

# 2015 Retailers Fuel Gallons Annual Report 

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## Introduction

In 2006 the lowa 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 motor fuel retailers, administered by the Department of Revenue, were established in 2007 (lowa 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 Fuel Gallons Annual Report is due to the Department by January $31^{\text {st }}$ in the following year. Despite a requirement for retailers to complete the report, the participation rate for retail locations across the state is typically under 90 percent. Motor 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 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 based on the available data. With the new 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 lowa'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. Because of the change in reporting, in many instances calendar year 2015 gallons are not directly comparable to 2014 calendar year gallons, particularly estimates of pure biodiesel sales.

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 $1^{\text {st }}$ through September $15^{\text {th }}$, retailers can only continue to sell Registered E15 if they obtain low volatile gasoline for blending which is not piped into lowa. 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 report their sales by station electronically. 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 continued to have the option of completing a spreadsheet for all retail locations using a redesigned document to match the report changes noted above. For calendar year 2015, the Department continued to mail paper forms to retailers but intends to move all retailers to the webform in calendar year 2016.

## Reporting Requirements

Fuel retailers had the option of completing the Department's webform, mailing a paper form, or securely emailing an electronic file with annual fuel sales by location for calendar year 2015. 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 2015

The Department identified 2,502 potential retail locations at which fuel may have been sold at retail during 2015. Paper reports were mailed to 1,449 locations identified using Department of Agriculture and Land Stewardship motor fuel license information and the Department of Revenue eligible purchasers database. Electronic files were emailed to seventeen large fuel retailers with 1,053 locations. In 2015, the Department also completed additional follow-up communications to retailers regarding the need to complete the report.

The Department received webform reports, paper forms, or electronic files representing 2,333 ( $93.2 \%$ ) of the locations, the highest response rate since calendar year 2009 which had a response rate of 94.9 percent. Replies from 93 locations indicated that no retail sales of any type of fuel were made during 2015. The remaining 2,240 locations reported 2.39 billion gallons of retail fuel sales (see Table 1).

Of the reporting 2,240 lowa retail locations, 2,090 (93.3\%) reported selling E10 fuel, 111 (5.0\%) reported selling E15 Registered, E15 Flex Fuel, and/or E20, 226 (10.1\%) reported selling E85, and 431 (19.2\%) 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 2015, the reported amount of E10 gasoline sold equaled 1,319.4 million gallons, E85 gasoline sold equaled 13.2 million gallons, E20 gasoline sold equaled 2.5 million gallons, and E15 gasoline sold equaled 6.2 million gallons, with $90.3 \%$ sold through registered pumps. Combined, the five ethanol blends represented $85.9 \%$ of total reported gasoline fuel sales during the year. 2,102 (95.2\%) of the 2,207 locations that sold gasoline sold one or more ethanol blend.

With just under 7 percent of locations failing to return their Retailers Fuel Gallons Annual Report to the Department for 2015, 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 2015 through January 2016 were compared with gallons reported as sold by retailers completing the 2015 annual report. During this period, fuel taxes were paid on a total of $1,658.2$ million gallons of gasoline fuels. In comparison, the 89.5 percent of retail locations that filed annual reports indicated $1,561.7$ million gallons of gasoline fuels were sold, including all ethanol blends and nonethanol gasoline, which equals 94.2 percent of taxable gallons, reported for 2015. This suggests that the retail location who failed to complete Annual Fuel Gallons Reports, on average, have slightly lower sales than those that did complete reports.

## Diesel Fuel Sales

During 2015, based on annual reports submitted to the Department, the amount of clear biodiesel sold equaled 308.7 million gallons, or 48.7 percent of total clear diesel fuel sales. Retailers reported selling 634.1 million of gallons of clear diesel fuel. In comparison, the number of taxable (clear) gallons of diesel fuel shipped during 2015 as reported on the Monthly Fuel Tax Reports equaled 671.9 million. Therefore, retailers completing annual reports for 2015 accounted for 94.4 percent of diesel fuel on which fuel taxes were paid, again slightly higher than the 93.2 percent response rate.

During 2015, 193.6 million gallons of dyed (non-taxed) diesel fuel sales were also reported on the annual reports, including 33.4 million biodiesel gallons (17.3\%). Dyed diesel gallons are not captured in the Monthly Fuel Tax Reports.

