

2024 Retailers Fuel Gallons Annual Report (Revised)

April 2025

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Introduction

lowa fuel retailers are businesses that offer a range of fuel options, including gasoline, diesel, ethanol, and biodiesel. Iowa Code section 452A.33 requires all Iowa fuel retailers to report gasoline and diesel gallons to the Iowa Department of Revenue and for the Department to prepare and submit an annual report of fuel gallons to the Iowa Governor and Legislature. Since 2007, when this law became effective, the Department has published the Retailers Fuel Gallons Annual Report for each calendar year. The annual report is based on retailers' reports of gallons that are due to the Department by January 31st in the following year. The present report concerns fuel gallons sold or dispensed in Iowa in 2024. Retail dealers who fail to file the report by January 31st are subject to a \$100 penalty for each retail fuel site from which the retail dealer sells or dispenses gasoline or diesel fuel.

Over the years, the Retailers Fuel Gallons Annual Report has been updated to reflect changes in law and trends in biofuel sales. Most recently, the statutory criteria used to calculate the lowa fuel tax rate for undved biodiesel classified as B-11 to B-19, undved biodiesel classified as B-20 or Higher, and ethanol blended fuel classified as E-15 or Higher and Alcohol changed effective July 1, 2024. The current report includes data on B20 or higher biodiesel blends, which became subject to a lower fuel excise tax rate starting July 1, 2024. Ethanol blended gasoline with 15 percent ethanol is classified as either Registered E15 or Flex Fuel E15. Registered E15 is sold or dispensed by retailers who have registered with the U.S. Environmental Protection Agency to sell E15 to consumers with vehicles manufactured in 2001 or later, enabling year-round sale of E15 gasoline. Flex Fuel E15, which includes gallons sold or dispensed by retailers through a blender pump at any time during the year, also encompasses ethanol blends ranging from 15 percent to 19 percent. The definition of E85 has been updated. consistent with Iowa Code section 214A.1, to include ethanol blended gasoline with 68 to 83 percent ethanol. The E15 Access Standard, which requires most retailers to offer E15 for sale, will take effect January 1, 2026.

The Department is issuing this revised Retailers Fuel Gallons Annual Report primarily to correct the gallons of E86 reported sold or dispensed. While E86 is generally not sold or dispensed at retail in Iowa, the Department believed retailers could report a limited number of gallons of E86 sold or dispensed for specialized purposes. However, retailers initially reported significantly more E86 sold or dispensed than expected. The Department contacted those retailers reporting they sold or dispensed E86 to help determine whether they reported correctly and to encourage them to file amended reports if needed. Several retailers have since filed amended reports to correct their E86 gallonage and to make other adjustments, and other retailers have continued to file new reports. This revised Retailers Fuel Gallons Annual Report reflects the gallonage in all amended and new reports for 2024.

Reporting Requirements

Fuel retailers were instructed to report their 2024 annual fuel sold or dispensed to the Department via GovConnectIowa. Retailers with a significant number of locations were able to upload an electronic file with annual fuel sales by location within

GovConnectIowa. The Retailers Fuel Gallons Annual Report mandates that retailers provide information on the retail gasoline gallons sold or dispensed for the following types of fuel:

Gasoline (non-ethanol blend)
Ethanol Blended Gasoline (10% to 14% ethanol) E10
Ethanol Blended Gasoline (15% ethanol) Registered E15
Ethanol Blended Gasoline (15% to 19% ethanol) Flex Fuel E15
Ethanol Blended Gasoline (20% to 69% ethanol) E20
Ethanol Blended Gasoline (68% to 83% ethanol) E85
Ethanol Blended Gasoline (84% to 100% ethanol) E86

In addition to gasoline sold or dispensed, the Retailers Fuel Gallons Annual Report also requires retailers to provide information on the gallons of clear and dyed diesel sold or dispensed. The differentiation between clear diesel and dyed diesel is based on whether the fuel is subject to State and Federal fuel excise taxes. Dyed diesel fuel is not subject to these taxes and is primarily sold or dispensed for use in farm, construction, and other types of equipment that do not travel on public roads under their own power, except for short distances such as between farm fields.

For biodiesel sales, information is collected for the following fuel types:

Clear Diesel (non-biodiesel)

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 29% biodiesel) B20-B29

Clear Biodiesel (30% to 49% biodiesel) B30-B49

Clear Biodiesel (50% to 100% biodiesel) B50-B100

Dyed Diesel (non-biodiesel)

Dyed Biodiesel (1% to 4% biodiesel) D1-D4

Dyed Biodiesel (5% to 10% biodiesel) D5-D10

Dved Biodiesel (11% to 19% biodiesel) D11-D19

Dyed Biodiesel (20% to 29% biodiesel) D20-D29

Dyed Biodiesel (30% to 49% biodiesel) D30-D49

Dyed Biodiesel (50% to 100% biodiesel) D50-D100

Statistical Summary for 2024

The Department has identified 2,263 retail locations that potentially sold or dispensed fuel at retail during 2024. To provide instructions for completing the online report, letters were mailed to 1076 retailers at their main business address. The Department identified these retailers using information from the Department of Agriculture and Land Stewardship's motor fuel license database and the Department of Revenue's eligible purchaser's database.

