Sales

During 2016, the reported amount of E10 gasoline sold equaled 1,346.9 million gallons, E85 gasoline sold equaled 13.5 million gallons, E20 gasoline sold equaled 3.0 million gallons, and E15 gasoline sold equaled 6.0 million gallons, with 82.5% sold through registered pumps. Combined, the five ethanol blends represented 86.2% of total reported gasoline fuel sales during the year. Of the 2,125 locations that sold gasoline, 2,050 (96.5%) sold one or more ethanol blend.

With just under 9 percent of locations failing to report their Retailers Fuel Gallons Annual Report to the Department for 2016, gallons from the Department's Monthly Fuel Tax Reports were used to estimate the amount of underreporting of gasoline sales. The gallons presented in the Monthly Fuel Tax Reports reflect taxable fuel shipped from terminals rather than gallons sold at retail locations. Because the Monthly Fuel Tax Reports reflect fuel shipments made during the prior month, taxable gallons reported in the monthly reports covering February 2016 through January 2017 were compared with gallons reported as sold by retailers completing the 2016 annual report. During this period, fuel taxes were paid on a total of 1,766.9 million gallons of gasoline fuels. In comparison, the 91.6 percent of retail locations that filed annual reports indicated 1,588.0 million gallons of gasoline fuels were sold, including all ethanol blends and non-ethanol gasoline, which equals 89.8 percent of taxable gallons reported for 2016.

Diesel Fuel Sales

During 2016, based on annual reports submitted to the Department, the amount of clear biodiesel sold equaled 344.8 million gallons, or 54.7 percent of total clear diesel fuel sales. Retailers reported selling 629.9 million of gallons of clear diesel fuel. In comparison, the number of taxable (clear) gallons of diesel fuel shipped during 2016 as reported on the Monthly Fuel Tax Reports equaled 713.5 million. Therefore, retailers completing annual reports for 2016 accounted for 88.3 percent of diesel fuel on which fuel taxes were paid.

Annual reports for 2016 indicated 211.7 million gallons of dyed (non-taxed) diesel fuel sales were sold, including 35.0 million biodiesel gallons (16.5%). Dyed diesel gallons are not captured in the Monthly Fuel Tax Reports.

Based on the annual reports, 1,410 retail locations sold clear diesel fuel and 471 of these locations sold clear biodiesel fuel during 2016. In addition, 650 retail locations sold dyed diesel fuel and 443 of these locations sold dyed biodiesel fuel during 2016.

Total diesel gallons reported were 841.5 million gallons and total biodiesel gallons were 379.8 million gallons; therefore, biodiesel blended gallons accounted for 45.1 percent of diesel gallons sold by reporting retailers.

Table 1. Iowa Gasoline, Diesel, and Biofuel Sales for Calendar Year 2016

Fuel Type	Locations	Gallons Sold	Pure Petroleum/Diesel	Pure Biofuel
Gasoline (Non-Ethanol)	1,745	218,549,742	218,549,742	0
Ethanol				
E10	2,040	1,346,926,032	1,212,233,429	134,692,603
E15 Registered	124	4,951,912	4,209,125	742,787
E15 Flex	36	1,050,768	893,153	157,615
E20	89	3,031,908	2,425,526	606,382
E85	257	13,471,861	2,829,091	10,642,770
Total Ethanol	2,050	1,369,432,481	1,222,590,324	146,842,157
Total Gasoline and Ethanol	2,125	1,587,982,223	1,441,140,066	146,842,157
Ethanol Share	96.5%	86.2%		9.2%
Clear Diesel (Non-Biodiesel)	1,168	285,060,665	285,060,665	0
Clear Biodiesel				
Clear B1-B4	89	9,429,250	9,148,258	280,992
Clear B5-B10	383	95,230,140	88,564,030	6,666,110
Clear B11-B19	233	203,079,356	172,881,456	30,197,900
Clear B20-B49	158	37,064,676	29,440,472	7,624,204
Clear B50-B100	9	28,215	14,108	14,108
Subtotal Clear Biodiesel	471	344,831,637	300,048,324	44,783,313
Total Clear Diesel	1,410	629,892,302	585,108,989	44,783,313
Clear Biodiesel Share	28.7%	54.7%		7.1%
Dyed Diesel (Non-Biodiesel)	313	176,701,857	176,701,857	0
Dyed Biodiesel				
Dyed D1-D4	30	2,148,567	2,062,839	85,728
Dyed D5-D10	104	31,470,394	29,896,874	1,573,520
Dyed D11-D19	16	468,334	398,693	69,641
Dyed D20-D49	16	795,018	631,483	163,535
Dyed D50-D100	17	73,406	36,703	36,703
Subtotal Dyed Biodiesel	443	34,955,719	33,026,592	1,929,127
Total Dyed Diesel	650	211,657,576	209,728,449	1,929,127
Dyed Biodiesel Share	58.6%	16.5%		0.9%
Total Biodiesel	514	379,787,356	333,074,916	46,712,440
Total Diesel and Biodiesel	1,443	841,549,878	794,837,438	46,712,440
Biodiesel Share	35.6%	45.1%		5.6%
Total Fuel	**2,162**	**2,429,532,101**	**2,235,977,504**	**193,554,597**
Pure Biofuel Share of Total Gasoline and Diesel Sales				8.0%
Biofuel Distribution Percentage				12.2%