Based on the annual reports, 1,445 retail locations sold clear diesel fuel and 405 of these locations sold clear biodiesel fuel during 2015. In addition, 375 retail locations sold dyed diesel fuel and 118 of these locations sold dyed biodiesel fuel during 2015.

Total diesel gallons reported were 827.8 million gallons and total biodiesel gallons were 342.0 million gallons; therefore, biodiesel blended gallons accounted for 41.3 percent of diesel gallons sold by reporting retailers.

Table 1. 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

## 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 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 2015 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 2015, was 143.8 million gallons. Pure biodiesel comprised 4.5 percent of diesel and biodiesel sales. The aggregate biodiesel gallonage, which is the number of pure biodiesel gallons sold by retailers during 2015, was 37.5 million gallons. Together, pure ethanol and pure biodiesel comprised 7.6 percent of all fuel sales reported by retail locations. However, the formula specified in lowa 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 = <br> (Pure Ethanol Gallons + Pure Biodiesel Gallons) / Total Gasoline Gallons

Using this formula, during 2015 biofuels accounted for 11.6 percent of lowa retail motor fuel sales. This is a slight increase from the 11.4 percent calculated for 2014.

Figure 1 presents the biofuel distribution percentage calculated for the 2007 through the 2015 calendar years. 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 lowa, which occurred in late 2013, that resulted in higher ethanol sales during the following calendar year. The 0.2 percentage point jump to 11.6 percent in calendar year 2015 reflects growth in both clear biodiesel and ethanol gasoline sales, but may also reflect the updates to the collection of biofuel data sales and the updated information about biofuel blends used in the calculation of the biofuel distribution percentage.

Figure 1: Statewide Biofuel Distribution Percentage, 2007-2015


Source: Retail Fuel Gallons Annual Reports, 2007-2015
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, setting aside the change in data collection regarding estimates of pure ethanol and biodiesel between 2014 and 2015. 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 2015 or 2014. 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.

There was a small increase in the share of retailers reporting less than an 8.0 percent biofuel distribution percentage, from 2014 (17\%) to 2015 (18\%), but a bigger drop in stations with a reported biofuel distribution percentage between 8.0 percent and 9.99 percent, from 60 percent to 52 percent. The 10 percent to 11.99 percent increased from

14 percent to 18 percent in 2015. There was a slight increase in the share with 15.0 percent to 24.99 percent and 25 percent or greater.

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


Source: 2014 Retail Fuel Gallons Annual Report


Source: 2015 Retail Fuel Gallons Annual Report

To further illustrate the variation in sales of biofuel among lowa 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 2015 annual gallons report. Three counties exceeded the 25 percent goal, seven 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. Only one county had a biofuel distribution percentage below 8.0 percent. Fifty counties fell in the 8.0 percent to 9.99 percent category and thirty fell into the 10.0 percent to 11.99 percent. 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 2015


Biofuel Distribution Percentage


Adams and Monroe Counties did not meet the requirement of five retailers or more reporting. Source: 2015 Retail Fuel Gallons Annual Report