Out of these potential locations, the Department received reports from 2,112 retail locations, representing a response rate of 93 percent, which is higher than the 83.7 percent in 2023. These 2,112 locations reported a total of 2,438 million (two billion) gallons of retail fuel sold or dispensed, as shown in Table 1.

Gasoline Fuel Sold or Dispended

Amongst the 2,071 retail locations that sold or dispensed gasoline in 2024, 1,999 of them (or 96.5%) sold or dispensed at least one ethanol blend. E10 gasoline was the most common ethanol blend, with a reported total of 1,005 million (one billion) gallons sold or dispensed. Additionally, these retailers reported 257 million gallons of E15 gasoline, one million gallons of E20 gasoline, 30 million gallons of E85 gasoline, and 39 thousand gallons of E86 gasoline. In total, ethanol blends of E15 or higher constituted 19.4 percent of all gasoline sold or dispensed in 2024. In comparison, the number of taxable gallons of gasoline fuels shipped during 2024, as reported on the Monthly Fuel Tax Reports, equaled 1.6 billion gallons. Therefore, retailers completing annual reports for 2024 accounted for 90.8 percent of gasoline fuels on which fuel taxes were paid.

Diesel Fuel Sold or Dispensed

According to the annual reports submitted to the Department, a total of 1,535 retail locations sold or dispensed clear diesel fuel in 2024. Out of these locations, 905 (or 59%) sold or dispensed clear biodiesel fuel as well. In addition, 408 retail locations sold or dispensed dyed diesel fuel during this period, and 144 (or 35.3%) of these locations also sold or dispensed dyed biodiesel fuel.

In 2024, the reported amount of clear B1-B10 diesel sold or dispensed equaled 74 million gallons, B11-B19 diesel sold or dispensed equaled 170 million gallons, and B20 or higher blend diesel sold or dispensed equaled 238 million gallons. The amount of clear biodiesel sold or dispensed in 2024 equaled 482 million gallons, or 71 percent of total clear diesel fuel sales. Retailers reported selling 680 million gallons of clear diesel fuel. In comparison, the number of taxable (clear) gallons of diesel fuel shipped during 2024, as reported on the Monthly Fuel Tax Reports, equaled 693 million gallons. Therefore, retailers completing annual reports for 2024 accounted for 98 percent of diesel fuel on which fuel taxes were paid.

Annual reports for 2024 indicated 238 million gallons of dyed (non-taxed) diesel fuel were sold or dispensed and 33 million dyed biodiesel gallons sold or dispensed. Dyed diesel gallons are not captured in the Monthly Fuel Tax Reports. Total diesel gallons reported were 951 million, and total biodiesel gallons 515 million; therefore, biodiesel

blended gallons accounted for 54 percent of clear and dyed diesel gallons sold or dispensed by reporting retailers.

