

GASOLINE TAXES FROM ATVs, SNOWMOBILES AND RECREATIONAL WATERCRAFT IN MAINE

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Abstract

The report updates three earlier reports looking at gasoline use and gasoline taxes paid by users of ATVs, snowmobiles and gasoline powered watercraft in Maine in 2001 following the passage of LD 977. Given time and financial limitations, this report maintains the same fuel use per vehicle/watercraft per season as determined earlier. This implies that these nonroad vehicles have the same level of use per year and that the efficiency per vehicle/watercraft is unchanged. While there has been increases in engine efficiency generally, engines and vehicle sizes have also risen as have the size of boat trailers. While there are different registration trends between ATVs, snowmobiles and watercraft, the overall trend is an increase in the number of nonroad vehicles. Given this starting point and taking into account Maine's current tax on gasoline of \$0.30/gallon, we find that ATVs, snowmobiles and gasoline powered recreational watercraft paid \$1,076,772, \$2,318,425, \$2,296,193 respectively in gas taxes. This is a total of \$5,691,390 in gas tax paid by these nonroad users in 2022. We also estimate the current distribution of gasoline taxes to nonroad user groups under current law and compare this to gas taxes paid by each user group.

Disclaimer and Acknowledgements

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Introduction

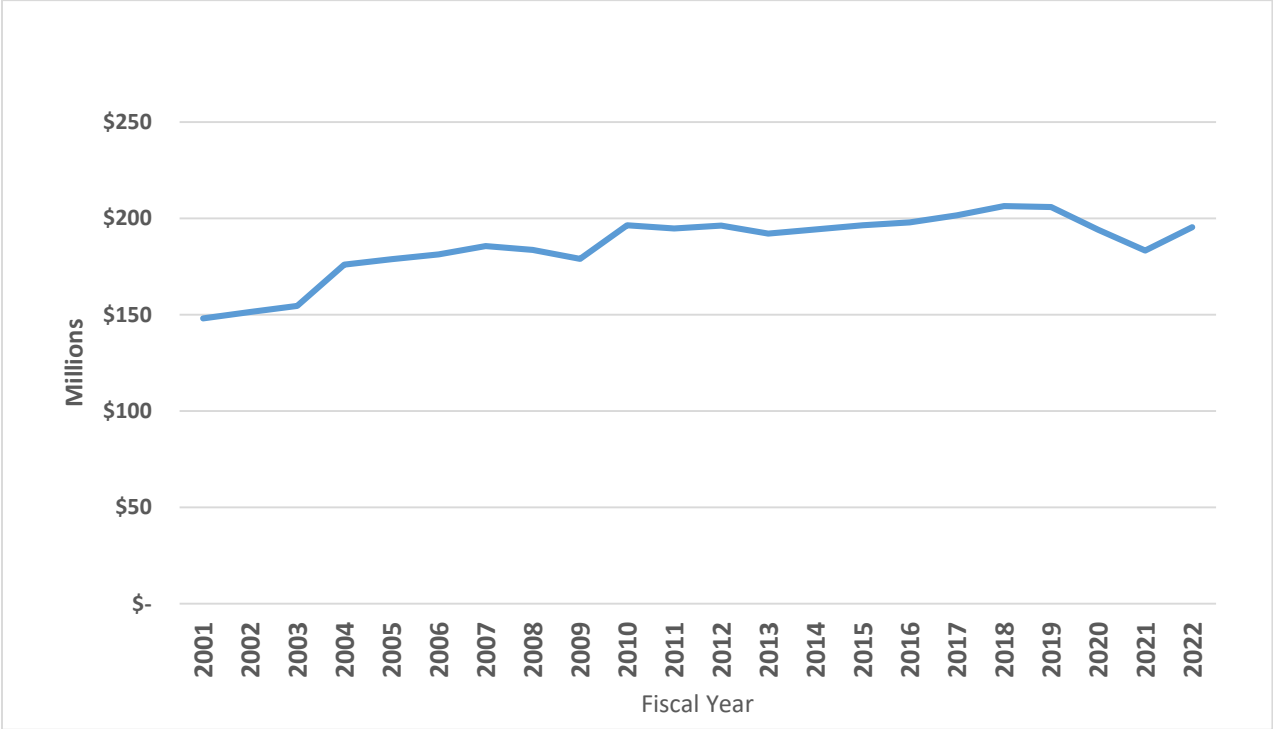
This report is an update to three earlier reports looking at gasoline use and gasoline taxes paid by users of ATVs, snowmobiles and watercraft in Maine in 2001 (Rubin and Morris 2001; Rubin, Hart, and Morris 2001; Rubin and Morris 2005) following LD 977.² Given time and financial limitations, this report maintains the same fuel use per vehicle/watercraft per season as determined earlier. This implies that the same level of use per vehicle/watercraft per year and that the efficiency per vehicle/watercraft is unchanged. While there has been increases in engine efficiency (fuel use per motive power) generally, engines and vehicles sizes have also risen.