Source: 2016 Retailers Fuel Gallons Annual Reports

Biofuel Distribution Percentage

The primary purpose of this report is to provide the information needed to determine the State's progress toward replacing 25 percent of petroleum-based motor fuels with biofuels by the year 2020. Table 1 provides estimates of the breakdown between petroleum or diesel and pure biofuel for each fuel type.

Based on blend details provided by a small number of biofuel retailers in 2015 the following blend assumptions were used to measure progress to meeting the goal of 25 percent biofuels:

- E10 blend gasoline fuel gallons were multiplied by 0.10
- E15 Registered blend gasoline fuel gallons were multiplied by 0.15
- E15 Flex blend gasoline fuel gallons were multiplied by 0.15
- E20 blend gasoline fuel gallons were multiplied by 0.20
- E85 blend gasoline fuel gallons were multiplied by 0.79
- B1-B4 blend diesel fuel gallons were multiplied by 0.0399
- B5-B10 blend diesel fuel gallons were multiplied by 0.076
- B11-B19 blend diesel fuel gallons were multiplied by 0.142
- B20-B49 blend diesel fuel gallons were multiplied by 0.20
- B50-B100 blend gallons were multiplied by 0.50
- D1-D4 blend diesel fuel gallons were multiplied by 0.0399
- D5-D10 blend diesel fuel gallons were multiplied by 0.05
- D11-D19 blend diesel fuel gallons were multiplied by 0.142
- D20-D49 blend diesel fuel gallons were multiplied by 0.20
- D50-D100 blend gallons were multiplied by 0.50

