

The taxation of registered motor vehicles in Connecticut

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Executive Summary

- Registered motor vehicles represent 6.4% of the total net Grand List value in Connecticut.
- The tax on motor vehicles currently yields over \$650 million each year across the state, or nearly \$183 per capita.
- The Connecticut motor vehicle property tax system can be summarized as follows:
 - In 2013, there were 2.856 million registered vehicles in Connecticut with an aggregate gross taxable value of \$23,690 million. Net motor vehicle assessments as a percent of total net Grand List value varies across cities from less than 3% to over 16%.
 - Vehicles are valued at 70% of average retail value based on NADA data as of October 1 each year. Vehicles acquired after October 1 and before July 31 are valued on a supplemental valuation list.
 - Variations in local mill rates result in very large differences in the tax obligation associated with vehicles of the same value based solely on the address of the owner.
 - The new 32 mill state rate cap will result in about \$67 million in lost revenue. About 74% of this amount will occur in 10 cities. The state has committed to replace the lost revenue with sales tax receipts.
- Other states vary widely in their tax treatment of motor vehicles
 - Eleven states levy an ad valorem tax on motor vehicles similar to Connecticut's. Two other states levy an ad valorem tax on at least some vehicles.
 - Twelve states levy an excise tax based on age-adjusted Manufacturer's Suggested Retail Value when new.
 - Nine other states have variations on these two approaches.
 - The remaining 16 states levy no tax on motor vehicles beyond modest registration fees.
- Administration of the motor vehicle tax in Connecticut faces several significant challenges. As a result of the combination of these factors, the majority of resources in a local assessor's office are devoted to maintaining motor vehicle accounts and values.
 - Assessors must estimate the average retail value for 2.856 million vehicles each year.
 - About 70% of these values can be estimated using published NADA data.
 - The remaining vehicles are often specialized or have specialized equipment for which valuation data is difficult to obtain.
 - Vehicles sold during the year are often eligible for a prorated tax credit. Credits for approximately 360,000 vehicle sales each year must be processed manually.
 - Vehicles relocating out of state are also eligible for a prorated credit. All of these approximately 75,000 credits must be processed manually.
 - There are claims that some Connecticut residents are registering their vehicles out of state to avoid the vehicle property tax. The evidence for this claim at this point is inconclusive.
 - There is a pronounced negative correlation between city mill rates and the total motor vehicle assessed value per capita. Towns with high mill rates also show a much lower number of vehicles per 100 population. This evidence is consistent with the broader claim that behaviors are changed by the current tax.
- Essentially any approach that attempts to both promote increased equity and remain revenue neutral will create large numbers of taxpayers with higher tax obligations enroute to reducing the tax bills for other vehicle owners. There are only a few courses of action available:
 - Increase the taxes paid by some in order to achieve uniformity and equity statewide
 - Continue the current course of capping the maximum tax rate (and therefore the amount of acceptable inequity) and either

- replace the lost revenue from state resources or
- provide local governments with an alternative revenue source under local control
- Abandon the tax on motor vehicles as a significant source of revenue and either replace the lost revenue or provide local governments with an alternative revenue source.
- Mandate equity in motor vehicle taxation, phased in over a sufficient time period to allow local governments to adjust to lower revenues, higher taxes on the remaining property tax base or a combination of both

Options

The options that might be considered regarding the taxation of motor vehicles include:

- **Option 0:** The status quo
- **Option 1a:** A revenue-neutral statewide mill rate and “hold harmless” provision to replace the lost revenue in some cities. The required revenue-neutral mill rate would be about 28.1 mills. Significantly, 73 communities would see taxes on motor vehicles increase by an average of about 28.9%. At the same time, 96 communities would receive tax reductions of about 15.4% on average. There would be very little change in about 20% to 25% of cities.
 - Advantage: Greatly improved equity
 - Disadvantage: Many taxpayers will see their motor vehicle tax increase substantially
- **Option 1b:** A statewide minimum mill rate with an additional local rate up to a maximum allowed rate. The revenue raised by the statewide rate would be used to replace the revenue lost by cities required to lower their mill rate on vehicles. The text provides a more detailed example.
 - Advantage: Improved equity
 - Disadvantage: Does not completely address equity concerns, and many taxpayers will see their motor vehicle tax increase substantially
- **Option 2a:** Replace the current ad valorem tax with a revenue-neutral excise tax based on vehicle MSRP and age. The rate would be set by the state and would be largely uniform, though some provision could be made for a local surtax if desired.
 - Advantage: Greatly improved equity; Substantial savings in administrative costs
 - Disadvantage: Many taxpayers may see their motor vehicle tax increase substantially
- **Option 2b:** Replace the current ad valorem tax with an excise tax based on vehicle MSRP and age. The rate would be set by the local governments within bounds set by the state.
 - Advantage: Somewhat improved equity; Substantial savings in administrative costs
 - Disadvantage: Does not completely address equity concerns; some taxpayers may see their motor vehicle tax increase
- **Option 3:** Replace the current ad valorem tax with an excise tax based on vehicle weight. This moves the property tax toward a user charge.
 - Advantage: Improved equity and substantial savings in administrative costs
 - Disadvantage: Very substantial revenue losses
- **Option 4:** Replace the current 30% assessment exemption granted to all vehicle owners with a fixed dollar exemption per vehicle. This would equalize the benefits received from the assessment exemption across all vehicle owners.
 - Advantage: Substantially improved equity in benefits received from the assessment exemption; Reduction tax obligation for many vehicle owners; Revenue gains in some communities
 - Disadvantage: Revenue losses in some communities; Substantial tax increases for owners of expensive vehicles

- **Option 5:** Repeal the ad valorem tax on motor vehicles without replacing the revenue. This option would need to be phased in to allow local governments to increase the tax on the remaining property base, reduce spending or both.
 - Advantage: Greatly improved equity and substantial savings in administrative costs
 - Disadvantage: \$600 to \$700 million in lost revenue for local governments
- Moving away from an ad valorem tax to an excise tax would greatly reduce the cost of administering the tax. In itself, such a change will not address the larger question of balancing equity and revenue needs. But reducing administrative costs is also worthy of state attention.

The taxation of registered motor vehicles in Connecticut

Lawrence C Walters

Introduction

The base for the Connecticut property tax is reported for several property categories. Based on the 2013 Grand Lists for Connecticut's 169 assessing jurisdictions, just under 11.5% of the state property tax base is considered tangible personal property, or physical property that can be moved without damage to land or buildings. The state further divides tangible personal property into two categories: business personal property and motor vehicles. This paper is focused on the taxation of motor vehicles. The tax on business personal property is discussed in a separate paper.

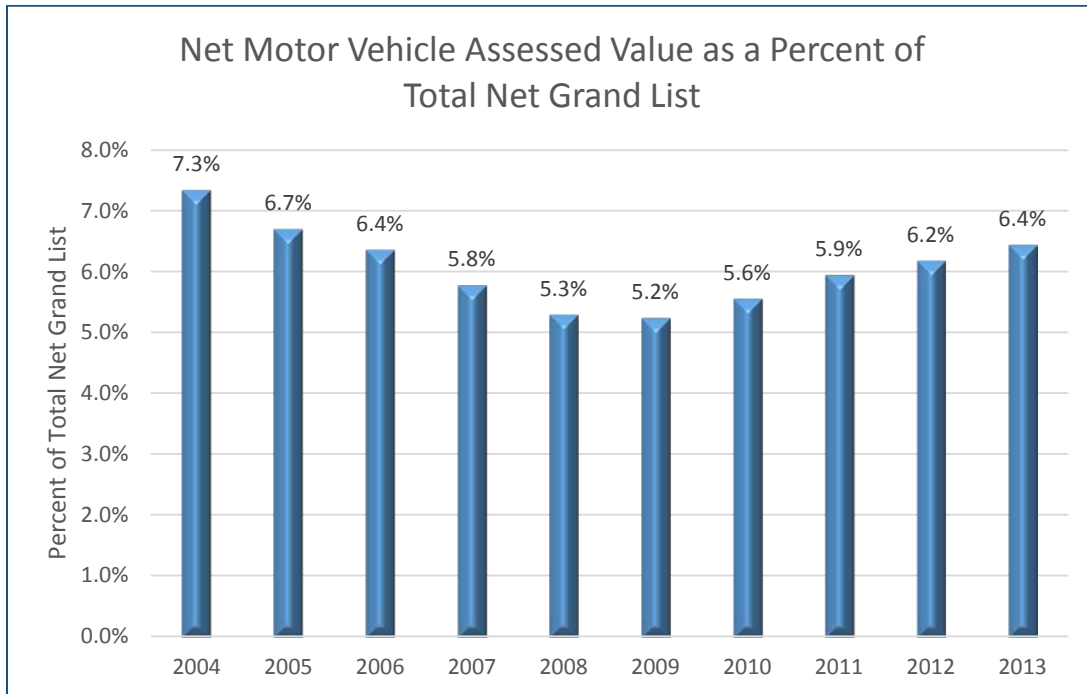
Under Connecticut law, all motor vehicles are subject to the property tax. Vehicles registered with the State Commissioner of Motor Vehicles are valued and taxed directly as a separate class of property. All other motor vehicles garaged in Connecticut are taxed as personal property and are reported on the declaration of personal property submitted to the local assessor each year. This discussion focuses on the policies, procedures and outcomes associated with the first group: vehicles registered in the state of Connecticut.¹

Motor vehicles make up a significant share of the total property tax base in Connecticut. Figure 1 reports the trends for the most recent decade. At 6.5% of total net taxable property in the state, motor vehicles are a larger share of the total base than business personal property. In addition, the tax on motor vehicles represents a more significant cost for households and the large majority of businesses than does the business personal property tax. At current rates, the tax on motor vehicles yields over \$650 million each year, or nearly \$183 per capita.

