



CONNECTICUT TAX PANEL

Volume 3

Statement of Final Recommendations
Accompanied by
Staff Study Papers on the Property Tax and
Local Revenue Diversification

CONNECTICUT TAX PANEL

Contents of Volume 3

Preface

Statement of Final Recommendations

Staff & Consultant Papers on the Property Tax and Local Revenue Diversification

Preface

The work of the Connecticut Tax Panel is published in three volumes. Volume 1 has two parts. The first is the *Connecticut Tax Panel Final Report* that includes the policy recommendations as transmitted to the Governor and the General Assembly on December 31, 2015. The second part of Volume 1 is a separate *Staff Report* designed to give context to the Panel's recommendations. The *Staff Report* draws on a series of eighteen consultant research papers that were presented to the Tax Panel during its policy deliberations, and as such does not necessarily represent the view of either the Tax Panel as a whole, or any member thereof. The only document that represents the Panel's views is the *Connecticut Tax Panel Final Report of Policy Recommendations*.

Volume 2 is also presented in two parts. For purpose of completeness and continuity, the first part of Volume 2 presents the full text of the Panel's *Final Report* Recommendations as transmitted on December 31, 2015. The second part is a compendium of consultant papers that provides background research on the Connecticut economy and its revenue system, and then proceeds to an analysis of the state's major state revenue sources.

Volume 3 again leads with the Tax Panel's *Final Report*. This *Final Report* section is followed by a set of consultant and staff papers on the topics relating to the local revenue system—the property tax and local revenue diversification. As with the other two volumes, the staff and consultant research papers represent only materials presented to the Tax Panel, and thus do not necessarily represent the view of either the Tax Panel as a whole, or any member thereof.

In making its recommendations, the Tax Panel adopted a strict rule of *revenue neutrality*. There are two facets to this rule. The first, pertains to the analysis of options for changing the structure of each type of state or local tax examined. Thus, when a tax policy option was identified that broadened (narrowed) the base of a specific tax, the rule required that the statutory tax be reduced (increased) in order to generate an equal-yield amount of tax collected. This allowed the Panel to make statements regarding how well a policy option for a given tax would meet the tests of *Guiding Guidelines and Criteria for Evaluating Changes to the Connecticut State and Local Revenue System* that the Panel adopted on May 12, 2015. This statement of the Panel's normative policy criteria is presented as the first paper in Volume 2.

Second, there is the principle of “revenue neutrality” as applied to the Panel's overall set of policy recommendations. Here the rule was applied that recommended changes in the state and local tax system as a whole must generate the same amount of revenue as the current system. Thus, in circumstances when there was a recommended change in a tax or taxes that led to an overall increase (decrease) of revenues to the state/local system, the Panel did not have the option to make recommendations for compensatory changes on the expenditure side of the budget. Rather, it set the rule that it must identify what other revenues might be decreased (increased) to maintain a tax system equal-yield of tax in the aggregate.

Tax Panel *Final Report* Transmittal of Final Recommendations
To the Governor and the Connecticut General Assembly

December 31, 2015

State of Connecticut
GENERAL ASSEMBLY



STATE TAX PANEL
ROOM 501 STATE CAPITOL
HARTFORD, CONNECTICUT 06106

December 31, 2015

Governor Dannel P. Malloy
State of Connecticut

The Honorable Brendan Sharkey
Speaker of the House

The Honorable Martin Looney
Senate President

The Honorable Joe Aresimowicz
House Majority Leader

The Honorable Bob Duff
Senate Majority Leader

The Honorable Len Fasano
Senate Republican Leader

The Honorable Themis Klarides
House Republican Leader

The Honorable John Fonfara
Senate Chair, Finance, Revenue and Bonding
Committee

The Honorable Jeff Berger
House Chair, Finance, Revenue and Bonding
Committee

The Honorable Scott Frantz
Senate Ranking Member, Finance, Revenue and
Bonding Committee

The Honorable Christopher Davis
House Ranking Member, Finance, Revenue and
Bonding Committee

Re: State Tax Panel

By this letter we transmit the condensed final report of the State Tax Panel as is required pursuant to PA 14-217 (Section 137). This report will be available in its entirety as of February 28, 2016.

The recommendations are the result of hearings and meetings over many months and represent the consensus reached on the major elements of the Connecticut tax code. In some cases there were dissenting votes, as noted.

We wish to thank the members of the Tax Panel for their invaluable service. We also wish to thank the Panel's staff leaders, Robert D. Ebel and Michael E. Bell, and the chief administrator Mary E. Finnegan.

Sincerely,

William H. Nickerson
Co-chair

William R. Dyson
Co- chair

TAX PANEL MEMBERSHIP & STAFF 2015

Co-chairs: William Dyson and William H. Nickerson

Voting Members:

1. Melinda Agsten, Partner, Wiggin and Dana LLP
2. Alfred Casella, Partner, Murtha Cullina, LLP
3. Alan Clavette, CPA, Clavette and Company, LLC
4. William Dyson, Co-Chair, Former O'Neill Endowed Chair, CCSU
5. John Elsesser, Town Manager, Town of Coventry
6. Marian Galbraith, Mayor, City of Groton
7. Christiana N. Tiana Gianopulos, Senior Counsel, Day Pitney, LLP
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9. Anika Singh Lemar, Clinical Associate Professor, Yale Law School
10. Donat C. Marchand, Partner, Ivey, Barnum, and O'Mara. LLC
11. William H. Nickerson, Co-Chair, CEO, Eugene A. Hoffman Management
12. David Nee, Board Member, CT Voices
13. Louis B. Schatz, Partner, Shipman and Goodwin, LLP
14. Robert Testo, Principal, RJ Testo and Associates

Ex-Officio Members:

1. Rep J. Brendan Sharkey, Speaker of the House
2. Sen. Marty Looney, President Pro Tempore of the Senate
3. Ben Barnes, Secretary, Office of Policy and Management
4. Kevin Sullivan, Commissioner, Department of Revenue Services
5. Sen. John Fonfara, Senate Chair, Finance, Revenue and Bonding Committee
6. Rep. Jeff Berger, House Chair, Finance, Revenue and Bonding Committee
7. Sen. Scott Frantz, Ranking Member, Finance, Revenue and Bonding Committee
8. Rep. Chris Davis, Ranking Member, Finance, Revenue and Bonding Committee

Other: Patricia Widlitz, Former House Chair, Finance Committee (2014)
Sean Williams, Former House Ranking Member, Finance Committee (2014)

Staff: Robert D. Ebel, Executive Director
Michael E. Bell, Director, Intergovernmental and Local Finance
Mary E. Finnegan, Administrator

Recommendations of the Connecticut Tax Panel
December 2015

1. Connecticut Personal Income Tax
2. Connecticut General Retail Sales Tax
3. Connecticut General Business Taxation
4. Connecticut Estate and Gift Taxation and Probate Fees
5. Property Tax and Local Revenue Diversification
6. Memoranda of Panel Member Comment

1. The Connecticut Personal Income Tax December 2015

Recommendation 1. Taxation of Retirement Income

Other than federally excluded income, tax all retirement income including military and teacher retirement income similar to the state's treatment of social security income.

- Revenue Implications: Base broadening will allow for a reduction in statutory tax rates due to the long run capture of the trend of a growing segment of the Connecticut population that is of retirement age (Age 65 and older increasing from 18.6% in 2015, to 20.7% in 2020, to 23.5% in 2025).
- Adopted with Panel Members Galbraith, Schatz, and Testo dissenting

The following three draft options do not have a significant revenue impact that differs from the current set of revenue projections.

Recommendation 2. Connecticut Definition of Adjusted Gross Income

- Retain the Connecticut definition of Adjusted Gross Income as the starting point for calculating the Connecticut Personal Income Tax.
- Adopted without dissent.

Recommendation 3. The Earned Income Tax Credit (EITC)

- Retain the Earned Income Tax Credit. Increase the credit from an amount equal to 27.5% to 30% of the federal earned income tax credit (Current Connecticut law phases in this increase by FY 2017).
- Adopted without dissent

Recommendation 4. Net Capital Gains Income

- Retain the tax treatment of taxing net capital gains income at the same rate as all other income in the Connecticut income tax.
- Adopted without dissent

2. The Connecticut General Retail Sales Tax December 2015

Recommendation 1. Remote Sales Transactions

Connecticut should remain aggressive in the taxation of remote purchases (e-commerce, mail order, cross-border shopping) destined for Connecticut residents by pursuing opportunities to expand the definition of *nexus* through administrative procedures and, if needed, through legislation. As part of its enforcement the state should require sellers to collect and remit the tax.

- Revenue Implication: Systematic and uniform capturing of such transactions will exert a downward pressure on statutory tax rates.
- Adopted without dissent

Recommendation 2. Digital Downloads

Tax retail consumption of digitized versions of goods at the same standard retail sales tax rate as other goods. As part of the enforcement strategy the state should look to use sellers, wherever they are located, to collect and remit the sales tax.

- Revenue implication: Base broadening overtime to allow for lower statutory tax rates.
- Adopted without dissent

Recommendation 3. Shared Economy

Ensure that the sharing economy is taxed similarly to the traditional economy. Recognizing that the sharing economy is still in its early stages of development, the General Assembly should provide legislative support to the Department of Revenue Services in its efforts to identify the size of the tax base as well as to capture the tax due at retail by requiring the sharing economy organizing business entity to collect and remit tax due.

- Revenue Implication: Base broadening overtime to allow for lower statutory tax rates.
- Adopted without dissent

Recommendation 4. General Application of Sales and Use Tax

Adopt the presumption that the Connecticut sales tax on final consumption be broadly applied to all goods and services sold at retail. If exclusions, exemptions or credits are to be allowed, the General Assembly must be explicit in its rationale for such treatment.

- Revenue Implication: Base broadening to allow for lower statutory tax rates.
- Adopted with Panel Members Clavette, Marchand and Schatz dissenting

Recommendation 5. Eliminate Sales Tax Holidays

Eliminate the practice of a sales tax holiday

- Revenue Implication: An increase of \$5.2 m in retail sales tax yield would result in a less than 0.2% reduction in the standard statutory rate (FY 2014)
- Adopted without dissent

3. Connecticut General Business Taxation The Corporate Net Income (Profits) Tax and Its Alternatives December 2015

Analysis of Replacing the Corporate Net Income (Profits) Tax with a Broad Based/Low Rate General Business Tax Alternative

Recommendation 1. Alternatives to the Corporate Net Income Tax and Business Taxes

The Tax Panel finds that the taxation of the current corporate net income tax base violates many its adopted criteria for a high quality tax system. Therefore, the state shall undertake, through the Department of Revenue Services, a study of the structural impacts and tradeoffs of replacing the corporate net income tax with a broad based/low general business tax to be imposed uniformly on corporate and non-corporate businesses alike. In carrying out this study, which will include an examination of both a gross receipts tax and a value added tax, the state shall also examine how the adoption of a broader base and lower rate tax can become a vehicle for a single-business-tax strategy for further modernizing and stabilizing the current business tax system. This single-business tax analysis will include (i) eliminating the capital base system; (ii) phasing-out the proliferation of tax credits that can now be applied against the corporate net income tax; and (iii) phasing-in the exemption of business-to business transactions from the retail sales tax, and (iv) applying a less stringent ownership rule for business-to-business purchases when services are sold between a parent and a subsidiary.

- Revenue implications: The analysis is to be carried out on an equal-yield/revenue neutral basis of the alternatives *vis-à-vis* the current tax treatment of corporate and non-corporate entities alike.
- Adopted without dissent.

Relating to the Existing Corporate Net Income Tax

Recommendation 2. Capital Base System

Eliminate the capital base (stock) tax that serves as an alternative method of calculating taxpayer corporate income tax liability.

- Revenue implications: since, at present, the corporate taxpayer is required to pay the higher of the two tax liability calculations -- capital base and net income -- any revenue losses would be made up by raising the corporate net income tax rate and/or placing limits on the issuance of new credits against the net income tax.
- Adopted without dissent.

Recommendation 3: Proliferation of Tax Credits

Discontinue the practice of issuing new tax credits that erode the base of the corporate net income tax, and also evaluate existing credits as to whether they are achieving their intended objectives. If credits are intended to provide general tax reduction, then phase out the credits and lower the statutory rate. If credits are intended to promote economic development, then efforts are to be made to identify alternative and transparent policies that can promote economic growth at lower revenue costs to the state.

- Revenue Implications: Elimination of credits paid in 2012 would have reduced the corporate statutory rate by 1.9 percent. The elimination of credits and credit carry forwards will put long term downward pressure on corporate income tax rates.
- Adopted without dissent

Recommendation 4. Mandatory Unitary Reporting

Maintain mandatory combined reporting for business entities that are part of a unitary business; require that unitary groups be broadly inclusive.

- Connecticut requires unitary reporting commencing with the 2016 tax year. Only a modest revenue gain is anticipated from adopting mandatory reporting.
- Adopted with Panel Member Galbraith dissenting.

Recommendation 5. Apportionment of Multi-state Income.

Broadly adopt single sales apportionment factor based on market (destination) sourcing for the taxation of corporate and non-corporate business activities alike.

- Revenue Implications: The adoption of market sourcing is not projected to result in a significant change in revenue yield
- Adopted without dissent

Recommendation 6: Claiming of Net Operating Loss

Reinstate full use of Net Operating Losses.

- Revenue implications: With an estimated annual revenue loss of \$90.1 million in FY 2016. Revenue neutrality will require raising the standard corporate tax rate of 7.5% to 8.2%. These numbers do not address the treatment the current unfunded contingent liability of claimable net operating losses totaling \$78 billion.
- Adopted without dissent

4. The Connecticut Estate and Gift Tax and Probate Fees December 2015

- All Recommendations Approved Without Dissent

Recommendation 1. Basic Structure and Effect on Taxpayer Migration Effect

For the present retain the current estate tax exemption level of \$2 million of the adjusted estate. The State should then (i) further examine the option of phasing in the level of tax exemption in conformity with federal law and (ii) continue to monitor data for tax induced taxpayer migration flows.

Recommendation 2. Portability

Provide “portability” of the Connecticut estate tax exemption between spouses such that the unused exemption of the first to die may be claimed by the second-to-die’s estate as permitted for federal estate tax purposes.

Recommendation 3. Qualified Terminable Interest Property

Review current practice to ensure the full implementation of a Connecticut Qualified Terminable Interest Property (QTIP) election regardless of whether a federal QTIP election is made and independent from a federal QTIP election such that married couples can defer state estate taxes until the second death.

Recommendation 4. Gift Tax

Repeal the Gift tax; continue to apply a rule that gifts made in contemplation of death are included in the value of the estate.

- Revenue Implications: Taken together, portability, QTIP, and elimination of the Gift Tax reduce E&G revenues by about 50% of current yields (\$207m to \$106m in FY 2014).

Recommendation 5. Estate Filing Dates to Conform to Federal Law

Replace the Connecticut deadline for filing an estate return from the current practice of six (6) months following the decedent’s death to conform to the federal practice of nine (9) months.

- Revenue Implications: A delay in Estate and Gift tax revenues in the fiscal year of implementation. For the Probate Court, a reduction in \$7.4 million in probate fees is anticipated for the year in which the transition occurs (FY 2016 estimate). In addition, there is an ongoing annual loss of interest revenue to the Probate Court. For FY 2016 the interest loss is estimated to be \$200,000.

Recommendation 6. Probate Fee Structure

Revise the current formula of the probate fee for decedents’ estates so that it reflects an appropriate level as a direct user fee for estate settlement rather than a vehicle for paying for essential judicial services unrelated to decedents’ estates.

- Revenue Implications. The present treatment whereby probate fees are designed to fully cover the cost of Probate Court Administration results in a highly unstable revenue source to the Probate Court. This revenue instability reflects the uncertainty of the length of time an estate may be in probate. In some years the Court may largely cover its operating costs; in others it may be required to cover net operating losses through temporary borrowing from other state agency funds.

5. Property Tax and Local Revenue Diversification

December 2015

Administrative Issues

Recommendation 1: Fractional Assessment.

Eliminate the 70 percent fractional assessment and define assessed value as 100 percent of estimated market value. When this transition is made, all municipalities must lower their property tax mill rate to raise the same amount of revenue as they raise currently.

- Revenue Implications: Revenue Neutral.
- Adopted without dissent

Recommendation 2: Assessment Cycle

Eliminate the 5-year reassessment cycle and institute annual reassessment. To ensure an accurate description of each property retain the 10-year physical inspection requirement. This recommendation should be implemented over a five-year period. The Tax Study Panel recognizes there may be some cost implications for municipalities and recommends ways to mitigate increased costs resulting from moving toward annual reassessments should be explored. For example, 13 municipalities have already joined together for regional revaluations.

- Revenue Implications: During the five-year transition revenue neutrality can be accomplished by reduced mill rates to accompany base broadening as properties reassessed to reflect current market value.
- Adopted without dissent

Recommendation 3: Local Fiscal Disparities

The Tax Study Panel's mandate is to review the state's overall state and local tax structure. The Panel affirmed at its May 2015 meeting it would not look at state and local expenditure policy. Accordingly, addressing the magnitude and design of state grants to local governments in Connecticut is beyond the Panel's scope of work. However, in view of evidence presented to the Panel that there are significant differences in property tax capacity of municipalities (fiscal disparities) across municipalities, the Panel concludes that state grant policies should be re-examined in an effort to further relieve pressure on the property tax and to equalize fiscal disparities.

1. Property taxes are regressive.
 2. The property tax fails to meet requirements of horizontal and vertical equity.
 3. The property tax system is detrimental to Connecticut's economic competitiveness
 4. State grant policies should be re-examined in an effort to further relieve pressure on the property tax to address fiscal disparities across municipalities.
 5. The State needs to look at the distribution formula which addresses closing the "need-capacity gap."
- Revenue Implications: Revenue Neutral
 - Adopted without dissent

Tax Exempt Properties

Recommendation 4: Payments in Lieu of Taxes (PILOT)

The Panel recommends retention of Connecticut's existing statutory scheme for *payment-in-lieu-of-taxes* (PILOT) grants from the state to municipalities that is designed to recognize that state properties, hospitals, and colleges and universities serve regional and statewide communities. The Panel acknowledges that funding of this existing program is outside the scope of the Panel's charge, and it consequently makes no recommendation as to the funding of this program.

The Panel notes that municipalities in Connecticut are free under existing law to develop voluntary traditional PILOT programs. These programs can generate revenues from tax exempt properties to help finance the delivery of local public services benefiting those properties. A municipality considering development of such a voluntary program could model its program on the Boston model or develop a model that better reflects its community and its exempt organizations. A municipality could use the portion of its budget that finances goods and services that benefit all properties as a starting place for conversations with exempt organizations about voluntary PILOT payments, and the Panel recommends that the Office of Policy and Management develop estimates of the value of locally provided services to provide a framework for informing such a discussion. A municipality that develops a traditional PILOT program should consider exempting organizations with real property valuations below some threshold amount to protect small nonprofits.

- Revenue Implications: Revenue Neutral.
- Adopted without dissent

Direct Property Tax Relief

Recommendation 5: Low Income Tax Credit “Circuit Breaker”

Eliminate the more than 100 state and local option partial property tax exemptions and replace them with a single unified state circuit breaker mechanism that provides property tax relief targeted to homeowners and renters whose property taxes are high relative to their household income. Such a circuit breaker would be a single threshold type circuit breaker implemented as a refundable credit through the Connecticut state income tax to provide targeted relief, replacing the current property tax credit. The circuit breaker could be designed so that this recommendation is revenue neutral.

- Revenue Implications: Implement this replacement on a revenue neutral basis.
- Adopted without dissent

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Agricultural Land Use Valuation

Recommendation 6: Agricultural Land

Tighten up the implementation of the PA490 use value assessment program so the program is more aligned with the intended purpose of the program by

1. Implementing an objective test of agricultural use in order to qualify for participation in the program (e.g., establish a *de minimis* level of gross income from agricultural production)
2. Rationalizing use value assessment computation methods using more accurate income measures and more realistic capitalization rates
3. Requiring forest land participating in the program to be adjacent parcels
4. Allowing towns to remove land from the program if it has been rezoned for subdivision
5. Expanding the time period which land must remain undeveloped from 10 to 15 years
6. Increasing the penalties for early withdrawal from the program
7. Moving away from general tax relief for agriculture broadly and move toward strategic use of use value assessment to protect and preserve land that provides ecosystem services that are a form of public good or generates positive externalities.
 - Revenue Implications: Base broadening will increase revenues over time and allow property tax rates to be reduced.
 - Adopted without dissent

Revenue Diversification

Recommendation 7: Local Non-Property Taxation.

Allow for a local sales tax of 1 percent to be implemented on a statewide basis with the revenue to be collected by the Department of Revenue Services (DRS), which will act as the collection agent for all local governments. The local tax will be piggybacked to the standard state sales tax rate. The funds shall be deposited in the Municipal Revenue Sharing Account and then distributed to municipalities in a manner that is fiscally equalizing (e.g., on the basis of fiscal needs such as documented by the Federal Reserve Bank of Boston, 2015)

- Revenue Implications: An increase of approximately \$600 million is intended to be applied to a reduction in property tax rates. Under this arrangement the local sales tax will lead statewide property tax reduction of 6 to 7 percent.
- Adopted with Panel Members Clavette, Nickerson, and Schatz dissenting

Personal Property Taxes

Recommendation 8: Taxation of Business Tangible Property

Exempt the first \$10,000 of personal property from taxation thereby eliminating 56 percent of personal property accounts. The Panel recognizes that for zero tax due accounts there must be a mechanism put in place so that each municipality will continue to be able to identify individual businesses located in their jurisdiction.

- Revenue Implications: Reduces administrative costs for taxpayers and local governments and would result in reduced revenues by \$19 million, or three (3) percent of personal property tax total collections. Revenue neutrality can be accomplished by a small increase on the remaining taxable tangible property tax base or through revenue diversification.
- Adopted without dissent

Recommendation 9: Personal Property Tax Revenue Administration/Implementation

The Office of Policy and Management or other research agency should revisit the implementation of the personal property tax by

1. Periodically examining depreciation schedules and the 30 percent residual value
 2. Improving audit procedures and practices
 3. Strengthening the role of OPM in overseeing uniformity of assessment administration
 4. Requiring all municipalities to use the same OPM standard form for filing information
 5. Periodically estimating economic and functional obsolescence in at least chemical products manufacturing and other industries where standard depreciation schedules are inadequate.
- Revenue Implications: Revenue Neutral.
 - Adopted without dissent

Motor Vehicle Tax

Recommendation 10: Motor Vehicles (“Car Tax”)

The Panel supports the changes in the motor vehicle tax made in 2015 and recommends that the impact of these changes on the equity, efficiency and administration costs of the motor vehicle tax should be evaluated after they have been in place for a period of no more than three years. This will also provide time to see how the Municipal Revenue Sharing Account works to hold harmless those municipalities that experience a decline in motor vehicle tax revenues because of the ceiling placed on the mill rate applied to motor vehicles.

- Revenue Implications: Revenue Neutral.
- Adopted without dissent

Recommendation 11: Antique Vehicles

The assessed value of antique vehicles should be set at current market value rather than the current assessment limit of \$500, but shall not exceed a valuation of \$50,000.

- Revenue Implications: Broadening the property tax base over time will lower statutory tax rates.
- Adopted without dissent

Conveyance and Controlling Interest Taxes***Recommendation 12. Conveyance and Controlling Interest Taxes***

To assure inter-community equity the local real estate conveyance (REC) tax rate shall be set at the same rate statewide as the targeted community rate (0.5 percent). The state rate shall remain unchanged.

- Revenue Implications: Will raise approximately \$40 million in additional revenues for local governments.
- Adopted without dissent

6. Memoranda of Panel Member Comment

- *Memorandum of Comment* submitted by Panel Members Elsesser, Lemar, Galbraith, and Nee relating to the Local Revenue System.
- *Memorandum of Comment* Submitted by Senator Scott Frantz Relating to the Connecticut Estate and Gift Tax and Scope of the Panel's Activity
- *Memorandum of Comment* submitted by Panel Member Marchand relating to (i) claim of refund for overpayment of income taxes: to enable a taxpayer to secure a refund 2 years from the date of payment, in addition to 3 years from the due date of the return, and (ii) sales tax refunds and deficiency assessments: to change the standard of proof borne by a taxpayer in tax litigation from "clear and convincing" to "preponderance of the evidence."
- *Memorandum of Comment* submitted by Panel Member Schatz Relating to the Connecticut Personal Income Tax: Taxation of Retirement Income and the Connecticut Retail Sales Tax, the General Application of the Sales and Use Tax, and the Local Sales Tax Revenue Diversification
- *Memorandum of Comment* submitted by Revenue Commissioner Kevin Sullivan

Memorandum of Comment

Submitted by Panel Members Elsesser, Lemar, Galbraith, and Nee

Relating to the Local Revenue System

We have repeatedly opined that the Tax Panel, of which we are all members, failed its statutory charge “to review the state's overall state and local tax structure” because it refused to consider the structure of the property tax. This Memorandum sets forth some major concerns with our current property tax system and urges the Connecticut General Assembly to undertake a major overhaul of that system in the interest of improving the economic prospects of our state.

Expert after expert told the Tax Panel that Connecticut is singular in regard to (a) the degree to which our towns rely on the property tax to fund all local functions and (b) the sheer number of towns in the state. The latter singularity creates massive inefficiencies that increase local property tax burdens. The former distorts local policymaking, as towns seek to maximize property tax revenue while limiting local expenditures. The primary local expenditure is public education. As any reader of our local newspapers knows, towns regularly make land use decisions intended to prohibit any influx of school-age children and, by extension, their parents. By over-regulating housing production, these towns intentionally make housing more expensive thus driving recent college graduates and young families, our emerging workforce, to urban centers in neighboring states.

But young families and recent college graduates are our state's future. They pay a disproportionate percentage of the sales tax. They provide workers for Connecticut's employers and pay their fair share of income taxes. And their children represent Connecticut's long-term prospects. The young adults most likely to settle in Connecticut are those who grew up here. Artificially inflating property values through zoning, thus making it harder for young families and college graduates to find housing in the state, is bad economic policy. In fact, in his presentation to the Tax Panel on economic competitiveness, Professor Michael Wasylenko concluded that while changing tax policy cannot significantly improve Connecticut's economic competitiveness, changing our housing policy can. He specifically recommended that Connecticut increase housing production and decrease housing costs by easing zoning restrictions in order to compete economically with our neighboring states. Unfortunately, our towns will never allow this so long as their fiscal interests lie in inflating property values and decreasing education costs. As a result of our dysfunctional property tax structure, the towns work against the state's economic interests.

Our cities, on the other hand, have worked to increase zoning density and housing production. They are striving to create the kind of economic environment that contemporary employers seek: dense innovation districts with a concentration of high-technology companies and highly-educated employees. But state taxation policy handicaps local policy. Because Connecticut, with its 169 small municipalities, is the most economically-segregated state in the country, our cities have exorbitant property tax rates. By way of example, Bridgeport's property tax rate is nearly twice that of neighboring Fairfield and nearly three times that of nearby Darien. And even Darien's rate is higher than Boston's residential rate. These high rates severely limit the ability of our cities to compete with cities in our neighboring states. In today's competitive environment, our property tax system ties our hands behind our backs. It is well past time to do something about it.

Memorandum of Comment
Submitted by Senator Scott Frantz, *Ex Officio Panel Member*
Relating to the Connecticut Estate and Gift Tax and Scope of the Panel's Activity

As a non-voting, Ex officio member of the State Tax Panel, I would like to make the following suggestions to the Panel:

1) Immediately Raise the Estate and Gift Tax Exemption to the Federal Level and Consider Their Repeal

Although the Tax Panel recommendations include a provision to repeal the gift tax, I would like to further emphasize that the gift tax should be eliminated this coming legislative session. Connecticut currently has an exemption level of \$2,000,000 that should be raised to the 2016 federal level of \$5,450,000 if the estate and gift taxes are not done away with completely. An argument can be made that the estate tax along with an onerous probate fee (tax) that applies to all estate assets, including those that do not have to go through the probate court, is driving tax payers out of the state and that we are losing a greater amount of value in lost economic development contributions, future income tax payments to the state and philanthropy than amounts raised by taxing estates. With respect to the gift tax, Connecticut is the only state in the country to have one. It is one more significant tax that wealthy individuals see as a deterrent to remaining in the state or moving to the state, and it should be repealed. As income tax revenue to the state continues to fall significantly short of projections, it is imperative that Connecticut preserve as much of its tax base as it can in order to stay solvent.