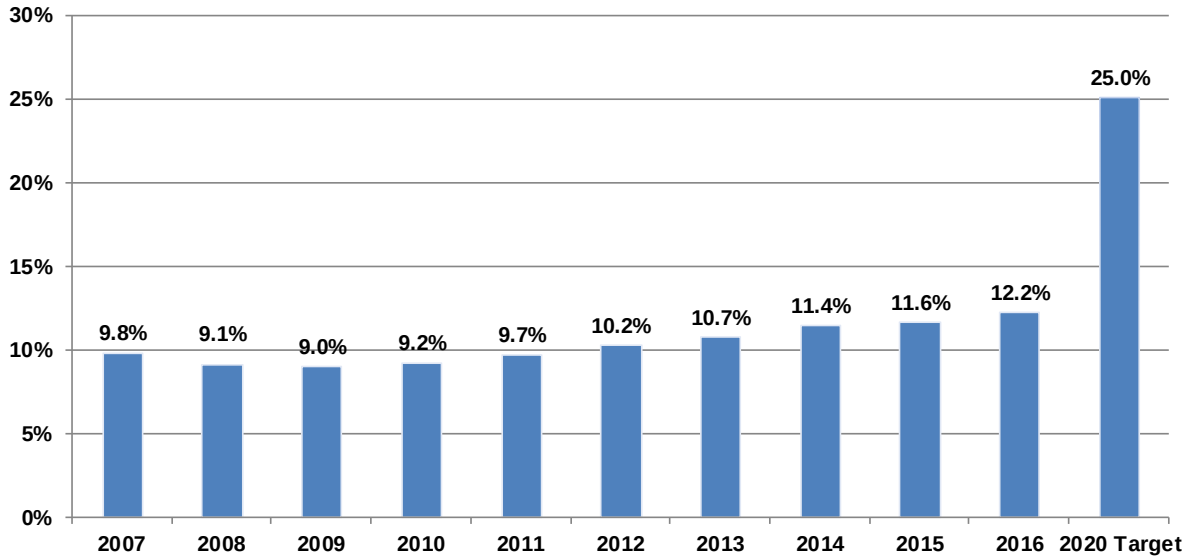
These calculations indicate that during 2016 pure ethanol comprised 9.2 percent of the volume of total gasoline and ethanol fuel sales. The aggregate ethanol gallonage, which is the number of pure ethanol gallons sold by retailers during 2016, was 146.8 million gallons. Pure biodiesel comprised 5.6 percent of diesel and biodiesel sales. The aggregate biodiesel gallonage, which is the number of pure biodiesel gallons sold by retailers during 2016, was 46.7 million gallons. Together, pure ethanol and pure biodiesel comprised 8.0 percent of all fuel sales reported by retail locations. However, the formula specified in Iowa Code 452.31(8) for the biofuel distribution percentage used to determine progress toward meeting the 25 percent biofuels goal does not include diesel fuel in its denominator. The formula is:

Biofuel Distribution Percentage =
(Pure Ethanol Gallons + Pure Biodiesel Gallons) / Total Gasoline Gallons

Using this formula, during 2016 biofuels accounted for 12.2 percent of Iowa retail motor fuel sales. This is an increase from the 11.6 percent calculated for 2015 (see Appendix).

Figure 1 presents the biofuel distribution percentage calculated for the 2007 through the 2016 calendar year. Between 2010 and 2013, the State percentage increased 0.5 percentage points each year solely as a result of higher biodiesel usage. The 0.7 percentage point jump in 2014 reflected a change in the octane level of gasoline piped into Iowa, which occurred in late 2013, that resulted in higher ethanol sales during the following calendar year. The 0.6 percentage point jump to 12.2 percent in calendar year 2016 reflects growth in both clear biodiesel and ethanol gasoline sales.