The next section describes the motor vehicle tax in Connecticut in greater detail. Section 3 provides a more general discussion of motor vehicle taxes in other states. Section 4 returns to the tax in Connecticut with a discussion of the administrative challenges associated with the tax. Section 5 concludes with a set of options the state may choose to consider and a few concluding observations.

¹ Unregistered motor vehicles and snowmobiles constituted 0.93% of the total 2013 personal property valuation in the state.

Figure 1



Source: Office of Policy and Management, Total Grand Lists by Town, and calculations by the author

The Connecticut “Car Tax”

The implementation of any property tax involves several recurring steps regardless of the type of property. Motor vehicles are no exception. Tax administrators must be able to:

- Identify the property that will be taxed and the appropriate taxpayer who will incur the obligation
- Value the property in a fair and consistent manner as defined by law
- Apply the appropriate tax rate to determine the tax due
- Notify taxpayers of their obligation
- Receive and appropriately respond to inquiries and appeals from taxpayers
- Effectively collect the tax

This list also serves to organize the discussion of the motor vehicle property tax in Connecticut.

Discovery

Discovery is the process used to identify taxable property, in this case motor vehicles, and associate that property with the individual or firm that will be responsible for paying the tax. Discovery of motor vehicles in Connecticut relies on cooperation between the state’s vehicle registration system and local assessors and tax collectors. When a vehicle is purchased and registered with the state, the tax assessor in the town where the taxpayer resides or conducts business is notified by the Department of Motor Vehicles.

Vehicles (and equipment) that normally move from job site to job site are taxable in a jurisdiction if the vehicle remains in the jurisdiction for 3 months or longer. While it is the legal obligation of the vehicle owner to notify the local assessor, in practice “discovery” of such vehicles and equipment requires

diligence on the part of the local assessor. It also requires documentation such as photographic evidence in order to overcome disputes from non-resident vehicle owners.

Table 1: Connecticut Registered Motor Vehicles and Assessed Value

Year	Total Registered Motor Vehicles (1,000s)	Gross Assessed Motor Vehicle Value (\$millions)
2003	2,964	18,815
2004	3,042	20,320
2005	3,059	21,356
2006	3,052	21,592
2007	3,047	22,067
2008	3,094	20,984
2009	3,072	21,048
2010	3,082	21,910
2011	2,829	23,221
2012	2,706	23,101
2013	2,856	23,690

Source: (Office of Highway Policy Information 2014a); Grand List by Town

Table 1 reports the number of registered motor vehicles in Connecticut and how this total has varied over the past decade. The data indicate that there are typically about three million registered motor vehicles in Connecticut, though this number dropped significantly in 2011. Motor vehicle assessed value on the other hand has increased each year for the past decade, except for the 2008 assessment year.

Valuation

Motor vehicles are valued for tax purposes at 70% of their average retail price. The average retail price is determined for most vehicles through the use of National Automobile Dealers Association (NADA) book values. Interviews with local

assessors indicated that state-provided NADA data was adequate for about 70% of vehicles. The remaining 30% require local assessors to use other sources and assessor judgment to arrive at an estimate of average retail price. For example, the chassis of a truck may have specialized equipment mounted it. The chassis can often be valued using NADA data, but the equipment must also be valued and that information is not available from state sources.

Assessments are made as of October 1 of each year for all vehicles registered on that date. Vehicles acquired after October 1 and before July 31st are also valued but on a prorated basis. The state produces a supplemental list of vehicles registered after October 1 and before the end of July. Local assessors then apply the percentages shown in Table 2 to calculate the part-year property tax due for these “supplemental vehicles.” Due dates for both the regular tax and the supplemental tax are discussed below.

Figure 1 above reports the relative importance of motor vehicle values compared to the total net grand list for the state. Table 1 reports the total net motor vehicle assessed values for the most recent decade available. It is also helpful to recognize the variations that exist among local jurisdictions in the relative importance of motor vehicles for the local tax base.

Figure 2 shows the distribution in local assessments by net motor vehicle assessed

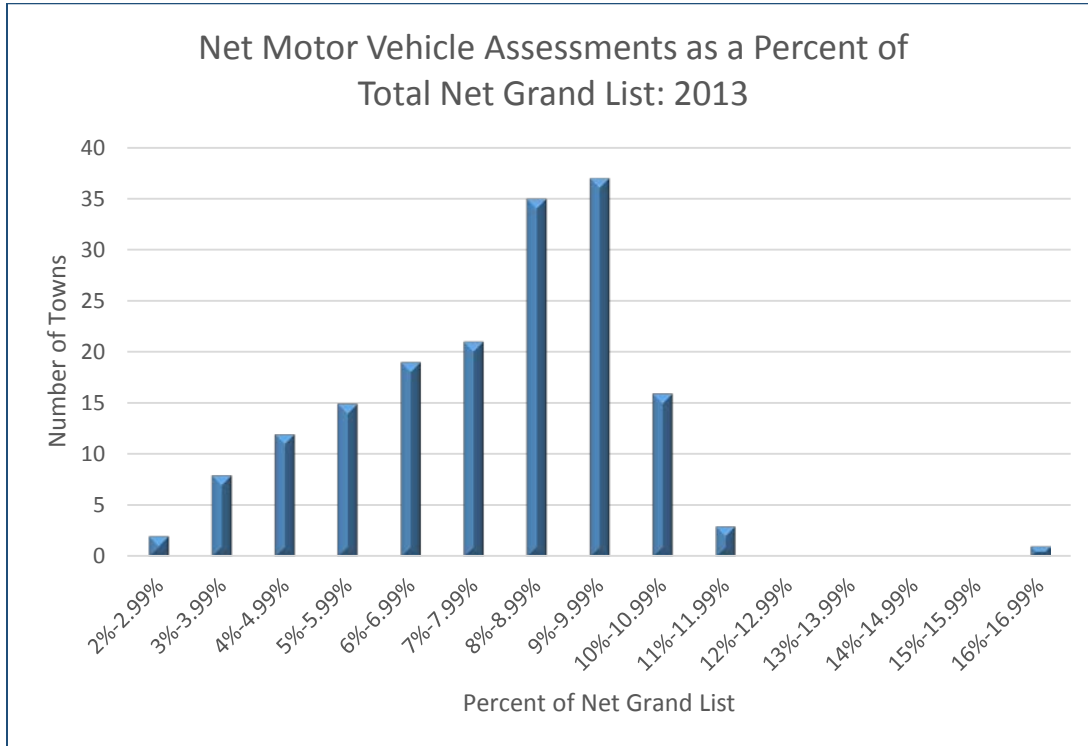
Table 2: Percentages used to calculate the supplemental motor vehicle tax

Month of acquisition	Percent of assessed value used to calculate tax
October	100.00%
November	91.7%
December	83.3%
January	75.0%
February	66.7%
March	58.3%
April	50.0%
May	41.7%
June	33.3%
July	25.0%

Source: (DMV 2015)

value as a percent of total net grand list for 2013. The average among all 169 jurisdictions was 7.8% of total taxable property value. In this case the average may not be very representative. The range was from a low of 2.48% of total value in Greenwich to a high of 16.84% in Windsor Locks. But as the figure indicates, both these extremes are unusual. The most common share among the 169 towns falls between 8% and 10% of total value. This range includes 43% of all communities. The number of local governments above 10% falls off quickly, and Windsor Locks is very unusual. Below 8%, the number of communities tapers more gradually. This data confirms that any significant changes in the motor vehicle property tax will affect communities very differently.