Maine State Gas Tax

In Maine, gasoline is taxed per-gallon sold at retail. The total tax on gasoline consists of both state and federal taxes. The Maine Gasoline Tax Act has undergone several changes since its inception at \$0.01 a gallon in 1923. The tax had risen to 22 cents per gallon on gasoline by 2003 and, in 2004, was indexed for inflation. This adjustment caused it to increase rapidly until January 1, 2012, when indexing motor fuel tax rates was repealed (Maine Revenue Service, 2023). Since then, it has remained at its present day rate of \$0.30 per gallon plus a \$0.59 per barrel (\$0.014/gallon) ground water oil clean-up fund fee. A per gallon tax on gasoline is an excise tax – a per unit (gallon) tax rather than a sales or ad valorem tax which is placed on the value (not quantity) sold. Maine fuel tax receipts, including taxes on both gasoline and diesel, as well as revenue collected from the gasoline tax accrues primarily to the Highway Fund, but also smaller amounts accrue to the General Fund and Other Special Revenue Funds representing the amounts of gasoline tax revenue that accrues to the Department of Agriculture, Conservation and Forestry, the Department of Marine Resources, the Department of Inland Fisheries and Wildlife and the TransCap Trust Fund at the Maine Municipal Bond Bank (Office of Fiscal and Program Review 2023). In addition to 0.30/gallon gas tax, Maine passed LD259 (June 16, 2023) which adds 40% of the 5.5% sales tax on vehicle purchases and 40% of sales and use taxes collected by the Bureau of Motor Vehicles into the Highway Trust Fund. This is estimated to raise approximately \$100 million per year. The federal gas (excise) tax of \$0.183/gallon tax supports the federal highway trust fund plus there is a \$0.001/gallon leaking underground storage tank (LUST) fee for a total state and federal tax rate of \$0.498/gallon (EIA 2023).

² LD 997 Resolve, to Study the Gasoline Tax Allocations for Nonhighway Recreational Vehicles and Make Recommendations for Changes, 26 July 2023.

Figure 1: Maine Gasoline Tax Revenue

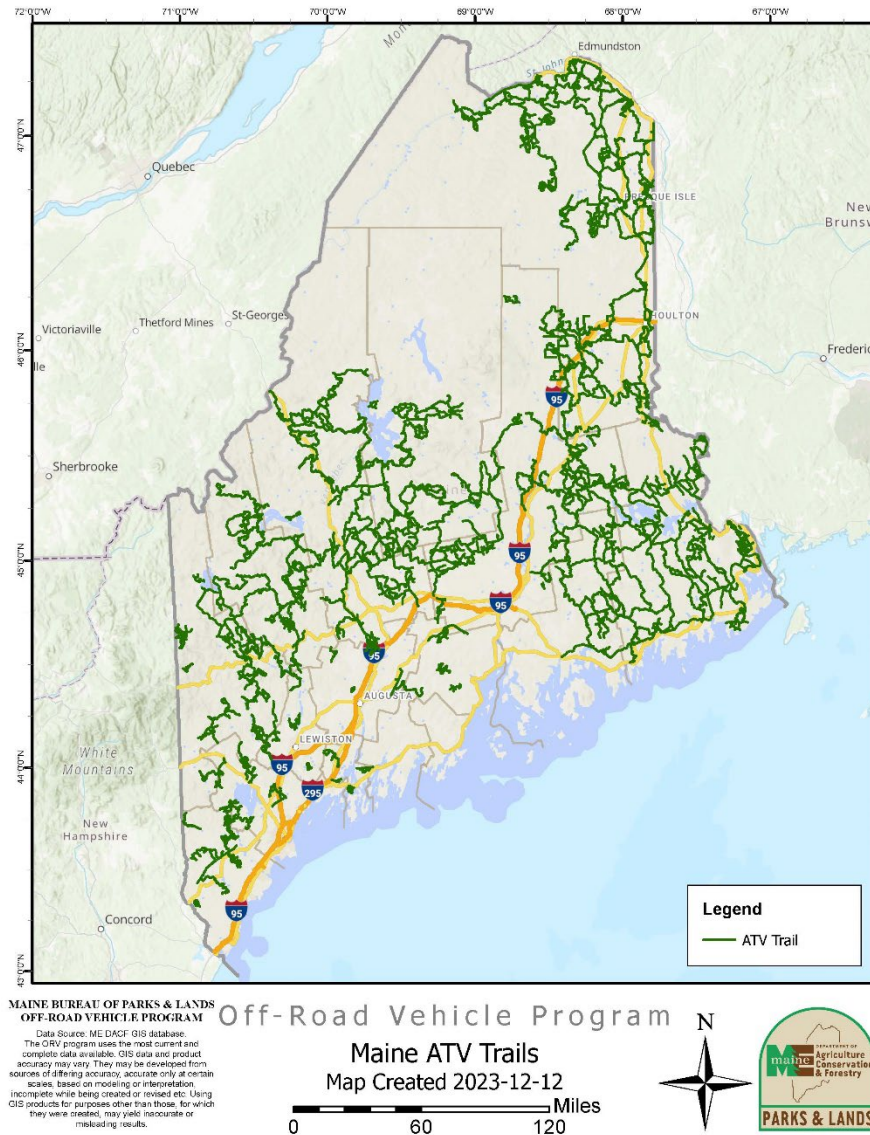


Source: State of Maine Compendium of State Fiscal Information, 2006, 2015, and 2022.

ATV Technology, Efficiency, and Use

In 2001 when the original Maine gas tax studies were done there were 56 ATV clubs and a total of 1,268 miles of trail. Some areas like Aroostook County and Downeast had quite a few miles of connecting trails, but not so much elsewhere. The bigger landowners like Irving, AFM, Wagner, and Weyerhaeuser, and many others did not authorize ATV trails. Today, there are 142 clubs and 6,260 miles of trail statewide on over 3,000 landowners who have given permission for the ATV trails system (Bronson 2023).