Figure 1: Statewide Biofuel Distribution Percentage, 2007-2016

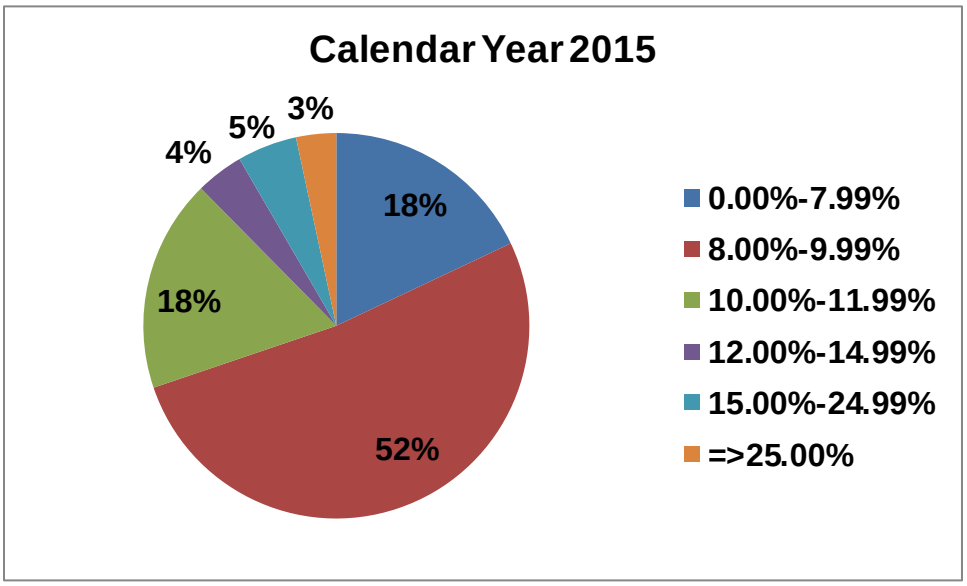


Source: Retail Fuel Gallons Annual Reports, 2007-2016

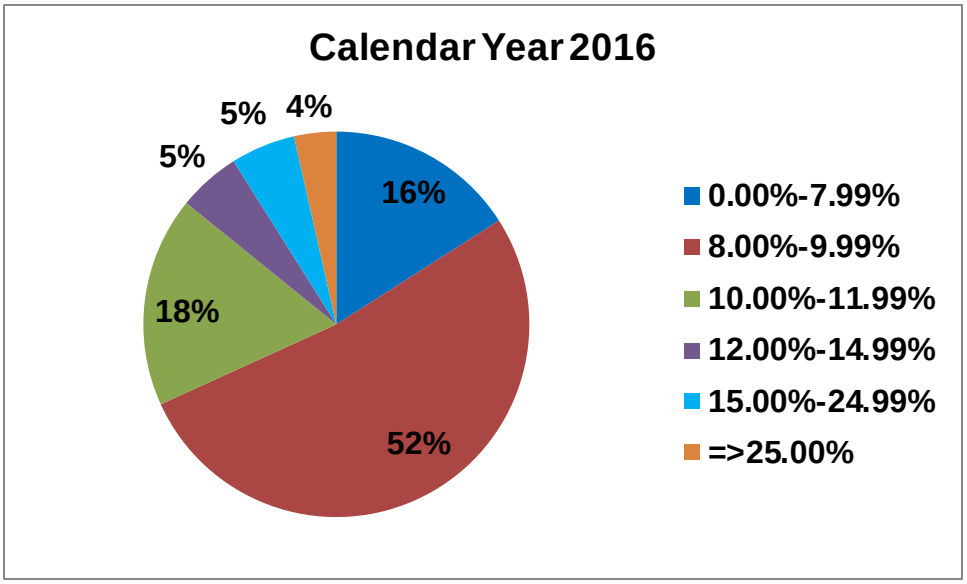
Although the 25 percent goal was for the state as a whole, it is instructive to consider that same measure at the retailer and county level. Figure 2 illustrates the breakdown of retail locations by biofuel distribution percentage calculated using the sales reported by each retail location for which annual reports were filed in 2016 or 2015. The data includes only the retail locations that reported gasoline or ethanol sales in the respective calendar year, excluding those with only diesel sales reported. However, as noted above, the calculation of the biofuel distribution percentage includes any pure biodiesel reported at those locations.

The share of stations reporting a biofuel distribution percentage equal to or greater than 25 percent grew to 4 percent in 2016 compared to 3 percent in 2015 and the share of 12 percent to 14.99 percent grew from 4 percent in 2015 to 5 percent in 2016. There was a decline in the share reporting zero to 7.99 percent from 18 percent in 2015 to 16 percent in 2016. All other categories remained the same in 2015 and 2016.

Figure 2: Breakdown of Retail Locations by Reported Biofuel Distribution Percentage