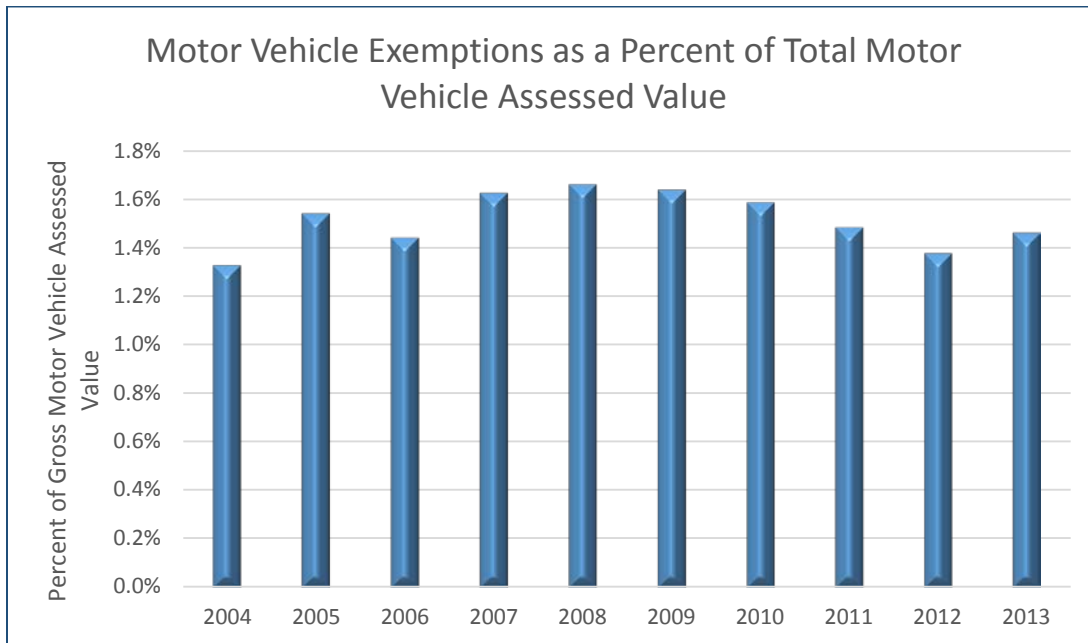
Figure 2



Source: Grand Lists by Town and calculations by the author

Exemptions from the motor vehicle tax are available to qualified individuals such as honorably discharged veterans, or their surviving spouses. Several potential exemptions are local options. Figure 3 reports the overall importance of motor vehicle tax exemptions as a percentage of total motor vehicle assessed values. The overall level of exemptions from the motor vehicle tax has been modest, and consequently the revenue impact of these exemptions has also been small.

Figure 3



Source: Grand Lists by Town and calculations by the author

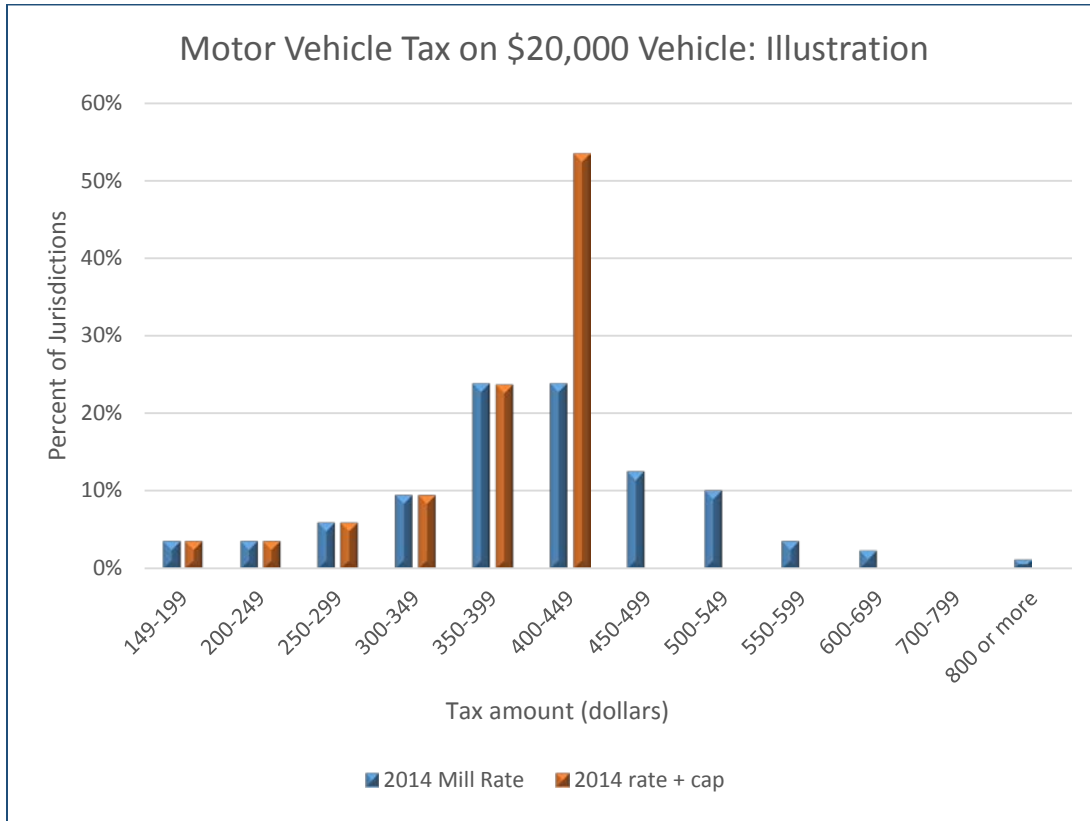
Tax rates

As with the balance of the property tax system, the motor vehicle property tax rate is determined by local governments. Because of the existence of special districts, often the rate varies within a given community depending on the address of the property owner. Even without these within-community variations, there are substantial variations in tax rates across the state. Consequently, there have been in the past substantial variations in motor vehicle tax bills for similarly priced vehicles.

In order to address this issue, the state legislature acted in 2015 and adopted a cap on the rate applied to motor vehicles. While 2014 rates went as high as 58.22 mills in Waterbury and 74.29 mills in Hartford, the state has set the maximum rate for motor vehicles at 32 mills beginning July 1, 2016. This maximum rate will be reduced again in subsequent years to 29.36 mills. Based on a comparison of 2014 mill rates, the state cap will affect motor vehicle property tax rates in 49 of the state's 169 cities and towns in the next fiscal year, and an additional 31 cities thereafter. The legislature has committed to replace the revenue lost by cities with transfers from sales tax revenues.

To illustrate the variations in existing tax rates and the impact the new rate cap will have, Figure 4 shows the range of tax amounts that would be due on a vehicle with an average retail value of \$20,000. The tax on such a vehicle which now ranges as high as \$815 in Waterbury and \$1,040 in Hartford will be reduced to a maximum of \$448 beginning with the 2016-2017 fiscal year. Compared with the revenue resulting from applying the 2014 mill rates, the revenue loss to cities and towns will be over \$67 million which the state has committed to reimburse from sales tax revenues.

Figure 4



Source: Calculations by the author

The ten cities likely to see the largest revenue loss from the new state cap are shown in Table 3, along with an estimate of lost revenue compared to their 2014 mill rate. These ten cities represent nearly 74% of the expected revenue loss and therefore will be the major recipients of increased state transfers.

Table 3: Cities with the largest revenue loss under the new state motor vehicle mill rate cap

City	Estimated revenue loss (\$millions)
Hartford	12.38
Waterbury	10.31
Bridgeport	4.39
New Britain	4.37
East Hartford	3.59
New Haven	3.58
Torrington	2.91
Hamden	2.76
West Hartford	2.60
Manchester	2.46
Total	49.35

Billing and collection

Cities typically mail out tax notices once a year. All property taxes are assessed as of October 1. Notices are mailed typically in June of the following year, and the tax is due on July 1. Taxes become delinquent on August 1. For vehicles acquired after October 1, the pro-rated supplemental motor vehicle tax is due January 1 and is delinquent after February 1. Legally, the city is not obligated to mail out individual tax notices and is required only to publish general notices that taxes are due. (CGS 12-145) Failure to receive a tax notice does not relieve the taxpayer of the tax obligation.

Some jurisdictions allow payment of the tax in installments. For example, Waterbury allows taxpayers to pay in two installments if the amount due is over \$200. The first installment is due in July and the second in January. For vehicles on the supplemental motor vehicle list, there is no provision for paying in installments. If the taxpayer elects to pay in installments, no reminder notice for the second installment is sent by the city.

In the event that the taxpayer fails to pay the motor vehicle property tax, the Department of Motor Vehicles is notified by the city's tax collection office. Vehicle registration renewals and any new registration of a vehicle is suspended until all property tax obligations have been met. A tax clearance form obtained from the local tax collector must be submitted to the Department of Motor Vehicles along with the registration application. All outstanding vehicle taxes associated with the taxpayer's name and/or the vehicles' identification number, including taxes not yet delinquent, must be paid in full in order to obtain a motor vehicle release form from the tax collector's office.

Late payment is also subject to interest charges, generally at the rate of 1.5% per month from the original due date.

Collection rates in Connecticut cities are generally quite high, averaging over 98% for the relevant tax year. The lowest collection rate in 2012 was reported to be 93.8% in Hartford. Delinquent taxes for a given year are nearly always collected in subsequent years.

Taxing motor vehicles in other states

The academic literature on motor vehicle taxes is quite thin and tends to focus on the impact of tax levels on consumer purchasing decisions. Beck and Bennett (2003) examined the impact of taxes and license fees on new car registrations. They found that in states with taxes and fees based on the age or value of the car people tend to substitute older model vehicles for new cars. Pritchard and DeBoer (1995) also find vehicle taxes based on market value tend to reduce the number of registered vehicles in a state. Ott and Andrus (2000), on the other hand, find no relationship between vehicle purchasing decisions by consumers in high vehicle property tax states and low tax states.