2) Encourage Any Future Panels or Commissions Analyzing the Tax Code to Review All Taxes to Determine if They Pay for Themselves

One of the original intentions of the legislator who suggested we create a tax panel was to look at all 387 taxes and fees that the state imposes on taxpayers to see if they all were feasible and economical. Fully recognizing the Tax Panel only had so much time to complete its work, I think it would be a valuable exercise to scrutinize each one of these taxes in the future.

Memorandum of Comment
Submitted by Panel Member Marchand
Relating to refund for overpayment of income taxes and sales tax refunds and deficiency
assessments

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February 1, 2016

MEMORANDUM

To: Robert D. Ebel and Members of Connecticut State Tax Panel

Re: **Two Inequities in Administration of Connecticut Taxes**

The direction given to the State Tax Panel in § 137 of P.A. 14-217 was to "consider and evaluate options to modernize tax policy, structure and administration with respect to ... (3) equity,... (12) overall public policy." There are two practices imposed by statute or judicial decision that are highly inequitable in the administration of the Connecticut Tax System and are bad public policy:

- (1) The limitation under §12-732 for a claim of refund for overpayment of Connecticut income taxes, now three years from the due date of the return, should provide at alternate period of two years from the date of payment, the limitation governing refunds in neighboring states and for federal income taxes. The change would enable Connecticut taxpayers to secure a refund when taxes are determined not to be due during negotiations with the Department of Revenue Services after the three year period from the date of assessment has expired.

A similar problem should be corrected with respect to refunds of sales and use taxes under §12-425 which now mandates a refund claim must be filed within six months of the assessment. An alternate period of two years from the date of payment should be provided for the filing of claim for a refund of Connecticut sales and use taxes.

- (2) The burden of proof for a Connecticut taxpayer to prevail on a refund claim should be changed from "clear and convincing evidence" to "the preponderance of evidence," the standard for tax cases in neighboring states and in the federal tax system.

Donat C. Marchand
Member
State Tax Panel

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Memorandum of Comment

Submitted by Panel Member Louis B. Schatz

Relating to the Connecticut Personal Income Tax, the Connecticut Retail Sales Tax and the Local Sales Tax Revenue Diversification

At our meeting on December 15, 2015, I voted against three of the recommendations that were ultimately adopted by the State Tax Panel. This Comment Memorandum sets forth my reasons for dissenting.

1. Connecticut Personal Income Tax. Recommendation 1: Taxation of Retirement Income.

The adoption of this recommendation would expand Connecticut's taxation of retirement income to include, among other items, the taxation of military retirement income. The taxation of retirement income that is currently exempt from taxation in Connecticut will lead to the unwelcome result of encouraging retirees to relocate to States that do not tax similar types of income. Specifically, it is my understanding that most of Connecticut's neighboring States do not tax military retirement pension income.

2. The Connecticut Retail Sale Tax. Recommendation 4: General Application of Sales and Use Tax.

Historically, services in Connecticut have been presumed to be exempt from sales tax unless they are specifically identified as taxable in the statute. This is the approach that is followed by virtually all other states that have a sales tax on services. Even with such presumption, Connecticut's sales tax on enumerated services is viewed as one of the broadest (and least business friendly) in the country. By expanding the sales tax to all services (subject to enumerated exceptions) Connecticut will become a much less desirable business location relative to other states. Such an extension of the service tax will also penalize headquarter companies in Connecticut by taxing services entirely in Connecticut that may benefit multiple locations.

3. Property Tax. Recommendation 7: Local Non-Property Taxation.

An increase by 1% in the State sales tax rate would mean that since 2011 the sales tax rate will have increased from 6% to 7.35%, an increase of almost 23%. In light of Connecticut's other business taxes, a rate increase such as this will increase the perception that Connecticut is an anti-business competitive State and will have the effect of discouraging out of state companies from relocating to Connecticut and discouraging businesses in general from expanding their investment in Connecticut.



Memorandum of Comment

Submitted by

Kevin B. Sullivan, *Ex Officio Panel Member*

Commissioner of Revenue Services

As an ex-officio member of the State Tax Panel, I did not participate in the vote on any of the recommendations. I do, however, appreciate the work of the Panel members, the information provided by our consultants and the opportunity to engage in a wide-ranging discussion of state tax policy. As was pointed out in the final Report of Governor Malloy's Business Tax Task Force a few years ago, Connecticut needs to see taxes not as the means to spending but as a matter of sustainable fiscal and economic policy.

Staff from DRS and OPM have already met to review and consider the Panel's recommendations for appropriate action.

Before commenting on specific recommendations, let me offer an observation on our process. The scope of review, established in the enabling legislation, was simply too broad for the time available. As a consequence, the Panel (now disbanded) never actually reviewed or approved any narrative or summary other than the recommendations submitted as our "final report." Hopefully, a narrative will be produced by the consultants that includes all of the topical papers as an appendix. While there is no opportunity for the Panel to issue such a report, all the background information would thus be captured, transmitted and available as the consultant's final report to the Panel. Since the Panel did not actually review and approve any of the consultant reports and working papers in final form, these cannot be represented as the action of the Panel. But it would be a shame to lose all of that content and context for the final recommendations already submitted on behalf of the Panel.

I also cannot help but note with some amusement, the inordinately deep dive that the Panel took with respect to Connecticut's Uniform Gift and Estate Tax. In terms of both the time taken up and the detail of the recommendations, we would have done better to focus a bit more on the bigger tax picture. After all, the UGE (not "huge") tax is actually a relatively minor and highly concentrated part of Connecticut's general tax burden.

As to the specific recommendations, I offer only the few following comments:

Connecticut General Retail Sales Tax – Recommendation 5: Eliminate Sales Tax Holidays. Had I been a voting member of the Panel, I would have dissented on this recommendation at this time. Recent changes in the Corporate Income Tax will fairly but significantly impact out-of-state retailers. We should allow time to absorb those changes. At the very least, it does appear that Connecticut's modest "sales tax holiday" pays for itself and serves as an important retail marketing tool.

Connecticut General Business Taxation – Recommendation 1: Alternatives to the Corporate Net Income Tax and Business Taxes. Given the significant Corporate Income Tax reforms enacted this year, it is important that those changes be given an opportunity to settle in as the state economy continues to improve. So, in the very near term, this is not the time for a new debate over the direction of business taxation. In the longer term, it makes sense to consider moving away from taxation based on choice of business formation. But that should be based on sufficient prior understanding of the consequences of any proposals and prior engagement with Connecticut's business community.

Connecticut General Business Taxation – Recommendation 5: Apportionment of Multi-State Income. Moving to market (destination) sourcing makes sense for Connecticut and for Connecticut businesses. Perhaps we should endeavor to prove this assumption first perhaps by collecting real financials on the basis of an informational filing. In any event, DRS does intend to continue the work of an informal, external working group that is already advising on implementation of unitary reporting and the topic of sourcing is part of the groups agenda.

Connecticut Estate and Gift Tax and Probate Fees. Recommendation 1: Basic Structure and Effect on Taxpayer Migration. For every complex issue, there is a simple solution – and it’s usually wrong. There may be many good reasons to reform Connecticut’s Uniform Gift and Estate Tax. However, Connecticut estate taxation is at least regionally competitive as indicated by no lessening of net taxpayer and income out-migration from the state of New York to our state. Indeed, based on the most recent available federal census data, only one of the states among the top net outmigration destinations (in terms of taxpayers and federal AGI) does not have an income tax or an estate tax. In fact, a quick profile of taxpayer net outmigration among the states suggests only one strong correlation: Sunshine. This is clearly an area where assumptions and anecdotes need to be tested by unbiased factual analysis.

Compendium of Research Papers on the Property Tax and Local Revenue Diversification

Contents

- Chapter 1: Overview of Property Taxes in Connecticut
and Data Appendix
Michael E. Bell
- Chapter 2: Properties Exempt from Paying Property Taxes in Connecticut
Michael E. Bell
- Chapter 3: Direct Property Tax Relief
John E. Anderson
- Chapter 4: Diversifying Municipal Revenue in Connecticut
David L. Sjoquist
- Chapter 5: The Business Personal Property Tax in Connecticut
Lawrence C. Walters
- Chapter 6: The Taxation of Registered Motor Vehicles in Connecticut
Lawrence C. Walters
- Chapter 7: Real Estate Conveyance and Controlling Interest Transfer Taxes
Catherine F. Collins

Chapter 1

Overview of Property Taxes In Connecticut

A Report Prepared for the Connecticut Tax Panel

Presented October 27, 2015

Michael Bell
MEB Associates
And
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This paper would not have been possible without the input and support of David LeVasseur and Shirley Corona of the Office of Policy and Management. Additional valuable comments on earlier versions of this paper were provided by John Chaponis from the Connecticut Association of Assessing Officers, George Rafael from the Connecticut Conference of Municipalities, John Anderson from the University of Nebraska, Michael Fedele from the Fedele Group, LLC, Gregory Servodidio, Esq. from Connecticut Business and Industry Association and John Rappa and Rute Pinho of the Office of Legislative Research. Any remaining errors of omission or commission are the sole responsibility of the author.

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Findings

1. The property tax base in Connecticut is generally broader than the property tax base in other states because it includes selected personal property and motor vehicles. In addition, Connecticut provides very modest property tax relief.
2. Both the Connecticut state and local revenue system, and local revenue systems are more dependent on property taxes than most other states.
 - a. Property taxes account for a high share of state and local own-source revenues (5th) and state and local taxes (11th). Property taxes in Connecticut rank 8th nationally in terms of property taxes per \$1,000 of state personal income and 2nd in terms of property taxes per capita.
 - b. For local governments in Connecticut, property taxes are high relative to personal income (4.4 percent), a large share of local own-source revenues (86 percent), and a large share of local tax revenues (98.9 percent).
3. Heavy reliance on one source of tax revenue
 - a. Undermines political balance between opposing philosophies of tax equity – ability to pay principle and benefits received principle of taxation
 - b. Undermines the realization of the benefits of revenue diversification since individual revenue sources differ in terms of their revenue raising capacity, stability over the business cycle, growth rate, equity, ease of administration, economic effects and acceptability by citizens. Lack of revenue diversity in Connecticut prevents achievement of these benefits of revenue diversification.
 - c. Over-reliance on any single tax source tends to obscure its virtues and make more obvious its defects. Specifically, one strength of the property tax is revenue stability because taxes are based on an asset value, not annual streams of income or sales. As a consequence of virtually sole reliance on the property tax for local tax revenues, a structural deficit is created where revenues grow more slowly than income, but expenses grow the same as income or faster.
4. The 5-year assessment cycle in Connecticut undermines the equity of the property tax and distorts measures of assessment quality which are used to equalize between towns for differences in assessment practices.
5. The state provides 22 full property tax exemptions for certain types/uses of property (colleges, hospitals, churches, etc.); 66 partial exemptions based on the characteristics of the owner and property (veterans, blind, elderly, etc.); 15 exemptions intended to promote economic and housing development; and 11 miscellaneous exemptions. Most are not used extensively and, as a result, property tax relief provided to taxpayers is very modest in Connecticut.
6. The state provides 38 property tax relief options to local governments with 73.7 percent of these tax relief measures being used by 3 or fewer municipalities. No local option relief measure is used by a majority of municipalities. Locally provided property tax relief is very modest also.
7. Significant fiscal disparities exist across municipalities in Connecticut making it difficult for many municipalities to raise sufficient revenues to provide a given level of goods and services to their citizens.
 - a. Revenue raising capacity as measured by the Net Grand List per capita varies across municipalities in Connecticut from a high of \$494,018 in Greenwich to a low of \$27,873 in Hartford.

- b. There is significant variation across Connecticut municipalities in property taxes per \$1,000 personal income ranging from a high of \$123.00 in Hartford to a low of \$41.50 in Putnam.
- 8. In the aggregate, Net Grand Lists in Connecticut have been declining since 2009, albeit the decline is not uniform across municipalities. For example, between 2007 and 2012 sixty-four towns experienced increases in their Net Grand Lists, but 105 towns experienced declines. Property tax revenues, however, continued to grow over this period as local governments increased mill rates.
- 9. Heavy dependence on property taxes, declining property values with increasing property tax revenues result in high and increasing effective property tax rates which means high property tax rates, if not balanced by high service levels, decrease property values.
 - a. high property tax rates, if not balanced by high service levels, discourage families and businesses from locating or expanding in a jurisdiction.
 - b. high property tax rates in older city centers may contribute to urban sprawl when surrounded by suburban communities with lower property tax rates resulting in inefficiency and cost of inadequate public infrastructure such as roads, water, sewers.
 - c. high property rates burden low-income homeowners.
- 10. Property taxes in Connecticut are regressive. According to a study by the Connecticut Department of Revenue Services, and confirmed by a study from the Institute of Taxation and Economic Policy, property taxes in Connecticut are regressive.
- 11. Effective property tax rates are high in Connecticut with 11 of the 19 representative municipalities having effective tax rates over 2 percent and 1 having effective tax rates over 3 percent. In part, regressivity reflects the fact that spending on housing declines as a share of income as income increases, but it is exacerbated in Connecticut by high effective property tax rates, which tend to be in municipalities with high concentrations of low income people, and limited property tax relief which is generally not targeted to taxpayers according to need.
- 12. Property tax relief provided to residential property owners in Connecticut is very modest. Few properties receive property tax relief and the relief provided is generally modest. As a result, the effective property tax rate for properties receiving property tax relief is only slightly lower than the effective property tax rate for property not receiving any relief.

In *Democracy in America* Alexis de Tocqueville concludes that to understand America you first have to understand the township, the political and administrative foundation of government. “It is nonetheless in the township that the force of free peoples resides.” [de Tocqueville, p. 57]

The American political landscape is dominated by the belief that local governments are critical to governance. Local governments provide the goods and services that impact the daily lives of all citizens, e.g., the road network, sewerage systems, provision of potable water, public schools, etc. In addition, local governments promote democratic ideals and practices. The ability of local government to pursue policies and programs that respond to the preferences of local residents requires own-source revenues that a local government can use as it sees fit. [Bell, Brunori, Youngman, p. vii] The only revenue source capable of ensuring a strong and vibrant local government is the property tax. [Brunori, 2] The property tax is the major source of locally raised revenues in Connecticut.

The purpose of this paper is first to lay out the argument why property taxes are a good revenue source for local governments. Second, the paper documents the importance of property taxes in Connecticut and compares that with the importance of property taxes in other states. Then the administration of the property tax in Connecticut is described. Finally, to the extent possible, the paper reflects on how the overall system of property tax administration is working in Connecticut.

The Property Tax: A Good Source of Local Revenues

Local officials have two fundamental decisions to make: 1) what level, quality and composition of public goods and services should be provided to local residents, and 2) how should the cost of providing those public goods and services be shared across the members of the community? How should elected officials distribute the cost of providing community services across taxpayers in a fair or equitable manner?

In public finance there are two basic approaches to sharing the cost of providing services across taxpayers in a fair manner. First, there is the *ability-to-pay-principle* of taxation. The case for *ability-to-pay principle* of taxation for the real property tax rests on the argument that while it is not a perfect correlation, there is a strong relationship between the value of one’s property and income, higher income families tend to live in higher valued residences. Thus, taxing property value is a proxy, albeit an imperfect one, for ability-to-pay taxes.

Second, there is the *benefits-received principle* of taxation. Since the property tax funds community services – e.g., public education, police, fire, streets – the level and quality of these site oriented services benefits property owners and increases the value of their property. This is supported by numerous studies identifying factors explaining the actual sales price of individual properties.

The property tax is considered to be roughly consistent with both approaches to taxation. The tax generates reliable revenues, while minimizing distortions of private market decisions in a way that taxpayers and voters can understand and is done in an equitable manner. The property tax scores well on the following criteria for a good revenue source [NCSL] and should be an essential foundation for any local revenue system.

Revenue Stability

The property tax tends to be a stable revenue source because it is based on asset value, not an annual stream of income or sales. A stable tax generates revenues that change relatively more slowly than the economy. Since real estate markets reflect long-term asset values, which tend to respond slowly to

annual changes in the level of economic activity (less than economic flows like sales, personal income and profits) the property tax tends to be more stable than the general sales tax or the personal income tax.

The property tax, because of this relative stability, represents a critical anchor for funding local governments. In a recent study of the impact of the Great Recession on local revenues generally, and property taxes specifically, Alm, Buschman and Sjoquist concluded that local government reliance on the property tax rather than more elastic revenues sources like income, sales, and excise taxes has helped local governments avoid some of the more severe difficulties experienced by many other governments in the current economic situation. (Alm et al., 2011, 323)

Giertz documented a similar stabilizing impact of the growth in property tax revenues as income and sales tax revenues declined, albeit more modestly, as a result of the stock market decline in 2000 and the recession of 2001. (Giertz, 2006)

Neutrality

Neutrality in taxation requires taxes minimize unintended influence on private economic decisions. What is to be avoided, to the extent possible, is a tax that causes taxpayers to adjust their behavior to avoid or minimize their tax liabilities. To the extent that economic actors adjust their behavior to shift or avoid the tax, the tax has distorted private economic decisions and the economy is moved to a less efficient, or lower welfare, position because of the tax (Fisher, 1996, 303).

As a general rule, such inefficiencies are best avoided by a system with a broad tax base (e.g., allow few, if any, tax exemptions, deductions, and credits) combined with low rates (NCSL, 1992).

In this context, an ideal real property tax would be broad based and include all forms of real property, i.e., land and structures for both residential and commercial properties, agricultural land and property owned by governments and non-profit organizations alike. In addition, because the property tax often is assessed primarily against real property,¹ which, in the short-run, is immobile, there is little that property owners can do to avoid the tax. Thus, the tax has little impact on their economic decisions in the short-run. In this respect, the property tax tends to distort private economic decisions less than other local taxes – especially when the base of the tax is defined as broadly as possible.

Simplicity

Taxes may cause distortions in the allocation of economic resources if they are complex and difficult to administer. In such a situation, the taxpayer may spend substantial resources to comply with the tax law, and the local jurisdiction may expend substantial resources administering it.

The property tax is generally considered to be taxpayer-passive because most taxpayers face minimal compliance costs. Alternatively, the property tax is considered to have higher administrative costs for the local government associated with preparing and maintaining the tax roll, generating and delivering tax bills, collecting tax revenues and enforcing the property tax when it is not paid in a timely fashion. In addition, local assessors determine the taxable value of all the properties on a town's Grand

¹ The property tax base in Connecticut is broader than that in most states because, in addition to real property, the Connecticut property tax base also includes motor vehicles and select personal property which must be valued annually.

List.² Relative to other potential local tax sources with tax bases that are annual flows that must be monitored and verified (high compliance costs for both taxpayers and the government), the property tax is relatively easy to administer and involves low taxpayer compliance costs, except perhaps in the case of commercial and industrial property and motor vehicles which may have higher compliance costs for both the taxpayer and the government.

Another virtue of the property tax, from the government's perspective, is that taxpayers cannot easily hide or move real property.³ In addition, the property provides collateral for the tax liability. If the property owner fails to pay the taxes a lien is placed on the property. That lien prevents the property from being sold or mortgaged until the tax liability is satisfied. If collection efforts are unsuccessful, a local government can ultimately seize and sell the property. The local government retains the taxes owed, penalties, interests, and administrative costs, and in Connecticut remits the remainder of the funds to the court and the property owner must apply to the court for monies. While property tax sales are often the last resort for local governments, such sales provide powerful incentives to comply with the law.

Equity

Horizontal equity means that similarly valued properties are treated the same by the property tax. Two residential properties valued at \$100,000 would pay the same property tax. Vertical equity generally means that taxpayers with different income levels should pay different amounts of tax. The property tax, however, deals with property values, not income levels. In this context, vertical equity means that there are no inequities in the appraisal levels for groups of properties defined by value. [Eckert, 516]

To achieve a fair allocation of the responsibility for financing local public services, properties need to be assessed for tax purposes uniformly. Appraisal uniformity requires the equitable treatment of individual properties both within and between groups (property types, use classes, neighborhoods, etc.). When individual property valuations are at the same percentage of market value, they are most likely to be accepted as fair. To promote fairness, then, the ultimate policy objective should be to implement the property tax uniformly across all property use classes at 100 percent of market value, which promotes transparency, as well as, horizontal and vertical fairness. Dissimilar treatment of similar properties -- real differences in the taxation of equals -- undermines confidence in the property tax system.

Accountability

The property tax improves accountability in local finance because the tax is generally more visible than other potential local taxes. Many property owners pay property taxes by writing one or two checks a year to their local governments. Each check is relatively large so the property owner is aware of the tax and has to plan for its payment.⁴ As a result, property taxes paid are relatively large payments that

² The property tax is different from other state and local taxes because the tax base, estimated market value, must be estimated by the government. The property tax is a tax on an asset value which does not change hands annually. In contrast the base of the personal income tax or general sales tax are based on annual economic flows, e.g., income or retail sales.

³ For some types of personal property this may not be the case.

⁴ Cabral and Hoxby (2012) estimate about 31 percent of people pay their property taxes through an escrow account which reduces the visibility of the tax. This is in contrast to the situation with income taxes where the tax is withheld each pay period for most individuals. The taxpayer is generally not aware of the amount of the tax being withheld and often gets a refund when they file their income tax return. Similarly, sales taxes are less visible than property taxes. A sales tax is paid on each transaction, but the taxpayer often has no idea how much sales tax she pays annually.

are more easily linked in the mind of the taxpayer to the level and quality of goods and services provided by the local government. The visibility of the property tax provides, to some extent, public pressure that tends to keep property taxes lower than they might otherwise be.

In conclusion, based on traditional criteria for evaluating a revenue system, the local property tax emerges as a very defensible source of local revenues. While most economists would embrace this conventional wisdom, this conventional wisdom is being re-evaluated in light of legislative efforts to limit the ability of local governments to raise revenues from the property tax and reduce property tax liabilities for preferred groups of property owners or land uses. The manner in which the property tax is administered greatly influences its productivity, neutrality, simplicity, equity and accountability. Bahl *et al* conclude that

“bad practice has overtaken many of the potential advantages of taxing property . . . In the United States, voter preferences in recent years appear to be to trade an equitable property tax for one where revenue growth is restrained.” [Bahl *et al.* 2010, 14]

Giertz is more direct

“rather than a broad-based, low-rate tax that treats all types of real property uniformly, the tax in most states is characterized by a bewildering array of constraints and preferences including classified bases, rate limits, revenue limits and caps, assessment exemptions, freezes and caps, circuit breakers, and special incentives for business.” [Giertz, 2006. 695]

This does not describe the situation with the property tax in Connecticut. The risk of such a “confusing and opaque jumble of special provisions that accumulate as the broad base of the property tax is destroyed” [Witte, 2009, 314] is not as great in Connecticut because of the broader nature of the tax base (real and select personal property and motor vehicles) and the limited amount of property tax relief provided.

The next two sections document the importance of the property tax in financing government in Connecticut and compares that reliance to other state and local revenue systems. That is followed by a description of the framework for administering the real property tax in Connecticut.

THE ROLE OF PROPERTY TAXES IN STATE AND LOCAL FINANCE

State and local governments across the country generally have their own budget accounting and reporting systems. Such systems may even vary across local governments within the same state. In order to compare state and local revenue numbers across jurisdictions, researchers typically rely on data from *Government Finances* prepared annually by the US Census Bureau. The Census Bureau collects data from individual state and local governments and reconfigures that data in a manner that is consistent across state and local governments. This section reports on the relative importance of property taxes in the state and local revenue system across states and across Connecticut.

Property Taxes as a Share of State and Local Own-Source Revenues

Table 1 reports the share of state and local own-source revenues attributable to the property tax (total state and local property taxes) for the ten states most dependent and the ten states least dependent on

property taxes in 1992 and 2012. Nationally, in 1992 property taxes accounted for 22.5 percent of total state and local own-source revenues, and its relative importance nationally declined slightly by 2012 to 22.2 percent.

Reflecting the fact there are 50 different systems of state and local finance in the U.S., the relative importance of the property tax varies significantly across states. In 1992, the relative importance of the property tax in state and local own-source revenues ranged from 44.4 percent in New Hampshire to 7.2 percent in New Mexico – with the highest share being 6.2 times more than the lowest. By 2012 the range was from 45.0 percent in New Hampshire to 9.4 percent in North Dakota – with the highest being just 4.8 times greater than the lowest.

Of the ten states with the highest property tax share of state and local own-source revenue in 1992, eight are among the highest in 2012. In 1992, five of the ten states where property taxes are the greatest share of state and local own-source revenues are from the Northeast (New Hampshire, Rhode Island, Connecticut, Vermont and Maine). In 2012, Massachusetts is added to the top ten states resulting in six states being from the Northeast. Connecticut had the fourth highest reliance on property taxes in 1992 (31.3 percent) and fell to fifth place in 2012 (31.7 percent).

The relative importance of property taxes increased between 1992 and 2012 only slightly in the top ten states, with the exception of New Jersey where the *share* increased 16.3 percent.

The list of the bottom ten states, in terms of the property tax share of state and local own-source revenues, also reflects a regional pattern, albeit to a lesser extent. Of the ten states with the lowest share of state and local own-source revenues coming from property taxes in 1992, nine are among the bottom ten states in 2012. In 1992, four states with the lowest share of own-source revenues coming from property taxes were in the south – Arkansas, Kentucky, Louisiana and Alabama. Kentucky dropped off the list in 2012 and was replaced by North Dakota.

For the states in the bottom ten, the share of property taxes increased slightly between 1992 and 2012 except for Louisiana, New Mexico and Alabama where the property tax share of state and local own-source revenues increased 32.4 percent, 58.3 percent and 42.5 percent respectively.

Table 1 Property Taxes as a Share of State/Local Own-Source Revenues, Selected States			
Top Ten States			
1992		2012	
New Hampshire	44.4%	New Hampshire	45.0%
New Jersey	31.9%	New Jersey	37.1%
Rhode Island	31.8%	Rhode Island	31.9%
Connecticut	31.3%	Vermont	31.8%
Michigan	30.4%	Connecticut	31.7%
Vermont	29.7%	Illinois	29.7%
Illinois	28.9%	Maine	29.2%
Maine	27.6%	Texas	28.1%
Texas	27.3%	Massachusetts	27.5%
Oregon	26.7%	Wisconsin	27.1%
Bottom Ten States			
1992		2012	
Arkansas	12.1%	Louisiana	13.5%
West Virginia	12.1%	West Virginia	13.2%
Kentucky	11.8%	Arkansas	13.1%
Hawaii	11.8%	Hawaii	12.9%
Alaska	10.7%	New Mexico	11.4%
Louisiana	10.2%	Oklahoma	11.0%
Oklahoma	9.7%	Alaska	10.8%
Delaware	8.9%	Alabama	10.4%
Alabama	7.3%	Delaware	10.1%
New Mexico	7.2%	North Dakota	9.4%
Exhibit			
1992		2012	
United States	22.5%	United States	22.2%
Sources: Data for 2012 come from the Bureau of Census, http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk ; data for 1992 come from Bureau of Census, State and Local Government Finances by Level of Government and State: 1991-92.			

Property Taxes as a Share of State and Local Tax Revenues

Table 2 reports information on the property tax share of state and local tax revenue for the top and bottom ten states in 1992 and 2012. On average nationally, in 1992 property taxes accounted for 32.1 percent of state and local taxes and that share was unchanged in 2012.

Again, there is diversity across states in the share of state and local tax revenues attributable to the property tax. In 1992 the share ranged from 60.1 percent in New Hampshire to 12.1 percent in Alabama – with the highest share being just under five times the lowest. By 2012 the range was from 64.7 percent in New Hampshire to 12.0 percent in North Dakota – with the highest share being 5.4 times the lowest.

Of the ten states with the highest share of state and local taxes coming from property taxes in 1992, six are in the top ten states in 2012. Of those six states, five experienced increases in the property tax share of state and local taxes and only Montana experienced a slight decline. Four of the top ten states in 2012 are from the Northeast – New Hampshire, Rhode Island, Vermont, and Maine. In 1992, Connecticut ranked tenth (39.1 percent), but fell out of the top ten states in 2012 with 37.8 percent of total state and local taxes attributable to property taxes.

Of the ten states least dependent on property taxes for tax revenues in 1992, eight are still in the bottom ten states in 2012. North Carolina and Louisiana dropped out of the bottom ten in 2012 and were replaced by Alaska and North Dakota. The share of state and local taxes coming from property taxes increased from 1992 to 2012 for all of the eight states on both the 1992 and 2012 list, with two increasing the property tax share of state and local tax revenues by nearly 50 percent or more – New Mexico (increasing by 54.9 percent) and Alabama (increasing by 48.8 percent).