Table 2. Calendar Year 2015 Total Gallons by County

| County | Number of Retailers Reporting | Gasoline Sales | Ethanol Sales | Clear and Dyed Diesel Sales | Clear and Dyed Biodiesel Sales |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Adair | 12 | 1,810,782 | 7,520,613 | 4,653,234 | 252,780 |
| Allamakee | 17 | 1,343,499 | 6,099,959 | 5,367,840 | 244,533 |
| Appanoose | 15 | 654,927 | 4,868,178 | 2,356,279 | 403,749 |
| Audubon | 7 | 188,819 | 1,770,154 | 1,735,839 | 375,979 |
| Benton | 23 | 1,222,760 | 9,105,211 | 3,529,864 | 171,230 |
| Black Hawk | 67 | 9,296,676 | 47,990,028 | 8,041,775 | 14,510,649 |
| Boone | 14 | 1,260,377 | 9,259,121 | 2,084,018 | 332,672 |
| Bremer | 15 | 2,158,638 | 9,677,843 | 2,720,216 | 26,776 |
| Buchanan | 17 | 1,276,589 | 8,019,066 | 1,928,789 | 86,804 |
| Buena Vista | 23 | 1,155,246 | 8,409,080 | 1,866,166 | 112,875 |
| Butler | 13 | 1,280,217 | 5,992,834 | 1,388,082 | 882,832 |
| Calhoun | 15 | 345,522 | 4,136,925 | 4,183,238 | 0 |
| Carroll | 27 | 1,698,945 | 9,320,092 | 10,372,523 | 224,401 |
| Cass | 17 | 919,650 | 8,229,840 | 4,301,266 | 272,140 |
| Cedar | 22 | 1,863,900 | 9,659,187 | 7,406,226 | 12,494,605 |
| Cerro Gordo | 28 | 5,324,371 | 27,580,803 | 6,181,862 | 15,527,150 |
| Cherokee | 16 | 775,277 | 4,505,298 | 1,956,726 | 553,848 |
| Chickasaw | 14 | 1,386,687 | 5,889,505 | 5,303,527 | 2,828,308 |
| Clarke | 10 | 1,270,411 | 6,451,369 | 2,513,288 | 7,775,165 |
| Clay | 23 | 1,158,533 | 7,568,489 | 6,028,951 | 92,661 |
| Clayton | 23 | 1,586,749 | 8,835,365 | 2,732,125 | 213,232 |
| Clinton | 29 | 2,309,804 | 18,735,435 | 8,054,892 | 1,403,323 |
| Crawford | 14 | 1,055,809 | 5,981,113 | 4,119,098 | 122,001 |
| Dallas | 36 | 6,677,977 | 33,975,045 | 4,941,108 | 5,521,460 |
| Davis | 7 | 230,114 | 2,205,655 | 1,321,005 | 436,173 |
| Decatur | 8 | 691,485 | 2,799,583 | 580,339 | 196,698 |
| Delaware | 15 | 882,038 | 7,050,094 | 2,429,338 | 498,443 |
| Des Moines | 23 | 3,258,815 | 13,967,064 | 1,507,643 | 0 |
| Dickinson | 27 | 2,133,252 | 8,196,639 | 2,764,982 | 109,544 |
| Dubuque | 69 | 14,138,283 | 84,889,429 | 21,012,050 | 14,488,623 |
| Emmet | 10 | 512,902 | 3,779,562 | 1,556,450 | 1,228,191 |
| Fayette | 24 | 1,984,946 | 9,661,786 | 3,382,010 | 128,607 |
| Floyd | 12 | 613,464 | 4,063,381 | 2,809,318 | 1,375,098 |
| Franklin | 14 | 618,633 | 5,594,049 | 4,776,813 | 466,432 |
| Fremont | 9 | 675,524 | 7,181,090 | 6,585,028 | 11,220,589 |
| Greene | 13 | 300,113 | 4,256,089 | 3,146,725 | 80,187 |
| Grundy | 14 | 780,649 | 6,493,076 | 6,358,536 | 1,992,512 |
| Guthrie | 14 | 572,443 | 4,547,056 | 1,410,663 | 8,414,075 |
| Hamilton | 17 | 1,172,700 | 7,496,241 | 4,299,226 | 2,988,740 |
| Hancock | 14 | 626,172 | 4,196,090 | 4,212,385 | 173,899 |
| Hardin | 21 | 801,974 | 6,793,313 | 5,914,902 | 450,294 |
| Harrison | 20 | 854,634 | 7,220,530 | 4,395,714 | 110,695 |
| Henry | 21 | 1,286,049 | 14,917,428 | 2,846,166 | 7,548,818 |
| Howard | 12 | 535,457 | 3,659,055 | 2,599,056 | 539,430 |
| Humboldt | 13 | 646,865 | 3,816,264 | 3,870,344 | 182,533 |
| Ida | 11 | 443,887 | 3,017,209 | 1,853,660 | 423,445 |
| lowa | 49 | 3,150,153 | 16,781,250 | 11,760,360 | 2,186,303 |
| Jackson | 21 | 1,350,171 | 8,086,875 | 4,943,825 | 24,280 |
| Jasper | 29 | 2,294,757 | 16,699,034 | 9,625,634 | 11,096,621 |