Table 1. Iowa Gasoline, Diesel, and Biofuel Sales for Calendar Year 2024

| Fuel Type | Locations | Gallons Sold | Pure Petroleum/Diesel | Pure Biofuel | | | |
|---------------------------------|--------------------|----------------------|-----------------------|----------------------|--|--|--|
| Gasoline (Non-Ethanol) | 1,648 | 193,968,165 | 193,968,165 | 0 | | | |
| , | | | | | | | |
| Ethanol | | | | | | | |
| E10 | 1,876 | 1,005,361,342 | 904,825,237 | 100,536,108 | | | |
| E15 Registered | 726 | 254,981,798 | 216,734,532 | 38,247,266 | | | |
| E15 Flex Fuel | 38 | 1,759,796 | 1,495,827 | 263,969 | | | |
| E20 | 95 | 1,077,817 | 862,257 | 215,560 | | | |
| E85 E86 | 433 2 | 29,971,609 39,617 | 6,294,035 5,546 | 23,677,574 34,070 | | | |
| Total Ethanol | 1,999 | 1,293,191,979 | 1,130,217,434 | 162,974,547 | | | |
| T-1-1 0 1 1 511 1 | 0.074 | 4 407 400 444 | 4 004 405 500 | 400.074.547 | | | |
| Total Gasoline and Ethanol | 2,071 | 1,487,160,144 | 1,324,185,599 | 162,974,547 | | | |
| Ethanol Share | 96.5% | 86.96% | | | | | |
| Gasoline Share | 79.6% | | | | | | |
| Clear Diesel (Non-Biodiesel) | 955 | 197,704,575 | 197,704,575 | 0 | | | |
| Clear Biodiesel | | | | | | | |
| Clear B1-B4 | 46 | 8,591,549 | 8,248,748 | 342,801 | | | |
| Clear B5-B10 | 396 | 65,132,655 | 60,182,581 | 4,950,075 | | | |
| Clear B11-B19 | 710 | 169,758,289 | 145,652,601 | 24,105,688 | | | |
| Clear B20-B29 | 678 | 237,476,815 | 189,981,445 | 47,495,370 | | | |
| Clear B30-B49 | 6 | 144,356 | 101,049 | 43,306 | | | |
| Clear B50-B100 | 25_ | 762,182 | 381,092 | 381,092 | | | |
| Subtotal Clear Biodiesel | 905 | 481,865,846 | 404,547,516 | 77,318,332 | | | |
| Total Clear Diesel | 1,535 | 679,570,421 | 602,252,091 | 77,318,332 | | | |
| Clear Biodiesel Share | 59.0% | 70.91% | | | | | |
| Dyed Diesel (Non-Biodiesel) | 362 | 238,587,270 | 238,587,270 | 0 | | | |
| Dyed Biodiesel | | | | | | | |
| Dyed D1-D4 | 7 | 4,371,597 | 4,197,171 | 174,426 | | | |
| Dyed D5-D10 | 76 | 14,384,556 | 13,665,324 | 719,232 | | | |
| Dyed D11-D19 | 64 | 9,407,525 | 8,071,656 | 1,335,869 | | | |
| Dyed D20-D29 | 53 | 4,361,829 | 3,489,462 | 872,367 | | | |
| Dyed D30-D49 | 3 | 9,066 | 6,347 | 2,719 | | | |
| Dyed D50-D100 | 19 | 206,765 | 103,383 | 103,383 | | | |
| Subtotal Dyed Biodiesel | 144 | 32,741,338 | 29,533,343 | 3,207,996 | | | |
| Total Dyed Diesel | 408 | 271,328,608 | 268,120,613 | 3,207,996 | | | |
| Dyed Biodiesel Share | 35.3% | 12.07% | | | | | |
| Total Biodiesel | 938 | 514,607,184 | 434,080,859 | 80,526,328 | | | |
| Total Diesel and Biodiesel | 1,587 | 950,899,029 | 870,372,704 | 80,526,328 | | | |
| Biodiesel Share | - | 54.12% | | | | | |
| Total Fuel | 2,112 | 2,438,059,173 | 2,194,558,303 | 243,500,875 | | | |
| Pure Biofuel Share of Total Gas | oline and Diesel S | ales | | 10.0% | | | |
| Biofuel Distribution Percentage | | | | | | | |

Source: 2024 Retailers Fuel Gallons Annual Reports

Biofuel Distribution Percentage

The following assumptions concerning blends were used to estimate the total amount of biofuel sold or dispensed in lowa 2024:

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-B29 blend diesel fuel gallons were multiplied by 0.20

B30-B49 blend diesel fuel gallons were multiplied by 0.30

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-D29 blend diesel fuel gallons were multiplied by 0.20

D30-D49 blend diesel fuel gallons were multiplied by 0.30

D50-D100 blend gallons were multiplied by 0.50

These calculations indicate that in 2024, pure ethanol comprised 11 percent of the volume of total gasoline and ethanol fuel sales. The aggregate ethanol gallonage, which is the number of pure ethanol gallons sold or dispensed by retailers in 2024, was 163 million gallons. Pure biodiesel comprised 8.5 percent of total diesel and biodiesel sales. The aggregate biodiesel gallonage, which is the number of pure biodiesel gallons sold or dispensed by retailers in 2024, was 81 million gallons. Pure biodiesel sold or dispensed in clear diesel comprised 11.4 percent of gallons sold or dispensed while pure biodiesel sold or dispensed in dyed diesel comprised only 1.2 percent of gallons sold. Together, pure ethanol and pure biodiesel comprised 10 percent of all fuel sales reported by retailers in lowa.

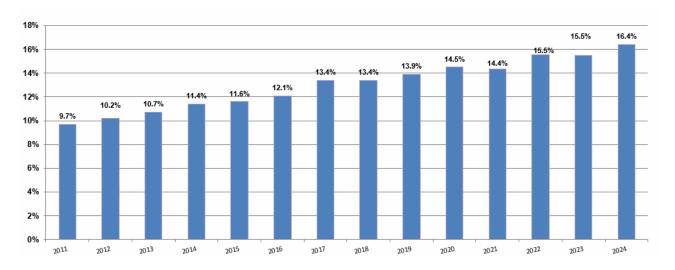
However, note that the formula specified in Iowa Code section 452.31(8) to determine a biofuel distribution percentage does not include diesel fuel in its denominator. The formula is as follows:

Biofuel Distribution Percentage =

(Pure Ethanol Gallons + Pure Biodiesel Gallons) / Total Gasoline Gallons

Using this formula, biofuels accounted for 16.37 percent of lowa retail motor fuel sales in 2024. This level is an increase compared to the percentage calculated for 2023 (see Appendix).