Figure 2: Maine ATV Trails

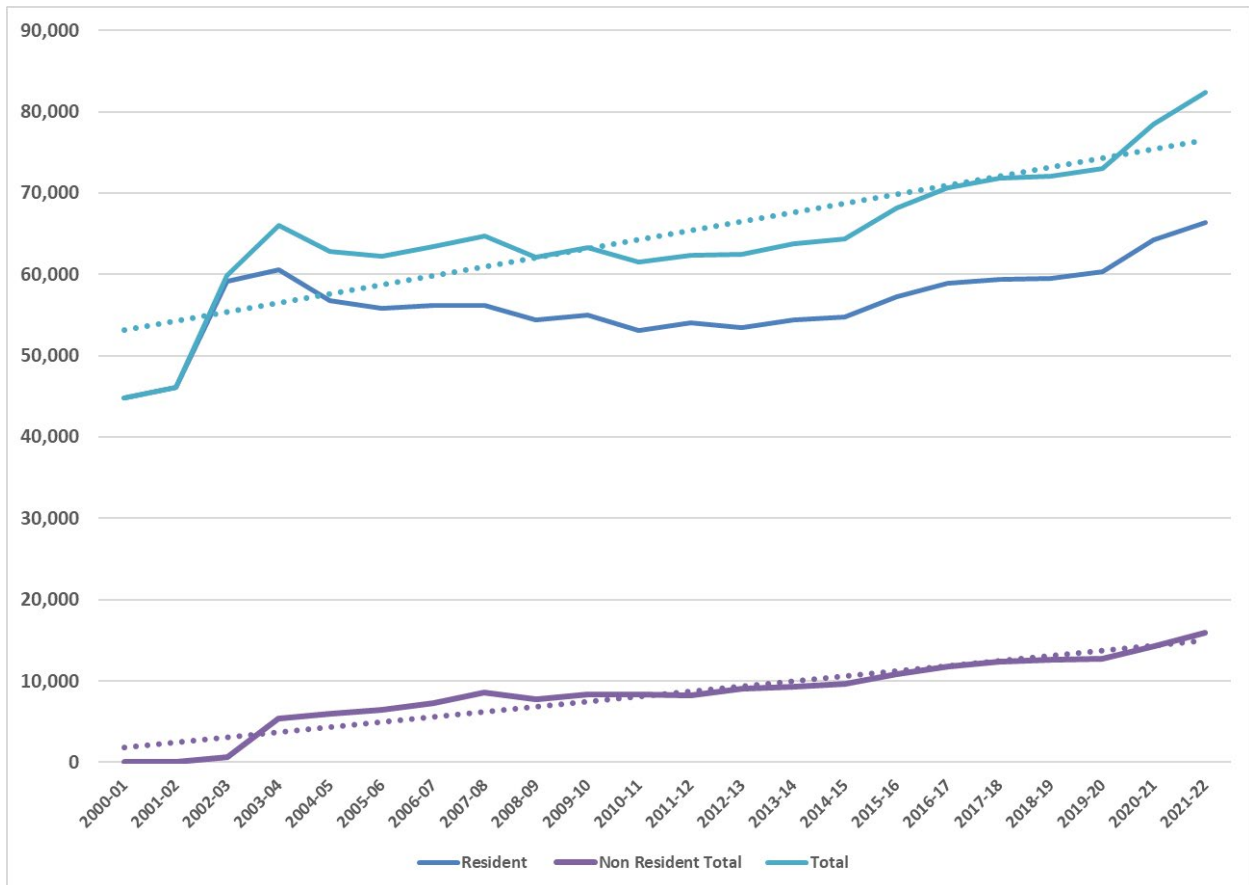


In 2008, the US Environmental Protection Agency adopted new standards for emissions of hydrocarbons (HC), nitrogen oxides (NOx), and carbon monoxide (CO) from a variety of nonroad engines, equipment, and vessels (50 HP diesel engines and larger) that cause or contribute to air pollution (US EPA 2008). The result was a movement towards 4-stroke engines such that new 2-stroke engines are not common. The first side-by-side ATVs came out in 2004 and their use has grown every year. The new side-by-side ATVs are significantly bigger than the original 3 and 4 wheelers we all called ATVs. Today 25% of registered ATVs are side-by-sides and the number is growing since 50% of the current sales are side-by-side ATVs (Bronson 2023). On average a side-by-side ATVs weighs 3 times as much and has an engine that is twice as large as a regular quad ATV. ATVs side-by-sides have made the sport more family oriented as multiple people can ride together. They have also turned out to be very popular with the aging population as they are easier to ride and operate (Bronson 2023).

As is seen in Figure 3 and Table 1, ATV registrations have steadily increased from about 45 thousand to 82 thousand vehicles since the 2000-01 season representing an 84% increase. ATVs use is on the rise for both residents and nonresidents. Currently about 19% of the users are from out of state not counting the people who come here from out-of-state and rent machines (which are included in Maine resident registrations). Prior to 2002, Maine did not have a non-resident registration. ATV riders registered in other states could come and ride in Maine such that out-of-state ATVs were not tracked.