Table 2 Property Taxes as a Share of State and Local Tax Revenue, Selected States				
1992			2012	
Top Ten States				
New Hampshire	60.1%		New Hampshire	64.7%
Michigan	43.7%		New Jersey	48.1%
New Jersey	43.3%		Rhode Island	44.9%
Wyoming	42.5%		Vermont	42.9%
Rhode Island	42.1%		Texas	41.2%
Vermont	41.7%		Maine	38.7%
Oregon	41.2%		Illinois	38.4%
Montana	40.0%		Montana	38.1%
Texas	39.3%		Florida	38.1%
Connecticut	39.1%		Wisconsin	37.9%
Bottom Ten States				
North Carolina	20.6%		Kentucky	20.8%
West Virginia	17.7%		West Virginia	20.3%
Arkansas	17.2%		New Mexico	18.9%
Kentucky	16.9%		Arkansas	18.8%
Louisiana	16.7%		Alabama	18.0%
Hawaii	16.4%		Hawaii	17.7%
Oklahoma	14.9%		Alaska	17.4%
Delaware	14.1%		Oklahoma	17.3%
New Mexico	12.2%		Delaware	16.6%
Alabama	12.1%		North Dakota	12.0%
Exhibit				
United States	32.1%		Connecticut	37.8%
			United States	32.1%
Sources: Data for 2012 come from the Bureau of Census, http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk ; data for 1992 come from Bureau of Census, State and Local Government Finances by Level of Government and State: 1991-92.				

Property Taxes per \$1,000 of Personal Income

The previous two sections present information on the relative importance of property taxes within individual systems of state and local finance. This section, and the next, report information on the relative use of the property tax across states. Interpreting these metrics must be done with caution. For example, not all states have the same composition of the property tax base. The definition of property taxes includes taxes on real property and personal property, including motor vehicles. While Connecticut includes motor vehicles in its property tax base, along with select personal property, most of its neighboring states do not. In fact, only 11 states nationally apply the property tax to motor vehicles and Connecticut is the only state in the region that does. In addition, no state in the region, including Connecticut [CGS 12-81(54)], taxes business inventory and few tax business personal property. See Table 3.

Table 3 Components of the Property Tax Base, Selected States		
State	Inventory/Business Property	Automobiles
Connecticut	No/Yes	Yes
New York	No/No	No
Rhode Island	No/Local Option	No
Massachusetts	No/Yes	No
Vermont	Local Option/Local Option	No
New Hampshire	No/No	No
Maine	No/Yes	No
Source: Business Personal Property comes from Catherine Collins, "The Shrinking Personal Property Tax: State Approaches to Exempting Business Personal Property from Local Property Taxes" in Bloomberg BNA, Weekly State Tax Report, January 9, 2015; Automobiles comes from Significant Features of the Property Tax, Lincoln Institute of Land Policy and the George Washington Institute of Public Policy, George Washington University.		

In Connecticut, automobiles account for 6.2 percent of the taxable property tax base in the state and select personal property accounts for another 4.8 percent of the tax base. In other words, because Connecticut taxes automobiles and business personal property, which most of the neighboring states do not, the current share of property taxes from real property in Connecticut's is lower than its neighbors.

Table 4 presents standard information on property taxes per \$1,000 of state personal income for the ten states with the highest and lowest property taxes per \$1,000. The national average was \$37.20 in 1992, falling significantly to \$32.49 in 2012. In 1992, the range was from \$62.36 in New Hampshire to \$11.35 in Alabama – the highest being 5.5 times the lowest. In 2012, the range was from \$53.10 in New Jersey to \$14.74 in Alabama – with the highest being just 3.6 times the lowest.

In 1992, five of the top ten states were in the Northeast and the number increased to six states in 2012 (adding Connecticut). New Jersey is the only state in the top ten in 1992 (\$49.77) that experienced an increase in property taxes per \$1,000 personal income in 2012 (\$53.10). All other states experienced a decrease in property taxes per \$1,000 personal income. While Connecticut experienced a decrease from \$45.85 in 1992 (which was not in the top ten) to \$43.99 in 2012, it was ranked eighth in 2012.

In 1992, six of the bottom ten states were in the South – North Carolina, Tennessee, Kentucky, Louisiana, Arkansas, and Alabama. By 2012 North Carolina had dropped out of the bottom ten states. While all but one of the top ten states experienced a decline the property tax share of personal income from 1992 to 2012, six of the states in the bottom ten experienced increases in property taxes as a share of personal income with the property tax share in New Mexico and Alabama increasing

Table 4				
Property Taxes Per \$1,000 of Personal Income, Selected States				
1992			2012	
Top Ten States				
New Hampshire	\$ 62.36		New Jersey	\$ 53.10
Wyoming	\$ 59.24		New Hampshire	\$ 52.58
Vermont	\$ 53.43		Vermont	\$ 49.44
New York	\$ 52.58		Rhode Island	\$ 48.70
Alaska	\$ 52.33		New York	\$ 45.66
Michigan	\$ 51.29		Wyoming	\$ 45.29
Oregon	\$ 50.01		Maine	\$ 44.60
New Jersey	\$ 49.77		Connecticut	\$ 43.99
Rhode Island	\$ 48.94		Illinois	\$ 43.27
Maine	\$ 47.45		Wisconsin	\$ 41.67
Bottom Ten States				
North Carolina	\$ 22.52		Hawaii	\$ 21.03
Tennessee	\$ 21.40		North Dakota	\$ 20.63
West Virginia	\$ 20.65		Tennessee	\$ 20.52
Kentucky	\$ 19.21		Kentucky	\$ 20.05
Louisiana	\$ 18.51		Louisiana	\$ 19.73
Arkansas	\$ 18.04		New Mexico	\$ 19.15
Delaware	\$ 16.13		Arkansas	\$ 18.66
Oklahoma	\$ 15.78		Delaware	\$ 17.15
New Mexico	\$ 15.17		Oklahoma	\$ 14.79
Alabama	\$ 11.35		Alabama	\$ 14.74
Exhibit				
Connecticut	\$ 45.86			
United States	\$ 37.20		United States	\$ 32.49
Sources: Data for 2012 come from the Bureau of Census, http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk and Bureau of Economic Analysis, http://www.bea.gov/newsreleases/regional/spi/2014/spi0314.htm ; data for 1992 come from Bureau of Census, State and Local Government Finances by Level of Government and State: 1991-92.				

26.2 and 29.9 percent respectively.

But as discussed above, the property tax base for Connecticut is broader than neighboring states because its base includes automobiles and business personal property, which are not generally included in the other states, and property tax relief in Connecticut is modest. As a result, real properties in Connecticut are currently paying a smaller share of property taxes than in neighboring states.

Property Taxes Per Capita

Table 5 presents information on property taxes per capita for the top and bottom ten states in 1992 and 2012. In 1992 the national average was \$702.09 per capita increasing to \$1,420.19 per capita by 2012 – an increase of 102 percent. The range in 1992 was from \$1,349.15 in New Hampshire to \$174.15 in Alabama – with the highest being 7.7 times the lowest. By 2012 the range was from \$2,916.32 in New Jersey to \$503.01 in Alabama – with the highest being 5.5 times the lowest.

Table 5 Property Taxes Per Capita, Selected States				
1992			2012	
Top Ten States				
New Hampshire	\$ 1,349.15		New Jersey	\$ 2,916.32
New Jersey	\$ 1,272.79		Connecticut	\$ 2,622.85
Connecticut	\$ 1,197.18		New Hampshire	\$ 2,581.97
New York	\$ 1,177.50		New York	\$ 2,426.49
Alaska	\$ 1,071.21		Wyoming	\$ 2,288.43
Wyoming	\$ 989.41		Rhode Island	\$ 2,229.24
Vermont	\$ 955.92		Vermont	\$ 2,201.84
Michigan	\$ 949.80		Alaska	\$ 2,060.30
Rhode Island	\$ 939.49		Massachusetts	\$ 2,051.98
Massachusetts	\$ 875.86		Illinois	\$ 1,983.21
Bottom Ten States				
Mississippi	\$ 357.01		Mississippi	\$ 868.57
Tennessee	\$ 347.87		Tennessee	\$ 795.26
Delaware	\$ 331.39		Louisiana	\$ 790.01
Kentucky	\$ 296.83		West Virginia	\$ 773.20
West Virginia	\$ 293.43		Delaware	\$ 758.76
Louisiana	\$ 276.21		Kentucky	\$ 714.10
Arkansas	\$ 260.91		New Mexico	\$ 683.65
Oklahoma	\$ 242.45		Arkansas	\$ 661.16
New Mexico	\$ 217.46		Oklahoma	\$ 600.49
Alabama	\$ 174.15		Alabama	\$ 530.01

Exhibit			
United States	\$ 702.09	United States	\$ 1,420.19
Sources: Data for 2012 come from the Bureau of Census, http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=bkmk and population data from the 2015 Statistical Abstract of the US; data for 1992 come from Bureau of Census, State and Local Government Finances by Level of Government and State: 1991-92.			

In 1992, six of the ten states with the highest property taxes per capita are Connecticut neighbors – New Hampshire, New Jersey, New York, Vermont, Rhode Island and Massachusetts. All seven were still in the top ten in 2012.

Connecticut ranked third in 1992 with per capita property taxes of \$1,197.18, or 171 percent of the national average. By 2012 Connecticut had moved up to second highest property taxes per capita at \$2,622.85, or 185 percent of the national average.

In conclusion, by most metrics reliance on property taxes by local governments in Connecticut is high, in large part because it is essentially the only tax available for local governments. Over-reliance on any single tax source tends to obscure its virtues and make more obvious its defects.⁵ For example, one strength of the property tax is revenue stability because taxes are based on an asset value, not annual streams of income or sales. As a consequence of virtually sole reliance on the property tax for local tax revenues, however, a structural deficit is created where revenues grow more slowly than income, but expenses grow the same as income or faster.

LOCAL GOVERNMENT RELIANCE ON PROPERTY TAXES IN CONNECTICUT

Local governments in Connecticut rely more heavily on the property tax to fund the provision of local public goods and services than local governments in other states. Local property taxes in Connecticut are relatively high at 4.4 percent of state personal income. Among the other New England states Maine (4.4 percent) and New Hampshire (4.8 percent) have similarly high property taxes relative to personal income. Rhode Island property taxes are even higher, accounting for nearly five percent of personal income (4.9 percent). Massachusetts is somewhat lower at just under four percent (3.7 percent). Vermont is the lowest in the region with property taxes accounting for 1.5 percent of personal income. The neighboring states of New Jersey (5.3 percent) and New York (4.6 percent) have property taxes as a share of personal income that are higher than those in Connecticut. In Pennsylvania property taxes take less personal income (3 percent). Nationally, property taxes account for an average of 3.2 percent of personal income.

Local property taxes as a share of own-source general revenue are also high in Connecticut, which is more reliant on property taxes than all of the other states and the District of Columbia. Local property taxes account for 86 percent of own-source general revenues. Most of the other New England

⁵ Shannon, John. 1987. "State Revenue Diversification – The Search for Balance," in *The Quest for Balance in State-Local Revenue Structures*, edited by Frederick D. Stocker, Tax Policy Roundtable, Property Tax Papers Series # TPR-16, Cambridge, MA: Lincoln Institute of Land Policy.

states are also highly reliant on property taxes by this measure. Maine, Massachusetts, New Hampshire, and Rhode Island all have property taxes as a share of own source revenues greater than 75 percent. Vermont is less reliant on local property taxes at 56 percent. The neighboring state of New Jersey is also high at 79 percent, but New York and Pennsylvania are less reliant on property taxes, in the range of 45 to 50 percent. Nationally, property taxes on average account for 47.2 percent of local own source revenues.

Finally, local property taxes as a share of own-source taxes are high with Connecticut among the highest states by this measure, very highly reliant on property taxes (98.9 percent). Property taxes account for virtually all local government taxes in Connecticut. The other New England states are similarly highly reliant on property taxes as a share of total local taxes – Maine (99 percent), New Hampshire (99 percent), Rhode Island (98 percent) and Massachusetts (96 percent). Neighboring New Jersey is also highly reliant on property taxes by this measure, but New York (59 percent) and Pennsylvania (71 percent) have more diversified tax revenue systems resulting in lower property tax reliance. Nationally, property taxes on average account for 73.5 percent of local tax revenues.

Revenue diversification, or the lack thereof in Connecticut, is an important issue. For example, each major revenue source has its own unique strengths and weaknesses. Thus, the more intensively each source is used the less obvious become its virtues and the more obvious become its defects. [Shannon] Also, revenue diversification can lead to a political balance between opposing philosophies of tax equity – ability to pay principle and benefits received principle of taxation. Finally, as Sjoquist points out in his paper on diversifying municipal revenues in Connecticut individual revenue sources differ in terms of their revenue raising capacity, stability over the business cycle, growth rate, equity, ease of administration, economic effects and acceptability by citizens. Lack of revenue diversity in Connecticut undermines achieving these benefits of revenue diversification.

PROPERTY TAX VARIATION ACROSS MUNICIPALITIES IN CONNECTICUT

The relative importance of the property tax varies across towns in Connecticut. In terms of property taxes as a share of total revenues, the range is from Putnam, where property taxes account for 39.2 percent of total revenues, to Warren where property taxes account for 94.3 percent of total revenues. Table 6 lists the 8 towns that receive a majority of their total revenue from *non-property tax* sources and the 14 towns that depend on property taxes for 90 percent or more of their total revenues. On average, property taxes account for 73.7 percent of total revenue for towns in Connecticut.

Table 6 Property Tax Revenues as a Share of Total Revenues for Connecticut Towns, 2013			
Putnam	39.2%	Essex	90.2%
Windham	44.6%	Easton	90.4%
New Haven	45.6%	Redding	90.4%
Hartford	46.0%	Middlebury	90.9%
Plainfield	47.6%	Southbury	91.2%
New Britain	48.4%	Haddam	91.3%
Ansonia	49.1%	Washington	91.9%
New London	49.1%	Roxbury	93.2%
		Woodbury	93.2%
		Goshen	93.4%
		Old Lyme	93.4%
		Lyme	93.5%
		Bridgewater	93.7%
		Warren	94.3%
Source: Municipal Fiscal Indicators, OPM			

Table 7 reports property taxes per capita for the 10 municipalities with the highest and the 10 municipalities with the lowest per capita property taxes. The range is from \$991.27 in Putnam to \$6,316.01 in Westport. On average, property taxes per capita in Connecticut are \$2,732.94.

Table 7		
Property Taxes Per Capita by Connecticut Municipalities, 2013		
Municipality	Prop Tax Revenue	Prop Tax Revenue Per Capita
Ten Municipalities with Lowest Property Taxes Per Capita		
Putnam	\$ 9,382,379	\$ 991.27
Mansfield	\$ 26,865,483	\$ 1,042.35
Windham	\$ 32,411,684	\$ 1,285.51
Thompson	\$ 13,480,856	\$ 1,441.19
Griswold	\$ 17,347,376	\$ 1,450.57
Plainfield	\$ 22,289,566	\$ 1,463.72
Brooklyn	\$ 12,277,485	\$ 1,482.79
New Britain	\$ 108,661,000	\$ 1,489.75
New London	\$ 41,535,473	\$ 1,507.91
Canterbury	\$ 8,139,019	\$ 1,597.14
Ten Municipalities with Highest Property Taxes Per Capita		
Ridgefield	\$ 112,820,333	\$ 4,483.40
Woodbridge	\$ 40,442,516	\$ 4,516.19
Redding	\$ 45,072,306	\$ 4,840.24
Easton	\$ 38,098,917	\$ 5,002.48
Greenwich	\$ 318,184,576	\$ 5,099.44
Darien	\$ 111,676,352	\$ 5,235.65
Wilton	\$ 107,138,324	\$ 5,742.53
New Canaan	\$ 116,331,874	\$ 5,760.71
Weston	\$ 63,543,227	\$ 6,126.42
Westport	\$ 172,477,712	\$ 6,316.01
Source: OPM Municipal Fiscal Indicators and author calculations.		

Table 8 reports property taxes per \$1,000 personal income for the 10 municipalities with the highest and the 10 municipalities with the lowest property taxes per \$1,000. The range is from \$41.50 in Putnam to \$123.00 in Hartford. The average property taxes per \$1,000 across the 169 municipalities in Connecticut is \$67.43.

There is not a strong relationship between municipalities with high property taxes per capita and high property taxes per \$1,000 with a correlation coefficient of 0.293. The significant variation in property taxes per \$1,000 of personal income across towns in Connecticut reflects significant variation across towns in the capacity to raise revenues from the property tax to provide services to their citizens.

Table 8 Property Taxes Per \$1,000 Personal Income, 2013			
Municipality	Prop Tax Rev	Personal Income	PT per \$1,000 PI
Ten Municipalities with Lowest Property Taxes Per \$1,000			
PUTNAM	\$ 9,462,249	\$ 228,030,780	\$ 41.50
LISBON	\$ 7,309,881	\$ 160,967,308	\$ 45.41
THOMPSON	\$ 13,613,575	\$ 298,373,892	\$ 45.63
WOODSTOCK	\$ 14,565,613	\$ 303,173,727	\$ 48.04
SOMERS	\$ 19,088,274	\$ 381,484,000	\$ 50.04
CANTERBURY	\$ 8,133,950	\$ 160,778,800	\$ 50.59
POMFRET	\$ 8,265,535	\$ 162,601,134	\$ 50.83
GRISWOLD	\$ 17,379,328	\$ 340,221,591	\$ 51.08
EASTFORD	\$ 3,485,224	\$ 67,780,384	\$ 51.42
GRANBY	\$ 32,683,980	\$ 626,263,807	\$ 52.19
Ten Municipalities with Highest Property Taxes Per \$1,000			
MORRIS	\$ 7,603,237	\$ 87,829,630	\$ 86.57
EAST HARTFORD	\$ 115,890,000	\$ 1,309,568,022	\$ 88.49
NORTH CANAAN	\$ 7,494,900	\$ 82,292,231	\$ 91.08
NORFOLK	\$ 6,333,899	\$ 69,093,328	\$ 91.67
COLEBROOK	\$ 5,066,611	\$ 54,239,739	\$ 93.41
WATERFORD	\$ 73,303,784	\$ 761,514,210	\$ 96.26
BRIDGEPORT	\$ 285,962,925	\$ 2,963,752,512	\$ 96.49
WATERBURY	\$ 224,710,000	\$ 2,316,357,120	\$ 97.01
CORNWALL	\$ 5,837,331	\$ 57,683,024	\$ 101.20
HARTFORD	\$ 255,546,000	\$ 2,077,657,523	\$ 123.00

DETERMING PROPERTY TAX LIABILITIES IN CONNECTICUT

A property tax can be either general or selective in its application. A general tax applies broadly to all types of property and treats various property types uniformly. A selective tax, by contrast, is levied only on certain types of property. The property tax nationally has become increasingly a selective property tax which applies primarily to real property. In Connecticut, however, the property tax is a more general property tax because the tax base includes real property, select personal property and motor vehicles.

There are a number of steps involved in determining property tax liabilities for individual properties in Connecticut. Specifically, the property tax liability for a property is calculated by estimating the assessed taxable base (which is 70 percent of Fair Market Value),⁶ multiplying it by the tax rate and making adjustments for any applicable property tax relief measures. In other words,

$$\text{Property Tax Liability} = (\text{market value} \times \text{assessment ratio}^7 \times \text{tax rate}) - \text{property tax relief.}$$

The following sections discuss how each of these elements is determined in the context of administering the property tax in Connecticut.

Defining the Property Tax Base

The Connecticut property tax has three components – real property, personal property (which is predominately, but not solely, business personal property) and motor vehicles.

Real Property

Connecticut General Statutes (CGS) Section 12-64 (a) lists the types of real property subject to the property tax, which fall into the following general categories:

- Residential
- Commercial
- Industrial
- Public Utility
- Vacant Land
- Apartments.

According to CGS Section 12-64(a), real property is included in the Grand List of the town where it is located. Each property owner will be liable for taxes on the property which are determined as a “uniform percentage of its present true and actual valuation, not exceeding one hundred percent of such valuation, to be determined by the assessors.”

There are some exceptions to the rule that taxable value is a uniform percentage of “present true and actual valuation.” For example, CGS Section 12-107a says that it is in the public interest to encourage the preservation of farm land, forest land, open space land and maritime heritage land.⁸ Thus, it is in the public interest to prevent the forced conversion of these lands into more intensive uses as a result of economic pressures caused by the assessment of these properties for property tax purposes at full market value. In addition, these unimproved wooded lots, open space lots, farmed lots, and maritime heritage land provide zero impact on the municipal budget i.e. they place no kids in the school system, do not call the police, use the town roads, street lights, etc.

⁶ The property tax is the most difficult tax to administer because the tax base is not observable like it is for income or sales taxes. The base of the property tax is the market value of the property, but not all properties sell every year so the tax base has to be estimated by the assessor.

⁷ Statewide the assessment ratio is 70 percent for all types of property. In Hartford, however, the current assessment ratio for residential properties is 30.68 percent and 70 percent for all other properties.

⁸ Section 12-107b defines marine heritage land as “that portion of waterfront real property owned by a commercial lobster fisherman licensed pursuant to title 26, when such portion of such property is used by such fisherman for commercial lobstering purposes . . . and not less than fifty percent of the adjusted gross income of such fisherman, as determined for purposes of the federal income tax, is derived from commercial lobster fishing.”

CGS Section 12-63 stipulates that the true and actual value of farm land, forest land, open space land and maritime heritage land shall be based upon its current use without regard to neighborhood land use of a more intensive nature. This use value is deemed by all assessors and boards of assessment appeals to be the “use value” or “PA490 value.” As a result, these properties are valued at current use and the assessed value is 70 percent of that use value.

Hartford has a limited for of classification because the assessment ratio for residential properties is 30.68 percent in Grand List year 2014 (FY 2016). Local governments have the option of phasing in increases in assessed values that result from reassessment. Hartford has opted for such a phase in, but it has been stretched out over a longer period of time.

Personal Property

CGS Section 12-71 (a) identifies personal property subject to property taxation. Specifically, “All goods, chattels and effects or any interest therein, including any interest in a leasehold improvement classified as other than real property, belonging to any person who is a resident in this state, shall be listed for purposes of property tax in the town where such person resides.” CGS Section 12-41 (c) identifies specific personal property subject to the property tax including

- Machinery used in mills and factories
- Cables, wires and poles
- Underground mains, conduits, pipes and other fixtures of water, gas, electric and heating companies
- Furniture and fixtures of stores, offices, hotels, restaurants, taverns, halls, factories and manufacturers
- Computers
- Motor vehicles not registered with the commissioner of DMV
- Mechanics tools
- Farm tools
- Tractors and construction equipment.

CGS Section 12-58 provides more detail regarding the property of any trading, mercantile, manufacturing or mechanical business subject to the personal property tax. CGS Section 12-59 provides more detail regarding the property of corporations subject to personal property taxation. CGS Section 12-80a provides more detail about property of telecommunications firms subject to personal property taxation. Manufacturing machinery is exempt from the business personal property tax.

CGS Section 12-81, however, explicitly exempts a wide variety of personal property including, for example,

- Fuel and provisions for the use of a family (12-81(30))
- Household furniture (12-81(31))
- Private libraries (12-81(32))
- Musical instruments (12-81(33))
- Watches and jewelry (12-81(34))
- Wearing apparel (12-81(35))
- Sheep, goats and swine (12-81(40)) -- horses & ponies are a local option exemption pursuant to PA 14-33
- Dairy and beef cattle, oxen, asses and mules (12-81(41))

- Cash on hand or on deposit (12-81(43))
- Carriages, wagons and bicycles (12-81(47)).

Taxable personal property is predominately, but not solely, business personal property.

Motor Vehicles

CGS Section 12-71 (f)(1) says that “Property subject to taxation under this chapter shall include each registered and unregistered motor vehicle and snowmobile that, in normal course of operation, most frequently leaves from and returns to or remains in a town in this state . . .” Each such vehicle will be included in the Grand List of the town where it most frequently leaves from and returns to or in which it remains. Similarly, any motor vehicle owned by a nonresident will be included on the Grand List of the town where the vehicle most frequently leaves from and returns to or in which it remains. The Grand List of each town will also include motor vehicles assigned to an employee of a firm; any leased vehicles; any motor vehicles designed or used for recreational purposes including, but not limited to, a camp trailer, a camper or motor home; and any registered motor vehicle that is used or intended for use for construction, building, grading, paving or similar projects.

Taxable motor vehicles include

- Passenger motor vehicles
- Commercial vehicles and trailers
- Farm vehicles
- Public service, interstate or service buses
- Motorcycles & ATVS
- Snowmobiles
- All trailers (Camp, landscape, boat, snow mobile, horse/livestock)
- Hearses, limousines and school buses.

Valuing the Property Tax Base

Real Property

The process of determining property tax liabilities for each property starts with the assessor estimating its “present true and actual valuation” or market value of all property within the corporate limits as of a specific date and those values remain in place for a period of 5 years until such time as the town implements a new town-wide revaluation.⁹ In between the 5-year intervals for town wide revaluation, the assessment stays the same unless the situation of the property changes. Specifically, there are three situations that could trigger a reassessment as a result of new construction, demolition or destruction. The assessor will reassess the property to reflect these changes, but utilizing the same specific date as all other properties in town. The tax is then applied to a uniform percent of that value.

⁹ Revaluation is done differently across the country. Connecticut mandates a 5-year cycle, but some states do an annual revaluation, 3-yr cycle, 5, 10, and others like NJ use a sales ratio and COD to determine when values are no longer fair, uniform and equitable. When a municipality in Connecticut implements a town-wide revaluation every 5 years that the municipality is required, pursuant to CGS 12-62i, to meet “performance based revaluation testing standards” and submit such certification (that details their overall median, COD, PRD, an unsold property test, and includes a listing of all sold properties that took place in town) to the Office of Policy and Management.

CGS Section 12-62 (b) says “Each such municipality shall assess all property for purposes of the local property tax at a uniform rate of seventy percent of present true and actual value . . . “

In the terminology of the assessors, the appraised value is their best estimate of the market value of a property. The assessed value is 70 percent of this amount. Finally, the taxable value is the assessed value minus any applicable property tax relief provided. All real property in a town is reassessed every five years.¹⁰

Connecticut utilizes the three traditional approaches to estimating the market value of individual properties that do not sell during the tax year:¹¹

- the sales approach;
- the cost approach; and
- the income approach.

The valuation process in Connecticut starts with the **cost approach** to valuation. The cost approach that is most widely utilized in Connecticut is not your standard cost approach that utilizes national sources or developers. It is what is commonly referred to as a “Market Driven Cost Approach”, “CAMA (Computer Assisted Mass Appraisal) System, or a “Mass Appraisal Algorithm”. While it functions like a traditional cost approach, the valuation information (tables in the algorithm) are set based on the local market. For example, in a town with 500 sales per year the assessor makes calculated adjustments to the CAMA system/algorithm until it is producing values that are similar to that of the 500 qualified sales (with a tested COD of less than 10). Once recalibrated with the new sales information, the CAMA system is applied to the remaining properties in town to ensure each property is assessed fairly.

In using the cost method, the assessor first determines the market value of the land by examining sales of comparable land. Next, the assessor estimates the cost of replacing a building at the time of reassessment based on recent sales information. When applied to existing buildings, this replacement cost is depreciated according to the building’s age and functional or economic obsolescence and upkeep is added back.

There are actually three different approaches to implementing the cost approach to valuation. Specifically, the assessor may use

- the **reproduction cost approach** which estimates the current cost of reproducing exactly the existing structure, less accrued depreciation;
- the **historical cost approach** to valuation, which starts with the actual historical cost of building a structure and applies trending factors to that data; and
- the **replacement cost approach**, which seeks to estimate the cost of replacing a structure with one that would serve the same functions, but which would be constructed using current building technology and materials.

¹⁰ Legislation permits municipalities to extend the period of reassessment. For example, 13 municipalities chose to delay their 2010 revaluation to 2011 in accordance with PA 09-60. While most municipalities comply with the 5-year reassessment cycle, a growing number of municipalities extend the 5-year cycle as a result of general or specific delay bills passed by the general assembly.

¹¹ Many towns in Connecticut contract with professional valuation firms to conduct revaluations for their town. According to Section 12-2c the Office of Policy and Management must certify all companies that perform any valuation for a municipality for assessment purposes.

The ***sales approach*** to valuation involves a comparison of a property being valued with similar properties that actually sold recently in an arm's-length transaction – a sale between a willing buyer and a willing seller who are unrelated. All differences, minor and major, are enumerated and evaluated according to the judgment of the assessor. The value of the property being assessed for tax purposes is thereby related to the prices of comparable properties that have sold.