Barbour (2009) tested the hypothesis that vehicle taxes based on value would prompt people to buy older vehicles and consequently vehicles with higher emission levels. She found that while the value-based tax had a significant impact on the probability of buying a new vehicle in a given year, it had no relationship to the age of the vehicle purchased.

At a more macro level, Errecart et al. (2012) note that while there is a trend among states to reduce personal property taxes generally, many states continue to tax large household items like motor vehicles and personal watercraft. At the same time, a number of states have adopted an excise tax approach in lieu of an ad valorem property tax on motor vehicles. The result is a wide variation among states in how the taxation of motor vehicles is implemented. Table 4 provides a summary listing of states that have either a

property tax on motor vehicles, or some other variation of a charge based on some measure of vehicle value. The table is complicated because state systems often have fairly unique features. Nonetheless, there are patterns and commonalities.

First, there are a few states that levy an ad valorem tax on motor vehicles similar to Connecticut. Eleven mostly southern states fall into this category. Two other states levy a property tax on at least some motor vehicles.

The second set of states levy a tax or fee based on the original Manufacturer’s Suggested Retail Price (MSRP), adjusted for age. Because there is no attempt to relate this age-adjusted value to actual market value, it is referred to as an excise tax. In some cases, a registration fee calculated in a similar manner is used in lieu of calling the charge a tax. And it is certainly the case that the rates vary significantly. The point is that this set of states have a charge that is tied to some measure of original value and which is then reduced each year according to a fixed schedule. Twelve states fall into this category.

To illustrate how the excise tax approach works, consider the example of Indiana. Passenger vehicles registered in Indiana are classified into one of 17 categories based on MSRP. At the low end, Class 1 vehicles range from \$0 to \$1,499 in original cost. Class 17 includes all passenger vehicles with an MSRP of \$42,500 or higher. (BMV 2015)

Within each class, the excise tax is based on the model year of the vehicle, ranging from 1 to 10 years. For example, a vehicle with an MSRP of \$20,000 when new would fall into Class 12 (\$18,000 to \$21,999). The “age” of the vehicle is based on the model year. Thus, if the vehicle is from the 2012 model year, the age of the vehicle in 2015 is three, regardless of when it was acquired. The excise tax for this vehicle is currently \$189. At current rates, this value will decline each year based on a set schedule until age 10 years. The current tax for an age 10 vehicle in this class is \$26.

In addition to the state levied excise tax, counties in Indiana are allowed to levy an additional surtax (either \$20 or \$25 dollars) and a wheel tax based on the gross weight of the vehicle and the type of vehicle. The website listed in the footnote provides additional details on the Indiana system.

The point of this discussion is simply to illustrate the difference between an excise tax and an ad valorem tax. Clearly, rates will differ depending on the revenue needs of the governments involved.

Table 4: State treatment of motor vehicles

State	Motor vehicle registration fee	Property tax
States which assess ad valorem property tax on motor vehicles		
Alabama	Yearly flat fee	Yes
Arkansas	Flat fee based on weight	Yes
Connecticut	\$80 every 2 years	Yes
Kansas	Flat fee	Yes
Kentucky	Flat fee	Yes
Maine	Flat fee	Yes, if registration excise tax not paid. Registration excise tax is based on age and MSRP. Tax rate set by state.
Mississippi	Flat fee	Yes
Missouri	Annual fee based on vehicle horsepower. Maximum is \$54.75	Yes
North Carolina	Flat fee	Yes
South Carolina	Flat fee	Yes
Tennessee	Flat fee	Yes, if used by a commercial business
Virginia	Flat fee	Yes
West Virginia	Flat fee	Yes

State	Motor vehicle registration fee	Property tax
States which assess an excise tax or registration fee based on vehicle value		
Arizona	Flat fee plus vehicle license tax (assessed value of 60% of the MSRP - reduced by 16.25% each year). Uniform fee per \$100 of assessed value.	No
California	Vehicle license fee based on purchase price of vehicle when acquired. Declines each year for first 11 years.	No
Colorado	Based upon the year, weight, taxable value and month of registration.	No
Indiana	Flat fee	Licensed motor vehicles subject to the Motor Vehicle Excise Tax are exempted from the personal property tax. Excise tax varies for passenger cars from \$12 to \$532 based on age and original price.
Iowa	\$0.40 per 100 pounds of weight plus 1.00% of list price (vehicles less than 7 years old) 0.75% of list price (vehicles 8-9 years old) 0.50% of list prices (vehicles 10-11 years old) Vehicles 12 years or older: \$50/year	No
Louisiana	Private passenger car - \$20.00 minimum for 2 years (Based upon 0.1% percent of selling price) Truck (including vans) - \$40.00 for 4 years (up to 6000 lbs. GVW)	No
Massachusetts	Biannual flat fee	Vehicles not subject to annual state registration excise tax are taxable. Registration excise tax is based on MSRP and vehicle age. Rate is \$25 per thousand.
Michigan	For model year prior to 1983, fee depends on the weight of the vehicle; after 1983, fee depends on the price of the vehicle; fees can vary from \$30 to \$148, fees decline by 10% each year until the fifth renewal.	Vehicles that have not paid the registration fee or are not registered are taxable.
Minnesota	Registration tax system for passenger vehicles based on value of vehicle.	No
Nevada	Flat fee	Government Services Tax (GST) based on the value of vehicle. GST is based on MSRP and vehicle age. Rate is set by state
Rhode Island	Biannual fee based on weight	Excise tax in lieu of property tax
Wyoming	\$15 plus county registration that is calculated as a percentage of MSRP and the age of the vehicle.	No
Other variations		
Alaska	Biannual flat fee	Local option to tax, exempt or impose registration fee in lieu of tax
District of Columbia		No, but some special equipment mounted on vehicles is taxable
Florida	Vehicle license tax based on weight	No
Georgia	Annual flat fee	Vehicles purchased on or after 1 March 2013 are exempt from annual ad valorem tax. Instead, the property tax as well as the sales and use taxes are replaced by a one-time title ad valorem tax
Hawaii	Annual fee based on weight up to a maximum of \$150 plus county fee also based on weight	Annual tax based on weight
Idaho	Flat fee that varies slightly with age	Unregistered vehicles subject to property tax
Maryland	Biannual flat fee	Unregistered vehicles and some classes of registered vehicles are taxable
Texas	Flat fee	Leased vehicles for personal use are exempt, but may be subject to municipal property taxes at local option. Vehicles used to produce income are taxable
Utah	Annual fee based on weight	Annual uniform age-based fee in lieu of property tax

Source: (LILP/GWU 2015; Teigen 2015)

Table 4 also describes a few other variations that exist among states. These variations include giving local governments options on whether or not, and how, to tax motor vehicles; basing the charge solely on the weight of the vehicle; limiting the ad valorem tax to commercial vehicles, etc. The variations are substantial, and not all states are included in Table 4. Those not included report charging motor vehicles only fixed and quite modest registration fees.

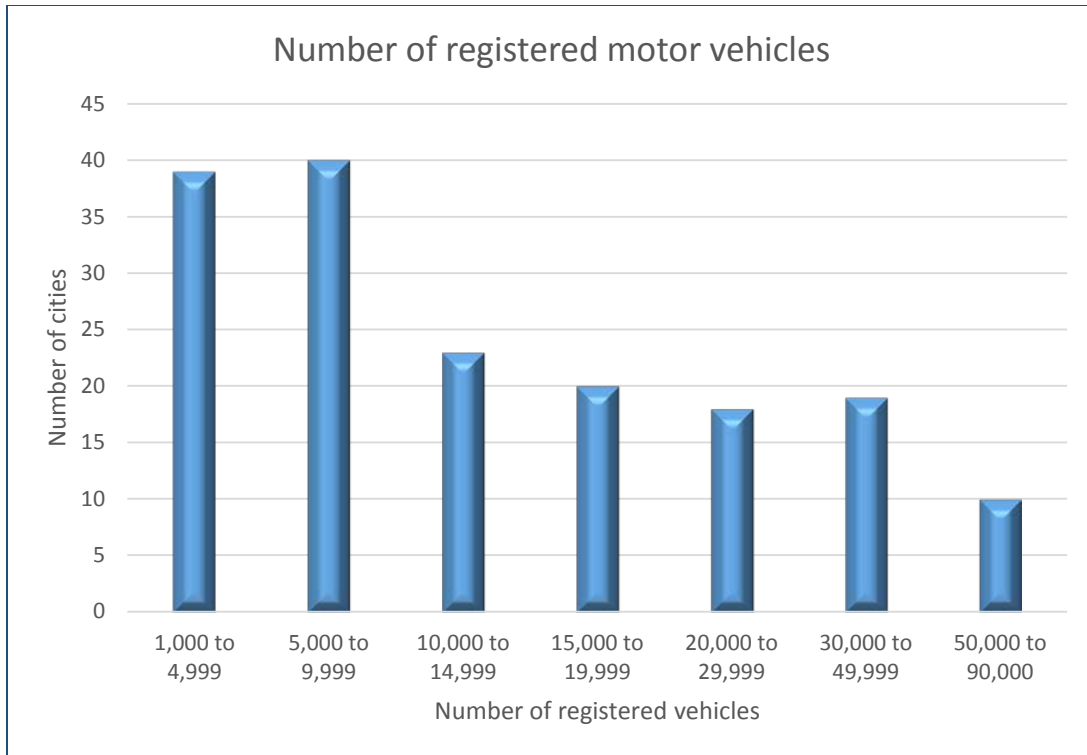
In evaluating the range of approaches taken by states, it seems clear that the variations are based at least in part on differences in state objectives. Those states that view motor vehicles as valuable assets that can be taxed as a source of general government revenue will employ either an ad valorem or excise tax approach. Those states that view motor vehicles in terms of the burden they place on roads are focused more on cost recovery and set their fees accordingly. A third group appears to be focused on simply recovering the cost of the vehicle registration system. Of course it is possible to mix these strategies, as in the case of Indiana.