Fuel consumption by ATVs is shown using three different methods, Table 4. Rubin et. al (2001) found fuel consumption per ATV to be 43.6 gallons in 2001, while the EPA has two separate estimates 46 and 55.5 gallons per year. Caution should be used in comparing the various estimates as they are not directly comparable as they were estimated using different approaches and different underlying vehicle populations and ridership patterns. These are discussed in the section: Federal Fuel Use Methodology. Using an average fuel consumption of 43.6 gallons per year and Maine’s current gas tax on gasoline, 0.30/gallon, the operator of a ATV in Maine pays on average \$13.08 per year.

Figure 3: Maine ATV Registrations



Source: Maine Department of Inland Fisheries and Wildlife

ATV riders can buy seasonal resident-only registrations or nonresident-only registrations. Nonresidents can also purchase a 7-day registration. This allows vacationers to use their ATVs in Maine without having to purchase a seasonal registration. There are also a small number of special registrations for official use and a small number of registrations that are transferred from one machine to another machine during the course of a season (~ 1%). These fee exempt and transferred registration are combined into resident and non-resident categories and displayed in Table 1. Using 2001 as the base year, we calculate the percentage change in total registrations as 48% for residents and 84% for all registrations (resident and non-resident).

Table 1: Maine ATV Registrations

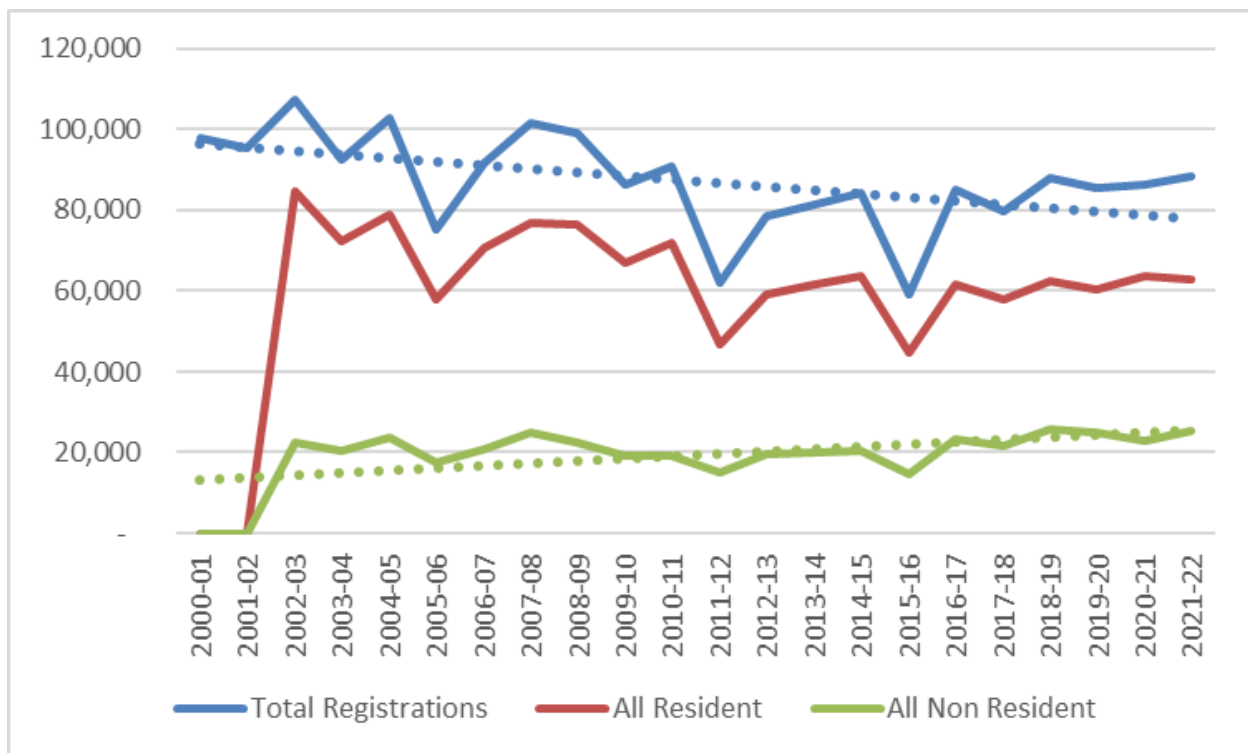
| Year | Resident | Non Resident Seasonal | Non Resident 7 Day | Non Resident Total | Total |
|-----------------|-----------------|------------------------------|---------------------------|---------------------------|--------------|
| 2000-01 | 44,796 | - | | | 44,796 |
| 2001-02 | 46,141 | | - | - | 46,141 |
| 2002-03 | 59,173 | 684 | - | 684 | 59,857 |
| 2003-04 | 60,620 | 5,403 | - | 5,403 | 66,023 |
| 2004-05 | 56,795 | 5,979 | - | 5,979 | 62,774 |
| 2005-06 | 55,847 | 6,421 | - | 6,421 | 62,268 |
| 2006-07 | 56,172 | 7,295 | - | 7,295 | 63,467 |
| 2007-08 | 56,126 | 8,554 | - | 8,554 | 64,680 |
| 2008-09 | 54,366 | 7,771 | - | 7,771 | 62,137 |
| 2009-10 | 55,040 | 8,303 | - | 8,303 | 63,343 |
| 2010-11 | 53,125 | 8,405 | - | 8,405 | 61,530 |
| 2011-12 | 54,017 | 8,277 | - | 8,277 | 62,294 |
| 2012-13 | 53,477 | 8,720 | 296 | 9,016 | 62,493 |
| 2013-14 | 54,424 | 9,024 | 328 | 9,352 | 63,776 |
| 2014-15 | 54,738 | 9,294 | 346 | 9,640 | 64,378 |
| 2015-16 | 57,294 | 10,438 | 383 | 10,821 | 68,115 |
| 2016-17 | 58,853 | 11,358 | 462 | 11,820 | 70,673 |
| 2017-18 | 59,430 | 11,328 | 1,096 | 12,424 | 71,854 |
| 2018-19 | 59,498 | 11,470 | 1,108 | 12,578 | 72,076 |
| 2019-20 | 60,299 | 11,523 | 1,206 | 12,729 | 73,028 |
| 2020-21 | 64,234 | 12,931 | 1,302 | 14,233 | 78,467 |
| 2021-22 | 66,434 | 14,289 | 1,599 | 15,888 | 82,322 |
| % Change | 48% | | | | 84% |