Table 2. Calendar Year 2015 Total Gallons by County (continued)

| County | Number of Retailers Reporting | Gasoline Sales | Ethanol Sales | Clear and Dyed Diesel Sales | Clear and Dyed Biodiesel Sales |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jefferson | 15 | 995,063 | 5,200,087 | 1,788,782 | 930,517 |
| Johnson | 61 | 7,771,791 | 42,345,358 | 6,304,157 | 5,559,199 |
| Jones | 14 | 1,007,492 | 7,769,995 | 3,508,695 | 0 |
| Keokuk | 12 | 546,722 | 3,694,492 | 1,585,337 | 1,201,706 |
| Kossuth | 18 | 1,065,931 | 6,868,662 | 10,442,957 | 91,229 |
| Lee | 27 | 2,267,764 | 13,979,176 | 3,052,459 | 1,270,369 |
| Linn | 94 | 14,292,357 | 81,533,170 | 16,947,137 | 4,959,239 |
| Louisa | 10 | 549,581 | 4,052,669 | 1,048,172 | 902,580 |
| Lucas | 8 | 539,769 | 2,633,718 | 463,636 | 3,326,195 |
| Lyon | 17 | 1,023,345 | 5,640,793 | 3,596,736 | 231,728 |
| Madison | 11 | 1,004,433 | 6,993,944 | 7,202,281 | 1,301,006 |
| Mahaska | 16 | 942,704 | 9,118,084 | 2,200,401 | 1,675,990 |
| Marion | 23 | 2,055,283 | 13,797,156 | 3,878,327 | 564,912 |
| Marshall | 23 | 2,572,210 | 13,084,803 | 4,110,168 | 1,352,155 |
| Mills | 11 | 547,598 | 5,101,765 | 2,391,948 | 447,673 |
| Mitchell | 10 | 610,593 | 3,361,419 | 425,320 | 277,808 |
| Monona | 16 | 1,019,179 | 5,367,719 | 4,111,089 | 1,998,206 |
| Montgomery | 9 | 742,506 | 4,159,570 | 3,592,387 | 0 |
| Muscatine | 20 | 2,401,447 | 13,075,548 | 1,972,696 | 575,617 |
| O'Brien | 22 | 1,002,609 | 6,340,366 | 3,708,138 | 322,856 |
| Osceola | 7 | 557,955 | 1,996,610 | 2,429,958 | 34,399 |
| Other | 6 | 600,228 | 4,460,994 | 1,063,694 | 0 |
| Page | 11 | 686,165 | 5,620,109 | 1,545,383 | 714,998 |
| Palo Alto | 12 | 428,242 | 4,138,871 | 3,832,152 | 127,315 |
| Plymouth | 20 | 2,272,328 | 9,612,838 | 15,247,465 | 1,099,249 |
| Pocahontas | 9 | 311,744 | 2,788,507 | 6,892,881 | 16,506 |
| Polk | 184 | 37,875,255 | 179,477,319 | 34,445,509 | 43,595,531 |
| Pottawattamie | 71 | 7,140,785 | 58,585,756 | 25,063,883 | 42,644,651 |
| Poweshiek | 20 | 2,132,103 | 15,110,332 | 9,561,529 | 24,182,555 |
| Ringgold | 5 | 127,911 | 847,834 | 372,387 | 199,962 |
| Sac | 17 | 581,426 | 4,896,801 | 1,974,180 | 188,350 |
| Scott | 82 | 5,051,235 | 75,429,524 | 11,569,714 | 36,145,854 |
| Shelby | 14 | 505,119 | 3,982,237 | 4,455,148 | 499,687 |
| Sioux | 35 | 3,222,774 | 11,962,246 | 17,949,303 | 681,625 |
| Story | 43 | 5,556,986 | 34,314,771 | 3,609,958 | 2,879,572 |
| Tama | 17 | 761,037 | 6,050,426 | 2,974,445 | 22,039 |
| Taylor | 8 | 182,643 | 2,078,039 | 898,347 | 0 |
| Union | 12 | 717,107 | 5,462,239 | 1,248,538 | 322,052 |
| Van Buren | 8 | 266,087 | 2,255,603 | 1,337,827 | 246,504 |
| Wapello | 25 | 2,063,601 | 14,509,982 | 1,754,772 | 3,518,839 |
| Warren | 28 | 2,861,203 | 23,765,762 | 1,830,807 | 1,366,201 |
| Washington | 25 | 1,539,886 | 11,143,584 | 4,926,378 | 8,198,409 |
| Wayne | 9 | 220,610 | 2,330,464 | 1,164,503 | 580,602 |
| Webster | 36 | 1,913,719 | 16,940,095 | 4,946,739 | 198,118 |
| Winnebago | 20 | 691,254 | 4,949,791 | 3,569,116 | 431,951 |
| Winneshiek | 16 | 1,527,291 | 7,665,624 | 5,804,970 | 128,401 |
| Woodbury | 52 | 7,816,509 | 39,952,209 | 10,619,035 | 15,841,847 |
| Worth | 9 | 421,048 | 5,045,846 | 415,754 | 373,829 |
| Wright | 18 | 824,964 | 4,877,698 | 2,181,604 | 23,822 |
| Total | 2,240 | 220,393,237 | 1,341,319,000 | 485,745,906 | 342,041,256 |