Administrative challenges

As noted previously, there are over 2.8 million motor vehicles registered in Connecticut. That equates to an average of nearly 17,000 for each assessing jurisdiction. Clearly, the average masks significant variations across the cities and towns. The median number of registered vehicles among the 169 jurisdictions is just under 11,900. The distribution is shown in Figure 5.

Recognizing that the average retail value of each vehicle must be determined each year, the magnitude of the task becomes clearer. Even if valuing 70% of the vehicles can be largely automated using NADA data, the typical city is still left with the challenge of valuing thousands of vehicles each year. It is fair to say that the majority of resources in a local assessor's office are devoted to managing and maintaining motor vehicle accounts and valuations. The task is rendered even more complex given some of the technical administrative challenges associated with the motor vehicle property tax described below.

Figure 5



Source: US Census (2014), Office of Highway Policy Information (2014a) and calculations by the author

Valuing specialized vehicles and mounted equipment

There are over 6,500 heavy trucks registered in Connecticut. Many of these have specialized equipment mounted on the truck. The truck chassis may appear in the NADA database, but the specialized equipment does not. Even commonly available light trucks may have specialized equipment mounted in or on the truck. Local assessors are required to value the complete vehicle each year. To be consistent with the way in which other vehicles are currently valued, assessor must estimate the average retail value of often very specialized equipment.

Given the lack of information on such markets, it is likely that assessors simply depreciate the acquisition cost of the equipment at a fixed rate each year. While this is consistent with the way in which other business personal property is treated in Connecticut, it is probably not consistent with “average retail price.” Potential buyers of such equipment will consider condition, hours of use, maintenance history and other factors that are often unrelated to age. The challenges facing assessors in trying to accurately estimate the current value of the large range of highly specialized vehicles is substantial.

Treatment of antique cars (Lohman 2011)

All antique cars in Connecticut have an assessment limit of \$500 regardless of actual market value. The definition of antique has been expanded over the years. When the limit was originally adopted in 1973, it applied only to vehicles 25 years and older, of historical interest, conforming to the manufacturer’s original specifications and not used for general transportation. (CGS §14-1(2)).

While these restrictions also apply for obtaining a specially designated license plate from the Department of Motor Vehicles, since 2008, a vehicle need not have the special plate to qualify for the assessment limit. Local assessors can require the owner of an antique car to that does not have a special plate to

provide “reasonable documentation” that meets the statutory criteria for an antique vehicle. (PA 09-187 § 29) The statute does not specify what constitutes reasonable documentation.

The requirements to obtain the special plate were changed in 1979 to include motor vehicles other than automobiles and to eliminate the restriction on use for general transportation. In 2005, the age requirement was reduced to 20 years because the NADA values used to determine assessed value stop at that age.

The administrative challenge created by the state’s approach to antique vehicles revolve around discovery and documentation. Unless the vehicle is registered, the assessor generally must rely on the taxpayer to declare the vehicle as personal property, or on the chance discovery of the vehicle while conducting other business. Assessors are left on their own to determine what constitutes reasonable documentation.

Vehicles sold or disposed of during the tax year

State law provides that vehicle owners are entitled to a property tax credit if during the course of the tax year a vehicle is sold, totally damaged, or stolen and not recovered. The credit is the prorated portion of the tax depending on the month in which the sale or other disposal took place. In order to obtain the credit, the taxpayer must file documentation as required by the local assessor.

Based on national statistics (NIADA 2014; Office of Highway Policy Information 2014a), used vehicle sales represent about 17% of the vehicle fleet each year. Assuming that Connecticut follows this national trend (and ignoring thefts and heavily damaged vehicles), this translates into about 487,000 used vehicle sales each year in Connecticut. Again assuming that Connecticut follows national seasonal fluctuation trends in vehicle sales, approximately 360,000 auto sales in Connecticut each year are eligible for a property tax credit in the percentage amount shown in Table 2. Depending on the size of the jurisdiction, each assessor’s office must therefore process anywhere from a few hundred to over 14,000 requests for a motor vehicle property tax credit each year. And each transaction requires the manual review and verification of the documentation provided.

Vehicles relocated out of state

State law also provides for a property tax credit if the vehicle owner moves out of state and registers their vehicle in their new place of residence. The most recent estimates from the US Census Bureau place out migration from Connecticut at about 2.7% of the population each year. (US Census Bureau 2015) If each of these households takes only one vehicle with them, the number of potential credit requests could exceed 75,000 each year.

The documentation required to process such a credit request includes proof that the Connecticut vehicle plates were returned to the Department of Motor Vehicles, and evidence that the vehicle is registered in another state. Manually processing a given request may require only a few minutes, but when multiplied by the volume of applications, an assessor’s office can spend hundreds of hours each year responding to these requests.

Registering Connecticut vehicles in other states

Interviews with several local assessors raised the issue that some Connecticut residents are registering their vehicles in other states in order to avoid the motor vehicle property tax in Connecticut. This issue has also been raised in the press. (Besthoff 2015a, 2015b) This is a difficult claim to evaluate. On the one hand, the trend in total motor vehicle assessed value has generally been increasing since 2003, with the exception of the recession years of 2008 and 2009 and a modest drop in 2012.

On the other hand, vehicle registration and use statistics seem to tell a different story. The number of registered vehicles in Connecticut peaked in 2008 at 3,093,744 (OHPI, 2015 and earlier years). In fact, the number of registered vehicles in Connecticut was very close to this value for the period 2004 to 2010. During this seven year period, vehicle registrations fluctuated between 3.04 million and 3.09 million.

Beginning in 2011, total registrations began to fall sharply. In that year, registrations were 8.2% lower than in the previous year. In 2012, registrations fell another 4.3%. Overall, the decline represented an 11.7% decline from the average of the seven preceding years. Registrations began to rebound slightly in 2013, but were still down 6.8% from the seven year average.

The drop in registrations could be explained by a number of factors. Households and businesses may have been consolidating their vehicle use and reducing the number of vehicles owned. (The number of licensed drivers also fell during these years.) Expanded public transportation options may have reduced the need for private vehicles. (The number of publicly owned buses registered in the state did increase sharply between 2010 and 2012.) And there may be other explanations as well.

The pattern of usage statistics, however, does not support a claim that Connecticut households are driving less. Figure 6 reports three statistics, each indexed to their value in 2005. The values are all indexed to allow direct comparison of the trends in what would otherwise be numbers on very different scales. As discussed previously, the figure shows that the number vehicle registrations was very stable between 2004 and 2010, and then fell dramatically in 2011 and 2012 before rebounding somewhat in 2013.