Snowmobile Technology, Efficiency, and Use

Snowmobiles vary in vehicle and engine size. In 2001, the most common engine size was 500 cc and 95% of the snowmobiles had an engine of 700 cc or smaller (ISMA 2024). Most were reported to be two-stroke vehicles. New snowmobiles have much more horsepower than earlier and, due in large part to environmental regulations, new machines are increasingly four-stroke and more fuel efficient and powerful which impacts fuel consumption in opposite directions.

Fuel consumption by snowmobiles is shown Table 4 using three different methods. Rubin et. al (2001) found annual fuel consumption per snowmobile to be 87.4 gallons while the US EPA report found that fuel consumption/machine to be 255 gallons in 2005, while the updated NONROAD2008 found it to be 114.3 gallons per snowmobile for 2013. It is important to note the large drop in fuel consumption noted by the EPA's model for snowmobiles. As with ATVs, caution should be used in comparing fuel use between the different studies as they were estimated using different methods and different underlying vehicle populations and ridership patterns. Given an average fuel use of 87.4 gallons per year and Maine's current gas tax on gasoline, 0.30/gallon, the operator of a snowmobile in Maine pays on average \$26.22 per year.

Figure 4: Snowmobile Registrations



Snowmobiles, similar to ATVs, allow for both resident and non-resident registrations with nonresidents eligible for seasonal, 10-day and 3-day options. Shown in Figure 4 are resident and nonresident registrations aggregated together. As seen in Table 2, Maine resident registrations

have declined 26% since 2002-03 while nonresident registrations have increased 13%. Overall registrations have fallen 10% over the whole time period shown (e.g., 2000-2001 base year).

Table 2: Snowmobile Registrations

| Year | All Resident | All Non Resident | Total Registrations |
|-------------------------------------|--------------|------------------|---------------------|
| 2000-01 | NA | NA | 97,835 |
| 2001-02 | NA | NA | 95,395 |
| 2002-03 | 84,711 | 22,574 | 107,285 |
| 2003-04 | 72,133 | 20,500 | 92,633 |
| 2004-05 | 78,916 | 23,886 | 102,802 |
| 2005-06 | 57,894 | 17,341 | 75,235 |
| 2006-07 | 70,833 | 20,900 | 91,733 |
| 2007-08 | 76,740 | 24,868 | 101,608 |
| 2008-09 | 76,480 | 22,651 | 99,131 |
| 2009-10 | 67,137 | 18,998 | 86,135 |
| 2010-11 | 71,790 | 19,102 | 90,892 |
| 2011-12 | 46,790 | 15,222 | 62,012 |
| 2012-13 | 59,066 | 19,517 | 78,583 |
| 2013-14 | 61,411 | 20,111 | 81,522 |
| 2014-15 | 63,765 | 20,459 | 84,224 |
| 2015-16 | 44,564 | 14,618 | 59,182 |
| 2016-17 | 61,709 | 23,326 | 85,035 |
| 2017-18 | 57,748 | 21,834 | 79,582 |
| 2018-19 | 62,275 | 25,791 | 88,066 |
| 2019-20 | 60,433 | 25,069 | 85,502 |
| 2020-21 | 63,658 | 22,801 | 86,459 |
| 2021-22 | 62,955 | 25,467 | 88,422 |
| % Change | | | -10% |
| % Change Base: 2002-2003 | -26% | 13% | |

Recreational Watercraft Technology, Efficiency, and Use

Many of the 69 DACF maintained boating facilities were constructed over 30 years ago utilizing design standards that are now outdated due to increased tow vehicle size. As facilities are renovated, new design standards regarding turning radius, parking space dimension and ADA compliance add to the expense of these projects. Since the previous study, DIF&W has changed their open water fishing season to allow for more fishing, this results in the potential for increased use of boating infrastructure especially in southern Maine.

As can be seen in Figure 5 and Table 3, the number of registered, gasoline powered recreational watercraft have increased 3% since 2004. There are also a small number of diesel and electric powered watercraft; these are not shown in Table 3 and make up 7% of total registrations in 2022. For the sample years shown, pleasure and gas-powered pleasure boat registrations are broken out separately. The overall number of registered watercraft has declined 2% since 2000. Rubin et. al found annual fuel consumption per gasoline powered recreational watercraft to be 69.3 gallons in 2001. Given Maine’s current gas tax on gasoline, 0.30/gallon, the operator of a watercraft in Maine pays on average \$20.79 per year.