Figure 1. Statewide Biofuel Distribution Percentage, 2011-2024 Calendar Years



Source: Retailers Fuel Gallons Annual Reports, 2011-2024

Table 2: Comparision of Fuel and PureBiofuel Gallons sold in 2024 Vs 2023

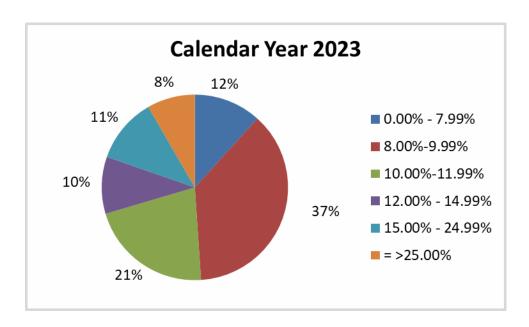
| | Change in Biofuel Gallons Sold | Percent Change in Biofuel Gallons | Change in Pure | Percent Change in Pure Biofuel Gallons |
|-----------------------|-----------------------------------|--------------------------------------|-----------------------|---|
| Fuel Type | Gallolis Solu | Diolael Gallolis | Diolael Gallolis Sola | Fulle Diolatel Gallons |
| Ethanol | | | | |
| E10 | 25,476,658 | 2.6% | 2,547,623 | 2.6% |
| E15 Registered | 77,318,918 | 43.5% | 11,597,842 | 43.5% |
| E15 Flex | 893,572 | 103.2% | 134,033 | 103.2% |
| E20 | 87,675 | 8.9% | 17,532 | 8.9% |
| E85 | 10,963,321 | 57.7% | 8,661,022 | 57.7% |
| E86 | 39,617 | 0.0% | 34,070 | 0.0% |
| Total Ethanol | 114,779,761 | 9.7% | 22,992,122 | 16.4% |
| Clear Biodiesel | | | | |
| Clear B1-B4 | 3,742,534 | 77.1% | 149,326 | 77.2% |
| Clear B5-B10 | 2,787,007 | 4.4% | 211,800 | 4.5% |
| Clear B11-B19 | -116,509,938 | -40.6% | -16,544,379 | -40.7% |
| Clear B20-B29 | 147,733,429 | 164.6% | 29,546,689 | 164.6% |
| Clear B30-B49 | -377 | -0.2% | -114 | -0.3% |
| Clear B50-B100 | -381,576 | -33.3% | -190,789 | -33.4% |
| Total Clear Biodiesel | 37,371,079 | 8.4% | 13,172,533 | 20.5% |
| Dyed D1-D4 | 2,621,054 | 149.7% | 104,580 | 149.7% |
| Dyed D5-D10 | -10,575,873 | -42.3% | -528,792 | -42.4% |
| Dyed D11-D19 | 109,684 | 1.1% | 15,573 | 1.2% |
| Dyed D20-D29 | -859,795 | -16.4% | -171,958 | -16.5% |
| Dyed D30-D49 | 9,066 | 0.0% | 0 | 0.0% |
| Dyed D50-D100 | -479,636 | -69.8% | 48,940 | 89.9% |
| Total Dyed Biodiesel | -9,175,500 | -21.8% | -734,858 | -18.6% |
| Total Change | 142,975,340 | 8.6% | 35,429,797 | 17.0% |

Source: 2024 and 2023 Retailers Fuel Gallons Annual Reports

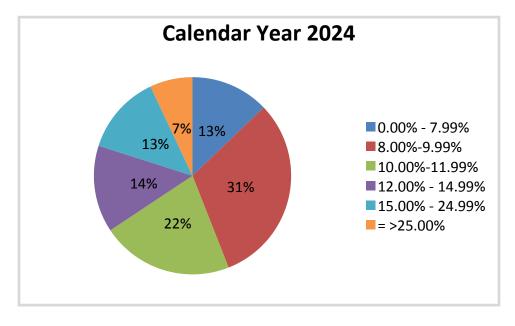
Figure 1 presents the biofuel distribution percentage calculated for calendar years 2011 through 2024. Due to the implementation of penalties in 2022, retailers are submitting at an increased rate. Consequently, the biofuel distribution percentage is currently standing at 16.4%.

While the overall biofuel distribution percentage increased, there were variations in the sales of different ethanol and biodiesel blends. According to Table 2, there was an increase of 25 million gallons (2.6%) of E10 gasoline between 2023 and 2024. However, E15 saw tremendous growth, an increase of reported sales of 78 million gallons (E15 Registered 43.5% and E15 Flex 103.2% increases) as retailers prepared for the E15 Access Standard. It's worth noting that E15 is a blend of gasoline and ethanol that contains 15% ethanol, while E10 contains 10-14% ethanol. Additionally, E20 and higher saw increases in gallons sold. The table shows significant increases in total amongst ethanol and biodiesel, whereas dyed biodiesel shows a decrease.