This method is used generally for valuing residential and small apartment/commercial properties. It is based on the principle that the value of a property tends to be set by the cost of buying an equally desirable substitute property. Adjustments may be made to reflect differences between the property being valued for tax purposes and the comparable sales being used to determine value. Such adjustments may reflect physical differences (e.g., square footage, lot size, number of garages, baths, bedrooms, etc.) and economic conditions (age and condition of the property), location and time of sale, financing, etc. The adjustments may be expressed on a lump-sum or percentage basis and are applied to the properties that sold.

Finally, the ***income approach*** to valuation is used to estimate the market value of investment properties, including industrial properties, commercial buildings as well as larger apartment buildings. For these properties, the market value is estimated by looking at the relationship between the net income generated by the property and the relevant capitalization rate.

The income approach starts by looking at the relationship between the underlying asset and the stream of income it generates. An example might be a bank account. If you put \$1,000 in the bank and the interest rate is 5 percent then the bank will pay you \$50 per year in income. The fundamental relationship involved in this example is

$$\text{Income} = \text{value} \times \text{interest rate.}$$

In this example, the value of the asset is the \$1,000 in the bank account and the interest rate is 5 percent so the annual income generated is \$50.

This same relationship is used to determine the value of the underlying asset when the interest rate and annual flow of income are known, but the market value of the asset is not known. Rearranging the above relationships yields

$$\text{value} = \text{income} / \text{interest rate.}$$

Thus, if a property yields an annual net income of \$1 million and the applicable interest (capitalization) rate is 10 percent, the value of the property for tax purposes would be \$10 million (\$1 million/0.1 = \$10 million).

In applying the income approach to valuation the first step is to estimate annual net income for the property being valued. This requires information on the income and operating expenses for the property being valued. Typically, this information is obtained from schedules sent to the property owner by the assessor.

The second step in applying the income approach to valuation is to estimate the capitalization rate to be applied to the annual net income to calculate the estimated market value of the property. Just as fluctuations in construction costs influence the value of property under the cost approach, market trends in the rate of return on money invested, vacancy factors, rent controls, or other lease agreements and other variations in capital costs and risk estimates will influence the determination of the appropriate interest

rate to use in capitalizing net income to estimate market value of a property. As a result, different capitalization rates may be used on similar properties in different neighborhoods or towns, or may be utilized for the same property over time as market conditions change.

In principle any property could be valued with the sales, cost or income approach and the expectation would be that the values would be the same. However, the sales approach is used often for residential housing as is the cost approach. The cost approach is also used for some commercial and tax exempt properties. The income approach is used for properties that generate predictable streams of income and are typically purchased by investors for their income stream.

Personal Property

CGS Section 12-40 requires the assessor in each town to advertise on or before October 15 each year a notice requiring all persons in the town liable to pay taxes to bring in a declaration of the taxable personal property belonging to them and their estimated value on the first day of October in that year. There is a penalty equal to 25 percent of the assessment of personal property if a person fails to file a declaration of personal property on or before November 1. CGS 12-42 enables the assessor to grant an extension to the November 1 filing deadline, or not more than 45 days, to personal property owners who show good cause for a delay in filing.

The value of business personal property is self-reported, by the person (business) owning the property, on the personal property declaration (form M-15) which is utilized statewide. The M-15 instructs the property owner to begin with their original acquisition cost and depreciate that value based on a sliding scale depreciation table that drops a certain percentage each year until the depreciated value falls to 30 percent. This original cost times depreciation per year is similar to how businesses write off personal property expenses on their IRS returns. Also, the M-15 form contains an accelerated depreciation table for “computers, electronic data processing equipment, printers, etc.” that drops to a 20 percent residual value in five years because peripheral computer equipment has a short life/value. Assessors then take 70 percent of the depreciated value in order to determine the taxable assessed value as listed on the Grand List. [CGS Section 12-71 (b)]

Local assessors have the right to audit the values provided by the property owner within three years of the filing. CGS 12-53(b) provides that any omitted property shall be assessed and a 25 percent penalty will be added. In contrast to real property which is valued on a 5 year cycle, personal property is valued annually.

Motor Vehicles

CGS Section 12-71d indicates that the Office of Policy and Management will recommend a schedule of motor vehicle values which will be used by assessors in each municipality in determining the assessed value of a motor vehicle for purposes of property taxation. For the majority of motor vehicles these data come from the National Automobile Dealers Association (NADA). The value for each motor vehicle listed represents 100 percent of the average retail price applicable to such motor vehicle as of October 1 each year. Again, in contrast to real property which is valued on a 5 year cycle, motor vehicles are valued annually. Like other property types, the taxable base of motor vehicle values is 70 percent of the estimated average retail price.

Summary

The sections above define the property tax base for the various components of the Grand List for each town and how they are valued. Appendix Table 1 summarizes the outcome of the process by reporting the value of each key component of the Grand List for each town. Appendix Table 2 reports the share of Grand List value attributable to each component for each town. The conclusion is that there are vast differences across municipalities in the composition of the property tax base and the frequency in which those components are valued.

The residential property share of the total Grand List value ranges from 93.8 percent in Weston to just 20.2 percent in Hartford. Residential properties account for more than 90 percent of the total Grand List value in two other municipalities – Sherman (92.3 percent) and Lyme (90.4 percent) – and less than 50 percent of total Grand List value in seven other municipalities – Waterbury (49.4 percent), New London (47.9 percent), North Canaan (45.6 percent), Killingly (45.5 percent), Windsor Locks (45.4 percent), New Haven (44.2 percent) and Waterford (43.1 percent). The median residential share of Grand List value is 76.3 percent.

The next component of the Grand List is commercial, industrial and public utility property (CIP). The share of value attributable to these classes of land use ranges from 49.2 percent in Hartford to just 0.4 percent in Roxbury. The CIP share of Grand List value is one-third or more in 3 additional cities – New London (39.8 percent), New Haven (38.9 percent) and Stamford (33.3 percent) – and one percent or less in three additional municipalities – Weston (1.0 percent), Lyme (0.9 percent) and Sherman (0.7 percent). The median share of Grand List value is 10.8 percent.

The next component of the Grand List is apartments. The share of Grand List value attributable to apartments ranges from a high of 12.9 percent in Hartford (the only municipality with a share greater than 10 percent) to a low of zero percent in 46 municipalities. The median share of Grand List value attributable to apartments is 0.5 percent.

The next component of the Grand List is motor vehicles. The share of Grand List value attributable to motor vehicles ranges from 12.5 percent in Windsor Locks to 2.4 percent in Greenwich.¹² There are 14 additional municipalities where motor vehicles account for 10 percent or more of Grand List value and 27 municipalities where motor vehicles account for 5 percent or less of Grand List value. The median share of Grand List value attributable to motor vehicles is 7.6 percent.

The next component of the Grand List is personal property. The share of Grand List value accounted for by business personal property ranges from 24.4 percent in Waterford (which is home to three nuclear power plants) to a low of 0.8 percent in New Canaan and Weston. There are 20 additional municipalities where business personal property accounts for 10 percent or more of Grand List value and 21 more municipalities where the share is 2 percent or less. The median share of Grand List value attributable to business personal property is 4.4 percent.

The Other category is the last element of the Grand List. There are seven municipalities where the other category accounts for more than ten percent of the Grand List value – Warren (31.7 percent), Cornwall (23.4 percent), Salisbury (21.3 percent), Norfolk (20.0 percent), Canaan (18.5 percent), Washington (17.1 percent) and Durham (14.5 percent). There are 8 municipalities where the other

¹² The relative importance of motor vehicles in the Windsor Locks Grand List reflects the fact that there are a number of rental car agencies located at the Bradley International Airport and their entire fleet is assessed in Windsor Locks.

category accounts for zero percent of Grand List value and another 43 municipalities where the share is 1.0 percent or less. The median share of Grand List value attributable to the other category is 2.0 percent.

Determining Assessment Quality

The property tax is the only major tax whose base must be estimated, rather than observed. Thus, by its very nature, the valuation of property is a subjective process which is part science and part art. Assessing property requires the talents of highly trained and experienced personnel. However, since no two individuals have exactly the same experiences, individual assessors may differ in the weights they assign different abstract factors – e.g., view, neighborhood quality, etc. – which may influence the value of a particular property.¹³

The Office of Policy and Management (OPM) prepares an annual assessment-sales ratio study calculating the coefficient of dispersion and price related differential for each town to measure the horizontal and vertical equity of property tax administration across towns. The primary purpose of the assessment/sales ratio study is to adjust for differences in assessment levels across towns to calculate an equalized net grand list used to allocate some state grants across towns. All states have similar programs because state aid should be distributed according to differences in capacity, not differences in property tax administration.

There are three dimensions of assessment uniformity measured in assessment/sales ratio studies:

- 1) The first step is to determine how close actual assessed values are to the target of market value.¹⁴ Three measures of central tendency are typically computed:
 - a) an average assessment/sales ratio which is the mean of the assessment/sales ratios for each individual property;
 - b) the median of the individual ratios, which is the value in the middle of the ratios when sorted into ascending or descending order; and
 - c) the weighted average which is the total of assessed value divided by the total sales value of all the properties.

In practice the median ratio is used most often, albeit some jurisdictions use the mean ratio. Bell and Bowman (1991, 357) found that while there are differences when using the mean vs the median ratio, the differences often are not critical. OPM uses the median ratio in its assessment/sales ratio study.

- 2) The next step is to determine the extent to which similar properties are treated the same. This is a measure of *horizontal uniformity* – properties of equal value are treated equally – and measures how individual properties are clustered around the measure of central tendency. The most commonly used measure of horizontal uniformity is the Coefficient of Dispersion (COD).¹⁵ Typically, CODs of less than 15 for residential properties indicate good assessment uniformity, while CODs of less than 20 for income producing properties and vacant land indicate good assessment uniformity. [Eckert, 540]

- 3) The final step is to determine if there is a systematic bias in valuing high- or low-valued properties. The statistical measure used to gauge *vertical assessment uniformity* is the Price

¹³ This is only an issue in towns with large assessment staffs.

¹⁴ In Connecticut the appraised value of a property is the estimated market value of the property. Assessed value in Connecticut is 70 percent of the appraised value.

¹⁵ The coefficient of dispersion is the average absolute deviation of individual-parcel ratios from the median ratio, expressed as a percentage of the median (or mean) ratio. [Eckert, 534-35]

Related Differential (PRD).¹⁶ The PRD tests to see if higher and lower valued properties are assessed at the same level. According to the International Association of Assessing Officers (IAAO) the PRD should range between 0.98 and 1.03 to indicate vertical uniformity in assessments. A PRD greater than 1 indicates an under valuation of high value properties, while a value less than 1 indicates under valuation of low valued properties.

Other Issues to Consider in Ratio Studies

The purpose of an assessment/sales ratio study is to compare the actual market value of a property to its gross assessed value determined by the assessor. Only arm's length sales transactions between a willing buyer and a willing seller are included in the assessment ratio studies. [Eckert, 23]

Use of arm's length transactions is important to ensure that the transactions reflect true market value. Arm's length transactions only take place between parties that have no kind of business or family connection to one another and are not acting out of distress. For instance, purchasing a property from a company owned by a relative, even if both entities are not affiliated parties, would not be considered a true arm's length transaction. In a similar manner, properties purchased at a tax sale, judicial sale or the sale of foreclosed properties do not represent arm's length sales because they are made under duress and there is not a willing seller and willing buyer.

Assessors in each town identify non-arm's length sales which OPM excludes from their assessment/sales ratio study because the assessor determines they are sales between related parties, to and from financial institutions or government agencies or sales with extreme ratios (which indicate abnormal transactions). Table 9 lists the codes given to properties determined by the assessor to be non-arms-length sales. There are 33 reasons that a property sale may be determined to be a non-arm's length sale that cannot be used in OPM's assessment/sale ratio study.

Table 9 Codes for Non-arms-length Sales Not Used in Assessment/Sales Ratio Study			
Code	Defined	Code	Defined
00	Verified Sale by Deed or Assurance	15	Government sale
01	Family sale	16	Sale to/from charitable org
02	Love & affection	17	Sale parcel in two towns
03	Intra corporation	18	In lieu of foreclosure
04	Transfer of convenience	19	Right of way sale
05	Deed 6 months from agreement	20	Csale of cemetery lot
06	Portion of property sold	21	Sale - other than cash
07	Prop substantially changed	22	Sale including household goods
08	Sale of undivided/part interest	23	Influenced by zoning change
09	Tax sale	24	Plottage
0A	Verified land sale	25	Other
0B	Beach sale	26	Unverified sale
10	Conveyance per last will & testament	28	Use assessment ie farming

¹⁶ The Price Related Differential is calculated by dividing the mean ratio by the weighted (or aggregate) mean ratio. [Eckert, 539-40]

11	Judicial sale	29	Sales of no consideration
12	Sale of non-bid to abutter	30	Sale at public or private auction
13	Bankruptcy	31	Estate sale
14	Sale of foreclosed property		

Assessors reported 35,940 sales to OPM for the 2012 assessment year. Of those, 12,700 (or more than 35 percent of total sales) were classified by the assessors as non-arm's length sales according to the codes in the table above. Of those non-arm's length sales, two codes account for 57.8 of total non-arm's length sales. Specifically, code 14 (sale of foreclosed property) accounts for 21.9 percent of all non-arm's length sales and code 25 (other)¹⁷ accounts for 35.9 percent of all non-arm's length sales.

Table 10 summarizes the findings of the OPM assessment/sales ratio for representative small cities, wealthy suburbs and rural towns in Connecticut. The results of an appraisal/sales ratio comparing the sales price to the estimated market value of a property (the appraised value in Connecticut) and using the median ratio to calculate the coefficient of dispersion are also presented in Table 10. The results are very consistent for the coefficient of dispersion and the price related differential for residential, CIP (commercial, industrial and public utility) and vacant land parcels. The results of the OPM assessment/sales ratio are essentially the same as the approach using appraised values across all property types – residential, CIP and vacant.

The only place where the two approaches differ is in the calculation of the mean and median values which are measures of central tendency. This merely reflects the fact that the OPM ratio study compares assessed value to sales price and the other approach compares the appraised value to sales price for each property and the assessed value is 70 percent of the appraised value.

For the OPM study if assessed value reflected 70 percent of the market value the ratio should approach 0.7 while for the study using appraised value the ratio should be around 1.0. Of the results presented in Table 10, there is only one town which has a mean ratio below 0.7 – Plainville (.687 for commercial properties). All other towns have mean ratios in excess of 0.7. Similarly, the median for the second approach is below 1.0 in only three towns and all are for vacant land – Torrington (.895), Litchfield (.861) and New Canaan (.981).

While these measures of central tendency exceed the assessment/sales ratio target of 0.7 and the appraisal/sales ratio of 1.0, they are more difficult to interpret in Connecticut than other states. The ratios are distorted by the 5-year assessment cycle in Connecticut and cannot be interpreted as a measure of assessment quality. For example, if a property is valued in 2012 it keeps that estimated market value until it is re-valued in 2017. However, because market conditions change over time, the actual market price of that house may increase or fall over the five years. As a result, the estimated

¹⁷ According to OPM, the other category is defined as short sales and sales that have an assessment/sales ratio that is either too high or too low. For example, the "Other" category includes properties that sold but the value differs from what was assessed. This might be a property which the assessor lists as a 2,400 sf colonial that sells for \$75,000 more than the assessor had valued the property. But the assessor might look at the MLS listing to see that they finished a 600 sf room over the garage and now it's a 3,000 sf colonial. Other properties included in this category might include property that was under construction and only assessed as a vacant lot, but when it sold it has a fully complete home that the assessor still needed to pick up or a property that was assessed at use value (PA 490) which it's assessed based on "use value" and not its FMV although that should have been coded as "28".

market value from 2012 will be less than/greater than the actual sales price in 2014 or 2015. In a market experiencing declines in property values, the 5-year

Table 10 Assessment/Sales Ratio Study Results from OPM and Appraisal/Sales Ratio Study Results, 2012												
	Coefficient of Dispersion						Price Related Differential			OPM Mean/Traditional Median		
	Residential		CIP*		Vacant		Residential	CIP*	Vacant	Residential	CIP*	Vacant
	OPM	Appraisal Value Used	OPM	Appraisal Value Used	OPM	Appraisal Value Used						
SMALL CITIES												
Manchester	12.90	12.90	29.06	29.07	15.67	15.67	1.04	1.31	1.38	75.76/102.6	74.37/101.7	115.70/174.8
Meriden	14.36	14.36	18.47	18.47	17.87	17.87	1.05	1.02	0.96	74.69/106.6	102.57/151.6	75.36/105.9
New London	19.83	19.82	26.84	27.84	0.00	0.00	1.07	0.96	0.00	96.25/131.4	104.67/136.2	0
Torrington	8.81	8.81	10.94	10.94	18.12	18.12	1.01	0.87	1.03	83.24/119.2	76.06/103.3	71.08/89.5
WEALTH SUBURBS												
Guilford	15.14	15.14	18.17	18.17	22.38	22.39	1.07	1.16	1.09	86.12/114.2	0	89.92/122.2
Litchfield	19.17	19.17	24.00	24.00	46.69	46.70	1.07	1.14	1.15	82.14/112.8	88.76/124.6	74.41/86.1
New Canaan	16.00	16.00	0.00	0.00	25.51	25.53	1.02	0.00	1.06	74.89/104.4	0	77/42/98.9
RURAL												
Durham	8.89	8.90	0.00	0.00	0.00	0.00	1.01	0.00	0.00	73.62/106.2	0	0
Killingly	18.37	18.38	0.00	0.00	40.59	40.59	1.10	0.00	1.38	95.54/124.4	0	139.99/169.5
Plainville	14.07	14.07	23.10	23.10	0.00	0.00	1.03	1.28	0.00	74.75/101.5	68.69/103.2	0
Union	5.56	5.56	0.00	0.00	0.00	0.00	1.01	0.00	0.00	82.81/113.7	0	0
Washington	27.79	27.79	17.73	17.73	33.82	33.84	1.33	0.84	1.10	84.09/122.1	71.50/124.1	88.00/110.8
*Commercial, industrial and public utilities												
Source: Office of Policy Management and author calculations.												

assessment cycle distorts the assessment/sales ratios over time giving it an upward bias. Thus, equalization for those towns that do not revalue each year does not reflect differences in assessment quality. Rather, the assessment/sales ratio is distorted by where the town is in the reassessment cycle and how markets have changed over time. Assessment accuracy is only determined by The Performance Based Revaluation Standards Certification, which is filed every five years when the town reassesses. These distortions would be corrected if Connecticut moved to annual reassessment.

If a property owner is not satisfied with the estimated assessed value of her property, she has the right to appeal the assessment. The appeals process is described in the next section.

Appeals Process

The property tax is the most difficult and challenging state and local tax to administer. The income tax is based on the annual income of an individual or business. The sales tax is based on the amount of taxable sales taking place annually. These are both annual flows that are well documented. Alternatively, the property tax is based on the estimated selling price a property. Property does not change hands annually so the value has to be estimated by the assessor.

Because the base of the real property tax is estimated, it is important there is a process for the property owner to challenge the estimated market value of his/her property. An appeals process is a critical part of the property tax system. Such an appeals process provides the opportunity for an aggrieved property owner to pursue relief and it provides information on the functioning of the assessment system. A well-functioning appeals process should be easily accessible and generally low cost for the property owner. Consistent with best practices, Connecticut has a three-step appeals process.

The first step in this process is when initial revaluations are determined and sent to the property owner. At that point the property owner is invited to meet the assessor or representative from the revaluation company to discuss the proposed valuation. This is an opportunity for the property owner to identify errors on the property record card and to present an alternative opinion of value. This is not a legislatively mandated process but most jurisdictions follow this practice before finalizing proposed values.

Board of Assessment Appeals

Boards of Assessment Appeals, created by the General Statutes of Connecticut, represent the second opportunity to appeal one's property valuation.¹⁸ The board of assessment appeals in each town meets at least once in September for the sole purpose of hearing appeals related to the assessment of motor vehicles. In addition, the board of assessment appeals in each town meets in March to hear appeals related to the assessment of real property. (CGS Section 12-110)

Each person owning property can contest the valuation of that property assigned by the assessor by filing a written appeal not later than February 20. The board will then notify each aggrieved taxpayer who filed a written appeal in the proper form and in a timely manner, no later than March first of the date, time and place of the appeal hearing. The board will determine all appeals for which the board conducts an appeal hearing and send written notification of the final determination of such appeals to each person within one week of the determination. (CGS Section 12-111)

¹⁸ Sections 12-110 to 12-117.

The boards have additional specific powers which they may exercise at their discretion:

- Administer oaths in cases coming before them
- Correct clerical omissions or mistakes in the assessment of taxes
- Add to the assessment lists the names of people who own taxable property in the town, but have been omitted from the list
- Increase the number, quantity or amount of property in any person's list¹⁹
- Reduce the list of any person appearing before the board by decreasing the valuation, quantity or amount of any item
- Make a supplemental list of any taxable property omitted by the assessors
- Add 25 percent to the value of any additional or supplemental lists of personal property as a penalty
- Elect not to conduct appeal hearing for any commercial, industrial, utility or apartment properties with assessment greater than \$1,000,000. [Connecticut Association of Assessors, 2009, p. 5]

Superior Court

If the taxpayer is not satisfied with the finding of the Board of Assessment Appeals, they have two months from the time of notification of the determination of the Board of Assessment Appeals for a final appeal to the Superior Court for the judicial district in which the town or city is located. The court has the power to grant relief in which case the applicant shall be reimbursed by the town for any overpayment of taxes together with interest and any costs awarded by the court. Alternatively, if the court finds the appeal is made without probable cause, it may assess the applicant double or triple the costs, but in practice it does not award costs to either side.

Determining the Property Tax Rate

Once the value of each component of the Grand List is determined by the assessor, the city councils or boards of finance in each town set the property tax rate to be used in calculating the property tax liability for each property, motor vehicle and business personal property.²⁰ The property tax rate is typically expressed in mills, or taxes per \$1,000 of value. A property tax rate of 24.00 mills is equivalent to 2.4 percent.

CGS Section 12-122 requires the selectmen in each town provide an itemized estimate of the current expenses of the departments of the town for the coming year and those estimates will be altered or approved by the voters at a town meeting. The selectmen, city councils and board of finance in each town consider other estimated yearly income of the town and then set a property tax rate which must be sufficient to pay the estimated expenses of the town in the coming year.

The process of setting the property tax rate can be a contentious process because of the political nature of the municipal budget process. Some communities are more willing to raise property tax rates than others. This could simply reflect the increased demand for local services and the relative wealth of their residents. Alternatively, many municipalities have a harder time approving budgets that increase the

¹⁹ When a board increases the assessment, or quantity thereof, they must mail to the owner, at the last known address, within one week of the decision, a written or printed notice to appear before such board at a specific time and place and show cause why such property should not be added to such grand list.

²⁰ New legislation caps the property tax rate on motor vehicles at 32 mills for assessment year beginning October 1, 2015 and 29.38 mills for each assessment year thereafter.

mill rate because of taxpayer dissatisfaction. This is particularly true during economic downturns, when there is more scrutiny of town budgets.

PROPERTY TAX RELIEF MECHANISMS

Efforts to reduce property tax liabilities include both *direct* and *indirect* property tax relief for property owners:

- *Direct* property tax relief reduces the tax liabilities for individual property owners; and
- *Indirect* property tax relief reduces reliance on property taxes generally by providing local governments access to alternative own-source revenues and increasing reliance on state grants.

Local governments in Connecticut have a high reliance on the property tax as described above, but they have a low reliance on user charges, other taxes and state grants. In 2012 current charges accounted for 27.5 percent of total local own-source revenues in the US; the comparable figure for Connecticut was 10.1 percent. Alternatively, in 2012 property taxes accounted for 73.5 percent of total local taxes in the U.S.; the comparable figure for Connecticut was 98.8 percent. Finally, intergovernmental transfers accounted for 37.0 percent of total local general revenues nationally, but just 29.1 percent in Connecticut. In short, local tax and own-source revenues in Connecticut are less diverse than local government tax and own-source revenues nationally.

Direct property tax relief programs reduce or eliminate the property tax liability for individual properties depending on the use of the property and the characteristics of the owner. For example, as mentioned above farm land, forest land, open space land and marine heritage land are taxed at use value, not market value. In addition, some properties are entirely exempt from paying property taxes. This group includes certain property uses/owners that are typically exempt from property taxation by most state and local governments – e.g., property belonging to private hospitals, schools, private colleges and universities, and religious organizations.

The purpose of this section is to briefly describe the plethora of direct property tax relief measures available in Connecticut which provide preferential treatment to individual properties based on the characteristics/use of the property and the characteristics of the property owner. These direct property tax relief programs fall into two general categories – property tax relief provided by the state²¹ and property tax relief options available to local governments. These are discussed in the next two sections.

State Provided Property Tax Relief Programs

There is no single place one can go to find a comprehensive list of state provided property tax relief mechanisms. As a start, Connecticut is one of just over a dozen states that annually prepares a tax expenditure report that includes a section on property tax expenditures. This is the first place to look for state programs that reduce or eliminate property taxes on individual properties based on the characteristics of the property or the property owner.

CGS Section 12-7(b)(e) requires the Office of Fiscal Analysis (OFA) to prepare biennially a report on tax expenditures, “which the law defines as any exemption, exclusion, deduction or credit

²¹ The lost revenue of some state imposed exemptions may be partially reimbursed by the state to the municipalities where the exempt properties are located.

created under the general statutes or public act which result in less tax revenue to the state or municipalities than they would otherwise receive.” [OFA, p. 1]

OFA developed guidelines for what is determined to be a tax expenditure if it:

- Impacts a statewide tax;
- Results in reduced tax revenue;
- Is not an appropriation;
- Is included in the definition of a tax base;
- Is not subject to an alternative tax; and
- Can be amended or repealed by a change in state law alone. [OFA, p. 2]

For example, CGS Section 12-704c provides an income tax credit for personal and real property taxes paid on the taxpayer’s primary residence or a motor vehicle. The maximum income tax credit allowable was \$300.²² OFA estimated that this state tax expenditure resulted in \$214.3 million of foregone state tax revenues in Fiscal Year 2015. [OFA, p. 26]

CGS Section 12-(7)(e) also requires that the tax expenditure report contain the following information:

- A description of each tax expenditure;
- The year in which the tax expenditure was enacted;
- The purpose of its enactment;
- A summary of any amendments to the tax expenditure since its enactment;
- The estimated state and municipal fiscal impact of the expenditure during each fiscal year of the current biennium;
- An estimate of the revenue that would result from the repeal of the expenditure; and
- An estimate of the number of taxpayers receiving benefit from the expenditure.

Table 11 lists 21 specific state mandated property tax relief programs described in the tax expenditure report. In addition, the tax expenditure report includes two tables – *Statewide Property Tax Grand List Reductions FY 13/Grand List 11: Select Governmental and Other Benevolent Organizations Exemptions* and *Statewide Tax Grand List Reductions (FY13 – Grand List 2011 – in millions)*. Neither table includes information on the cost of individual tax expenditures and only the second table includes some information on the number of participants for selected programs. This is understandable because these tax expenditures are *local* tax expenditures representing property tax revenues foregone by municipalities.²³ Since there are 169 municipalities and no one systematically collects information about these programs from individual municipalities, OFA is not able to comply with the mandate in the law to estimate the costs of each tax expenditure and the number of beneficiaries without significant additional expense.

²² The maximum credit was reduced in June 2015 to \$200.

²³ The only *state* property tax expenditure is the personal income tax credit for personal and real property taxes paid.

Table 11 State Property Tax Exemptions Described in Connecticut Tax Expenditure Report, 2014	
Section 12-81(1)	Federally-owned property
Section 12-81(2)	State-owned property
Section 12-81(4)	Municipally-owned property
Section 12-81(5)	Property held by trustees for public purpose
Section 12-81(6)	Property of volunteer fire companies
Section 12-81(7)	Property devoted to scientific, educational, literary, historical or charitable purposes
Section 12-81(8)	Specific enumerated Colleges
Section 12-81(9)	Personal property loaned educational institutions
Section 12-81(10)	property owned by horticultural societies
Section 12-81(11)	Cemetery property
Section 12-81(12)	Personal property of religious organizations
Section 12-81(13)	Real and personal property of houses of religious worship
Section 12-81(14)	Real and personal property religious organization used for a school, a non-profit camp or recreational facility for religious purposes, a parish house, orphan asylum
Section 12-81(15)	Dwelling house and land of officiating clergymen
Section 12-81(16)	Hospitals and sanatoriums
Section 12-81(18)	Property of veterans' associations
Section 12-81(27)	Grand army posts
Section 12-81(29)	the Red Cross
Section 12-81(45)	Connecticut National Guard
Section 12-81(48)	Airport improvements
Section 12-81(49)	Nonprofit camps or recreational facilities charitable purposes
Source: OFA, <i>Connecticut Tax Expenditure Report, January 2014</i> , pp. 194-198.	