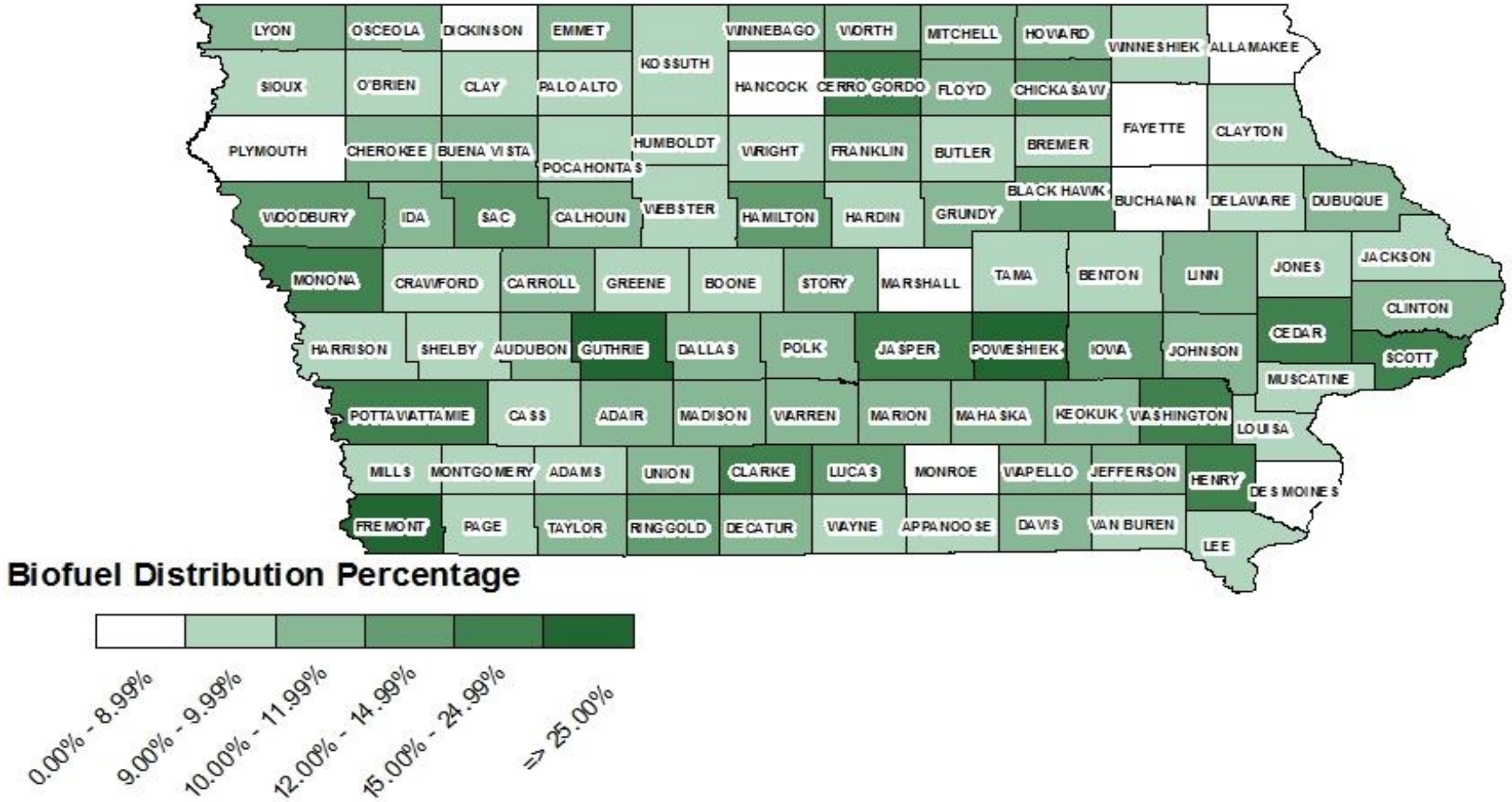
Source: 2015 Retail Fuel Gallons Annual Report



Source: 2016 Retail Fuel Gallons Annual Report

To further illustrate the variation in sales of biofuel among Iowa retailers, Figure 3 maps the biofuel distribution percentage calculated by county. These percentages are based on total sales reported by the retailers within each county who remitted the 2016 annual gallons report. Three counties (Fremont, Guthrie, and Poweshiek) exceeded the 25 percent goal, nine counties had pure biofuel sales comprising between 15.0 percent and 24.99 percent of total gasoline sales. Eight counties fell into the 12.0 percent to 14.99 percent category. Nine counties fell into the 0.0 to 8.99 percent category, thirty-six counties fell in the 9.0 percent to 9.99 percent category, and thirty-four fell into the 10.0 percent to 11.99 percent category. Table 3 provides the total gallons of non-ethanol gasoline, ethanol, clear and dyed non-biodiesel diesel, and clear and dyed biodiesel gallons for all counties with more than five retailers reporting sales to the Department.