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

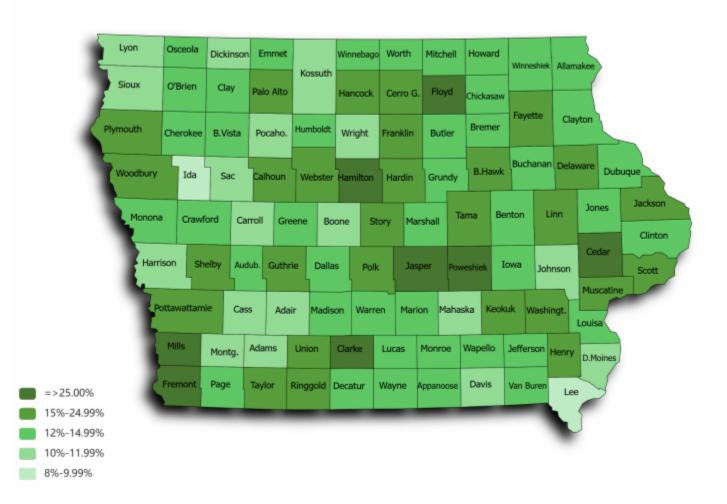


Source: 2023 Retailers Fuel Gallons Annual Reports



Source: 2024 Retailers Fuel Gallons Annual Reports

Figure 3. Biofuel Distribution Percentage by County for 2024



Source: 2024 Retailers Fuel Gallons Annual Reports

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In 2024, there were some changes in the percentage of retailers reporting their biofuel distribution percentages within certain ranges. The percentage of retailers reporting biofuel distribution percentages between 0 percent and 7.99 percent increased to 13 percent in 2024. The percentage of retailers reporting biofuel distribution percentages between 15.0 and 24.99 percent increased to 13 percent in 2024. Additionally, the percentage of retailers reporting biofuel distribution percentages between 12.0 and 14.99 percent increased to 14 percent in 2024.

However, the percentage of retailers reporting a biofuel distribution percentage equal to or greater than 25 percent remained at 7 percent in 2024. As well as the percentage of retailers reporting a biofuel distribution percentage between 10.0 and 11.99 percent remained the same at 22 percent in 2024. The percentage of retailers reporting a biofuel distribution percentage between 8.0 and 9.99 percent decreased to 31 percent in 2024.

Figure 3 depicts the biofuel distribution percentage across lowa retailers, highlighting the variation in sales by county. These percentages were computed based on the total sales reported by retailers who submitted the 2024 Retailers Fuel Gallons Annual Report. It is worth noting that every county had a biofuel distribution percentage of 9.2 percent or higher. A total of seven counties reported biofuel distribution percentages exceeding 25 percent.

Concurrently, 35 counties recorded pure biofuel sales between 15.0 and 24.99 percent of total fuel sales, with 44 counties falling within the 12.0 to 14.99 percent category. Moreover, 18 counties had a biofuel distribution of 10.0 to 11.99 percent, while only two counties had a biofuel distribution of 8.00 to 9.99 percent. To provide more detailed information on fuel sold or dispensed, Table 3 presents data on the total gallons of different fuel types sold or dispensed in each county.