Figure 5: Maine Watercraft Registrations

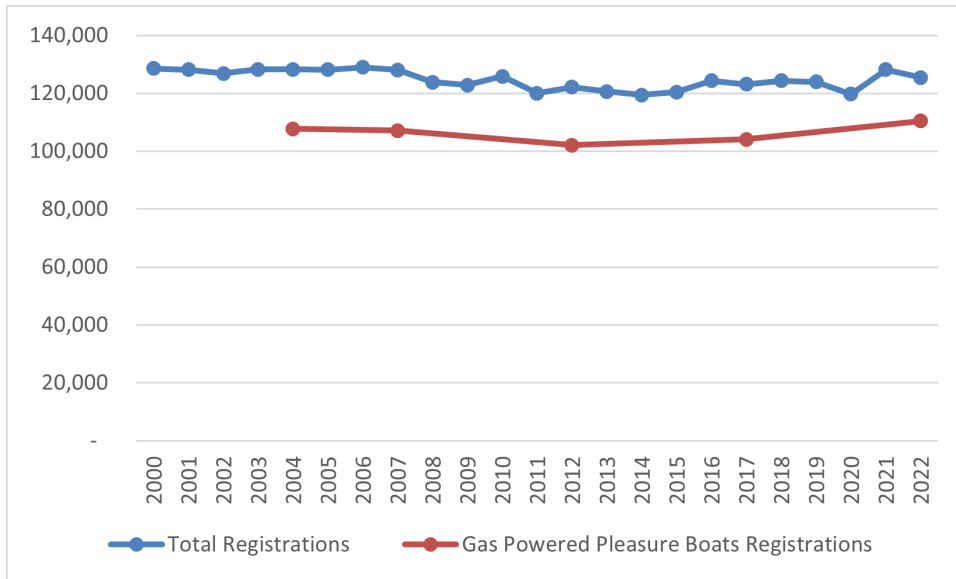


Table 3: Maine Watercraft Registrations

| Year | Pleasure | Gas Powered Pleasure | Total |
|----------------------------------|-----------------|-------------------------------------|--------------|
| 2000 | 117,306 | - | 128,601 |
| 2001 | 117,359 | - | 128,202 |
| 2002 | - | - | 126,850 |
| 2003 | - | - | 128,228 |
| 2004 | 113,763 | 107,749 | 128,307 |
| 2005 | - | - | 128,202 |
| 2006 | - | - | 129,028 |
| 2007 | - | - | 128,023 |
| 2008 | - | - | 123,894 |
| 2009 | - | - | 122,864 |
| 2010 | - | - | 125,828 |
| 2011 | - | - | 119,971 |
| 2012 | 107,744 | 102,136 | 122,103 |
| 2013 | - | - | 120,635 |
| 2014 | - | - | 119,441 |
| 2015 | - | - | 120,467 |
| 2016 | - | - | 124,362 |
| 2017 | 109,760 | 104,113 | 123,185 |
| 2018 | - | - | 124,378 |
| 2019 | - | - | 123,980 |
| 2020 | - | - | 119,676 |
| 2021 | - | - | 128,192 |
| 2022 | 116,426 | 110,447 | 125,467 |
| % Change | | | -2% |
| % Change (2004- 2022) | | 3% | |

Total Fuel Consumption Attributable to Non-Road Vehicles in Maine

In updating the gasoline use and gas tax used by ATVs, snowmobiles and recreational watercraft in Maine pursuant to LD 977, the Maine legislature directed the Department of Inland Fisheries and Wildlife to do a simplified estimation based on changes in registrations since the last studies in 2001 (Rubin, Hart, and Morris 2001b; Rubin and Morris 2001; Rubin, Hart, and Morris 2001a). The methodology employed in these earlier studies and in two federal studies of nonroad vehicle fuel use are summarized later in the methodology section.

For this update, the follow significant assumptions are used:

- Fuel use per vehicle/watercraft will be unchanged in terms of intensity per day and number of days per year.
- Net efficiency per vehicle/watercraft will remain unchanged.

As describe above, there have been significant changes in the technologies of the nonroad vehicles since 2001. This has likely changed the *use* of and *fuel efficiency* (fuel use per motive power) of these nonroad vehicles. Some changes such as the larger size of ATVs would imply greater fuel use, while improvements in engine technology (4 stroke engines) may improve fuel efficiency (less fuel use); the net result on average fuel use is not known. Additionally, changes in the number and types of registrations (resident and nonresident) also may reflect underlying changes in how often (days per season) and how intensively (hours per day of operation) these nonroad vehicles are used.

Table 4: Fuel Consumption Estimates per Vehicle/Watercraft

| | Rubin et al. (2001) (gallons/year) | EPA Hwang & Davis 2009 (gallons/year) | FHA 2015 (gallons per year) |
|--------------|---------------------------------------|------------------------------------------|--------------------------------|
| ATV Fuel Use | 43.6 | 46 | 55.5 |
| Snowmobile | 87.4 | 255 | 114.3 |
| Watercraft | 69.3 | 129 | 117 |

Sources: (Hwang and Davis 2009; Federal Highway Administration 2015). Note: Hwang and Davis refer to EPA model NONROADS 2005 and FHA 2015 refers to EPA model NONROAD2008

Recreational Boating: 117 Gallons comes from Table 3.5 and 10.1, FHA NONROAD 2008; 129 gallons, NONROADS 2005 by Hwang and Davis.