Figure 3. Biofuel Distribution Percentage by County for 2016



Source: 2016 Retail Fuel Gallons Annual Report

Table 2. Calendar Year 2016 Total Gallons by County

County	Number of Retailers	Gasoline Sales	Ethanol Sales	Clear and Dyed Diesel	Clear and Dyed Biodiesel	Biofuel Distribution
ADAIR	11	1,539,644	7,734,739	3,674,613	478,950	10.46%
ADAMS	6	221,777	1,404,397	369,999	71,899	9.54%
ALLAMAKEE	19	1,382,114	6,092,862	5,269,089	647,068	8.93%
AUDUBON	6	202,186	2,280,469	1,811,040	634,023	10.62%
BENTON	22	1,236,679	8,786,703	6,608,616	110,807	9.58%
BLACK HAWK	64	9,060,944	46,271,506	7,152,729	15,331,809	12.24%
BOONE	12	1,342,145	9,958,148	3,180,374	376,125	9.20%
BREMER	17	2,114,712	10,423,151	2,594,216	887,075	9.17%
BUCHANAN	16	1,710,098	8,873,820	13,412,979	693,975	8.72%
BUENA VISTA	22	1,221,431	9,870,579	5,255,641	579,977	10.47%
BUTLER	13	956,835	5,858,925	1,256,941	138,869	9.18%
CALHOUN	16	401,481	4,690,197	4,239,739	343,760	11.36%
CARROLL	25	1,654,381	9,257,730	10,135,985	470,759	10.07%
CASS	14	868,395	7,189,201	4,018,846	139,484	9.44%
CEDAR	18	1,602,067	9,087,086	4,046,705	11,480,989	23.77%
CERRO GORDO	34	5,235,046	29,679,367	4,807,094	16,519,353	15.38%
CHEROKEE	13	671,202	5,231,699	1,502,262	712,237	11.26%
CHICKASAW	12	1,397,673	5,979,407	4,828,174	3,368,082	12.89%
CLARKE	10	1,472,947	6,667,529	3,800,535	7,352,984	20.86%
CLAY	24	1,266,357	7,034,539	3,727,454	433,586	9.95%
CLAYTON	25	1,581,114	7,292,421	1,483,029	489,933	9.09%
CLINTON	24	2,128,811	19,677,151	8,410,350	2,168,761	10.67%
CRAWFORD	11	748,996	5,083,907	1,774,160	638,839	9.87%
DALLAS	37	6,679,298	37,092,867	9,004,841	4,349,358	10.06%
DAVIS	7	324,980	2,270,609	1,162,786	718,049	10.17%
DECATUR	6	358,989	2,410,992	322,210	232,634	9.99%
DELAWARE	13	1,014,744	6,497,660	1,986,620	262,067	9.56%
DES MOINES	21	3,133,770	14,181,875	2,027,388	27,716	8.37%
DICKINSON	22	1,793,327	7,717,353	1,460,668	25,285	8.65%
DUBUQUE	61	13,643,561	85,619,673	15,205,863	20,265,147	10.18%
EMMET	8	492,679	3,525,775	1,127,420	1,016,957	11.80%
FAYETTE	20	1,845,535	7,022,970	14,785,996	185,886	8.37%
FLOYD	15	1,235,580	6,784,642	3,875,719	1,606,578	10.47%
FRANKLIN	11	476,813	3,580,764	3,030,668	202,938	10.10%
FREMONT	8	373,687	4,656,500	1,098,401	11,276,770	40.67%
GREENE	11	320,205	4,414,116	1,688,185	128,092	9.60%
GRUNDY	14	798,672	6,621,546	5,542,769	1,720,284	10.34%
GUTHRIE	13	602,738	5,130,010	1,340,136	8,298,995	29.76%
HAMILTON	20	1,076,294	8,109,532	4,881,357	2,677,371	13.38%
HANCOCK	11	540,086	2,837,554	3,686,616	123,744	8.62%
HARDIN	22	816,053	7,721,660	6,640,374	52,967	9.12%
HARRISON	19	876,192	8,074,712	4,843,421	878,214	9.98%
HENRY	16	1,137,288	17,753,407	925,977	10,156,299	16.66%
HOWARD	11	652,857	3,915,069	2,594,627	967,603	11.21%
HUMBOLDT	15	766,055	4,280,690	5,108,836	344,164	9.85%
IDA	12	400,159	3,350,486	2,510,967	0	10.59%
IOWA	89	5,781,755	30,716,676	19,431,252	10,748,098	12.45%
JACKSON	14	1,132,828	6,979,356	4,199,171	550,577	9.93%
JASPER	32	2,109,667	16,619,520	4,888,252	13,253,219	18.74%