Table 3. Calendar Year 2024 Total Gallons by County

| County | Locations | Gasoline Sales | Ethanol Sales | Clear and Dyed Diesel Sales | Clear and Dyed Biodiesel Sales | Pure Biofuel Sales | Biofuel Percentag e |
|---------------------|-----------|----------------------|------------------------|--------------------------------------|---|--------------------------|---------------------------|
| Adair | 13 | 899,927 | 3,909,986 | 2,560,193 | 728,490 | 552,708 | 11% |
| Adams | * | 188,155 | 836,878 | 121,449 | 98,831 | 120,401 | 12% |
| Allamakee | 18 | 923,224 | 5,551,002 | 2,159,555 | 1,264,688 | 968,765 | 15% |
| Appanoose | 14 | 861,292 | 4,905,969 | 2,006,268 | 648,289 | 752,251 | 13% |
| Audubon | 6 | 226,034 | 2,061,341 | 2,629,564 | 520,260 | 279,088 | 12% |
| Benton | 25 | 1,533,438 | 9,475,394 | 2,180,182 | 3,118,310 | 1,565,443 | 14% |
| Black Hawk | 66 | 6,904,633 | 49,596,517 | 2,935,761 | 22,027,91 3 | 10,132,95 5 | 18% |
| Boone | 12 | 973,855 | 7,388,435 | 1,878,928 | 509,154 | 881,149 | 11% |
| Bremer | 13 | 1,703,424 | 8,624,524 | 1,480,529 | 2,011,415 | 1,391,486 | 13% |
| Buchanan | 14 | 1,144,234 | 6,911,214 | 4,352,410 | 1,660,141 | 1,133,256 | 14% |
| Buena Vista | 25 | 1,143,059 | 8,075,931 | 3,396,335 | 645,478 | 1,149,559 | 12% |
| Butler | 13 | 840,192 | 4,909,032 | 1,632,566 | 748,831 | 710,981 | 12% |
| Calhoun | 15 | 380,775 | 4,443,903 | 2,270,316 | 1,987,481 | 751,472 | 16% |
| Carroll | 26 | 1,398,550 | 9,232,217 | 13,245,592 | 550,745 | 1,199,521 | 11% |
| Cass | 13 | 832,866 | 6,272,560 | 4,900,141 | 539,685 12,475,95 | 844,040 | 12% |
| Cedar | 16 | 1,122,072 | 8,235,774 | 3,891,669 | 16,337,16 | 2,946,472 | 31% |
| Cerro Gordo | 29 | 3,351,959 | 22,234,553 | 7,265,465 | 7 | 5,592,339 | 22% |
| Cherokee | 12 | 672,245 | 3,678,922 | 1,120,133 | 867,344 | 586,177 | 13% |
| Chickasaw | 11 | 1,769,252 | 5,759,211 | 7,515,647 | 2,681,393 | 1,030,937 | 14% |
| Clarke | 12 | 1,414,424 | 5,363,342 | 2,628,186 | 8,846,359 | 2,243,424 | 33% |
| Clay | 19 | 672,228 | 5,972,583 | 1,948,227 | 593,985 | 844,840 | 13% |
| Clayton | 21 | 1,260,419 | 6,538,153 | 2,070,147 | 1,869,858 | 1,097,123 | 14% |
| Clinton | 31 | 1,798,282 | 20,405,143 | 4,312,883 | 4,000,813 | 3,006,666 | 14% |
| Crawford | 11 | 599,978 | 4,320,076 | 2,276,905 | 1,366,706 10,092,59 | 596,680 | 12% |
| Dallas | 52 | 7,749,638 | 43,582,786 | 7,245,879 | 9 | 7,089,598 | 14% |
| Davis | * | 304,243 | 1,948,523 | 227,833 | 138,115 | 225,765 | 10% |
| Decatur | * | 227,128 | 1,524,464 | 1,138,811 | 123,494 | 225,477 | 13% |
| Delaware | 13 | 1,396,947 | 5,419,867 | 4,666,500 | 2,311,623 | 1,054,466 | 15% |
| Des Moines | 22 | 1,554,635 | 14,818,799 | 1,761,987 | 893,630 | 1,911,543 | 12% |
| Dickinson | 23 | 1,666,084 | 8,889,876 | 963,379 | 844,339 14,583,12 | 1,195,738 | 11% |
| Dubuque | 51 | 5,743,115 | 37,853,400 | 2,329,022 | 2 | 5,652,573 | 13% |
| Emmet | 9 | 492,787 | 4,266,536 | 2,022,385 | 770,256 | 691,877 | 15% |
| Fayette | 15 | 579,482 | 6,364,669 | 436,704 | 1,347,414 | 1,050,638 | 15% |
| Floyd | 13 | 636,835 | 8,100,779 | 3,472,699 | 7,751,086 | 2,341,362 | 27% |
| Franklin | 11 | 762,903 | 5,687,771 | 4,147,884 | 2,618,410 | 1,244,064 | 19% |
| Fremont | 8 | 203,407 | 3,813,371 | 1,671,709 | 9,964,065 | 2,029,413 | 51% |
| Greene | 11 | 304,377 | 3,593,811 | 1,261,527 | 900,708 | 477,629 | 12% |
| Grundy | 11 | 629,438 | 4,795,811 | 1,631,670 | 2,194,126 | 659,049 | 12% |
| Guthrie Hamilton | 14 15 | 1,202,207 535,815 | 6,140,108 7,962,324 | 962,445 2,108,218 | 3,875,377 17,010,73 | 1,398,197 3,792,642 | 19% 45% |