The Office of Policy and Management does collect information on some of the programs listed in the tax expenditure report. Specifically, Table 12 reports information from OPM regarding the amount the state paid to local governments to reimburse them for property taxes lost because of a state property tax relief program. For example, the state paid local governments \$115.4 million in partial reimbursement for property taxes foregone by municipalities because of state mandated property tax exemptions for private colleges and hospitals. This amount, however, is not a property tax expenditure, it is a state appropriation that goes through the normal budgetary process. This would be excluded as a tax expenditure according to item 3 of the OFA guidelines described above. The unreimbursed amount of property taxes foregone because of these exemptions is a *local* tax expenditure, which could be estimated from the OPM data.

Table 12 State Property Tax Reimbursements to Municipalities, 2014	
Property Tax Relief Program	Amount Reimbursed by the State
Elderly homeowner	\$20,504,900
Elderly freeze	\$171,356
Totally disabled	\$400,000
State owned property	\$78,320,158
College and hospitals	\$115,431,737
Source: Office of Policy and Management	

Since a tax expenditure is revenue foregone because of a provision in the CGS the tax expenditure report on property tax expenditures would benefit from more clarity about what is a state property tax expenditure, what is a local property tax expenditure, and what is a state reimbursement that goes through the normal budgetary and appropriation process.

The tax expenditure report, however, is not a comprehensive list of all state provided property tax relief mechanisms. The report mentions, but does not list separately, property tax relief programs that provide partial exemptions for property occupied as dwelling places by the blind (exempts \$3,000 of value), veterans (exempts \$1,000 of value)²⁴, disabled veterans (a sliding scale which exempts between \$1,500 and \$3,000 of value depending on degree of disability and age),²⁵ totally disabled (exempts \$1,000 of value), elderly and specified relatives.²⁶

Connecticut statutes also require the veteran's and disabled veteran's exemptions to grow when the town's Grand List grows. For example, in Colchester and Andover the veteran exemption is now \$2,000 and not \$1,000 and in Madison it is now \$6,000 instead of \$1,000. The Disabled Veteran exemption has doubled as well in Colchester and Andover.

State mandated exemptions fall into three basic categories

- Properties totally exempt because of the characteristics of the owner and use of the property;
- Properties that are partially exempt because of the characteristics of the owner and use of the property;
- Properties that are partially exempt in order to promote economic development.

Table 13 lists 22 state provided full property tax exemptions for certain types and uses of properties, essentially those described in the tax expenditure report and listed in Table 11. For example,

²⁴ The surviving spouse or minor child of a veteran shall have \$1,000 of property exempt from property taxation.

²⁵ CGS 12-81(20) provides for a sliding scale of benefits for disabled veterans based on disability ratings by the Veterans' Administration of the United States amounting to ten per cent or more of total disability, provided such exemption shall be fifteen hundred dollars in any case in which such rating is between ten per cent and twenty-five per cent; two thousand dollars in any case in which such rating is more than twenty-five per cent but not more than fifty per cent; twenty-five hundred dollars in any case in which such rating is more than fifty per cent but not more than seventy-five per cent; and three thousand dollars in any case in which such person has attained sixty-five years of age or such rating is more than seventy-five percent. Disabled veterans with severe disability shall have \$10,000 of value of the dwelling house exempt from property taxation.

²⁶ For example, parents of veterans can have \$1,000 of property belonging to them exempt from property taxation.

the list includes exemptions for federally owned property, state owned property, property owned by colleges and religious organizations.

Table 13 State Provided Total Property Tax Exemptions for Certain Types of Property	
CGS Source	Description
Sec. 12-81(1)	Property of the United States
Sec. 12-81(2)	State property and reservation land
Sec. 12-81(4)	Municipal property
Sec. 12-81(5)	Property held by trustees for public purposes
Sec. 12-81(6)	Property of volunteer fire companies and property devoted to public use
Sec. 12-81(7)	Property used for scientific, educational, literary, historical, charitable or open space
Sec. 12-81(8)	College property
Sec. 12-81(9)	Personal property loaned to tax-exempt educational institutions
Sec. 12-81(10)	Property belonging to agricultural or horticultural societies
Sec. 12-81(11)	Property held for cemetery use
Sec. 12-81(12)	Personal property of religious organizations devoted to religious or charitable use
Sec. 12-81(13)	Houses of religious worship
Sec. 12-81(14)	Property of religious organizations used for certain purposes
Sec. 12-81(15)	Houses used by officiating clergymen as dwellings
Sec. 12-81(16)	Hospitals and sanatoriums
Sec. 12-81(18)	Property of veterans' organizations. (a) Property of bona fide war veterans' organization
Sec. 12-81(27)	Property of Grand Army posts
Sec. 12-81(29)	Property of American National Red Cross
Sec. 12-81(45)	Property of units of Connecticut National Guard
Sec. 12-81(48)	Airport improvements
Sec. 12-81(49)	Nonprofit camps or recreational facilities for charitable purposes
Sec 12-74	Municipal airports located in another town

Appendix Table 3 lists 66 state provided property tax exemptions for certain types of properties and owners with certain characteristics. For example, the list includes exemptions for the blind, veterans or parents of veterans, various types of personal property and a wide range of other types of personal and real property. Typically, relief is provided through exempting some portion of the value of the real property owned by these beneficiaries from property taxation. The amount exempted is generally very modest ranging from \$1,000 to \$10,000 typically.

Table 14 lists 15 state provided property tax exemptions intended to promote economic and housing development. Six of these exemptions are state provided options for local governments.

	Table 14 State Provided Property Tax Exemptions for Promote Economic and Development
CGS Source	Description
Sec. 7-498	Town/City Development Act
Sec. 8-215	Department of Housing, Moderate Income Housing - Municipal Option
Sec. 8-380	Department of Housing Deferment - Local Option
Sec. 8-58	Connecticut Housing Authority
Sec. 12-65	Multi-family fixed assessment
Sec. 12-65b(1)	Fixed assessment for 7 years if investment is \$3 million or more - Local Option
Sec. 12-65b(2)	Fixed assessment for 2 years if investment is \$500,000 or more - Local Option
Sec. 12-65b(3)	Fixed assessment for 3 years if investment is \$25,000 or more but not more than 50% - Local Option
Sec. 12-65e	Fixed assessment for 11 years for rehabilitation
Sec. 12-65g	Fixed assessment for 5 years for physically disabled
Sec. 32-602(c)	Capitol City Economic Development Authority
Sec. 32-666a	Fixed assessments - Adriaen's Landing & Capitol City Project
Sec. 32-70	Enterprise zone
Sec. 32-71	enterprise zone fixed assessments
Sec. 32-71a	Electric generating facility - Local Option

Finally, Table 15 lists 11 miscellaneous state provided property tax exemptions based on the type of business being carried out.

In summary, there are four groups of state provided property tax relief based on type of property, characteristics of the property owner or the type of business being carried out. In total, 124 property tax exemptions have been identified, albeit it cannot be claimed this is an exhaustive list. Property tax relief is generally very modest.

	Table 15 Miscellaneous State Provided Property Tax Exemptions
CGS Source	Description
Sec. 10a-191	State of Connecticut Health and Educational Facilities Authority
Sec. 12-241	Common carrier motor buses -- 100 percent exemption -- 50 percent for personal property
Sec. 12-245	Public air carrier
Sec. 12-255	Public Service Companies -- e.g. railroads
Sec. 12-268j	Public Service Companies -- e.g. railroads
Sec. 12-76	Municipal Water Corporations
Sec. 12-77	Generation of water power

State Provided Municipal Option Property Tax Relief Programs

In addition to providing direct property tax relief itself, the state also provides property tax relief options for municipalities. Specifically, Table 16 lists 38 state provided municipal options for providing property tax relief to their citizens. It is difficult to know how these programs are being used by the 169 municipalities, however, because no one is responsible for systematically collecting that information.

Fortunately, the Connecticut Conference of Municipalities (CCM) collect information about the usage of state provided municipal property tax relief options. Specifically, CCM staff collected information through searches and contact with towns asking them which of the 38 property tax relief options provided by the state they actually use to provide property tax relief to their citizens. As this is being written, approximately 140 municipalities have responded to the informal survey. So far, of the 38 property tax relief options provided by the state to municipalities, 14, or 36.8 percent, are not used by any municipality. One state provided option is used by six municipalities, and another 13 state authorized property tax relief options are used by between 1 and 3 municipalities. In other words, 28 of the 38 property tax relief options provided by the state, 73.7 percent of the total, are used by 6 or fewer municipalities.

Table 16 State Provided Municipal Option Property Tax Relief	
Source	Type
Sec 12-81c	Municipal option to exempt certain motor vehicles
Sec 12-81f	Municipal option to provide additional exemption for veterans or spouses eligible for exemption under CGS Section 12-81
Sec 12-81g	Additional exemption from property tax for veterans. State reimbursement for related tax loss. Regulations
Sec 12-81h	Municipal option to allow exemption applicable to assessed value of a motor vehicle specially equipped for disabled veteran eligible for exemption under CGS Section 12-81 related to disability.
Sec 12-81i	Municipal option to provide additional exemption for persons totally disabled and eligible for exemption under CGS Section 12-81
Sec 12-81j	Municipal option to provide additional exemption for blind persons eligible for exemption under CGS Section 12-81
Sec. 12-81m	Municipal option to abate up to fifty percent of property taxes of dairy farm fruit orchard, vegetable, nursery, non-traditional or tobacco farm or commercial lobstering business operated on maritime heritage land
Sec. 12-81n	Municipal option to provide additional exemption for businesses offering child day care services to residents
Sec. 12-81o	Municipal option to abate property taxes on certain food manufacturing plants
Sec 12-81p	Municipal option to abate property taxes on amusement theme parks
Sec 12-81q	Municipal option to abate property taxes on infrastructure of certain water companies
Sec 12-81r	Municipal option to abate or forgive taxes or fix assessment on contaminated real property
Sec 12-81s	Municipal option to exempt commercial fishing apparatus
Sec 12-81t	Municipal option to abate property taxes on information technology personal property
Sec 12-81u	Municipal option to abate property taxes on property of certain communications establishments
Sec 12-81v	Municipal option to abate taxes on property of electric cooperatives
Sec 12-81w	Municipal option to abate or exempt a portion of property taxes of local firefighters and certain emergency and civil preparedness personnel
Sec 12-81x	Municipal option to abate taxes of surviving spouse of police officer, firefighter or emergency medical technician
Sec 12-81y	Municipal option to abate property taxes on school buses
Sec 12-81z	Municipal option to abate taxes on property of non-stock corporations providing citizenship classes

Sec 12-81aa	Municipal option to abate taxes for urban and industrial reinvestment sites
Sec 12-81bb	Municipal option to provide property tax credits for affordable housing deed restrictions
Sec 12-81dd	Municipal option to abate real or personal property taxes paid by a nonprofit land conservation organization
Sec 12-81ff	Municipal option to abate property taxes on machinery used in connection with recycling
Sec 12-81gg	Municipal option to exempt horses and ponies from property taxation
Sec 12-91	Additional optional exemption for farm buildings or buildings used for housing for seasonal employees
Sec 12-124	Abatement of taxes and interest
Sec 12-124a	Municipal option to abate taxes on residence exceeding eight per cent of occupants' income
Sec 12-125a	Waiver of taxes on certain property held by suppliers of water
Sec 12-126	Abatement or refund of tax on tangible personal property assessed in more than one municipality
Sec 12-127a	Abatement of taxes on structures of historical or architectural merit
Sec 12-129b	Real property tax relief for certain persons sixty-five years of age or over
Sec 12-129n	Optional municipal property tax relief program for certain homeowners age sixty-five or over or permanently and totally disabled
Sec 12-129r	Municipal option to abate taxes on open space in exchange for transfer of development rights to municipality
Sec 12-129s	Municipal option to abate taxes on high mileage motor vehicles and hybrid passenger cars
Sec 12-129t	Municipal option to abate taxes on visitable housing
Sec 12-129u	Municipal option to abate taxes on historic agricultural structures
Sec 12-170v	Municipal option to provide real property tax relief to certain elderly homeowners

Table 17 provides information on state authorized local property tax relief mechanisms used by ten or more municipalities. The most popular tax relief option, used by 63 municipalities, or approximately 45 percent of the municipalities included in the survey so far, is property tax relief provided to certain homeowners age 65 or over or to permanently and totally disabled on their principal residence [CGS, Sec 12-129n]. Each municipality appoints a committee to make recommendations on the form and extent of property tax relief to be provided, but total property tax relief provided cannot exceed 10 percent of the previous year's total real property tax assessment.

Table 17 Municipal Usage of State Provided Municipal Property Tax Relief Options			
Option		Number Using	
Sec 12-129n		63	
Sec 12-81c		56	
Sec 12-129b		44	
Sec 12-81f		41	
Sec 12-91		23	
Sec 12-81w		18	
Sec 12-81m		13	
Sec 12-81g		11	
Sec 12-81j		10	
Sec 12-81x		10	
Source: Connecticut Conference of Municipalities. Informal survey, 2015.			

The second most popular state authorized property tax relief program, used by 56 municipalities, or 40.0 percent of municipalities responding to the CCM informal survey so far, exempts certain motor vehicles from the property tax [CGS, Sec 12-81c]. This provision authorizes municipal legislative bodies to exempt property owned by non-profit ambulance companies, including ambulances, and motor vehicles owned by the disabled that have been modified for use by that person.

CGS Section 12-129b provides tax relief for those who applied under this program not later than May 15, 1980. This is what is referred to as a “tax freeze” for the elderly. To receive benefits under this provision, the taxpayer must be

1. Sixty-five years of age or over or the surviving spouse 62 years or older on May 15, 1980 – making the taxpayer at least 97 or more as of May 15, 2015;²⁷
2. Occupy the property as their home;
3. A resident of the state for a year before filing for relief; and
4. Have adjusted gross income (plus tax exempt interest), as determined by the Internal Revenue Service, of not more than \$6,000.

²⁷ According to the Office of Policy and Management there are 63 taxpayers state-wide receiving this benefit.

Relief provided by state authorized property tax relief options for municipalities is relatively modest, as is relief provided through state mechanisms focused on individuals. As a result, there are very modest differences between gross and net Grand List total values and the relative importance of individual components of the base.

Circuit Breaker

The programs discussed in the previous sections provide property tax relief based on characteristics of the property and the property owner, regardless of their economic circumstances. Another approach to providing direct property tax relief is the circuit breaker which targets property tax relief on those with high property tax liabilities relative to income.

The state of Connecticut provides property tax relief to elderly and totally disabled homeowners through a circuit breaker. The circuit breaker was created when the “tax freeze” was abolished (except for those grandfathered). It was created because the “tax freeze” was too costly. The circuit breaker has a maximum benefit of \$1,000 for single taxpayer and \$1,250 for a married taxpayer whereas the “tax freeze” originally had no ceiling as to the amount of the benefit. Later a \$2,000 cap was installed.

The homeowner, when applying for benefits under this program, must document their taxable and non-taxable income, the total of which is called qualifying income.²⁸ In making the application the homeowner will submit to the assessor a copy of their federal income tax return (if they file one) to substantiate their application. In addition, the applicant must provide other evidence of qualifying income to the assessor such as any 1099s sent from banks or dividends, SS-1099 from Social Security and W-2P pension payments. [CGS Sec. 12-170aa (f)]

In a circuit breaker, the amount of relief provided the taxpayer varies with their income level and their property tax liability. Table 18 presents a schedule of benefits provided by this program to qualified homeowners by income class for both married and non-married taxpayers. For example, a married homeowner whose total qualifying income is between \$11,700 and \$15,900 will receive a 40 percent reduction in their property tax liability up to a maximum \$1,000 reduction. An unmarried homeowner with the same income level will qualify for a 30 percent reduction in their property tax liability up to a maximum \$750 reduction. The amount of relief declines as income increases. A married homeowner with qualifying income of \$28,900 or more, or an unmarried homeowner with qualifying income of \$23,600 or more, will not qualify for property tax relief under this program.

The program also provides benefits to people that are homeowners who reside in a multiple-dwelling complex. The benefits only accrue to persons who are 65 years of age or older or who are totally disabled. The amount of the annual benefit is determined in relation to the assumed amount of the property tax liability applicable to the dwelling unit occupied by the applicant. [CGS Sec. 12-170aa (j)]

The state reimburses the local municipality for property tax revenues foregone because of this program. [CGS Sec. 12-170aa (g)] The Secretary of the Office of Management and Policy is required to submit, on or before March first, annually, a report concerning the state programs of tax relief for elderly homeowners and grants to elderly renters to the joint standing committee of the General Assembly. Such report shall be prepared in relation to qualified participants, benefits allowed and state payments to municipalities as reimbursement for property tax loss in the preceding calendar year, including data concerning (1) the total number of qualified participants in each of the state programs for elderly

²⁸ This is generally a comprehensive measure of income, but Medicaid payments made on behalf of the homeowner or their spouse is excluded from this definition of qualifying income.

homeowners and the state program for elderly renters, and (2) total benefits allowed in each of such programs. [CGS Sec. 12-170bb]

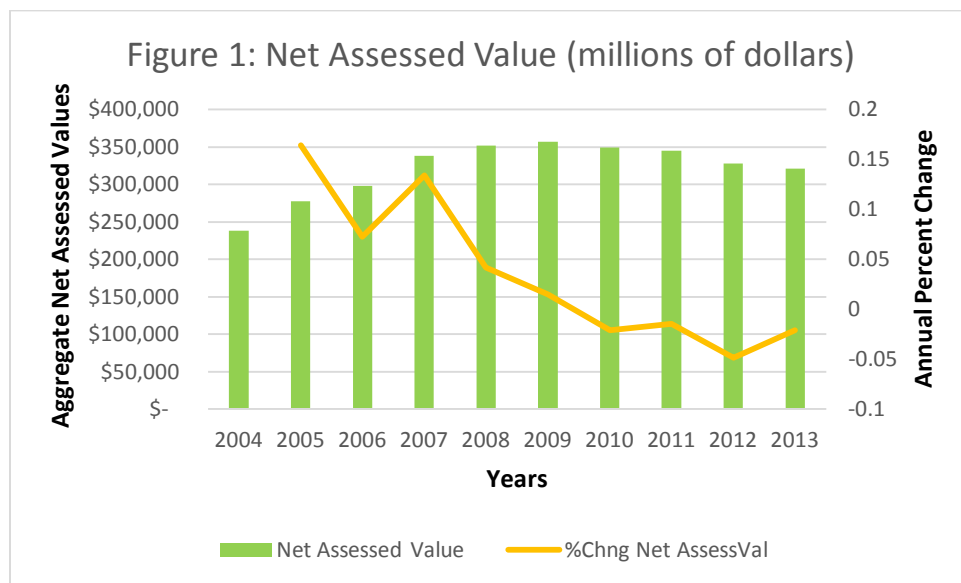
The portion of local revenues foregone because of the circuit breaker that are reimbursed by the state government is a state grant that goes through the normal budget and appropriation process; the portion of local revenues foregone that is not reimbursed is a local property tax expenditure.

Table 18 Circuit Breaker Relief by Income Level for Married and Non-Married Taxpayers				
Qualifying Income		Tax Reduction As Percentage Of Property Tax	Tax Reduction For Any Year	
Over	Not Exceeding			
Married Homeowners			Maximum	Minimum
\$ 0	\$ 11,700	50%	\$ 1,250	\$ 400
11,700	15,900	40	1,000	350
15,900	19,700	30	750	250
19,700	23,600	20	500	150
23,600	28,900	10	250	150
28,900		None		
Unmarried Homeowners				
\$ 0	\$ 11,700	40%	\$ 1,000	\$ 350
11,700	15,900	30	750	250
15,900	19,700	20	500	150
19,700	23,600	10	250	150
23,600		None		

OUTCOMES OF PROPERTY TAX ADMINISTRATION IN CONNECTICUT

After valuing each property at market value and calculating the assessed value, which is 70 percent of the estimated market value, exemptions are applied and a *net* taxable value is determined for each property. The Net Grand List is what is used to calculate the tax liability for each property.²⁹

In the aggregate, Net Grand Lists in Connecticut have been declining since 2009, albeit the decline is not uniform across municipalities. For example, between 2007 and 2012 sixty-four towns experienced increases in their Net Grand Lists, but 105 towns experienced declines. Between 2012 and 2013 the aggregate Net Grand Lists in Connecticut declined 2.1 percent, albeit 94 municipalities experienced increases averaging 0.6 percent and 75 municipalities experienced declines averaging 7.7 percent. See Figure 1.



Property tax revenues, however, continued to grow over this period as local governments increased mill rates. Data in Table 19 indicate that property tax revenues have grown by more than 2 percent annual from 2008 to 2013.

²⁹ The net Grand List is used to calculate the property tax liability, but further property tax relief is provided if the property owner qualifies for the circuit breaker program. The circuit breaker is a reduction in the tax liability applied in the tax collector's office and is not reflected in tax liabilities calculated from the Net Grand List.

Table 19 Increasing Property Tax Revenues in Connecticut		
Years	Property Tax Revenues (millions of dollars)	%change
2008	\$ 8,123.39	
2009	\$ 8,521.27	4.9%
2010	\$ 8,700.69	2.1%
2011	\$ 9,005.30	3.5%
2012	\$ 9,222.58	2.4%
2013	\$ 9,501.44	3.0%

Variations in Net Grand List Per Capita

Net Grand List per capita varies significantly across towns in Connecticut. The range is from the highest Net Grand list per capita in Greenwich, \$494,018, to the lowest net Grand List per capita in Hartford, \$27,873. In other words, the highest Net Grand list per capita is nearly 18 times greater than the lowest. See Table 20.

There are two important implications of such a disparity in property tax capacity across towns in Connecticut

- Significant fiscal gaps exist across municipalities making difficult for some to delivery a fixed level and quality of public services; and
- The property tax is regressive in Connecticut

First, since the property tax is a critical source of local tax revenue, these disparities in capacity result in significant disparities in the ability of individual towns to raise revenues to fund provision of local goods and services for their citizens.

The New England Public Policy Center at the Federal Reserve Bank of Boston recently completed a study of municipal fiscal disparities in Connecticut [Zhao and Weiner]. They first measure the capacity of local governments to raise revenue to finance non-education expenditures. The approach calculates the amount of revenue each municipality would raise if all municipalities used the same standard mill rate. This standard mill rate is applied to the value of taxable real and personal property in each municipality measured by the equalized net grand list.

The second part of the process is to estimate the cost of providing a common quality and quantity of non-education public services. Their analysis identifies and assigns weights to five cost factors: the unemployment rate, population density, private-sector wage index, town maintenance road mileage and jobs per capita.

The study then calculates a fiscal gap by subtracting per capita revenue capacity from per capita costs. A positive gap means a municipality lacks sufficient revenue-raising authority to provide a given level and quality of public services. They find a wide range of municipal gaps across the 169

The study then calculates a fiscal gap by subtracting per capita revenue capacity from per capita costs. A positive gap means a municipality lacks sufficient revenue-raising authority to provide a given level and quality of public services. They find a wide range of municipal gaps across the 169 municipalities in Connecticut documenting significant variation in fiscal disparities across the state. They conclude that these fiscal gaps are driven primarily by the disparities in the property tax base across municipalities [Zhao and Weiner, 8].

Table 20 Net Grand List Value Per Capita, 2012		
Top Ten Municipalities		
Greenwich		\$494,018
Darian		\$416,861
New Canaan		\$410,981
Westport		\$358,853
Washington		\$355,869
Salisbury		\$313,043
Roxbury		\$311,370
Sharon		\$310,476
Cornwall		\$278,346
Weston		\$256,521
Bottom Ten Municipalities		
West Haven		\$50,868
Naugatuck		\$49,397
Bridgeport		\$48,303
Ansonia		\$46,933
New Haven		\$46,511
Mansfield		\$39,253
Windham		\$38,171
Waterbury		\$36,621
New Britain		\$33,470
Hartford		\$27,873
Source: OPM Municipal Fiscal Indicators		

Regressivity of the Connecticut Property Tax

In addition, a recent study by the Connecticut Department of Revenue Services (DRS) found that the property tax in Connecticut is regressive, i.e., lower income households pay a higher share of income in property taxes than higher income households. Table 21 is a table reproduced from the Department of Revenue Services (DRS) incidence study. The table divides households in Connecticut into ten groups where the households in each group generate approximately the same amount of income. For example, there are 725,202 households in the first group generating approximately \$15.1 billion of personal income and there are 357 households in the tenth group generating \$15.1 billion in personal income.

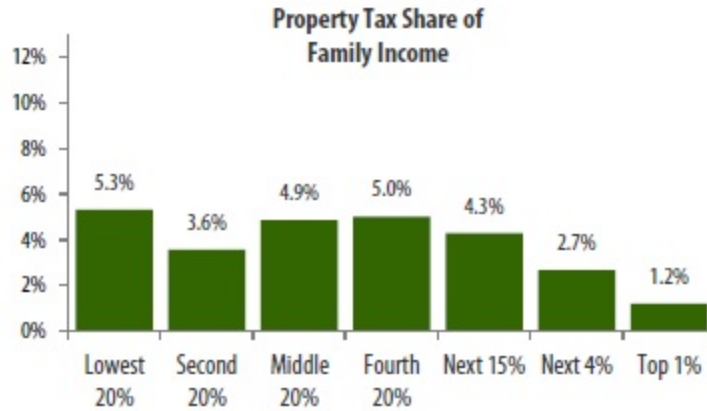
Table 21 Property Tax by Income Deciles					
Decile	Households	Aggregate CT AGI	Aggregate Property Tax Burden	% of Aggregate Property Tax Burden	Property Tax Effective Rate
1	725,202	\$15,103,112,547	\$ 1,891,446,502	25.9%	12.52%
2	251,321	\$15,103,182,979	\$ 1,155,842,404	15.8%	7.65%
3	173,126	\$15,103,113,264	\$ 1,008,197,182	13.8%	6.68%
4	129,303	\$15,102,288,605	\$ 882,596,703	12.1%	5.84%
5	97,426	\$15,103,013,303	\$ 752,605,941	10.3%	4.98%
6	67,958	\$15,102,959,408	\$ 609,183,682	8.3%	4.03%
7	37,893	\$15,104,085,522	\$ 435,618,721	6.0%	2.88%
8	15,050	\$15,103,068,542	\$ 274,668,774	3.8%	1.82%
9	3,646	\$15,113,849,361	\$ 166,577,761	2.3%	1.10%
10	357	\$15,090,190,108	\$ 138,491,249	1.9%	0.92%
Total	1,501,282	\$151,028,863,639	\$ 7,315,228,919	100.0%	4.84%
Source: Reproduced from Department of Revenue Services, <i>Connecticut Tax Incidence Study</i> , December 2014, Table from page 20.					

The table reports that the households in the first group paid approximately \$1.9 billion in property taxes; those in the last group paid only \$138 million in property taxes. In other words, the first group of households, with the lowest incomes, paid 25.9 percent of total property taxes, even though they only had approximately 10 percent of the income, while the wealthiest group of 357 households accounting for approximately 10 percent of the income paid only 1.9 percent of total property taxes.

The last column of the table is labeled “Property Tax Effective Rate.” The numbers in that column reflect the share of aggregate income each group pays in property taxes. Property taxes paid by the 725,202 households in the first group, with 10 percent of the state’s personal income, account for 12.52 percent of incomes. In contrast, the 357 households in the last group, also with 10 percent of the state’s personal income, pays less than 1 percent of their income in property taxes.³⁰

A recent study by the Institute of Taxation and Economic Policy (ITEP) provides additional evidence that the property tax in Connecticut is generally regressive. The figure below, which comes from *Who Pays? A Distributional Analysis of the Tax Systems in All 50 States* by the ITEP [page 41], shows that the 20 percent of Connecticut’s families with the lowest incomes pay 5.3 percent of their income in property taxes compared to just 1.2 percent for the families with the top 1 percent of income.

³⁰ The numbers in the last column of the table do not reflect effective property tax rates. Effective property tax rates are calculated by dividing the property tax liability for each property by the market value of that property. [Bell and Kirschner, p. 112]



The degree of regressivity of the property tax in Connecticut reflects, in part, the relatively modest amount of property tax relief provided to taxpayers and is in conflict with the equity criteria adopted by the Tax Study Panel.

Effective Property Tax Rates

The best way to compare the degree of intensity of property tax use across properties within each land use class, across land use classes and across towns is to calculate the ***effective tax rate*** for each property. The ***effective property tax rate*** is calculated by dividing the property tax liability for each property by the market value of the property. This measure provides information on whether property taxes are high in a jurisdiction, how they compare to property taxes in neighboring jurisdictions, how they vary across different land uses within a jurisdiction and whether or not property tax rates on residential properties are out of line with other land uses.