Table 2. Calendar Year 2016 Total Gallons by County (continued)

County	Number of Retailers	Gasoline Sales	Ethanol Sales	Clear and Dyed Diesel	Clear and Dyed Biodiesel	Biofuel Distribution
JEFFERSON	16	952,717	5,371,277	1,703,327	1,119,784	11.90%
JOHNSON	59	8,283,557	45,739,513	3,101,463	6,476,225	10.53%
JONES	11	1,145,664	7,205,546	1,553,435	1,280,013	9.24%
KEOKUK	9	499,023	3,959,770	1,683,848	725,746	11.90%
KOSSUTH	16	924,355	6,562,333	8,633,964	354,680	9.88%
LEE	21	2,077,852	12,490,398	1,597,497	1,619,112	9.27%
LINN	90	14,613,519	85,822,617	18,560,086	5,996,964	10.09%
LOUISA	9	561,418	4,605,290	1,169,043	254,678	9.95%
LUCAS	8	408,462	2,662,970	311,869	2,048,483	13.27%
LYON	12	942,449	5,748,507	1,898,103	990,308	10.59%
MADISON	10	906,381	7,258,538	6,634,634	1,122,143	10.75%
MAHASKA	15	756,986	9,110,945	2,296,337	1,627,614	10.55%
MARION	22	1,741,381	13,258,954	6,044,014	396,801	10.36%
MARSHALL	25	2,658,499	14,691,059	4,329,669	1,149,207	8.84%
MILLS	10	695,349	5,003,670	2,410,842	148,010	9.19%
MITCHELL	10	627,772	3,390,887	671,091	170,109	10.72%
MONONA	12	852,980	5,329,177	1,549,274	2,245,388	15.04%
MONTGOMERY	16	1,404,914	5,106,459	3,249,788	529,767	9.77%
MUSCATINE	19	2,405,183	12,891,582	1,857,756	300,652	9.83%
O'BRIEN	19	849,490	5,508,349	2,292,102	263,998	9.25%
OSCEOLA	8	232,318	2,357,126	2,653,192	19,163	10.14%
OTHER	18	825,826	7,762,319	2,641,871	412,146	9.45%
PAGE	7	566,751	4,940,807	517,497	73,811	9.07%
PALO ALTO	10	439,559	4,022,822	3,051,720	130,239	9.96%
PLYMOUTH	18	2,583,928	10,104,033	16,788,142	1,265,514	8.90%
POCAHONTAS	10	421,328	3,484,561	13,712,337	0	9.05%
POLK	187	35,661,404	193,718,423	36,180,463	44,150,831	11.98%
POTTAWATTAMIE	58	8,020,959	52,506,283	12,497,683	35,741,534	17.31%
POWESHIEK	18	1,506,130	12,393,839	6,029,642	15,808,593	26.11%
RINGGOLD	7	169,920	1,419,019	371,453	543,110	13.74%
SAC	16	598,323	5,146,805	1,274,939	669,327	12.47%
SCOTT	80	5,751,468	72,981,287	10,755,463	58,475,128	19.25%
SHELBY	13	522,926	4,543,151	3,707,386	182,080	9.87%
SIOUX	34	3,177,752	12,645,987	15,523,883	1,417,358	9.22%
STORY	43	5,263,777	35,466,153	2,734,209	3,149,732	10.40%
TAMA	16	676,197	5,763,753	3,230,102	16,017	9.05%
TAYLOR	6	211,867	1,803,114	289,082	522,841	10.47%
UNION	10	504,893	4,494,664	803,679	755,407	10.74%
VAN BUREN	8	288,246	2,249,833	769,902	284,935	9.72%
WAPELLO	29	2,063,474	14,381,080	2,316,461	3,354,751	11.88%
WARREN	30	2,979,834	23,263,107	1,789,958	1,722,403	10.17%
WASHINTON	21	1,479,783	9,769,155	2,585,990	8,155,025	17.13%
WAYNE	9	460,021	2,225,063	1,323,951	619,894	9.51%
WEBSTER	34	1,668,432	15,688,045	3,090,555	625,979	9.95%
WINNEBAGO	15	580,027	4,142,445	2,627,373	370,812	10.85%
WINNESHIEK	15	1,460,562	7,565,494	2,083,066	528,362	9.51%
WOODBURY	44	7,563,056	40,652,284	11,009,038	17,283,779	13.43%
WORTH	10	442,846	4,920,045	1,124,681	468,387	10.23%
WRIGHT	17	719,337	4,992,396	1,999,572	82,160	9.12%
Total	2,162	218,549,742	1,369,432,481	461,762,522	379,787,356	12.20%