| | | | | | 9 | | |
|---------------|-----|----------------|-------------|------------|----------------|----------------|-----|
| Hancock | 11 | 621,326 | 3,795,937 | 3,887,868 | 1,072,318 | 693,217 | 16% |
| Hardin | 22 | 1,412,718 | 9,831,473 | 3,920,674 | 3,027,960 | 1,741,387 | 15% |
| Harrison | 16 | 932,383 | 6,982,647 | 4,242,049 | 525,018 | 855,315 | 11% |
| Henry | 21 | 1,347,921 | 16,191,601 | 2,274,293 | 6,232,797 | 2,948,541 | 17% |
| Howard | 11 | 1,000,307 | 4,166,488 | 1,462,921 | 1,652,330 | 745,367 | 14% |
| Humboldt | 9 | 500,155 | 3,260,081 | 1,738,814 | 399,179 | 460,451 | 12% |
| lda | 9 | 1,270,674 | 2,734,161 | 2,587,555 | 60,729 | 369,070 | 9% |
| Iowa | 31 | 2,142,771 | 12,203,852 | 5,650,332 | 2,365,185 | 1,756,739 | 12% |
| Jackson | 15 | 805,712 | 6,543,284 | 503,424 | 2,578,033 | 1,228,965 | 17% |
| Jasper | 30 | 2,569,683 | 17,438,591 | 1,559,678 | 18,711,91 2 | 5,220,502 | 26% |
| Jefferson | 15 | 1,035,875 | 5,511,539 | 1,329,495 | 1,184,155 | 880,882 | 13% |
| Johnson | 59 | 8,334,476 | 44,117,554 | 4,870,293 | 4,525,329 | 5,998,699 | 11% |
| Jones | 10 | 878,208 | 5,850,813 | 1,584,047 | 1,267,692 | 825,287 | 12% |
| Keokuk | 13 | 653,264 | 5,681,620 | 8,753,488 | 1,392,485 | 950,514 | 15% |
| Kossuth | 16 | 529,531 | 5,455,085 | 2,831,716 | 135,142 | 664,611 | 11% |
| Lee | 23 | 1,361,578 | 12,476,882 | 4,805,366 | 182,454 | 1,322,806 | 10% |
| | | 13,472,72 | | | 23,647,37 | 14,594,73 | |
| Linn | 93 | 4 | 81,602,077 | 12,903,836 | 4 | 6 | 15% |
| Louisa | 8 | 440,145 | 2,815,810 | 1,153,495 | 513,127 | 443,599 | 14% |
| Lucas | 7 | 632,134 | 2,278,011 | 1,917,334 | 833,537 | 417,609 | 14% |
| Lyon | 14 | 687,198 | 5,222,238 | 3,025,016 | 760,713 | 699,917 | 12% |
| Madison | 12 | 1,015,292 | 8,016,748 | 19,651,697 | 1,030,892 | 1,151,100 | 13% |
| Mahaska | 13 | 949,327 | 8,890,582 | 1,654,290 | 1,235,706 | 1,152,178 | 12% |
| Marion | 16 | 1,783,857 | 12,027,419 | 4,032,138 | 1,670,861 | 1,805,132 | 13% |
| Marshall | 20 | 2,061,572 | 11,574,281 | 226,720 | 3,837,073 | 1,873,968 | 14% |
| Mills | 10 | 831,515 | 6,828,486 | 3,846,197 | 6,479,083 | 2,000,750 | 26% |
| Mitchell | 8 | 401,837 | 2,667,486 | 279,681 | 362,380 | 458,262 | 15% |
| Monona | 11 | 673,445 | 4,323,955 | 2,004,466 | 1,078,844 | 730,807 | 15% |
| Monroe | * | 402,259 | 2,882,250 | 128,160 | 462,248 | 397,451 | 12% |
| Montgomery | 8 | 635,414 | 3,898,274 | 62,443,004 | 303,757 | 532,146 | 12% |
| Muscatine | 23 | 1,915,553 | 18,063,541 | 905,207 | 4,529,301 | 3,310,480 | 17% |
| O'Brien | 20 | 806,804 | 6,862,315 | 5,806,586 | 700,134 | 964,246 | 13% |
| Osceola | 8 | 446,407 | 2,275,462 | 2,829,735 | 815,659 | 358,245 | 13% |
| Page | 8 | 523,786 | 3,925,598 | 1,509,307 | 625,452 | 539,548 | 12% |
| Palo Alto | 12 | 306,384 | 3,466,067 | 2,368,681 | 1,577,679 | 657,782 | 17% |
| Plymouth | 17 | 2,207,720 | 12,599,059 | 16,376,691 | 5,700,585 | 2,497,002 | 17% |
| Pocahontas | 10 | 744,688 | 5,655,194 | 13,577,845 | 360,438 | 762,594 | 12% |
| Polk | 223 | 33,573,25 6 | 190,638,313 | 18,651,294 | 56,752,73 8 | 33,671,66 9 | 15% |
| | | 0.405.460 | | | 44,211,44 | 12,191,79 | |
| Pottawattamie | 53 | 8,125,168 | 43,348,454 | 14,973,766 | 20,217,02 | 4 | 24% |
| Poweshiek | 21 | 1,424,422 | 9,041,544 | 1,559,510 | 4 | 4,364,311 | 42% |
| Ringgold | 7 | 615,895 | 2,618,169 | 805,639 | 1,415,726 | 632,748 | 20% |
| Sac | 13 | 471,071 | 4,342,224 | 2,531,833 | 726,540 | 546,084 | 11% |
| Scott | 109 | 6,141,235 | 106,771,182 | 11,793,402 | 61,157,70 7 | 23,343,57 4 | 21% |
| Shelby | 12 | 578,305 | 5,106,249 | 4,159,376 | 2,918,930 | 1,028,464 | 18% |

| Sioux | 26 | 2,860,586 | 13,440,952 | 16,286,440 | 932,697 | 1,771,175 | 11% |
|------------|----|-----------|------------|------------|----------------|----------------|-----|
| Story | 45 | 6,518,773 | 32,379,540 | 2,646,936 | 13,790,04 4 | 6,505,654 | 17% |
| Tama | 19 | 911,684 | 7,491,532 | 1,343,806 | 4,588,629 | 1,423,456 | 17% |
| | | , | | | | | |
| Taylor | 7 | 256,982 | 1,789,370 | 1,208,168 | 431,001 | 322,830 | 16% |
| Union | 10 | 626,354 | 4,970,262 | 655,508 | 1,230,100 | 860,915 | 15% |
| Van Buren | 7 | 145,610 | 2,133,319 | 641,663 | 170,881 | 321,235 | 14% |
| Wapello | 24 | 2,219,121 | 14,094,239 | 1,400,740 | 3,089,058 | 2,132,011 | 13% |
| Warren | 28 | 3,203,678 | 18,675,670 | 604,987 | 2,885,322 | 2,762,403 | 13% |
| Washington | 18 | 1,620,974 | 8,945,172 | 6,948,011 | 4,097,922 | 1,617,890 | 15% |
| Wayne | 8 | 371,884 | 1,878,660 | 1,566,623 | 340,323 | 306,093 | 14% |
| Webster | 28 | 1,706,561 | 14,383,177 | 1,213,469 | 4,322,313 | 2,433,129 | 15% |
| Winnebago | 13 | 582,020 | 4,013,677 | 1,887,780 | 629,933 | 653,104 | 14% |
| Winneshiek | 16 | 976,372 | 8,013,113 | 6,980,293 | 1,069,381 | 1,107,546 | 12% |
| Woodbury | 55 | 6,923,377 | 41,727,993 | 8,617,515 | 25,882,67 9 | 10,789,02 7 | 22% |
| Worth | 8 | 445,045 | 3,601,658 | 1,521,038 | 155,534 | 549,330 | 14% |
| Wright | 13 | 731,591 | 6,165,877 | 2,824,246 | 235,307 | 738,777 | 11% |