The Minnesota Center for Fiscal Excellence, in conjunction with the Lincoln Institute of Land Policy, conducts an annual 50-state property tax comparison study. The study compares effective property tax rates for four classes of property located in the largest city of each state: 1) residential homestead, 2) commercial property, 3) industrial property, and 4) apartments. In addition the study analyzes the effective tax rate for these use classes in a rural town in each state as well.

The study examines these four distinct classes of property using a standard set of assumptions about their “true” market value and the split between real and personal property. For example, the study calculates effective tax rates for residential homestead properties in rural areas that are valued at \$70,000 and \$150,000. Similarly, the study calculates effective property tax rates for commercial properties with an assumed total value of \$1 million and personal property of \$200,000 and commercial properties with an assumed valued at \$25 million and \$5 million of personal property; or an industrial property with an assumed value of \$25 million, \$12.5 million of machinery and equipment, \$10 million in inventory and \$2.5 million of fixtures.

The study reports the effective property tax rate for each type of property by first calculating the net property tax liability for each type of property in each urban municipality and each rural town. Specifically, the net local property tax for a given parcel of property is

$$\text{Net Property Tax} = \text{TMV} \times \text{SR} \times \text{CR} \times \text{TR} - \text{C}$$

where

TMV is the true market value of a property which the study assumes for each property type

SR is the sales ratio for each type of property in each municipality or town

CR is the classification rate for each type of property in states with classification

TR is the total local tax rate for all taxing jurisdictions that “normally” levy against real and personal property (e.g. cities, counties, school districts and special districts) applied to each property to determine the tax liability

C is all general deductions/credits from the gross property tax calculations.³¹

Table 22 presents a summary of how Connecticut communities ranked in effective property tax rates for the various land uses examined. The urban area included in the study was Bridgeport and the rural area was Litchfield. The results indicate that effective tax rates for each of the different land uses are higher in urban areas than in rural areas relative to other states. Specifically, residential property in Bridgeport had the highest effective tax rate of any other city, but residential property in Litchfield ranked tenth and twelfth in terms of effective property tax rates relative to rural areas in other states.

Apartments and all sizes of commercial properties in Bridgeport were in the top ten effective tax rates for urban areas, while the comparable land uses in Litchfield ranked 24th, 25th and 26th nationally compared to other rural areas. Industrial properties in Bridgeport ranked between 14th and 21st, while the comparable land uses in Litchfield ranked 32nd and 40th compared to rural areas in other states.

³¹ Minnesota Center for Fiscal Excellence, pp. 46-49.

Table 22 Property Use Classes and True Market Values Used for Minnesota Analysis							
URBAN							
Land Use Classes	Real Property	Mach&Equip	Inventories	Fixtures	Total	Urban	Rank*
Homestead	\$150,000	\$ -	\$ -	\$ -	\$ 150,000	Bridgeport	1
	\$300,000	\$ -	\$ -	\$ -	\$ 300,000	Bridgeport	1
Apartments	\$600,000	\$ -	\$ -	\$ 30,000	\$ 630,000	Bridgeport	5
Commercial	\$100,000	\$ -	\$ -	\$ 20,000	\$ 120,000	Bridgeport	5
	\$1,000,000	\$ -	\$ -	\$ 200,000	\$ 1,200,000	Bridgeport	7
	\$25,000,000	\$ -	\$ -	\$ 5,000,000	\$ 30,000,000	Bridgeport	7
Industrial	\$100,000	\$ 50,000	\$ 40,000	\$ 10,000	\$ 200,000	Bridgeport	14
(50% personal)	\$1,000,000	\$ 500,000	\$ 400,000	\$ 100,000	\$ 2,000,000	Bridgeport	17
	\$25,000,000	\$ 12,500,000	\$ 10,000,000	\$ 2,500,000	\$ 50,000,000	Bridgeport	17
Industrial	\$100,000	\$ 75,000	\$ 60,000	\$ 15,000	\$ 250,000	Bridgeport	17
(60% personal)	\$1,000,000	\$ 750,000	\$ 600,000	\$ 150,000	\$ 2,500,000	Bridgeport	20
	\$25,000,000	\$ 18,750,000	\$ 15,000,000	\$ 3,750,000	\$ 62,500,000	Bridgeport	21
RURAL							
Land Use Classes						Rural	Rank*
Homestead	\$70,000	\$ -	\$ -	\$ -	\$ 70,000	Litchfield	10
	\$150,000	\$ -	\$ -	\$ -	\$ 150,000	Litchfield	12
	\$300,000	\$ -	\$ -	\$ -	\$ 300,000	Litchfield	12
Apartments						Litchfield	24
Commercial	\$100,000	\$ -	\$ -	\$ 20,000	\$120,000	Litchfield	25
	\$1,000,000	\$ -	\$ -	\$ 200,000	\$1,200,000	Litchfield	25
	\$25,000,000	\$ -	\$ -	\$ 5,000,000	\$30,000,000	Litchfield	26
Industrial	\$100,000	\$ 50,000	\$ 40,000	\$ 10,000	\$200,000	Litchfield	32
(50% personal)	\$1,000,000	\$ 500,000	\$ 400,000	\$ 100,000	\$2,000,000	Litchfield	34
	\$25,000,000	\$ 12,500,000	\$ 10,000,000	\$ 2,500,000	\$50,000,000	Litchfield	35
Industrial	\$100,000	\$ 75,000	\$ 60,000	\$ 15,000	\$250,000	Litchfield	36
(60% personal)	\$1,000,000	\$ 750,000	\$ 600,000	\$ 150,000	\$2,500,000	Litchfield	40
	\$25,000,000	\$ 18,750,000	\$ 15,000,000	\$ 3,750,000	\$62,500,000	Litchfield	40
* Out of 53 since the analysis includes Washington DC and two cities for Illinois and New York.							

Source: Minnesota Center for Fiscal Excellence, various tables.

Effective property tax rates vary across towns in Connecticut and, to some extent, within different land use categories for each town. Table 23 describes the composition of the 2012 Grand List of Coventry. There were 6,135 residential properties in the Coventry Grand List. Of those, 608 residential properties qualified for one or more partial exemptions based on the characteristics of the property owner.

Table 23 Features of the Property Tax Base in Coventry					
Taxable Properties					
Use Class		# of parcels	Share of Total Parcels	Assessed Value	Share of Total Assessed Value
Code	Description				
100	Residential	6,135	96.1%	\$ 786,577,300	96.2%
200	Commercial	84	1.3%	\$ 29,184,900	3.6%
300	Industrial	3	0.0%	\$ 630,000	0.1%
400	Public Utility	20	0.3%	\$ 995,400	0.1%
600	Use Value	142	2.2%	\$ 423,700	0.1%
	Total Taxable	6,384	100.0%	\$ 817,811,300	100.0%
Tax Exempt Properties					
BAXX	Municipal	328	70.8%	\$ 36,982,900	61.3%
CAAX	Volunteer Fire Company	3	0.6%	\$ 1,667,200	2.8%
DBAX	Educational	1	0.2%	\$ 154,300	0.3%
DCAX	Literary	3	0.6%	\$ 1,359,700	2.3%
DEAX	Charitable	11	2.4%	\$ 1,126,000	1.9%
GAAX	Cemetery	1	0.2%	\$ 43,800	0.1%
GAAX	Church	13	2.8%	\$ 5,906,500	9.8%
IAAX	Parish House	1	0.2%	\$ 279,900	0.5%
NAAX	Non-profit company	9	1.9%	\$ 3,335,000	5.5%
ODBX	Education	1	0.2%	\$ 124,900	0.2%
OEBX	Hospital/Health Care	2	0.4%	\$ 459,000	0.8%
OGBX	Recreation	10	2.2%	\$ 1,488,700	2.5%
OHBX	Department Transportation	78	16.8%	\$ 4,514,100	7.5%
SAAX	State	2	0.4%	\$ 2,876,000	4.8%
	Total Tax Exempt	463	100.0%	\$ 60,318,000	100.0%
Totals					
	Taxable	6,384	93.2%	\$ 817,811,300	93.1%
	Tax Exempt	463	6.8%	\$ 60,318,000	6.9%
		6,847	100.0%	\$ 878,129,300	100.0%

The partial exemptions received most often are listed in Table 24. The vast majority of the partial exemptions are for veterans, albeit the amount of each exemption is relatively modest.

Table 24 Partial Property Tax Exemptions Based on Characteristics of the Owner			
Code	CGS Section	Description	Exempt Amount
AAA	12-81(19)	Veteran	\$ 2,000
ABA	12-81(20) 10% - 25%	Servicemen and veterans with disability rating	\$ 3,000
ACA	12-81(20) 26% - 50%	Servicemen and veterans with disability rating	\$ 4,000
AEA	12-81(20) 76% - 100%	Servicemen and veterans with disability rating	\$ 6,000
AFA	12-81(20) over 65 years	Servicemen and veterans with disability rating	\$ 6,000
AIA	12-81(22)	Surviving spouse/minor child of serviceman/veteran	\$ 2,000
CAB	12-81(19)	Veteran	\$ 1,000
CBB	12-81(20) 10% - 25%	Servicemen and veterans with disability rating	\$ 1,500
CEB	12-81(20) 76% - 100%	Servicemen and veterans with disability rating	\$ 3,000
CFB	12-81(20) over 65 years	Servicemen and veterans with disability rating	\$ 3,000
CIB	12-81(22)	Surviving spouse/minor child of serviceman/veteran	\$ 1,000
EAB	12-81(55)	Property of totally disabled person	\$ 1,000
FAA	12-81(17)	Blind person	\$ 3,000

The effective property tax rate for each residential property was calculated by dividing the tax liability (net assessed value x statutory property tax rate) by the estimated market value of the property (appraised value). For the 5,527 residential properties that did not receive any partial exemption based on the characteristics of the owner, the effective tax rate was 1.958 percent.³² This is the effective tax rate paid by all commercial, industrial, public utility and most properties assessed at use value because they do not receive any partial exemptions.³³

For those 608 properties that received one or more partial exemptions based on the characteristics of the property and the property owner the lowest effective property tax rate was 1.534 percent. There were 20 properties with an effective tax rate of less than 1.8 percent and 178 properties with an effective tax rate between 1.8 and 1.9 percent. The median effective tax rate for these 608 properties was 1.911 percent, only slightly lower than the effective tax rate on residential properties not qualifying for any partial exemptions.

In other words, there were over 400 residential properties that qualified for at least one partial exemption that had an effective property tax rate of 1.9 or higher. These tax relief programs provide very modest property tax relief to residential property owners. There is little variation in effective property tax rates within the residential use class and virtually no variation between the residential, commercial, industrial and public utility use classes.

³² The statutory tax rate in Coventry for FY 2014 was 27.97 mills.

³³ There are 14 properties in Coventry with land use code 600, 10 percent of the total, that qualify for a farm exemption. These 14 properties have a median effective property tax rate of just 0.98 percent.

Coventry's Grand List includes 143 properties classified as PA-490, or properties valued at use value not market value. Of these properties, 14 qualify for a farm exemption which reduces their gross assessed value by 50 percent. The remaining 129 properties do not qualify for any property tax relief. The effective tax rate for those properties not qualifying for additional property tax relief have an effective property tax rate of 1.98 percent. For the 14 properties with additional property tax relief the median effective property tax rate is 0.98 percent.³⁴

In contrast, for example, Washington DC provides an extensive mosaic of property tax relief mechanisms, especially for the elderly. As a result of these property tax relief programs, homeowners 65 years of age or older pay a median effective property tax rate of 0.23 percent. Non-elderly homeowners in the District who receive the homestead deduction pay a median effective property tax rate of approximately 0.63 percent, while non-homestead residential property and multi-family residential property pay a median effective tax rate of 0.85 percent. In other words, non-elderly homeowners pay a median effective property tax rate approximately 270 percent higher than that paid by elderly homeowners and about 75 percent of the rate paid by non-homestead residential and multi-family properties.

Table 25 presents information on the effective property tax rate for the residential properties in the representative cities examined here. Effective property tax rates are presented for properties that do not benefit from exemptions and those properties that do receive property tax relief through exemptions.

Table 25 indicates that for all residential properties in Bridgeport not receiving property tax relief through exemptions the effective property tax rate is 2.95 percent. For residential properties receiving relief through exemptions, the average effective property tax is reduced to 2.90 percent – very modest relief. Similarly, in Guilford, the effective property tax rate for residential properties not receiving relief through exemptions is 1.98 percent and for residential properties receiving relief through exemptions the average effective property tax rate is reduced to 1.91 percent; again, very modest relief.

Table 25 Residential (Code 100) Effective Property Tax Rates With and Without Tax Relief, Grand List 2014					
				Effective Tax Rates (%)	
	# of Parcels	# Parcels with Relief	% with Relief	With Relief	Without Relief
Large Cities					
Bridgeport	28,238	1,934	6.8%	2.90%	2.95%
Hartford	17,155	783	4.6%	1.94%*	2.28%
Small Cities					
Manchester	16,699	2,154	12.9%	2.61%	2.76%
Torrington	13,101	1,736	13.3%	2.99%	3.20%
Wealthy Suburbs					
Glastonbury	12,232	1,106	9.0%	2.45%	2.52%
Guilford	9,057	1,024	11.3%	1.91%	1.98%
Litchfield	3,272	406	12.4%	1.78%	1.83%
New Canaan	6,697	393	5.9%	1.11%	1.12%

³⁴ All PA-490 properties are valued at use value, not market value. The additional property tax relief for the 14 properties that qualify for the farm exemption have their use value reduced by 50 percent before calculating their property tax liability.

Mixed Base Cities					
Hamden	18,168	2,069	11.4%	2.66%	2.86%
Middletown	12,516	1,285	10.3%	2.22%	2.28%
Norwich	11,105	1,457	13.1%	2.70%	2.86%
Windsor	10,796	1,387	12.8%	2.06%	2.16%
Rural Towns					
Bozrah	911	177	19.4%	1.84%	1.89%
Durham	2,220	286	12.9%	2.20%	2.36%
Killingly	5,707	839	14.7%	1.83%	1.91%
North Canaan	1,210	117	9.7%	1.87%	1.93%
Plainfield	4,890	705	14.4%	1.94%	1.99%
Union	379	63	16.6%	2.00%	2.07%
Washington	1,858	139	7.5%	0.87%	0.89%
*This is the effective tax rate for residential properties without exemptions. Residential properties in Hartford have an assessment ratio of 30.68 percent instead of the 70 percent ratio for all other properties.					

Residential effective property tax rates in these representative municipalities are relatively high. Torrington has an effective property tax rate of 3.20 percent for residential properties not receiving property tax relief. Ten municipalities have residential effective property tax rates between 2 and 3 percent; 6 municipalities have residential effective property tax rates just under 2 percent; and 2 municipalities have rates around 1 percent. Property tax relief from exemptions provided to residential properties result in lower average effective property tax rates, but they are only marginally below the rate for properties not receiving such relief.

High and increasing effective property tax rates means

- high property tax rates, if not balanced by high service levels, decrease property values;
- high property tax rates, if not balanced by high service levels, discourage families and businesses from locating or expanding in a jurisdiction;
- high property tax rates in older city centers may contribute to urban sprawl when surrounded by suburban communities with lower property tax rates resulting in inefficiency and cost of inadequate public infrastructure such as roads, water, sewers;
- high property rates burden low-income homeowners; and
- more regressive property taxes in Connecticut because the highest effective property tax rates tend to be in municipalities with high concentrations of low income people, and what limited property tax relief is available is generally not targeted to taxpayers according to need.

CONCLUSION

In the final analysis, property taxes in Connecticut are high by most metrics. Only modest property tax relief is provided to taxpayers which contributes to the regressivity of the property tax in Connecticut. There is significant variation in property tax capacity across municipalities in the state resulting in significant fiscal gaps in the ability of individual towns to deliver goods and services to their citizens. Effective property tax rates are relatively high which exaggerates the limitations of the property tax and increases the degree of regressivity of the property tax.

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Overview of Property Taxes In Connecticut

DATA APPENDIX

A Report Prepared for the Connecticut Tax Panel
Presented October 27, 2015

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Appendix Table 1 Dollar Value of Grand List Components, by Municipality, 2012 Grand List							
Municipality	Total GL	Residential	CIP*	Apartments	Motor Vehicle	Personal Property	Other
ANDOVER	\$ 260,854,905	\$ 215,588,190	\$ 7,847,100	\$ 1,670,500	\$ 24,650,100	\$ 6,215,295	\$ 6,554,220
ANSONIA	\$ 904,146,191	\$ 650,539,000	\$ 111,374,200	\$ 15,706,400	\$ 92,401,747	\$ 49,728,234	\$ 103,010
ASHFORD	\$ 297,608,793	\$ 224,539,000	\$ 21,955,500	\$ 9,291,200	\$ 29,627,470	\$ 7,779,493	\$ 13,707,330
AVON	\$ 2,708,176,170	\$ 2,120,567,910	\$ 318,856,230	\$ 37,355,920	\$ 170,386,470	\$ 92,975,560	\$ 5,390,000
BARKHAMSTED	\$ 380,011,972	\$ 279,421,500	\$ 19,631,720	\$ 2,132,050	\$ 30,928,180	\$ 13,042,442	\$ 36,988,130
BEACON FALLS	\$ 478,414,418	\$ 357,510,880	\$ 46,215,070	\$ 732,140	\$ 40,894,420	\$ 20,246,218	\$ 13,547,830
BERLIN	\$ 2,232,806,100	\$ 1,373,260,650	\$ 383,597,350	\$ -	\$ 194,507,770	\$ 244,386,230	\$ 37,054,100
BETHANY	\$ 627,172,001	\$ 517,687,490	\$ 34,068,990	\$ -	\$ 45,148,221	\$ 23,058,090	\$ 7,209,210
BETHEL	\$ 1,882,206,735	\$ 1,255,956,110	\$ 303,678,230	\$ 20,778,950	\$ 138,500,925	\$ 154,811,610	\$ 29,259,860
BETHLEHEM	\$ 411,307,912	\$ 332,792,800	\$ 25,508,400	\$ -	\$ 32,866,944	\$ 7,880,598	\$ 12,259,170
BLOOMFIELD	\$ 2,135,509,137	\$ 1,108,698,440	\$ 554,763,070	\$ 101,411,670	\$ 149,570,677	\$ 318,128,410	\$ 4,348,540
BOLTON	\$ 486,817,810	\$ 391,849,180	\$ 24,518,890	\$ -	\$ 40,020,720	\$ 10,923,850	\$ 19,505,170
BOZRAH	\$ 228,706,840	\$ 139,015,090	\$ 32,538,360	\$ 971,750	\$ 23,347,366	\$ 25,509,754	\$ 8,296,270
BRANFORD	\$ 3,524,625,127	\$ 2,623,619,040	\$ 500,446,970	\$ 39,369,790	\$ 216,695,720	\$ 162,760,797	\$ 21,102,600
BRIDGEPORT	\$ 7,253,396,893	\$ 4,082,205,284	\$ 1,855,008,070	\$ 323,739,324	\$ 428,577,200	\$ 804,428,864	\$ 83,177,475
BRIDGEWATER	\$ 388,278,074	\$ 339,686,452	\$ 4,130,200	\$ -	\$ 17,216,667	\$ 3,736,185	\$ 23,508,570
BRISTOL	\$ 3,990,620,930	\$ 2,337,415,310	\$ 826,346,840	\$ 132,624,110	\$ 363,426,940	\$ 425,919,880	\$ 37,511,960
BROOKFIELD	\$ 2,201,852,892	\$ 1,558,058,000	\$ 343,298,080	\$ 10,703,910	\$ 138,392,894	\$ 117,611,678	\$ 44,492,240
BROOKLYN	\$ 535,385,065	\$ 392,458,170	\$ 57,744,100	\$ 15,334,700	\$ 51,467,425	\$ 16,038,140	\$ 17,677,230
BURLINGTON	\$ 943,797,671	\$ 790,741,124	\$ 16,994,640	\$ 344,260	\$ 78,945,640	\$ 12,073,287	\$ 45,042,980
CANAAN	\$ 172,404,100	\$ 104,378,720	\$ 15,661,350	\$ -	\$ 8,635,040	\$ 11,914,190	\$ 31,814,800
CANTERBURY	\$ 388,247,657	\$ 305,740,292	\$ 17,061,680	\$ 1,653,600	\$ 37,336,200	\$ 8,293,505	\$ 19,815,980
CANTON	\$ 1,138,218,630	\$ 867,156,540	\$ 147,358,270	\$ 7,844,880	\$ 80,215,250	\$ 41,245,740	\$ 2,242,830
CHAPLIN	\$ 173,488,925	\$ 136,652,900	\$ 9,240,900	\$ 286,600	\$ 15,735,480	\$ 9,180,345	\$ 2,679,300

CHESHIRE	\$ 2,936,048,458	\$ 2,132,581,190	\$ 408,072,560	\$ 12,966,510	\$ 224,076,407	\$ 150,703,701	\$ 20,614,600
CHESTER	\$ 509,933,780	\$ 368,113,190	\$ 80,077,710	\$ 3,245,470	\$ 28,645,540	\$ 21,017,410	\$ 12,079,930
CLINTON	\$ 1,508,606,922	\$ 1,171,099,215	\$ 168,162,695	\$ 4,395,992	\$ 92,309,005	\$ 59,830,167	\$ 17,205,840
COLCHESTER	\$ 1,197,750,009	\$ 878,388,950	\$ 119,602,000	\$ 20,882,700	\$ 116,869,213	\$ 47,565,126	\$ 35,324,720
COLEBROOK	\$ 186,330,780	\$ 147,564,450	\$ 13,376,100	\$ -	\$ 12,103,970	\$ 11,158,970	\$ 2,127,290
COLUMBIA	\$ 467,497,354	\$ 379,314,850	\$ 22,013,030	\$ 532,600	\$ 42,466,000	\$ 13,273,963	\$ 10,429,511
CORNWALL	\$ 393,891,130	\$ 269,300,730	\$ 9,886,700	\$ -	\$ 13,695,110	\$ 8,893,690	\$ 92,114,900
COVENTRY	\$ 999,590,655	\$ 848,031,150	\$ 35,544,600	\$ 55,200	\$ 91,608,910	\$ 22,724,195	\$ 1,681,800
CROMWELL	\$ 1,266,752,878	\$ 842,224,481	\$ 222,225,178	\$ 1,332,340	\$ 106,322,210	\$ 84,982,749	\$ 10,998,260
DANBURY	\$ 7,059,377,127	\$ 3,863,960,400	\$ 1,996,666,800	\$ 251,102,200	\$ 481,980,637	\$ 556,766,090	\$ 160,003,200
DARIEN	\$ 8,892,874,520	\$ 7,656,807,820	\$ 687,510,790	\$ 37,886,310	\$ 228,336,768	\$ 162,984,862	\$ 157,234,280
DEEP RIVER	\$ 499,568,917	\$ 382,196,640	\$ 47,039,790	\$ 2,779,210	\$ 33,206,870	\$ 26,669,997	\$ 10,455,620
DERBY	\$ 751,508,652	\$ 502,285,350	\$ 132,117,760	\$ 17,679,550	\$ 63,131,210	\$ 42,168,162	\$ 11,806,170
DURHAM	\$ 760,858,737	\$ 501,089,250	\$ 38,714,620	\$ 1,617,280	\$ 60,988,680	\$ 49,820,073	\$ 110,246,114
EAST GRANBY	\$ 634,565,539	\$ 372,464,980	\$ 95,943,960	\$ -	\$ 51,926,723	\$ 93,285,076	\$ 20,944,800
EAST HADDAM	\$ 851,695,057	\$ 694,306,560	\$ 41,930,770	\$ 3,240,440	\$ 71,392,447	\$ 18,486,410	\$ 25,578,870
EAST HAMPTON	\$ 1,133,427,986	\$ 911,125,546	\$ 63,065,480	\$ 2,123,006	\$ 97,418,591	\$ 26,895,504	\$ 34,922,865
EAST HARTFORD	\$ 2,931,215,678	\$ 1,465,637,746	\$ 750,152,589	\$ 107,505,660	\$ 260,238,178	\$ 429,435,080	\$ 25,752,085
EAST HAVEN	\$ 1,996,768,886	\$ 1,427,824,960	\$ 321,995,730	\$ 7,100,830	\$ 165,207,616	\$ 51,974,050	\$ 29,766,530
EAST LYME	\$ 2,064,155,868	\$ 1,674,001,261	\$ 166,943,478	\$ 29,720,262	\$ 125,576,010	\$ 47,432,319	\$ 50,202,800
EAST WINDSOR	\$ 963,819,567	\$ 495,820,898	\$ 279,978,510	\$ 38,580,960	\$ 96,541,197	\$ 82,522,100	\$ 8,956,862
EASTFORD	\$ 172,010,913	\$ 128,239,380	\$ 10,647,240	\$ -	\$ 14,140,153	\$ 12,906,160	\$ 6,077,980
EASTON	\$ 1,327,494,203	\$ 1,191,728,990	\$ 35,301,930	\$ -	\$ 75,894,810	\$ 15,115,113	\$ 9,453,360
ELLINGTON	\$ 1,293,077,667	\$ 957,862,216	\$ 151,901,205	\$ 59,866,795	\$ 118,252,936	\$ 55,910,160	\$ 9,151,150
ENFIELD	\$ 2,884,022,287	\$ 1,795,479,080	\$ 604,574,131	\$ 53,506,370	\$ 252,396,530	\$ 198,099,236	\$ 33,473,310
ESSEX	\$ 1,135,512,799	\$ 877,665,850	\$ 156,415,770	\$ -	\$ 62,289,730	\$ 38,557,249	\$ 584,200
FAIRFIELD	\$ 10,941,783,881	\$ 8,956,403,995	\$ 1,134,272,683	\$ 6,511,610	\$ 478,423,513	\$ 274,091,820	\$ 98,591,870
FARMINGTON	\$ 3,529,908,540	\$ 2,222,498,800	\$ 845,688,230	\$ -	\$ 221,149,860	\$ 231,544,880	\$ 9,026,770
FRANKLIN	\$ 217,971,045	\$ 129,512,230	\$ 39,545,266	\$ 1,170,970	\$ 18,908,139	\$ 15,733,270	\$ 14,272,140