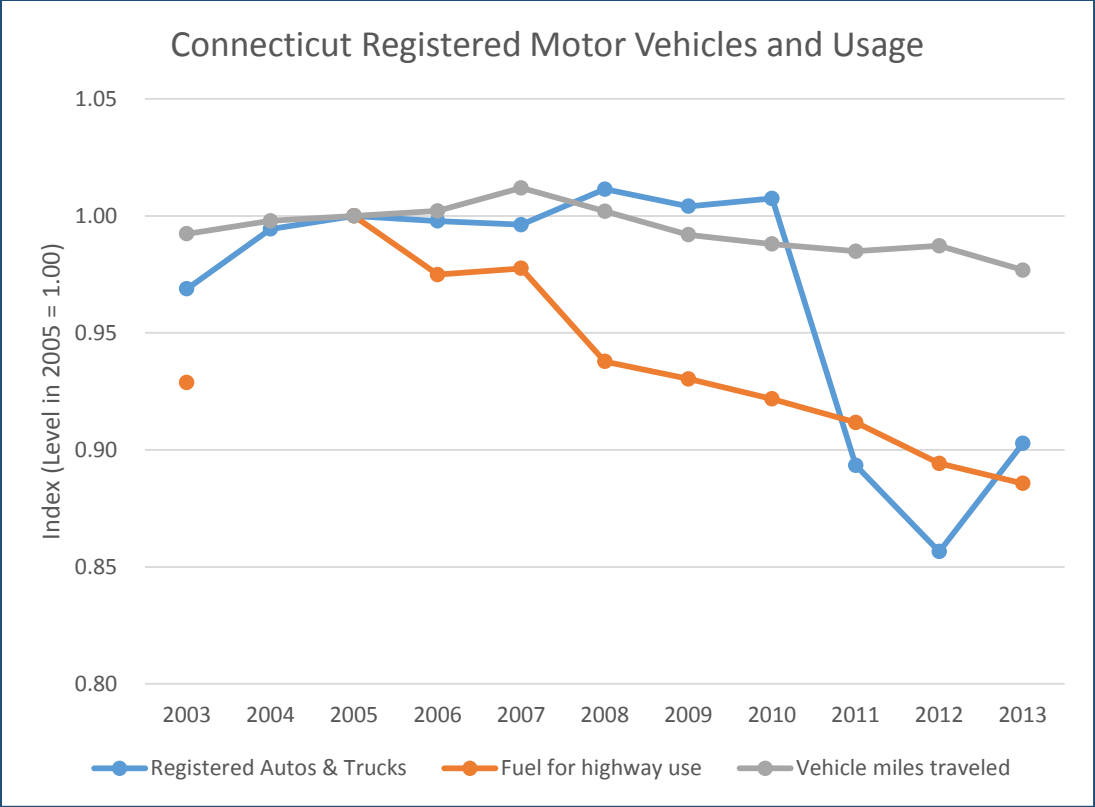
Aggregate fuel sales (gasoline and diesel) for highway use has declined steadily since 2005, but significantly, there was no radical change in the rate of decline beginning in 2011². The same is true for vehicle miles traveled. Miles traveled peaked in 2007, and has since declined at a fairly steady rate. Fuel sales and miles traveled data thus support a conclusion that drivers in Connecticut have not radically changed their driving behavior since 2010. The combined pattern seems to indicate both modest reductions in total driving and improved fleet fuel economy. There were no year-to-year dramatic changes in behavior. The only significant change was in the number of registered vehicles in the state.

Again, it should be stressed that this analysis does not demonstrate conclusively that some Connecticut residents are registering their vehicles in other states. It does demonstrate that the pattern of registrations has changed.

The more relevant question is whether the observed changes are at least in part a behavioral response to the motor vehicle property tax. In this regard, two other pieces of analysis are relevant. First, the change in the relationship between population and vehicle registrations seems to suggest a behavioral change. Figure 7 reports the number of registered vehicles per capita in the state. The change in the level of registrations is clearly seen in the three most recent years.

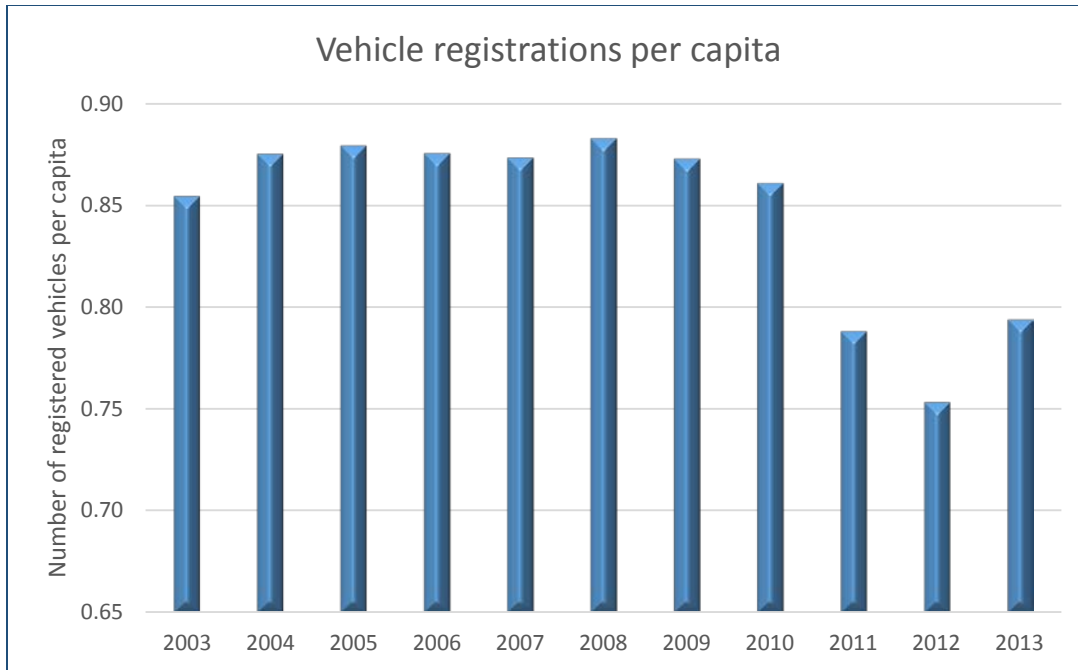
Figure 6

² Fuel sales for 2004 is omitted because the data for that year appears to have an error. Reported Connecticut gasoline sales in 2004 were 16% higher than in any other year on record.



Source: Office of Highway Policy Information (2014a and earlier years)

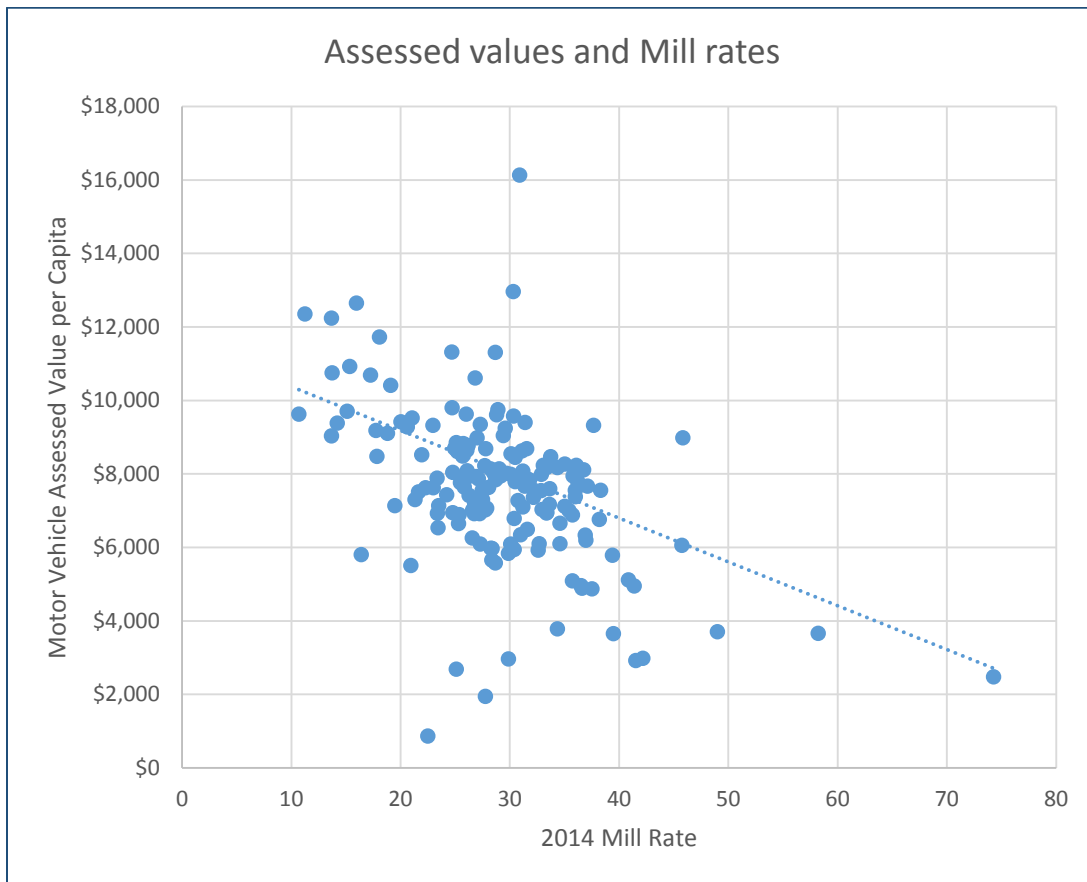
Figure 7



Source: Office of Highway Policy Information (2014a), US Census and calculation by the author

The second relevant point is that there is a pronounced negative correlation (-0.56) between the mill rate in a city and the total motor vehicle assessed value per capita in that city. Figure 8 demonstrates this negative relationship graphically using the 2014 mill rate for each town and the total motor vehicle assessed valuation per capita. The figure shows that cities with high mill rates tend to have much lower total motor vehicle assessed values, while those cities with low mill rates are much more likely to have higher total motor vehicle values per person.

Figure 8³



Source: 2013 Grand Lists by Town, 2014 mill rates, US Census and calculations by the author

It is possible that cities with low mill rates are well off and citizens can afford more expensive cars, while cities with high mill rates tend to have lower valued vehicles on average. The more likely scenario is that there are simply fewer vehicles registered per capita in cities with high mill rates.

- In the 10 cities with 2014 mill rates of 40 or higher, the average number of vehicles per 100 population was 59.4 in 2013.
- In the rest of the state, the average was 85.2 vehicles per 100 population. (US Census Bureau 2014 and calculations by the author.)