## Other Includes: Adams and Monroe Counties <br> Source: 2015 Retail Fuel Gallons Annual Report

| Fuel Type | Locations | Gallons Sold | Pure Petroleum/Diesel | Pure Biofuel |
| :---: | :---: | :---: | :---: | :---: |
| Gasoline (Non-Ethanol) | 1,673 | 213,252,397 | 213,252,397 | 0 |
| Ethanol |  |  |  |  |
| E10 | 1,983 | 1,269,655,383 | 1,142,689,845 | 126,965,538 |
| E15/E20 | 84 | 3,953,477 | 3,360,455 | 593,022 |
| E85 | 209 | 12,081,095 | 2,537,030 | 9,544,065 |
| Total Ethanol | 1,991 | 1,285,689,955 | 1,148,587,330 | 137,102,625 |
| Total Gasoline and Ethanol | 2,058 | 1,498,942,352 | 1,361,839,727 | 137,102,625 |
| Ethanol Share | 96.7\% | 85.8\% |  | 9.1\% |
| Clear Diesel (Non-Biodiesel) | 1,247 | 246,127,832 | 246,127,832 | 0 |
| Clear Biodiesel |  |  |  |  |
| Clear B2 | 54 | 11,435,901 | 11,207,183 | 228,718 |
| Clear B5 | 271 | 70,926,368 | 67,380,050 | 3,546,318 |
| Clear B10 | 140 | 49,066,144 | 44,159,530 | 4,906,614 |
| Clear B20 | 29 | 43,515,597 | 34,812,478 | 8,703,119 |
| Clear Other | 55 | 139,501,853 | 125,639,088 | 13,862,765 |
| Subtotal Clear Biodiesel | 326 | 314,445,863 | 283,198,328 | 31,247,535 |
| Total Clear Diesel | 1,247 | 560,573,695 | 529,326,160 | 31,247,535 |
| Clear Biodiesel Share | 20.7\% | 56.1\% |  | 5.6\% |
| Dyed Diesel (Non-Biodiesel) | 309 | 124,108,751 | 124,108,751 | 0 |
| Dyed Biodiesel |  |  |  |  |
| Dyed D2 | 35 | 1,509,752 | 1,479,557 | 30,195 |
| Dyed D5 | 87 | 33,766,218 | 32,077,907 | 1,688,311 |
| Dyed D10 | 21 | 1,231,759 | 1,108,583 | 123,176 |
| Dyed D20 | 12 | 403,228 | 322,582 | 80,646 |
| Dyed Other | 28 | 3,394,109 | 3,217,343 | 176,766 |
| Subtotal Dyed Biodiesel | 114 | 40,305,066 | 38,205,973 | 2,099,093 |
| Total Dyed Diesel | 313 | 164,413,817 | 162,314,724 | 2,099,093 |
| Dyed Biodiesel Share | 27.0\% | 24.5\% |  | 1.3\% |
| Total Biodiesel | 368 | 354,750,929 | 321,404,301 | 33,346,628 |
| Total Diesel and Biodiesel | 1,301 | 724,987,512 | 691,640,884 | 33,346,628 |
| Biodiesel Share | 28.3\% | 48.9\% |  | 4.6\% |
| Total Fuel | 2,088 | 2,223,929,864 | 2,053,480,611 | 170,449,253 |
| Pure Biofuel Share of Total Gasoline and Diesel Sales |  |  |  | 7.7\% |
| Biofuel Distribution Percen | tage |  |  | 11.4\% |

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[^0]:    Source: 2014 Retailers Fuel Gallons Annual Reports