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GLASTONBURY	\$ 3,832,330,378	\$ 2,778,614,720	\$ 581,418,280	\$ 26,720,170	\$ 277,944,148	\$ 151,740,270	\$ 42,612,960
GOSHEN	\$ 520,462,590	\$ 424,067,220	\$ 20,079,000	\$ 176,400	\$ 30,243,600	\$ 9,118,500	\$ 36,954,270
GRANBY	\$ 958,094,420	\$ 723,049,920	\$ 45,547,390	\$ 4,279,310	\$ 85,969,400	\$ 21,690,820	\$ 81,836,890
GREENWICH	\$ 30,870,296,450	\$ 24,272,802,260	\$ 4,603,130,070	\$ 335,906,620	\$ 744,462,450	\$ 659,911,710	\$ 589,989,960
GRISWOLD	\$ 702,683,326	\$ 539,186,798	\$ 51,889,827	\$ 8,956,533	\$ 73,495,252	\$ 17,252,599	\$ 20,858,850
GROTON	\$ 4,075,380,941	\$ 2,212,968,520	\$ 1,147,045,949	\$ 158,376,120	\$ 216,668,630	\$ 419,880,542	\$ 78,817,300
GUILFORD	\$ 3,515,896,964	\$ 2,991,278,249	\$ 243,475,070	\$ 5,133,250	\$ 180,755,270	\$ 74,735,295	\$ 25,653,080
HADDAM	\$ 902,819,095	\$ 692,711,490	\$ 53,206,240	\$ 682,810	\$ 66,554,110	\$ 56,935,275	\$ 33,411,980
HAMDEN	\$ 4,112,725,026	\$ 2,841,971,566	\$ 790,105,830	\$ 259,638,890	\$ 311,271,200	\$ 160,439,990	\$ 8,936,440
HAMPTON	\$ 158,364,447	\$ 129,211,620	\$ 2,427,180	\$ -	\$ 15,642,230	\$ 3,644,107	\$ 7,439,310
HARTFORD	\$ 3,582,979,216	\$ 722,520,804	\$ 1,764,177,966	\$ 461,453,223	\$ 303,904,106	\$ 712,366,050	\$ 80,010,290
HARTLAND	\$ 195,609,120	\$ 150,592,240	\$ 17,414,100	\$ -	\$ 16,537,950	\$ 6,093,520	\$ 4,971,310
HARWINTON	\$ 569,472,871	\$ 448,950,603	\$ 15,323,730	\$ -	\$ 49,964,310	\$ 17,880,068	\$ 37,354,160
HEBRON	\$ 776,032,135	\$ 650,171,830	\$ 25,215,610	\$ 3,016,650	\$ 70,159,735	\$ 14,870,640	\$ 15,614,320
KENT	\$ 673,671,155	\$ 535,590,300	\$ 46,124,410	\$ 218,600	\$ 25,256,190	\$ 13,450,755	\$ 53,249,500
KILLINGLY	\$ 1,765,102,163	\$ 803,268,961	\$ 401,320,490	\$ 35,044,800	\$ 103,561,412	\$ 396,183,040	\$ 60,768,260
KILLINGWORTH	\$ 718,292,757	\$ 623,600,530	\$ 21,596,370	\$ 62,480	\$ 54,401,224	\$ 10,314,613	\$ 8,380,020
LEBANON	\$ 681,957,590	\$ 547,967,690	\$ 21,028,730	\$ 1,225,250	\$ 55,044,100	\$ 38,369,980	\$ 19,547,090
LEDYARD	\$ 1,138,276,000	\$ 876,178,464	\$ 66,696,979	\$ 8,445,500	\$ 99,684,320	\$ 63,297,117	\$ 32,419,120
LISBON	\$ 385,600,049	\$ 221,777,275	\$ 84,205,670	\$ 799,830	\$ 30,733,575	\$ 33,864,969	\$ 15,018,560
LITCHFIELD	\$ 1,113,401,140	\$ 865,939,540	\$ 111,461,310	\$ 5,804,450	\$ 71,821,130	\$ 31,400,990	\$ 32,778,170
LYME	\$ 609,828,309	\$ 551,374,084	\$ 5,301,800	\$ -	\$ 21,807,840	\$ 5,827,205	\$ 25,517,380
MADISON	\$ 3,468,303,654	\$ 3,045,313,468	\$ 176,371,480	\$ 4,044,400	\$ 154,687,500	\$ 51,185,576	\$ 40,745,630
MANCHESTER	\$ 4,027,045,764	\$ 2,135,118,700	\$ 1,180,953,394	\$ 301,566,400	\$ 328,510,570	\$ 381,796,740	\$ 666,360
MANSFIELD	\$ 1,017,258,413	\$ 742,458,660	\$ 152,860,610	\$ 37,197,790	\$ 75,060,137	\$ 39,798,226	\$ 7,080,780
MARLBOROUGH	\$ 569,536,815	\$ 479,150,150	\$ 29,360,890	\$ -	\$ 49,923,350	\$ 10,332,055	\$ 770,370
MERIDEN	\$ 3,448,985,028	\$ 2,001,650,624	\$ 825,699,857	\$ 104,531,560	\$ 289,739,580	\$ 321,214,250	\$ 10,680,717
MIDDLEBURY	\$ 931,401,445	\$ 675,225,000	\$ 107,930,140	\$ -	\$ 65,454,506	\$ 45,235,859	\$ 37,555,940
MIDDLEFIELD	\$ 419,146,070	\$ 316,956,400	\$ 35,201,000	\$ 925,300	\$ 33,166,560	\$ 32,238,810	\$ 1,583,300
MIDDLETOWN	\$ 3,738,096,735	\$ 2,066,716,800	\$ 773,000,730	\$ 242,014,110	\$ 270,335,295	\$ 526,226,915	\$ 101,816,995

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MILFORD	\$ 6,583,930,018	\$ 4,290,598,841	\$ 1,407,537,860	\$ 119,089,180	\$ 367,147,161	\$ 449,793,536	\$ 68,852,620
MONROE	\$ 2,325,147,159	\$ 1,785,703,412	\$ 240,872,126	\$ 861,210	\$ 156,954,517	\$ 83,513,266	\$ 58,103,838
MONTVILLE	\$ 1,285,888,896	\$ 858,072,890	\$ 179,736,200	\$ 12,549,980	\$ 119,074,650	\$ 126,367,856	\$ 2,637,300
MORRIS	\$ 354,490,278	\$ 294,716,370	\$ 13,366,510	\$ -	\$ 18,434,670	\$ 6,712,808	\$ 21,259,920
NAUGATUCK	\$ 1,611,572,549	\$ 1,071,604,450	\$ 238,724,200	\$ 42,623,140	\$ 171,496,829	\$ 109,859,710	\$ 19,887,360
NEW BRITAIN	\$ 2,553,699,492	\$ 1,442,120,070	\$ 598,224,910	\$ 225,303,250	\$ 269,332,939	\$ 232,308,663	\$ 11,712,910
NEW CANAAN	\$ 8,302,535,878	\$ 7,444,928,044	\$ 414,802,442	\$ 44,704,321	\$ 248,515,992	\$ 66,567,550	\$ 127,721,850
NEW FAIRFIELD	\$ 1,693,093,096	\$ 1,517,405,143	\$ 45,528,600	\$ -	\$ 112,468,358	\$ 17,339,295	\$ 351,700
NEW HARTFORD	\$ 728,515,984	\$ 570,064,089	\$ 36,526,070	\$ 69,090	\$ 55,073,646	\$ 32,323,614	\$ 34,528,565
NEW HAVEN	\$ 6,277,434,638	\$ 2,777,322,135	\$ 2,442,007,126	\$ -	\$ 358,091,434	\$ 659,574,253	\$ 40,439,690
NEW LONDON	\$ 1,765,640,254	\$ 846,614,063	\$ 702,118,716	\$ 133,931,820	\$ 99,729,555	\$ 104,938,850	\$ 12,239,070
NEW MILFORD	\$ 2,960,793,350	\$ 2,029,178,645	\$ 397,046,745	\$ 16,856,350	\$ 208,180,915	\$ 183,231,960	\$ 143,155,085
NEWINGTON	\$ 2,615,812,716	\$ 1,625,490,567	\$ 548,053,298	\$ 62,071,957	\$ 215,500,357	\$ 203,054,589	\$ 23,713,905
NEWTOWN	\$ 3,066,819,890	\$ 2,399,002,420	\$ 246,702,529	\$ 3,045,180	\$ 227,119,975	\$ 120,959,992	\$ 73,034,974
NORFOLK	\$ 310,880,350	\$ 217,532,100	\$ 10,490,800	\$ -	\$ 13,934,330	\$ 6,860,740	\$ 62,062,380
NORTH BRANFORD	\$ 1,282,667,618	\$ 941,557,068	\$ 161,781,372	\$ 11,250,040	\$ 112,075,870	\$ 53,972,228	\$ 13,281,080
NORTH CANAAN	\$ 339,457,170	\$ 154,838,110	\$ 78,493,790	\$ 5,956,270	\$ 22,941,910	\$ 56,095,280	\$ 27,088,080
NORTH HAVEN	\$ 2,931,983,412	\$ 1,815,255,820	\$ 632,306,865	\$ 35,609,430	\$ 209,808,992	\$ 267,504,415	\$ 7,107,320
NORTH STONINGTON	\$ 530,101,338	\$ 371,939,280	\$ 54,415,410	\$ -	\$ 41,993,268	\$ 29,448,385	\$ 32,304,995
NORWALK	\$ 12,890,404,109	\$ 8,718,516,044	\$ 2,737,836,220	\$ 361,689,580	\$ 589,755,220	\$ 725,933,771	\$ 118,362,854
NORWICH	\$ 2,457,677,290	\$ 1,526,195,700	\$ 542,364,500	\$ 82,769,400	\$ 194,509,080	\$ 140,057,210	\$ 54,550,800
OLD LYME	\$ 1,612,740,033	\$ 1,411,968,301	\$ 70,330,124	\$ 3,139,855	\$ 70,144,820	\$ 30,551,988	\$ 29,744,800
OLD SAYBROOK	\$ 2,505,558,054	\$ 2,031,454,100	\$ 275,076,700	\$ 1,689,200	\$ 90,537,393	\$ 61,588,161	\$ 46,901,700
ORANGE	\$ 1,906,330,698	\$ 1,212,971,460	\$ 413,573,670	\$ 14,458,620	\$ 127,282,611	\$ 114,085,347	\$ 38,417,610
OXFORD	\$ 1,425,292,635	\$ 1,084,505,405	\$ 91,397,800	\$ 493,500	\$ 108,446,300	\$ 96,138,630	\$ 44,804,500
PLAINFIELD	\$ 891,818,800	\$ 513,266,220	\$ 192,919,310	\$ 15,552,780	\$ 84,563,380	\$ 75,926,170	\$ 25,143,720
PLAINVILLE	\$ 1,375,221,540	\$ 808,899,350	\$ 304,611,540	\$ 21,408,320	\$ 134,749,190	\$ 99,743,640	\$ 27,217,820
PLYMOUTH	\$ 765,110,082	\$ 556,468,883	\$ 56,192,770	\$ 274,150	\$ 81,932,407	\$ 27,346,792	\$ 43,169,230

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POMFRET	\$ 363,489,118	\$ 278,951,700	\$ 27,445,400	\$ 1,981,700	\$ 30,471,309	\$ 14,206,789	\$ 12,413,920
PORTLAND	\$ 802,900,480	\$ 592,334,610	\$ 76,092,710	\$ 1,091,510	\$ 69,042,343	\$ 36,695,127	\$ 28,735,690
PRESTON	\$ 384,022,681	\$ 286,268,310	\$ 21,842,600	\$ 515,800	\$ 36,020,880	\$ 22,181,821	\$ 17,709,070
PROSPECT	\$ 816,473,204	\$ 638,219,070	\$ 61,625,570	\$ 715,000	\$ 75,678,725	\$ 34,282,359	\$ 6,667,480
PUTNAM	\$ 652,629,595	\$ 363,792,584	\$ 153,591,370	\$ 10,163,800	\$ 54,444,700	\$ 64,181,441	\$ 16,619,500
REDDING	\$ 1,627,581,683	\$ 1,303,743,810	\$ 125,730,550	\$ -	\$ 88,624,925	\$ 71,670,670	\$ 37,811,728
RIDGEFIELD	\$ 4,692,754,721	\$ 3,776,118,843	\$ 475,525,061	\$ 9,701,600	\$ 238,114,964	\$ 150,631,817	\$ 52,364,036
ROCKY HILL	\$ 2,180,061,019	\$ 1,316,121,545	\$ 581,920,610	\$ 82,830,640	\$ 157,276,509	\$ 118,465,065	\$ 6,277,290
ROXBURY	\$ 695,022,600	\$ 606,716,020	\$ 2,452,830	\$ -	\$ 26,565,230	\$ 6,417,260	\$ 52,871,260
SALEM	\$ 363,625,921	\$ 287,165,490	\$ 18,827,800	\$ -	\$ 32,197,383	\$ 11,966,598	\$ 13,468,650
SALISBURY	\$ 1,159,770,040	\$ 805,232,420	\$ 51,962,100	\$ -	\$ 35,090,780	\$ 20,730,850	\$ 246,753,890
SCOTLAND	\$ 128,945,430	\$ 110,292,040	\$ 1,415,910	\$ -	\$ 9,647,400	\$ 3,531,400	\$ 4,058,680
SEYMOUR	\$ 1,233,443,605	\$ 912,671,830	\$ 126,034,860	\$ 14,220,780	\$ 108,655,375	\$ 63,333,960	\$ 22,747,580
SHARON	\$ 854,270,356	\$ 707,803,740	\$ 44,131,900	\$ -	\$ 24,968,339	\$ 15,627,837	\$ 61,738,540
SHELTON	\$ 4,550,467,410	\$ 2,940,810,980	\$ 904,662,780	\$ 61,898,170	\$ 307,274,340	\$ 386,240,490	\$ 11,478,820
SHERMAN	\$ 766,365,183	\$ 707,719,680	\$ 5,324,500	\$ 1,907,000	\$ 33,879,893	\$ 8,070,995	\$ 11,370,115
SIMSBURY	\$ 2,250,841,690	\$ 1,676,466,500	\$ 284,261,620	\$ 30,910,700	\$ 180,053,370	\$ 90,414,470	\$ 19,645,730
SOMERS	\$ 843,691,079	\$ 677,543,969	\$ 42,606,970	\$ 1,264,300	\$ 75,511,700	\$ 23,357,350	\$ 24,671,090
SOUTH WINDSOR	\$ 2,577,878,996	\$ 1,633,838,576	\$ 437,237,200	\$ -	\$ 206,715,320	\$ 258,779,320	\$ 41,308,580
SOUTHBURY	\$ 2,107,309,399	\$ 1,492,656,119	\$ 309,926,090	\$ 21,340,470	\$ 152,396,103	\$ 113,305,667	\$ 39,025,420
SOUTHINGTON	\$ 3,817,247,724	\$ 2,670,242,621	\$ 506,996,380	\$ 23,605,290	\$ 349,378,400	\$ 225,952,514	\$ 64,677,809
SPRAGUE	\$ 175,436,401	\$ 110,743,290	\$ 18,000,240	\$ 1,797,390	\$ 18,365,010	\$ 18,162,791	\$ 10,165,070
STAFFORD	\$ 812,270,351	\$ 562,360,010	\$ 67,288,435	\$ 6,748,750	\$ 81,496,756	\$ 76,502,420	\$ 24,622,730
STAMFORD	\$ 19,115,110,364	\$ 10,735,216,992	\$ 6,368,969,264	\$ 1,127,791,511	\$ 847,081,750	\$ 1,163,149,608	\$ 692,750
STERLING	\$ 233,607,201	\$ 148,570,320	\$ 13,653,390	\$ 1,085,540	\$ 24,570,565	\$ 24,049,246	\$ 22,763,680
STONINGTON	\$ 2,615,191,098	\$ 1,906,830,410	\$ 395,059,240	\$ 12,976,240	\$ 130,684,370	\$ 107,629,778	\$ 74,987,300
STRATFORD	\$ 4,770,175,005	\$ 3,159,427,360	\$ 768,877,270	\$ 38,774,820	\$ 314,680,673	\$ 459,162,907	\$ 68,026,795
SUFFIELD	\$ 1,451,774,332	\$ 1,152,182,290	\$ 110,869,000	\$ 6,983,200	\$ 107,186,708	\$ 69,895,664	\$ 11,640,670
THOMASTON	\$ 554,112,948	\$ 348,478,444	\$ 70,011,170	\$ 6,458,760	\$ 55,291,444	\$ 59,353,650	\$ 20,978,240

THOMPSON	\$ 627,214,354	\$ 483,785,025	\$ 32,508,100	\$ 2,383,200	\$ 63,989,861	\$ 24,101,198	\$ 22,830,170
TOLLAND	\$ 1,307,091,959	\$ 1,060,041,150	\$ 88,933,310	\$ 5,901,000	\$ 120,693,554	\$ 31,634,260	\$ 5,789,685
TORRINGTON	\$ 2,423,312,925	\$ 1,577,091,230	\$ 421,315,150	\$ 28,431,250	\$ 208,774,841	\$ 174,066,794	\$ 42,064,910
TRUMBULL	\$ 4,494,853,623	\$ 3,116,542,900	\$ 815,226,500	\$ 23,086,300	\$ 268,505,288	\$ 265,353,535	\$ 29,225,400
UNION	\$ 99,086,144	\$ 76,234,310	\$ 5,968,140	\$ -	\$ 7,760,690	\$ 3,208,514	\$ 5,914,490
VERNON	\$ 1,752,096,555	\$ 1,133,279,540	\$ 359,258,430	\$ 128,586,390	\$ 176,321,605	\$ 75,766,730	\$ 7,470,250
VOLUNTOWN	\$ 201,105,834	\$ 161,064,934	\$ 8,921,420	\$ 39,740	\$ 18,132,495	\$ 6,142,637	\$ 6,844,348
WALLINGFORD	\$ 4,398,223,525	\$ 2,704,956,120	\$ 850,986,010	\$ 24,172,800	\$ 331,575,171	\$ 474,562,394	\$ 36,143,830
WARREN	\$ 343,638,870	\$ 212,478,740	\$ 5,250,490	\$ -	\$ 13,413,370	\$ 3,686,710	\$ 108,809,560
WASHINGTON	\$ 1,256,444,990	\$ 935,511,980	\$ 48,767,840	\$ -	\$ 37,054,470	\$ 19,694,350	\$ 215,416,350
WATERBURY	\$ 4,207,938,751	\$ 2,077,214,585	\$ 1,199,504,370	\$ 213,584,937	\$ 390,456,120	\$ 489,318,342	\$ 51,445,334
WATERFORD	\$ 3,240,454,110	\$ 1,395,358,720	\$ 857,149,100	\$ 5,877,600	\$ 146,816,980	\$ 789,997,680	\$ 51,131,630
WATERTOWN	\$ 2,006,803,657	\$ 1,464,051,060	\$ 238,642,320	\$ 11,345,000	\$ 173,905,252	\$ 129,667,375	\$ 537,650
WEST HARTFORD	\$ 5,953,475,080	\$ 4,381,608,087	\$ 931,951,109	\$ 83,749,541	\$ 406,403,324	\$ 204,400,500	\$ 29,112,060
WEST HAVEN	\$ 2,869,784,194	\$ 1,997,604,316	\$ 494,170,761	\$ 110,316,500	\$ 251,648,030	\$ 105,972,697	\$ 20,388,390
WESTBROOK	\$ 1,170,648,367	\$ 862,338,957	\$ 148,697,540	\$ 5,669,790	\$ 53,267,680	\$ 64,142,560	\$ 42,201,630
WESTON	\$ 2,662,116,322	\$ 2,498,011,100	\$ 27,913,900	\$ -	\$ 114,926,893	\$ 21,169,329	\$ 95,100
WESTPORT	\$ 9,806,678,549	\$ 7,910,028,210	\$ 1,172,264,840	\$ 10,919,380	\$ 312,022,403	\$ 285,483,536	\$ 126,879,560
WETHERSFIELD	\$ 2,349,232,910	\$ 1,814,663,760	\$ 290,554,070	\$ 58,619,600	\$ 176,524,500	\$ 66,987,680	\$ 502,900
WILLINGTON	\$ 481,868,009	\$ 332,409,450	\$ 77,563,090	\$ 22,378,570	\$ 40,998,970	\$ 15,737,699	\$ 15,158,800
WILTON	\$ 4,285,537,660	\$ 3,186,954,440	\$ 622,382,490	\$ 19,205,270	\$ 194,342,230	\$ 242,392,140	\$ 39,466,360
WINCHESTER	\$ 710,836,697	\$ 493,173,705	\$ 84,787,550	\$ 14,461,580	\$ 66,207,691	\$ 49,056,501	\$ 17,611,250
WINDHAM	\$ 1,006,843,960	\$ 555,731,395	\$ 175,189,725	\$ -	\$ 94,936,820	\$ 93,406,300	\$ 87,579,720
WINDSOR	\$ 3,231,615,610	\$ 1,637,936,539	\$ 876,515,779	\$ 16,360,484	\$ 196,802,690	\$ 496,946,652	\$ 23,413,950
WINDSOR LOCKS	\$ 1,410,980,309	\$ 640,990,210	\$ 333,994,640	\$ 14,995,700	\$ 176,002,939	\$ 259,842,540	\$ 149,980
WOLCOTT	\$ 1,280,403,927	\$ 1,004,552,710	\$ 84,347,940	\$ 6,045,690	\$ 123,676,573	\$ 40,337,174	\$ 27,489,530
WOODBIDGE	\$ 1,205,125,560	\$ 974,451,100	\$ 78,402,240	\$ 924,980	\$ 83,004,010	\$ 52,461,510	\$ 16,806,700
WOODBURY	\$ 1,243,892,334	\$ 992,945,960	\$ 104,148,180	\$ 13,676,760	\$ 83,432,655	\$ 26,063,569	\$ 37,301,970
WOODSTOCK	\$ 683,371,370	\$ 544,982,190	\$ 31,993,830	\$ -	\$ 60,101,310	\$ 25,328,260	\$ 20,965,780

Property Tax Overview: Data Appendix

*CIP stands for commercial, industrial and public utility properties.

Source: Office of Policy and Management

Appendix Table 2
Relative Importance of Components of Grand List by Municipality, 2012 Grand List

	Residential	CIP	Apartments	MV	Personal Prop	Other
ANDOVER	82.6%	3.0%	0.6%	9.4%	2.4%	2.5%
ANSONIA	72.0%	12.3%	1.7%	10.2%	5.5%	0.0%
ASHFORD	75.4%	7.4%	3.1%	10.0%	2.6%	4.6%
AVON	78.3%	11.8%	1.4%	6.3%	3.4%	0.2%
BARKHAMSTED	73.5%	5.2%	0.6%	8.1%	3.4%	9.7%
BEACON FALLS	74.7%	9.7%	0.2%	8.5%	4.2%	2.8%
BERLIN	61.5%	17.2%	0.0%	8.7%	10.9%	1.7%
BETHANY	82.5%	5.4%	0.0%	7.2%	3.7%	1.1%
BETHEL	66.7%	16.1%	1.1%	7.4%	8.2%	1.6%
BETHLEHEM	80.9%	6.2%	0.0%	8.0%	1.9%	3.0%
BLOOMFIELD	51.9%	26.0%	4.7%	7.0%	14.9%	0.2%
BOLTON	80.5%	5.0%	0.0%	8.2%	2.2%	4.0%
BOZRAH	60.8%	14.2%	0.4%	10.2%	11.2%	3.6%
BRANFORD	74.4%	14.2%	1.1%	6.1%	4.6%	0.6%
BRIDGEPORT	56.3%	25.6%	4.5%	5.9%	11.1%	1.1%
BRIDGEWATER	87.5%	1.1%	0.0%	4.4%	1.0%	6.1%
BRISTOL	58.6%	20.7%	3.3%	9.1%	10.7%	0.9%
BROOKFIELD	70.8%	15.6%	0.5%	6.3%	5.3%	2.0%
BROOKLYN	73.3%	10.8%	2.9%	9.6%	3.0%	3.3%
BURLINGTON	83.8%	1.8%	0.0%	8.4%	1.3%	4.8%
CANAAN	60.5%	9.1%	0.0%	5.0%	6.9%	18.5%
CANTERBURY	78.7%	4.4%	0.4%	9.6%	2.1%	5.1%
CANTON	76.2%	12.9%	0.7%	7.0%	3.6%	0.2%
CHAPLIN	78.8%	5.3%	0.2%	9.1%	5.3%	1.5%
CHESHIRE	72.6%	13.9%	0.4%	7.6%	5.1%	0.7%

CHESTER	72.2%	15.7%	0.6%	5.6%	4.1%	2.4%
CLINTON	77.6%	11.1%	0.3%	6.1%	4.0%	1.1%
COLCHESTER	73.3%	10.0%	1.7%	9.8%	4.0%	2.9%
COLEBROOK	79.2%	7.2%	0.0%	6.5%	6.0%	1.1%
COLUMBIA	81.1%	4.7%	0.1%	9.1%	2.8%	2.2%
CORNWALL	68.4%	2.5%	0.0%	3.5%	2.3%	23.4%
COVENTRY	84.8%	3.6%	0.0%	9.2%	2.3%	0.2%
CROMWELL	66.5%	17.5%	0.1%	8.4%	6.7%	0.9%
DANBURY	54.7%	28.3%	3.6%	6.8%	7.9%	2.3%
DARIEN	86.1%	7.7%	0.4%	2.6%	1.8%	1.8%
DEEP RIVER	76.5%	9.4%	0.6%	6.6%	5.3%	2.1%
DERBY	66.8%	17.6%	2.4%	8.4%	5.6%	1.6%
DURHAM	65.9%	5.1%	0.2%	8.0%	6.5%	14.5%
EAST GRANBY	58.7%	15.1%	0.0%	8.2%	14.7%	3.3%
EAST HADDAM	81.5%	4.9%	0.4%	8.4%	2.2%	3.0%
EAST HAMPTON	80.4%	5.6%	0.2%	8.6%	2.4%	3.1%
EAST HARTFORD	50.0%	25.6%	3.7%	8.9%	14.7%	0.9%
EAST HAVEN	71.5%	16.1%	0.4%	8.3%	2.6%	1.5%
EAST LYME	81.1%	8.1%	1.4%	6.1%	2.3%	2.4%
EAST WINDSOR	51.4%	29.0%	4.0%	10.0%	8.6%	0.9%
EASTFORD	74.6%	6.2%	0.0%	8.2%	7.5%	3.5%
EASTON	89.8%	2.7%	0.0%	5.7%	1.1%	0.7%
ELLINGTON	74.1%	11.7%	4.6%	9.1%	4.3%	0.7%
ENFIELD	62.3%	21.0%	1.9%	8.8%	6.9%	1.2%
ESSEX	77.3%	13.8%	0.0%	5.5%	3.4%	0.1%
FAIRFIELD	81.9%	10.4%	0.1%	4.4%	2.5%	0.9%
FARMINGTON	63.0%	24.0%	0.0%	6.3%	6.6%	0.3%
FRANKLIN	59.4%	18.1%	0.5%	8.7%	7.2%	6.5%
GLASTONBURY	72.5%	15.2%	0.7%	7.3%	4.0%	1.1%
GOSHEN	81.5%	3.9%	0.0%	5.8%	1.8%	7.1%

GRANBY	75.5%	4.8%	0.4%	9.0%	2.3%	8.5%
GREENWICH	78.6%	14.9%	1.1%	2.4%	2.1%	1.9%
GRISWOLD	76.7%	7.4%	1.3%	10.5%	2.5%	3.0%
GROTON	54.3%	28.1%	3.9%	5.3%	10.3%	1.9%
GUILFORD	85.1%	6.9%	0.1%	5.1%	2.1%	0.7%
HADDAM	76.7%	5.9%	0.1%	7.4%	6.3%	3.7%
HAMDEN	69.1%	19.2%	6.3%	7.6%	3.9%	0.2%
HAMPTON	81.6%	1.5%	0.0%	9.9%	2.3%	4.7%
HARTFORD	20.2%	49.2%	12.9%	8.5%	19.9%	2.2%
HARTLAND	77.0%	8.9%	0.0%	8.5%	3.1%	2.5%
HARWINTON	78.8%	2.7%	0.0%	8.8%	3.1%	6.6%
HEBRON	83.8%	3.2%	0.4%	9.0%	1.9%	2.0%
KENT	79.5%	6.8%	0.0%	3.7%	2.0%	7.9%
KILLINGLY	45.5%	22.7%	2.0%	5.9%	22.4%	3.4%
KILLINGWORTH	86.8%	3.0%	0.0%	7.6%	1.4%	1.2%
LEBANON	80.4%	3.1%	0.2%	8.1%	5.6%	2.9%
LEDYARD	77.0%	5.9%	0.7%	8.8%	5.6%	2.8%
LISBON	57.5%	21.8%	0.2%	8.0%	8.8%	3.9%
LITCHFIELD	77.8%	10.0%	0.5%	6.5%	2.8%	2.9%
LYME	90.4%	0.9%	0.0%	3.6%	1.0%	4.2%
MADISON	87.8%	5.1%	0.1%	4.5%	1.5%	1.2%
MANCHESTER	53.0%	29.3%	7.5%	8.2%	9.5%	0.0%
MANSFIELD	73.0%	15.0%	3.7%	7.4%	3.9%	0.7%
MARLBOROUGH	84.1%	5.2%	0.0%	8.8%	1.8%	0.1%
MERIDEN	58.0%	23.9%	3.0%	8.4%	9.3%	0.3%
MIDDLEBURY	72.5%	11.6%	0.0%	7.0%	4.9%	4.0%
MIDDLEFIELD	75.6%	8.4%	0.2%	7.9%	7.7%	0.4%
MIDDLETOWN	55.3%	20.7%	6.5%	7.2%	14.1%	2.7%
MILFORD	65.2%	21.4%	1.8%	5.6%	6.8%	1.0%
MONROE	76.8%	10.4%	0.0%	6.8%	3.6%	2.5%