Even if vehicle owners are not registering their vehicles in other states, they may be registering them in other Connecticut towns with lower mill rates.

The recent change in the pattern of registrations, the pronounced negative relationship between value per capita and town mill rates, and the lower number of registered vehicles per capita in towns with high mill rates are all consistent with the conclusion that Connecticut residents and businesses are responding to the motor vehicle property tax by changing their behavior. Principles of sound tax policy would suggest that

³ Figure 8 omits three cities with unusually high motor vehicle values per capita: Southington (\$18,245), West Haven (\$36,455) and Easton (\$43,834).

such changes in behavior are unfortunate in that they represent significant economic inefficiency caused by the motor vehicle property tax policies.

Options and observations

Connecticut's motor vehicle property tax is one of the more controversial components of the state's property tax. With 2.8 million registered vehicles, the tax impacts nearly every household and business in the state. The disparities across the state in the amount of tax due on vehicles of the same value have been widely reported in the press. The legislature has debated a number of proposals to change the "car tax," most recently enacting a statewide cap on the mill rate applied to motor vehicles.

As demonstrated by the recent legislative action, any policy change to reduce the impact of the motor vehicle property tax has important revenue implications. The new statewide cap on the mill rate will require the state to reimburse a number of cities millions of dollars for lost revenue. The fact that the state government is facing its own fiscal challenges means that such continued reimbursements will be difficult to maintain. City governments are acutely aware of the insecurity created by state promises to increase transfers in a period of strong fiscal pressure on state coffers.

There are other options that the state might wish to consider. This section discusses several options that have been proposed or that the state may wish to consider. What must be born in mind however is that revenue neutrality overall for cities and towns cannot be achieved without either supplementing the motor vehicle property tax from other sources or by increasing the tax burden in some communities. State mandated mill rates or statewide single rates will inevitably increase the tax burden in some communities unless the mill rate is set at the lowest current level in the state (less than 11 mills). A rate that low would be a substantial benefit for vehicle owners, but would seriously undermine local government finance in many communities.

The greater the overall reduction in the motor vehicle property tax, the greater will be the need for cities to take some combination of three actions:

- Increase the mill rate on remaining property classes in order to replace the lost revenues
- Increase the revenue from other sources such as state transfers, regional revenue sharing or new tax sources
- Cut services and related spending

Option #0: Maintain the status quo

The state has recently imposed a cap on local mill rates for motor vehicles for the next fiscal year. The rate will be lowered even further in the following year. While this action does not eliminate tax inequities, it may reduce it to an acceptable level. It may be prudent to wait for these changes to take effect before considering more extreme measures.

Option #1a: Retain the current ad valorem system but impose a revenue neutral single statewide rate and "hold harmless" provisions for towns losing revenue.

In the context generated by the current statewide cap on the mill rate for motor vehicles, the estimated single rate that would generate the same amount of revenue would be about 28.1 mills. The result would be that vehicle owners in 73 towns would pay higher taxes for their vehicles; on average about 28.9% higher. The increased revenue generated from these towns would be used to offset the lost revenue in other parts of the state.

Owners in the remaining 96 communities would pay lower taxes; about 15.4% lower on average. These communities would be held harmless for the lost revenue with funds generated in the 73 communities with increased tax revenues.

In 20% to 25% of the cities and towns, the change in tax bills for the community would be very modest (less than 5%). Given the numbers of winners and losers, and the magnitude of the losses and gains, this will continue to be a very controversial alternative.

Option #1b: Retain the current ad valorem system but impose a statewide single rate with an optional additional local rate (De Avila 2015)

Under this option the motor vehicle mill rate would have two components: a uniform state rate and a local rate. Each local jurisdiction would be allowed to set their own rate up to a maximum state-approved rate. For example, if the state uniform rate were set at 3 mills, and based on the 2013 Grand List, the state would raise about \$70 million from the motor vehicle property tax. If the cap on local rates were set at 26.5 mills and local governments could elect any rate they choose up to that level, the overall maximum mill rate for motor vehicles would be 29.5 mills.

Assuming that governments would choose the lower of either their current mill rate or 26.5 mills, local governments would see a shortfall in current revenue levels by about \$70 million. This revenue shortfall would be replaced using the \$70 million in the state fund.

To be clear, the \$70 million collected by the state would be collected from all localities. The revenue generated would be used to compensate towns whose mill rate is currently above 29.5 and who would be required to lower their local rate to the state maximum of 26.5 mills. The total rate would be the combined state and local rate (29.5 mills maximum). Thus, there would be a net increase in taxes paid by vehicle owners in communities with current mill rates below 29.5. The relative size of the increase will depend on the current mill rate. Cities with very low mill rates (e.g., 11 mills) would see increases of 25% to 30%, but the average increase would be about 11%. About half the cities and towns would experience some increase in taxpayer obligations, but would see no change in their total revenue from the car tax.

The other half of the cities would see the tax obligations of their vehicle owners decline by about 6% on average. Again, even though tax bills would decline, city revenue losses would be compensated using the pool generated by the state mill rate.

Clearly, this option has multiple design parameters which could be modified and such modifications would affect the distribution of outcomes, both tax reductions and tax increases. The point is that under this option, the state generates the revenue to replace lost local revenues that result from reducing the motor vehicle mill rate by imposing a net tax increase in all other communities. As with option 1a, this approach is likely to be very controversial.

Option #2a: Replace the current ad valorem tax with an excise tax

Under this option the current ad valorem tax on motor vehicles would be repealed and replaced with an annual excise tax based solely on the manufacturer's suggested retail price (MSRP), and the age and type of vehicle. The base will be some predetermined percentage, say 70%, of the MSRP, regardless of actual acquisition cost. The annual change in taxable value is determined by the age of the vehicle. Both of these calculations would be carried out by the Department of Motor Vehicles.

A fixed excise tax rate would be applied to all vehicles in the state. For ease of compliance and administration, the excise tax could be collected by the Department of Motor Vehicles when the

registration is renewed. Since the state collects sales tax on new vehicle purchases, it might be reasonable to begin applying the excise tax at the first registration renewal, and each year thereafter, for new purchases. The rate is determined by the legislature and, under this option, is the same for all vehicles in the state in a given year. Knowing the value of the base from existing registration data, the rate is set at a level that will yield the desired level of revenue.

The Box provides a numerical example of how the excise tax might work in Connecticut. The numbers are only illustrative of the approach because the actual distribution of vehicle ages and MSRPs for Connecticut is not known to the author. However, the data does exist in the state's vehicle registration system. The data employed in the example are based on the actual fleet age distribution from another state and the best available information on the historical average MSRP. The total vehicle count is taken from Connecticut.

The point of the example shown is to illustrate the differences between an excise tax and the current ad valorem property tax. With an excise tax, no effort is made to determine actual market value either at acquisition or annually thereafter. The initial value is determined by the published MSRP, and the MSRP is subsequently reduced by a fixed percentage each year. This calculation yields the base for the excise tax.

The revenue could be collected by each local tax collector as the motor vehicle tax is now, but since the parameters of the tax are predetermined, it would likely reduce compliance costs for taxpayers and administrative costs for local jurisdictions if the tax were collected as part of the vehicle registration process. As is the case in Indiana, an optional local surtax could be added to the state tax if that is desirable. After collecting the tax, the state would forward the revenue to cities and towns based on the vehicle registration address.

The advantage of the excise tax approach is that it is based on a clearly stated functional relationship between original MSRP and vehicle age and does not require judgments regarding market value. Under this option as described, the tax rate would be uniform across the state. Administration of the tax after the transition period would likely be much simpler than the current system.

The disadvantage of the excise tax approach is that because the rate is uniform across the state, and given the amount of revenue needed to approximate current revenue levels, the actual tax obligation of vehicle owners in jurisdictions with very low mill rates will likely increase.

Box 1: Excise Tax Example

A state seeks to raise \$675 million annually through an excise tax on motor vehicles. The tax will apply to all vehicles beginning with the first registration renewal. It is estimated that a rate of 2.41% will achieve the desired target, based on the following table of age and MSRP values.

Table B.1: Age and MSRP value of the existing vehicle fleet

Vehicle Age	Average MSRP Value New	Percent of fleet	Number of vehicles	2.41% Excise tax per vehicle	Revenue estimate (millions)
0				0	
1	32,620	6.09%	174,107	\$550	\$95.76
2	31,760	6.92%	197,864	\$485	\$95.88
3	30,910	5.65%	161,550	\$427	\$68.97
4	30,660	4.69%	134,074	\$376	\$50.43
5	29,790	4.58%	130,860	\$331	\$43.37
6	28,970	4.07%	116,485	\$292	\$34.01
7	28,350	6.27%	179,308	\$257	\$46.13
8	28,800	7.07%	202,236	\$227	\$45.84
9	28,350	6.91%	197,426	\$200	\$39.43
10	27,850	6.69%	191,360	\$176	\$33.67
11	27,350	6.14%	175,495	\$155	\$27.21
12	26,850	5.72%	163,584	\$137	\$22.34
13	26,350	5.35%	152,822	\$120	\$18.39
14	25,850	5.03%	143,655	\$106	\$15.23
15	24,750	4.71%	134,594	\$93	\$12.57
16	21,050	4.00%	114,482	\$82	\$9.42
17	17,200	3.24%	92,544	\$73	\$6.71
18	16,900	2.90%	82,838	\$64	\$5.29
19	16,300	2.05%	58,639	\$56	\$3.30
20	15,500	1.91%	54,615	\$50	\$2.71
Total			2,858,538		\$676.68

Source: Calculations by the author

Option 2b: Replace the current ad valorem tax with an excise tax and allow local governments to set the rate

Under this option, the base for the excise tax would be calculated by the Department of Motor Vehicles in the same manner as under Option 2a. But rather than a uniform rate across the state, local cities and towns would be allowed to set their own rates within the range approved by the legislature. Local governments would also collect the tax as is currently the case with the motor vehicle property tax.