ATVS: The 55.5 gallons is stated on page 23 of FHA NONROAD 2008

Snowmobile: The 114.3 gallons is the sum of from the addition of two estimates from FHA: the average snowmobiler is estimated to use 101 gallons for "typical" offroad activities and 13.3 for ice fishing.

ATVS: The 46 gallons cited in EPA NONROADS2005 comes from table 3.8, Snowmobiles: The 255 gallons cited in 2005 comes from table 3.8.

Method for Updated Study

Gasoline Excise Tax = Fuel consumption/vehicle * registered vehicles * excise tax

Table 5: Estimated Gas Tax Paid by ATVs, Snowmobiles and Gasoline Watercraft: 2022

| | Fuel Use per Vehicle (gal/year) | Number Registrations | Gas Tax | Estimated Excise Tax per Vehicle | Estimated Total Gas Tax |
|-------------------|----------------------------------------|-----------------------------|----------------|-----------------------------------------|--------------------------------|
| ATVs | 43.6 | 82,322 | 0.30 | \$13.08 | \$1,076,772 |
| Snowmobile | 87.4 | 88,422 | 0.30 | \$26.22 | \$2,318,425 |
| Watercraft | 69.3 | 110,447 | 0.30 | \$20.79 | \$2,296,193 |
| Total | | | | | \$5,691,390 |

Gasoline Use in Maine: Summary of 2001 Methodology

ATVs

ATV fuel consumption in Maine has been studied by Rubin et al in 2001. Rubin et al.'s method for estimating non-road vehicle fuel consumption employed a survey of registered ATV owners to determine the types of equipment and their use. This survey included a questionnaire with various questions regarding a non-road user's activity levels and average use per vehicle type.

Fuel consumption per equipment was found through several questions answered in the survey and calculated to be 43.6 gallons per equipment. This number was then multiplied by the total number of registered ATVs to find the total gallons of gasoline bought in Maine. The confidence intervals were based on sample data, at a 95% confidence level, meaning that 95 out of 100 samples of a similar size would yield an average fuel use within the confidence interval. Using a confidence level of 95%, the confidence intervals for average fuel use per registered ATV were found to be 38.95 to 48.17 gallons.

Snowmobiles

Snowmobile fuel consumption was calculated in a similar manner (Rubin, Hart, and Morris 2001a). The owners of a random sample of snowmobiles registered in Maine were contacted by telephone. Unregistered vehicles were not included in the sample. The resulting sample was stratified for geography, meaning snowmobiles in all geographic areas of Maine.

The fuel consumption per equipment was given by calculating the average gasoline used per vehicle per year. This was answered directly in the survey and given in a variety of ways depending on how the respondents considered their gasoline usage. The result, 87.4 gallons of gas bought, was then multiplied by the number of registered snowmobiles in Maine, 95,334, to find the total quantity of fuel purchased in Maine. This was done at a 95% confidence level, meaning that in 95 out of 100 samples of the same size, the true average of fuel purchased for the

population of all snowmobiles will be within this interval. For average fuel purchased per equipment, this produces a range of 80.1 to 94.8 gallons per year. Snow groomers were left out of the calculations regardless of the type of fuel used.

Recreational Watercraft

The survey for recreational watercraft was taken from a telephone survey of owners and operators of gasoline powered watercraft registered with the state of Maine (Rubin, Hart, and Morris 2001b). Owners were randomly selected from vehicles registered for the year 2000. The sample was geographically stratified, meaning boats in all geographic areas of the state as well as those with addresses outside Maine had a chance of selection directly proportional to the number of boats in their area. The sample did not include unregistered watercraft, boats registered in other states which purchased gasoline from Maine, or those documented by the U.S. Coast Guard.

Gasoline consumption per equipment was found by calculating the average gasoline used per vehicle per year. This was answered directly through a variety of questions in the survey depending on what information the respondents had access to. Average fuel consumption was found to be 69.3 gallons of gasoline, rounded to the nearest tenth. This was done at a 95% confidence interval, meaning that in a 95 out of 100 samples of the same size, the true average of fuel purchased for the population of all watercraft will be within the confidence interval. The interval for fuel consumption per Maine registered watercraft ranges from 57.0 to 81.6 gallons per year.

Federal Fuel Use Methodology

Fuel use by various non-road vehicles has been studied at the federal level for the purposes of determining the amount of criteria emissions and fuel use from each of the non-road sectors. The EPA NONROAD2005 model contains estimates for eight sectors, including aviation, recreational boating, agricultural non-highway use (Hwang and Davis 2009).

A related, but separate model, NONROAD2008 forecasts emissions and fuel consumption (Federal Highway Administration 2015). A difference between the 2005 and 2008 models is that the FHA uses census data as the source for estimation, while the EPA 2005 uses data given by manufacturer sales and engine production. The EPA's model also gives fuel consumption per equipment, while the FHA model gives total fuel consumption per non-road sector. The NONROAD models account for four fuel types: gasoline, diesel, LPG, and compressed natural gas. Fuel type is further broken down to derive horsepower rating and source category classification. This is then used to calculate the gallons per piece of equipment through dividing total fuel consumption of a specific equipment by the total population per equipment. Non-road equipment is put into several categories such as fuel efficiency and engine size. Variables in the model such as fuel factor (BSFC), or gallons per horsepower-hour are derived from finding the average maximum power level in each of the different engine size categories. Load factor (LF) is derived from finding the ratio between average power usage and maximum value.