Source: 2024 Retailers Fuel Gallons Annual Reports Note: * Counties less than five retailers reported sales.

Appendix

Table 1. Iowa Gasoline, Diesel, and Biofuel Sales for Calendar Year 2023

| FuelType | Locations | Gallons Sold | Pure Petroleum/Diesel | Pure Biofuel |
|-------------------------------------|-------------------|---------------|-----------------------|--------------|
| Gasoline (Non-Ethanol) | 1,513 | 166,675,096 | 166,675,096 | 0 |
| Ethanol | | | | |
| E10 | 1,755 | 979,884,684 | 881,896,204 | 97,988,485 |
| E15 Registered | 457 | 177,662,880 | 151,013,456 | 26,649,424 |
| E15 Flex Fuel | 32 | 866,224 | 736,288 | 129,936 |
| E20 | 90 | 990,142 | 792,114 | 198,028 |
| E85 | 325_ | 19,008,288 | 3,991,736 | 15,016,552 |
| Total Ethanol | 1,797 | 1,178,412,218 | 1,038,429,798 | 139,982,425 |
| Total Gasoline and Ethanol | 1,873 | 1,345,087,314 | 1,205,104,894 | 139,982,425 |
| Ethanol Share | 95.9% | 87.61% | | |
| Gasoline Share | 80.8% | | | |
| Clear Diesel (Non-Biodiesel) | 779 | 178,343,693 | 178,343,693 | 0 |
| ClearBiodiesel | | | | |
| Clear B1-B4 | 54 | 4,849,015 | 4,655,540 | 193,475 |
| Clear B5-B10 | 330 | 62,345,648 | 57,607,374 | 4,738,275 |
| Clear B11-B19 | 598 | 286,268,227 | 245,618,160 | 40,650,067 |
| Clear B20-B29 | 200 | 89,743,386 | 71,794,705 | 17,948,681 |
| Clear B30-B49 | 4 | 144,733 | 101,313 | 43,420 |
| Clear B50-B100 | 27_ | 1,143,758 | 571,881 | 571,881 |
| Subtotal Clear Biodiesel | 801 | 444,494,767 | 380,348,973 | 64,145,799 |
| Total Clear Diesel | 1,381 | 622,838,460 | 558,692,666 | 64,145,799 |
| Clear Biodiesel Share | 58.0% | 71.37% | | |
| Dyed Diesel (Non-Biodiesel) | 307 | 164,475,881 | 164,475,881 | 0 |
| Dyed Biodiesel | | | | |
| Dyed D1-D4 | 22 | 1,750,543 | 1,680,697 | 69,846 |
| Dyed D5-D10 | 88 | 24,960,429 | 23,712,405 | 1,248,024 |
| Dyed D11-D19 | 52 | 9,297,841 | 7,977,545 | 1,320,296 |
| Dyed D20-D29 | 37 | 5,221,624 | 4,177,299 | 1,044,325 |
| Dyed D30-D49 | 5 | 686,401 | 480,480 | 205,920 |
| Dved D50-D100 | 9 | 108,885 | 54,443 | 54,443 |
| Subtotal Dyed Biodiesel | 149 | 42,025,723 | 38,082,869 | 3,942,854 |
| Total Dyed Diesel | 367 | 206,501,604 | 202,558,750 | 3,942,854 |
| Dyed Biodiesel Share | 40.6% | 20.35% | | |
| Total Biodiesel | 817 | 486,520,490 | 418,431,842 | 68,088,653 |
| Total Diesel and Biodiesel | 1,399 | 829,340,064 | 761,251,416 | 68,088,653 |
| Biodiesel Share | | 58.66% | | |
| Total Fuel | 1,898 | 2,174,427,378 | 1,966,356,310 | 208,071,078 |
| Pure Biofuel Share of Total Gasolin | e and Diesel Sale | s | | 9.6% |
| Biofuel Distribution Percentage | | | | 15.47% |

Source: 2023 Retailers Fuel Gallons Annual Reports