The advantage of this approach over Option 2a is that it retains a higher degree of local autonomy and control over the amount of revenue collected from local vehicle owners. As with Option 2a, another advantage is that the burden of estimating vehicle value is removed from local assessors and determining the base for the tax becomes fairly mechanical.

An important disadvantage of this option is that while it preserves local autonomy, it also will likely preserve the extreme differences in effective tax rates currently seen across the states. To the extent that taxpayer behavior is influenced by the current vehicle property tax, it will likely also be influenced by an excise tax rate determined by local authorities.

Option 3: Replace the current ad valorem tax with an excise tax based on vehicle weight

As noted in Table 4, some states take the position that the purpose of the revenue collected from motor vehicles is to partially recover the cost of constructing and maintaining the roads used by those vehicles. Similar to the tax on motor fuels, under this reasoning the tax on motor vehicles approaches a user charge. Since the damage done to roadways by vehicle use is largely a function of the vehicle's weight, it makes sense to base the excise tax on the weight of the vehicle.

The tax would likely not vary with the age of the vehicle. The tax rate would be much lower than the present ad valorem tax, especially for passenger vehicles and light trucks. It would be assessed and collected as part of the vehicle registration and re-registration process.

A similar approach is used to calculate the use tax for heavy trucks. The Federal Heavy Vehicle Use Tax (HVUT) is calculated on vehicles with a gross weight⁴ in excess of 55,000 pounds. The tax amount is \$100 plus \$22 per 1,000 pounds over 55,000 pounds for vehicles up to 75,000 pounds. For vehicles over 75,000 pounds, the tax is \$550. (Office of Highway Policy Information 2014b) Option 3 would simply extend this reasoning to all vehicles, though the rates could be quite different.

The advantage of this approach is that it converts the tax to a user charge and makes assessment and collection much easier. The major disadvantage is that a narrowly focused user charge would likely result in much lower overall revenue levels. The lost revenue for local governments would very likely need to be replaced by some other source, either from the state or an alternative revenue source for local governments.

Option 4: Replace the 30% assessment exemption with a fixed dollar exemption

At present, all motor vehicles are assessed at 70% of their average retail value, thus granting all vehicle owners an exemption of 30%. The resulting vehicle assessed values are then taxed at a uniform rate within each jurisdiction. The result is that all vehicle owners within a given jurisdiction pay the same tax rate. But this approach violates some approaches to equity. To illustrate this point, consider the example in Box 2.

Box 2: The equity of a fixed percentage assessment exemption

- Vehicle A has a current average retail market value of \$60,000. With a 70% assessment ratio, the taxable value of this vehicle is \$42,000.
- Vehicle B has a current average retail market value of \$6,000. With the same assessment ratio, the taxable value of this vehicle is \$4,200.
- Both vehicles are garaged in the same community and are taxed at 25 mills.
- The tax on Vehicle A will be \$1,050, and the tax on Vehicle B will be \$105.
- The 30% assessment exemption saves the owner of Vehicle A \$450
- The same 30% assessment exemption saves the owner of Vehicle B only \$45

The 30% assessment exemption thus grants a much

⁴ The unloaded weight of the vehicle plus the weight of the maximum load customarily carried on the vehicle

larger benefit to the owners of more expensive vehicles. As the example illustrates, granting a fixed percentage exemption to all vehicle owners inevitably extends much greater benefits to owners of more expensive vehicles.

If this outcome is considered either unfair or too expensive, one alternative is to replace the fixed percentage exemption with a fixed dollar exemption. Under this option, the 70% assessment ratio for motor vehicles would be repealed. It would be replaced with an exemption granted to each vehicle owner of a specific dollar amount. The taxable value of a vehicle would thus be the current average retail value less the state-specified dollar amount.

To illustrate the approach, the example in Box 2 is updated with an exemption of \$3,600 in Box 3. Because all vehicles receive the same dollar exemption, all owners receive the same dollar benefit. Further, if the current value of the vehicle is less than the dollar value of the exemption, there is no property tax due on the vehicle.

Based on the currently available data, it appears that replacing the current 30% assessment exemption with a dollar exemption of \$3,600 would be revenue neutral in terms of the statewide revenue collected. But again, this masks the likely impact on individual communities.

Using the best available American Community Survey estimates for vehicle counts by town and 2013 Grand List values, it is estimated that 47 cities and towns will see revenue increases of \$100,000 or more with this change in approach. At the same time, 34 communities will experience revenue declines in excess of \$100,000. Because the exemption is essentially revenue neutral at the state level, the gains in some communities could be used to offset losses in other jurisdictions without additional state aid.

The larger impact will actually be on individual vehicle owners. Owners of expensive vehicles will see substantial tax increases even in cities with very low mill rates. Under the current system these owners enjoy exemptions valued in the tens and hundreds of thousands of dollars. Under this option, the exemptions on such vehicles would largely disappear.

On the other hand, for vehicle owners of modestly priced vehicles, the value of the fixed dollar exemption will often be substantially higher than the current 30% exemption. For owners of vehicles at about the state average value, there will be little or no difference in their tax obligation. More precise simulations of this option should be readily possible using Department of Motor Vehicles data by town.

Option 5: Repeal the motor vehicle property tax

This option would simply do away with the motor vehicle property tax. The tax is very unpopular with vehicle owners. At least sixteen other states have abolished any tax on motor vehicles connected to the

Box 3: Replacing a fixed percentage assessment exemption with a fixed dollar exemption

The state-mandated exemption is \$3,600 per vehicle.

- Vehicle A has a current average retail market value of \$60,000. With the exemption, the taxable value of this vehicle is \$56,400.
- Vehicle B has a current average retail market value of \$6,000. With the exemption, the taxable value of this vehicle is \$2,400.
- Both vehicles are garaged in the same community and are taxed at 25 mills.
- The tax on Vehicle A will be \$1,410, and the tax on Vehicle B will be \$60.
- The exemption saves both owners \$90

The fixed dollar exemption thus grants both owners equal benefits.

value of the vehicle.⁵ Abolishing the tax would remove any vehicle-related behavioral incentives that reduce the efficiency of the state's economy. The action would be politically very popular with taxpayers.

Of course, the disadvantage of this option is that it has striking revenue implications. Even with the state mill rate cap in place the motor vehicle property tax generates over \$650 million each year, or about 7% of local government tax revenue. Cities and towns would either need to replace the revenues from some other source, cut services or a combination of both.

Concluding observations

As unpopular as the current motor vehicle property tax may be, it generates significant revenues for local governments. On the other hand, the variations in local mill rates create substantial inequities in the taxes paid for similarly valued vehicles in different cities. The evidence suggests that these inequities, in combination with the actual level of the tax, actually distort taxpayer behaviors in ways that reduce the efficiency of the state's economy. Finally, given the number of legislative proposals to change or eliminate the car tax and the amount of attention the issue receives in the press, it appears that there is political interest in making further changes to the current tax.

Finding an acceptable alternative is challenging. Essentially any approach that attempts to both promote increased equity and remain revenue neutral will create large numbers of taxpayers with higher tax obligations enroute to reducing the tax bills for other vehicle owners. It appears that there are only a few courses of action available:

- 1) Increase the taxes paid by some in order to achieve uniformity and equity statewide
- 2) Continue the current course of capping the maximum tax rate (and therefore the amount of acceptable inequity) and either
 - a. replace the lost revenue from state resources or
 - b. provide local governments with an alternative revenue source under local control
- 3) Abandon the tax on motor vehicles as a significant source of revenue and either
 - a. replace the lost revenue from state resources or
 - b. provide local governments with an alternative revenue source under local control
- 4) Mandate equity in motor vehicle taxation, phased in over a sufficient time period to allow local governments to adjust to lower revenues, higher taxes on the remaining property tax base or a combination of both

In terms of tax administration, moving away from an ad valorem tax to an excise tax would greatly reduce the cost of administering the tax. In itself, such a change will not address the larger question of balancing equity and revenue needs. But reducing administrative costs is also worthy of state attention.

⁵ Utah has an annual fee in lieu of tax that is based solely on the age of the vehicle. Utah Dmv, 'Uniform Fees', (updated 17 December 2014), accessed October 2015 2015.

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