Using the EPA's NONROAD model, fuel consumption can be derived from:

$$\text{Fuel Consumption} = \text{Pop} * \text{Power} * \text{LF} * \text{A} * \text{BSFC}$$

Where Pop = Engine population

Power = Average Power

LF = Load Factor (Fraction of available power)

A = Activity (hours per year)

BSFC = Fuel Factor (gallons per horsepower-hour)

Distribution of State Gas Taxes to Nonroad Recreational Vehicle Programs 2022

Maine statutes establish the percentage of gasoline taxes that are attributable to snowmobile, all-terrain vehicle and motorboat gasoline purchases and their distribution to state agencies for the administration of programs and the enforcement of laws relating to the use of those recreational vehicles (Maine Revised Statutes 2023). These are summarized below; see the referenced statutes for the exact language.

Motorboats

Of total gasoline tax revenues, 1.4437% is distributed among the following agencies in the following manner.

- A. The Commissioner of Marine Resources receives 24.6% for research, development and propagation activities.
- B. The Boating Facilities Fund, established under Title 12, §1896, within the Department of Agriculture, Conservation and Forestry, Bureau of Parks and Lands, receives 75.4% of that amount.

Snowmobiles

Of total gasoline tax revenues, 0.9045% is distributed among the following agencies in the following manner:

- A. The Commissioner of Inland Fisheries and Wildlife receives 14.93% of that amount
- B. The Snowmobile Trail Fund, Department of Agriculture, Conservation & Forestry, receives 85.07% of that amount

All-Terrain Vehicles (ATVs)

Of total gasoline tax revenues, 0.1525% is distributed among the following agencies in the following manner:

- A. The ATV Enforcement Grant and Aid Program, DIFW, receives 50% of that amount
- B. The ATV Recreational Management Fund, DACF, receives 50% of that amount

Together, these three programs receive 2.5007% of total gasoline tax revenues.

Using the revenue reported by the Office of Fiscal and Program Review and the distribution detailed in Maine Revised Statutes, we estimate the revenue the six organizations receive below. In 2022, Maine received \$195,353,581 in revenue from the gasoline tax (Office of Fiscal and Program Review 2023), with \$2,822,947 allocated to watercraft related uses, \$1,768,619 to snowmobile related uses, and \$282,192 to ATV related uses, totaling 1.4437%, 0.9405%, and 0.1525% of the total tax respectively. This sums to \$4,889,758 given to off-road uses. Of the \$2,822,947 allocated to watercraft, 24.6% (\$694,445) was allocated to the Commissioner of Marine Resources, with the remaining 75.4% (\$2,128,502) allocated to the Boating Facilities Fund. Of the \$1,768,619 attributed to snowmobile use, the Commissioner of Inland Fisheries and Wildlife receives 14.93% (\$264,055) and the Snowmobile Trail Fund receives 85.07% (\$1,504,564). The revenue given to ATV related uses is split evenly between the ATV Enforcement Grant and ATV Recreational Grant, each receiving \$149,096 (Maine Revised Statutes 2023).

Table 6: Estimated Revenue Allocated to Nonroad Uses By Organization: 2022

| Organization | Nonroad Vehicle Association | Percentage of Tax Received | Estimated Revenue from the Gas Tax in 2022 (Dollars) |
|---------------------------------------------------|------------------------------------|-----------------------------------|-------------------------------------------------------------|
| The Commissioner of Marine Resources | Watercraft | 0.36% | \$694,445 |
| The Boating Facilities Fund | Watercraft | 1.09% | \$2,128,502 |
| The Commissioner of Inland Fisheries and Wildlife | Snowmobiles | 0.14% | \$264,055 |
| Snowmobile Trail Fund | Snowmobiles | 0.77% | \$1,504,564 |
| ATV Enforcement Grant | ATVs | 0.08% | \$149,096 |
| ATV Recreational Fund | ATVs | 0.08% | \$149,096 |
| Total | | 2.50% | \$4,889,758 |

Sources: (Office of Fiscal and Program Review 2023; Maine Revised Statutes 2023)

Comparing the gas taxes paid by the non-road users groups with the revenues allocated to those groups is shown in Table 7. Significant caution should be used in interpreting the final column showing taxes paid by each user group versus revenues allocated. This is because this study, as described earlier, has assumed that fuel use per vehicle and watercraft has not changed in 20

years. This is not likely to be correct. Updating the average fuel efficiency and use would require surveying the user groups and getting fuel efficiency data from vehicle manufacturers.

Table 7: Gas Taxes Paid vs. Allocated

| | Estimated Gas Taxes Paid | Estimated Gas Taxes Allocated | Taxes Paid Less Allocated |
|-----------------------------------------------|---------------------------------|--------------------------------------|----------------------------------|
| ATVs | \$ 1,076,772 | \$ 298,192 | \$ 778,580 |
| Snowmobile | \$ 2,318,425 | \$ 1,768,619 | \$ 549,806 |
| Watercraft | \$ 2,296,193 | \$ 2,822,947 | \$ (526,754) |
| Total | \$ 5,691,390 | \$ 4,889,758 | \$ 801,631 |
| Note: Sums do not always add due to rounding. | | | |

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