Source: 2016 Retail Fuel Gallons Annual Report
Note: OTHER Includes Appanoose and Monroe counties as neither had the required five retailers reporting.

Appendix

Iowa Gasoline, Diesel, and Biofuel Sales for Calendar Year 2015

Fuel Type	Locations	Gallons Sold	Pure Petroleum/Diesel	Pure Biofuel
Gasoline (Non-Ethanol)	1,797	220,393,237	220,393,237	0
Ethanol				
E10	2,090	1,319,423,552	1,187,481,197	131,942,355
E15 Registered	58	5,618,511	4,775,734	842,777
E15 Flex	34	604,804	514,083	90,721
E20	78	2,519,403	2,015,522	503,881
E85	226	13,152,730	2,762,073	10,390,657
Total Ethanol	2,102	1,341,319,000	1,197,548,610	143,770,390
Total Gasoline and Ethanol	2,207	1,561,712,237	1,417,941,847	143,770,390
Ethanol Share	95.2%	85.9%		9.2%
Clear Diesel (Non-Biodiesel)	1,330	325,482,149	325,482,149	0
Clear Biodiesel				
Clear B1-B4	66	14,664,652	14,227,645	437,007
Clear B5-B10	359	121,199,415	112,715,456	8,483,959
Clear B11-B19	163	152,741,149	130,028,540	22,712,609
Clear B20-B49	31	20,020,434	15,902,231	4,118,203
Clear B50-B100	9	29,211	14,606	14,606
Subtotal Clear Biodiesel	405	308,654,861	272,888,478	35,766,383
Total Clear Diesel	1,445	634,137,010	598,370,627	35,766,383
Clear Biodiesel Share	23.3%	48.7%		5.6%
Dyed Diesel (Non-Biodiesel)	356	160,263,157	160,263,157	0
Dyed Biodiesel				
Dyed D1-D4	25	7,338,581	7,045,772	292,809
Dyed D5-D10	101	25,234,465	23,972,742	1,261,723
Dyed D11-D19	7	101,093	86,060	15,033
Dyed D20-D49	14	589,764	468,450	121,314
Dyed D50-D100	12	122,492	61,246	61,246
Subtotal Dyed Biodiesel	118	33,386,395	31,634,269	1,752,126
Total Dyed Diesel	375	193,649,552	191,897,426	1,752,126
Dyed Biodiesel Share	24.9%	17.2%		0.9%
Total Biodiesel	431	342,041,256	304,522,747	37,518,509
Total Diesel and Biodiesel	1,471	827,786,562	790,268,053	37,518,509
Biodiesel Share	29.3%	41.3%		4.5%
Total Fuel	**2,240**	**2,389,498,799**	**2,208,209,900**	**181,288,899**
Pure Biofuel Share of Total Gasoline and Diesel Sales				7.6%
Biofuel Distribution Percentage				11.6%

Source: 2015 Retailers Fuel Gallons Annual Reports