MONTVILLE	66.7%	14.0%	1.0%	9.3%	9.8%	0.2%
MORRIS	83.1%	3.8%	0.0%	5.2%	1.9%	6.0%
NAUGATUCK	66.5%	14.8%	2.6%	10.6%	6.8%	1.2%
NEW BRITAIN	56.5%	23.4%	8.8%	10.5%	9.1%	0.5%
NEW CANAAN	89.7%	5.0%	0.5%	3.0%	0.8%	1.5%
NEW FAIRFIELD	89.6%	2.7%	0.0%	6.6%	1.0%	0.0%
NEW HARTFORD	78.3%	5.0%	0.0%	7.6%	4.4%	4.7%
NEW HAVEN	44.2%	38.9%	0.0%	5.7%	10.5%	0.6%
NEW LONDON	47.9%	39.8%	7.6%	5.6%	5.9%	0.7%
NEW MILFORD	68.5%	13.4%	0.6%	7.0%	6.2%	4.8%
NEWINGTON	62.1%	21.0%	2.4%	8.2%	7.8%	0.9%
NEWTOWN	78.2%	8.0%	0.1%	7.4%	3.9%	2.4%
NORFOLK	70.0%	3.4%	0.0%	4.5%	2.2%	20.0%
NORTH BRANFORD	73.4%	12.6%	0.9%	8.7%	4.2%	1.0%
NORTH CANAAN	45.6%	23.1%	1.8%	6.8%	16.5%	8.0%
NORTH HAVEN	61.9%	21.6%	1.2%	7.2%	9.1%	0.2%
NORTH STONINGTON	70.2%	10.3%	0.0%	7.9%	5.6%	6.1%
NORWALK	67.6%	21.2%	2.8%	4.6%	5.6%	0.9%
NORWICH	62.1%	22.1%	3.4%	7.9%	5.7%	2.2%
OLD LYME	87.6%	4.4%	0.2%	4.3%	1.9%	1.8%
OLD SAYBROOK	81.1%	11.0%	0.1%	3.6%	2.5%	1.9%
ORANGE	63.6%	21.7%	0.8%	6.7%	6.0%	2.0%
OXFORD	76.1%	6.4%	0.0%	7.6%	6.7%	3.1%
PLAINFIELD	57.6%	21.6%	1.7%	9.5%	8.5%	2.8%
PLAINVILLE	58.8%	22.1%	1.6%	9.8%	7.3%	2.0%
PLYMOUTH	72.7%	7.3%	0.0%	10.7%	3.6%	5.6%
POMFRET	76.7%	7.6%	0.5%	8.4%	3.9%	3.4%
PORTLAND	73.8%	9.5%	0.1%	8.6%	4.6%	3.6%
PRESTON	74.5%	5.7%	0.1%	9.4%	5.8%	4.6%
PROSPECT	78.2%	7.5%	0.1%	9.3%	4.2%	0.8%

PUTNAM	55.7%	23.5%	1.6%	8.3%	9.8%	2.5%
REDDING	80.1%	7.7%	0.0%	5.4%	4.4%	2.3%
RIDGEFIELD	80.5%	10.1%	0.2%	5.1%	3.2%	1.1%
ROCKY HILL	60.4%	26.7%	3.8%	7.2%	5.4%	0.3%
ROXBURY	87.3%	0.4%	0.0%	3.8%	0.9%	7.6%
SALEM	79.0%	5.2%	0.0%	8.9%	3.3%	3.7%
SALISBURY	69.4%	4.5%	0.0%	3.0%	1.8%	21.3%
SCOTLAND	85.5%	1.1%	0.0%	7.5%	2.7%	3.1%
SEYMOUR	74.0%	10.2%	1.2%	8.8%	5.1%	1.8%
SHARON	82.9%	5.2%	0.0%	2.9%	1.8%	7.2%
SHELTON	64.6%	19.9%	1.4%	6.8%	8.5%	0.3%
SHERMAN	92.3%	0.7%	0.2%	4.4%	1.1%	1.5%
SIMSBURY	74.5%	12.6%	1.4%	8.0%	4.0%	0.9%
SOMERS	80.3%	5.1%	0.1%	9.0%	2.8%	2.9%
SOUTH WINDSOR	63.4%	17.0%	0.0%	8.0%	10.0%	1.6%
SOUTHBURY	70.8%	14.7%	1.0%	7.2%	5.4%	1.9%
SOUTHINGTON	70.0%	13.3%	0.6%	9.2%	5.9%	1.7%
SPRAGUE	63.1%	10.3%	1.0%	10.5%	10.4%	5.8%
STAFFORD	69.2%	8.3%	0.8%	10.0%	9.4%	3.0%
STAMFORD	56.2%	33.3%	5.9%	4.4%	6.1%	0.0%
STERLING	63.6%	5.8%	0.5%	10.5%	10.3%	9.7%
STONINGTON	72.9%	15.1%	0.5%	5.0%	4.1%	2.9%
STRATFORD	66.2%	16.1%	0.8%	6.6%	9.6%	1.4%
SUFFIELD	79.4%	7.6%	0.5%	7.4%	4.8%	0.8%
THOMASTON	62.9%	12.6%	1.2%	10.0%	10.7%	3.8%
THOMPSON	77.1%	5.2%	0.4%	10.2%	3.8%	3.6%
TOLLAND	81.1%	6.8%	0.5%	9.2%	2.4%	0.4%
TORRINGTON	65.1%	17.4%	1.2%	8.6%	7.2%	1.7%
TRUMBULL	69.3%	18.1%	0.5%	6.0%	5.9%	0.7%
UNION	76.9%	6.0%	0.0%	7.8%	3.2%	6.0%

VERNON	64.7%	20.5%	7.3%	10.1%	4.3%	0.4%
VOLUNTOWN	80.1%	4.4%	0.0%	9.0%	3.1%	3.4%
WALLINGFORD	61.5%	19.3%	0.5%	7.5%	10.8%	0.8%
WARREN	61.8%	1.5%	0.0%	3.9%	1.1%	31.7%
WASHINGTON	74.5%	3.9%	0.0%	2.9%	1.6%	17.1%
WATERBURY	49.4%	28.5%	5.1%	9.3%	11.6%	1.2%
WATERFORD	43.1%	26.5%	0.2%	4.5%	24.4%	1.6%
WATERTOWN	73.0%	11.9%	0.6%	8.7%	6.5%	0.0%
WEST HARTFORD	73.6%	15.7%	1.4%	6.8%	3.4%	0.5%
WEST HAVEN	69.6%	17.2%	3.8%	8.8%	3.7%	0.7%
WESTBROOK	73.7%	12.7%	0.5%	4.6%	5.5%	3.6%
WESTON	93.8%	1.0%	0.0%	4.3%	0.8%	0.0%
WESTPORT	80.7%	12.0%	0.1%	3.2%	2.9%	1.3%
WETHERSFIELD	77.2%	12.4%	2.5%	7.5%	2.9%	0.0%
WILLINGTON	69.0%	16.1%	4.6%	8.5%	3.3%	3.1%
WILTON	74.4%	14.5%	0.4%	4.5%	5.7%	0.9%
WINCHESTER	69.4%	11.9%	2.0%	9.3%	6.9%	2.5%
WINDHAM	55.2%	17.4%	0.0%	9.4%	9.3%	8.7%
WINDSOR	50.7%	27.1%	0.5%	6.1%	15.4%	0.7%
WINDSOR LOCKS	45.4%	23.7%	1.1%	12.5%	18.4%	0.0%
WOLCOTT	78.5%	6.6%	0.5%	9.7%	3.2%	2.1%
WOODBRIIDGE	80.9%	6.5%	0.1%	6.9%	4.4%	1.4%
WOODBURY	79.8%	8.4%	1.1%	6.7%	2.1%	3.0%
WOODSTOCK	79.7%	4.7%	0.0%	8.8%	3.7%	3.1%
Maximum	93.8%	49.2%	12.9%	12.5%	24.4%	31.7%
Minimum	20.2%	0.4%	0.0%	2.4%	0.8%	0.0%
Average	71.3%	12.5%	1.2%	7.4%	5.6%	3.2%
Median	73.6%	10.8%	0.5%	7.6%	4.4%	2.0%
Source: Office of Policy and Management.						

Appendix Table 3		
State Provided Property Tax Exemptions Based on Characteristics of Property Owner and Type of Property		
Tax Exp Rpt		
	CGS Source	Description
	Sec. 12-81(17)	Blind persons
	Sec. 12-81(19)	Veterans
	Sec. 12-81(20)	Servicemen and veterans having disability ratings
	Sec. 12-81(21)	Disabled veteran with severe disability
	Sec. 12-81(22)	Surviving spouse or minor child of serviceman or veteran
	Sec. 12-81(23)	Serviceman's surviving spouse receiving federal benefits
	Sec. 12-81(24)	Surviving spouse and minor child of veteran receiving compensation from Veterans' Administration
	Sec. 12-81(25)	Surviving parent of deceased serviceman or veteran
	Sec. 12-81(26)	Parents of veterans
*	Sec. 12-81(28)	Property of United States Army instructors
*	Sec. 12-81(30)	Fuel and provisions
*	Sec. 12-81(31)	Household furniture
*	Sec. 12-81(32)	Private libraries
*	Sec. 12-81(33)	Musical instruments
*	Sec. 12-81(34)	Watches and jewelry
*	Sec. 12-81(35)	Wearing apparel
	Sec. 12-81(36)	Commercial fishing apparatus
	Sec. 12-81(37)	Mechanic's tools
	Sec. 12-81(38)	Farming tools
	Sec. 12-81(39)	Farm produce
	Sec. 12-81(40)	Sheep, goats and swine
	Sec. 12-81(41)	Dairy and beef cattle, oxen, asses and mules
	Sec. 12-81(42)	Poultry
*	Sec. 12-81(43)	Cash
	Sec. 12-81(44)	Nursery products

	Sec. 12-81(46)	Watercraft owned by nonresident. Repealed
*	Sec. 12-81(47)	Carriages, wagons and bicycles
	Sec. 12-81(50)	Manufacturers' inventories
	Sec. 12-81(51)	Water pollution control structures and equipment
	Sec. 12-81(52)	Structures and equipment for air pollution control
*	Sec. 12-81(53)	Motor vehicle of member of armed forces
	Sec. 12-81(54)	Wholesale and retail business inventory
	Sec. 12-81(55)	Property of totally disabled persons
	Sec. 12-81(56)	Active solar energy heating or cooling systems
	Sec. 12-81(57)	Class I renewable energy sources, hydropower facilities, solar water or space heating systems, geothermal energy resources and solar thermal or geothermal renewable energy sources
*	Sec. 12-81(58)	Property leased to a charitable, religious or nonprofit organization
	Sec. 12-81(59)	Manufacturing facility in a distressed municipality, targeted investment community, enterprise zone or airport development zone. Designated manufacturing plant. Service facility
	Sec. 12-81(60)	Machinery and equipment in a manufacturing facility in a distressed municipality, targeted investment community, enterprise zone or airport development zone. Machinery and equipment in a service facility
	Sec. 12-81(61)	Vessels used primarily for commercial fishing
	Sec. 12-81(62)	Passive solar energy heating or cooling systems and hybrid systems
	Sec. 12-81(63)	Cogeneration systems
	Sec. 12-81(65)	Vanpool vehicles
*	Sec. 12-81(66)	Motor vehicles leased to state agencies
*	Sec. 12-81(67)	Beach property belonging to or held in trust for cities
	Sec. 12-81(68)	Livestock totally exempt except that exemption for horses and ponies limited to one thousand dollars in value unless used in farming
*	Sec. 12-81(69)	Property of Metropolitan Transportation Authority
	Sec. 12-81(70)	Machinery and equipment acquired as part of a technological upgrading of a manufacturing process
	Sec. 12-81(71)	Motor vehicles owned by American Indians
	Sec. 12-81(72)	Machinery and equipment in manufacturing facilities, including biotechnology and recycling industries, assessed prior to October 1, 2011

	Sec. 12-81(73)	Temporary devices or structures for seasonal production, storage or protection of plants or plant material
	Sec. 12-81(74)	Certain vehicles used to transport freight for hire
*	Sec. 12-81(75)	Certain health care institutions
	Sec. 12-81(76)	Machinery and equipment assessed commencing on or after October 1, 2011
	Sec. 12-81(77)	Real property of regional council of governments
*	Sec 10a-209	Tax exemption: The property, income, obligations and activities of the Connecticut Student Loan Foundation
	Sec 12-18a	Grants to towns for property tax relief based on population
	Sec 12-81e	Exemption for certain vans used to transport employees to and from work
	Sec 12-82	Exemptions of veterans of allied services of First World War
	Sec 12-88	When property otherwise taxable may be completely or partially exempted
	Sec 12-91	Exemption for farm machinery, horses or ponies. Additional optional exemption for farm buildings or buildings used for housing for seasonal employees
	Sec 12-95a	Exemption of merchandise in transit in warehouses
	Sec 12-96	Exemptions of tree plantations of not less than twenty-five acres. Conversion to forest land classification
	Sec 12-97	Taxation of timber land of more than ten years' growth. Conversion to forest land classification
*	Sec 32-46	Tax exemption: The CT Innovations Corporation provided under CGS Section 32-23h
*	Sec 38a-188	Non-profit health care centers
*	Sec 38a-240	Non-profit Legal service corporation property exempt from taxes

Chapter 2

Properties Exempt from Paying Property Taxes in Connecticut

A Report Prepared for the Connecticut Tax Panel
Presented October 27, 2015

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Executive Summary

The Tax Revision Panel adopted a set of criteria for evaluating changes in the system of financing state and local governments in Connecticut. The criteria included

- Taxes should be designed to avoid unintended interference with private economic decisions; and
- The structure of the tax system should treat taxpayers in similar circumstances similarly.

Exempting individual properties from paying the real property tax violates these criteria because

- eliminating property taxes for some uses and property owners provides an incentive to buy more real property, or more expensive real property, than would be the case if the property were not exempt from paying property taxes; and
- exempting some properties from paying property taxes means the cost of providing government services must be spread across a smaller tax base requiring a higher tax rate to collect a given amount of revenue resulting in higher taxes, on properties not receiving preferential treatment, than they would pay if the property tax had a broader tax base and collected the same revenue with a lower tax rate. As a result, two similar properties, one exempt the other not, are not treated equally.

In a recent national study, Connecticut was identified as one of only two states that reimburse local governments for a portion of property tax revenues foregone because of state mandated exemptions -- Rhode Island was the other.

State reimbursement of local property taxes foregone because of state mandated exemptions is appropriate because the state mandated the exemptions; because benefits from the exempt organization might extend beyond the municipal borders; and state reimbursement can be more systematic and uniform than ad hoc local PILOTs.

The down side to state reimbursements for foregone local property tax revenues is that during periods of state budget pressure aid to local governments is vulnerable because it competes with other state spending priorities like Medicaid, transportation and education. State reimbursement for foregone property tax revenues may provide an incentive to overstate the value of exempt properties since this might increase the amount of the state reimbursement.

Connecticut exempts federally owned property, state and municipally owned property, and most property owned by religious organizations. Section 12-81(8) provides explicit exemption of property owned by six named colleges in Connecticut. In addition, like most states, Connecticut exempts properties used for charitable, educational, health, cemeteries and open spaces. Unlike most states Connecticut exempts properties owned by scientific and literary organizations.

The relative importance and composition of exempt properties varies significantly across municipalities in the state. In terms of the relative importance of parcels exempt from paying property taxes, there is not much variation across these 19 representative municipalities. There is more variation across these municipalities in the relative importance of exempt properties in terms of their share of total gross assessed value. In all cases, except for Union and Guilford, the exempt share of total gross assessed value is significantly higher than the exempt share of the number of parcels.

The 19 municipalities, in the aggregate, report properties with 47 different exempt codes, i.e., forty-seven different exempt land uses were reported.

- All 19 municipalities have municipally owned exempt properties and in 11 of these municipalities these properties have a larger share of total assessed value of exempt properties than the share of total exempt parcels.
- Seventeen of the representative municipalities have exempt properties classified as charitable organizations and in every case except one charitable properties account for a larger share of the number of exempt properties than they do the value of exempt properties.
- All 19 municipalities have exempt property classified as churches and in 9 municipalities the church share of the value of exempt properties is higher than the share of exempt parcels.

Exempting properties reduces the taxable base and results in non-preference properties paying a higher property tax than they would otherwise pay. In other words, exempt properties distort the distribution of property tax liabilities by removing some properties from the tax base. For half of the representative municipalities, however, the combined share of property taxes paid by residential and commercial properties when exempt properties pay taxes on 25 percent of their value is 2 percent or less lower than their share under the current system. Only three municipalities have combined residential and commercial shares 5 percent or more below their share under the current scenario.

Connecticut is the leader in the nation for taking responsibility for the impact of state mandated property tax exemptions by reimbursing local governments for some portion of the revenues foregone as a result of these exemptions. The majority of these funds are transferred to local governments through three state grant programs – Pequot, state owned property and college/hospitals. These state grants to local governments, however, do not address the issues associated with tax exempt properties discussed above. If Connecticut is to address the economic efficiency and equity concerns associated with exempting individual properties from paying property taxes, it will need to consider options for collecting revenues from the individual exempt property owners.

Nationally, there are a number of options available to local governments for generating revenue from exempt properties to help pay for the cost of the publicly provided services they consume. These include

- 1) Payment-in-lieu-of-taxes (PILOTs).
- 2) Services-in-lieu-of-taxes (SILOTs);
- 3) User fees and charges;
- 4) Other direct taxes;
- 5) Retaining revenue from properties sold to exempt entities.

PILOTs, which are voluntary payments by owners of exempt properties to the local government to help finance the delivery of local services they consume, is the most widely used mechanism for generating income from exempt properties.

Summary of Policy Options

Policy Option 1: Maintain the Status Quo The stakeholders in the current system – owners of exempt property, the state of Connecticut and local governments in the state – are familiar with the current system and have made decisions in the context of that system. The current system does not address the current efficiency and equity concerns associated with property tax exemptions.

Policy Option 2: Develop a traditional PILOT program along the lines of the program in Boston which has been characterized as “best practices.”

Connecticut might consider the development of a traditional¹ PILOT program to generate revenues from tax exempt properties to help finance the delivery of public services benefiting those properties. This would address directly the efficiency and equity issues associated with exempting some properties from paying property taxes outlined above.

Policy Option 3: Limit the value of real property exempt from taxation for individual properties. The owner of the exempt property would make a payment to the local government based on some portion of the value of the property. This would be a required payment, not a voluntary PILOT. Such an approach would impact the distribution of property tax liabilities across individual municipalities as well as the level of funds received by each local government vis-à-vis current state grant payments. The number of exempt properties and services available might be reduced which could result in few services to citizens. This could be mitigated by exempting the first \$10 million of value from these calculations.

¹ A traditional PILOT program would involve a voluntary payment from the owner of exempt properties to the local government in lieu of paying property taxes on the exempt property.

Policy Option 4: Phase out property tax exemptions for selected properties.

Connecticut might decide to re-examine certain tax exemptions for specific categories or uses of property. For example, property tax exemptions might be retained for federal, state and municipal properties, as well as religious and educational organizations, hospitals and non-profit organizations providing services to local residents. Other property tax exemptions could be reexamined. For example, PA 15-5 SS, Section 244, which becomes effective October 1, 2015 provides for the taxation of residential real property (not dormitories with 20 beds or more) held by private nonprofit institutions of higher learning. The rationale for limiting exemptions might rest on the *quid pro quo* argument which says that since nonprofits provide benefits to society, including some services that might typically be provided by government, they should be subsidized to some extent.

Policy Option 5: Return Responsibility for Establishing Property Tax Exemptions to Local

Governments. Giving some policy making responsibilities to local governments aligns the decision to establish property tax exemptions to the governments that will foregone property tax revenues as a result of those decisions. Some local governments might limit exemptions because of their limited property tax base while other local governments might be more generous in providing exemptions. As a result, this could create a mosaic of property tax exemptions across the 169 municipalities in Connecticut. Finally, this does not address the efficiency and equity concerns associated with property tax exemptions.

Introduction

The purpose of this paper is to gain a better understanding of the composition and relative importance of properties totally exempt from paying property taxes across municipalities in Connecticut. The paper describes state programs designed to offset revenues foregone by municipalities as a result of such exemptions. Finally, the paper discusses policy options for generating revenues to offset, at least partially, the cost of delivering government services to such properties.

There are two generally accepted rationales for exempting certain properties from paying the property tax. First, some argue that the appropriate base of the property tax should be property held in private hands. Because non-profits are generally created to benefit the public, property owned and used by non-profits should not be part of the property tax base. This argument depends not only on the charitable character of the property owner, but also on whether the property is used for charitable purposes. For example, some courts reject exemptions for property used for administration because that is not the charitable activity for which the property received an exemption. [Brody, 642]

Second, a property tax exemption can be justified as an appropriate subsidy to encourage certain types of activities by non-profits that benefit the general public. This is known as the *quid pro quo* justification for property tax exemption, which has become increasingly important as states narrow their definitions of organizations eligible for property tax exemptions. [Kenyon and Langley, 10-11] Under the narrowest formulation of the *quid pro quo* rationale, the state exempts individual properties because these charities are assumed to lessen the burdens of government. Practically, however, a requirement that the charity must lessen the burden of government creates difficulties when the charity receives government funding for service delivery. [Brody, 638-641]

The next section looks at national trends in property tax exemptions and that is followed by a discussion of property tax exemptions in Connecticut.

National Trends in Properties Exempt from Real Property Taxation

The United States has 51 different systems of state and local government and each has different treatment of real property taxes and exempt properties, which reflect the cultural, historical and political realities of each state and the District of Columbia. In spite of these different institutional settings, all 50 states and the District exempt some properties from paying the local tax on real property, and local governments may have additional exempt categories in some states.

The Lincoln Institute of Land Policy, in collaboration with the George Washington Institute of Public Policy at George Washington University, developed and maintains a data set describing the property tax in each of the 51 states; *Significant Features of the Property Tax*.² Data in Table 1 reflect a quick overview of state practices regarding property tax exemptions and indicate that all 50 states and the District of Columbia provide property tax exemptions to property owned by government (federal, state, local) and religious organizations. Virtually all states and the District provide tax exemptions to properties owned by charitable and educational institutions, as well as parks, open space and cemeteries.³

² <http://www.lincolnst.edu/subcenters/significant-features-property-tax/>

³ It is difficult to develop a comprehensive picture of how different states treat exempt properties because there is variation in the constitutional and/or statutory base of the exemptions, there are issues around definitions, legal opinions often clarify terms and conditions for exemption and exemptions typically show up in a variety of places in

There is more variation across the 51 states in how other land uses are treated. For example, a quick review of the data in *Significant Features of the Property Tax* suggest that 30 states do not provide tax exemptions to property owned by scientific organizations and 28 states do not provide exemptions for property owned by literary organizations. Connecticut exempts both of these categories of property from property taxation [CGS Sec. 12-81(7)]. Eleven states do not provide exemptions to membership organizations and 26 states do not provide exemptions for art and cultural organizations. Fifteen states do not provide tax exemptions for housing for vulnerable populations.

Table 1 National Trends in Exempting Property From the Real Property Tax, 2011	
Type of Exempt Property	States With Exemption
Government	51
Religious	51
Charitable/Benevolent	49
Educational	48
Parks, open space, Cemeteries	48
Health and Care Facilities	45
Membership Organizations	40
Housing for Vulnerable Populations	36
Art and Cultural	25
Literary	23
Scientific	21
States with	
Limits on Exemptions	10
Individual Properties Exempt by Name	20
Source: <i>Significant Features of the Property Tax</i> , http://www.lincolnst.edu/subcenters/significant-features-property-tax/	

In addition to

state statutes. For example, Brody says “every state recognizes property-tax exemption for those nonprofits that are classified as charities” [Brody, 625-626] but the definition of charity is only found in 11 states [Brody quoting Bowman, 638].

these specific land use classifications, 20 states, including the District, provide exemption from real property taxes to specific individual properties through legislation. Ten states provide some sort of limitations on exemptions from real property taxes. For example, in Maine religious institutions are exempt from paying the local property tax, but the exemption on parsonages is only up to \$20,000. In Maryland, nonprofit hospitals are exempt from paying real property taxes, but not more than 100 acres is exempt. In Mississippi the exemption for property belonging to nonprofit colleges or institutions for the education of youths is limited to 640 acres. In New Hampshire, dormitories, dining rooms and kitchens that are part of educational institutions and are worth more than \$150,000 are taxed on the excess. In Connecticut, recent legislation limits the exemption of residential property owned by private nonprofit institutions of higher learning intended to be used as student housing.⁴

Real Property Exempt from Property Taxation in Connecticut

Connecticut statutes define what types of real property are exempt from paying property taxes.⁵ The state provides full property tax exemptions for certain types of properties, based on the characteristics of the owner and the use of the land. For example, like all other states, Connecticut exempts federally owned property, state and municipally owned property, and most property owned by religious organizations. Section 12-81(8) provides explicit exemption of property owned by six named colleges in Connecticut.⁶

Connecticut statutes exempting real property from taxation are listed in Table 2. Like most states, Connecticut exempts properties used for charitable, educational, health, cemeteries and open spaces, including property leased to a charitable, religious or nonprofit organization, subject to authorization of the exemption by ordinance in any municipality [CGS Sec. 12-81(58)]. The state also exempts property owned by the Metropolitan Transportation Authority, the regional councils, the Connecticut Student Loan Foundation and the Connecticut Innovations Corporation. Unlike most states Connecticut exempts properties owned by scientific and literary organizations.

The relative importance and composition of exempt properties varies significantly across municipalities in the state. Nineteen municipalities in the state were identified as being representative of different types of municipalities in Connecticut. The types of municipalities include large cities, small cities, wealthy suburbs, cities with a mixed economic base and rural municipalities. (See Appendix Table 1 for descriptive statistics for these 19 representative cities).

⁴ Section 241 of PA 15-5 imposes restrictions on property tax exemptions for private nonprofit institutions of higher learning by requiring, starting October 1, 2015, that “any residential real property intended for use or used as student housing, except a dormitory (containing 20 or more beds), that is held by or on behalf of such entity, shall be taxable by a municipality.”

⁵ Connecticut is one of 4 or 5 states that do not have a constitutional foundation for providing property tax exemptions.

⁶ Trustees of the Berkeley Divinity School, the board of trustees of Connecticut College of Women, the Hartford Seminary Foundation, Sheffield Scientific School, Trinity College, Wesleyan University and the President and Fellows of Yale College. CGS Section 12081(7) exempts other privately owned educational institutions.

Table 2 Real Properties Exempt from Paying Property Taxes in Connecticut	
CGS Source	Description
Sec. 8-58	Property of Municipal Housing Authority
Sec. 10a-209	Property, Income Obligations and Activities of the Connecticut Student Loan Foundation
Sec. 15-120aa	Connecticut Airport Authority
Sec. 22a-270a	Material Innovation and Recycling Authority
Sec. 32-46	The Connecticut Innovations Corporation
Sec. 38a-188	Non-profit Health Care Centers
Sec. 38a-240	Non-profit Legal Service Corporations Real Property
Sec. 12-74	Municipal airports located in another town
Sec. 12-76	Exemption of Certain Municipal Corporation Water Supply Lands
Sec. 12-81(1)	Property of the United States
Sec. 12-81(2)	State property and reservation land
Sec. 12-81(4)	Municipal property
Sec. 12-81(5)	Property held by trustees for public purposes
Sec. 12-81(6)	Property of volunteer fire companies and property devoted to public use
Sec. 12-81(7)	Property used for scientific, educational, literary, historical, charitable or open space land for preservation purposes
Sec. 12-81(8)	College property
Sec. 12-81(10)	Property belonging to agricultural or horticultural societies
Sec. 12-81(11)	Property held for cemetery use
Sec. 12-81(13)	Houses of religious worship
Sec. 12-81(14)	Property of religious organizations used for certain purposes
Sec. 12-81(15)	Houses used by officiating clergymen as dwellings
Sec. 12-81(16)	Hospitals and sanatoriums
Sec. 12-81(18)	Property of veterans' organizations. (a) Property of bona fide war veterans' organization
Sec. 12-81(27)	Property of Grand Army posts
Sec. 12-81(29)	Property of American National Red Cross
Sec. 12-81(45)	Property of units of Connecticut National Guard
Sec. 12-81(48)	Airport improvements
Sec. 12-81(49)	Nonprofit camps or recreational facilities for charitable purposes
Sec. 12-81(67)	Beach property belonging to or held in trust for cities
Sec. 12-81(69)	Property of Metropolitan Transportation Authority
Sec. 12-81(75)	Certain Health Care Institutions
Sec. 12-81(77)	Real Property of Regional Council of Governments
Sec. 12-255	Public Service Railroad
PA 15-5 Sec. 7	Connecticut Port Authority

Table 3 reports information on the number, value and relative importance of exempt properties for these representative municipalities for Grand List 2014.⁷

Table 3 Importance of Exempt Properties Across Representative Municipalities				
Municipalities	# of Parcels	Share of total	Value of Parcels	Share of Total
Large Cities				
Bridgeport	1,885	5.5%	\$3,083,764,116	33.8%
Hartford	1,434	6.3%	\$3,757,029,369	59.1%
Small Cities				
Manchester	598	3.2%	\$450,955,640	12.0%
Torrington	411	2.8%	\$225,923,410	12.5%
Wealthy Suburbs				
Glastonbury	558	3.9%	\$249,554,640	6.8%
Guilford	578	5.4%	\$162,635,520	5.5%
Litchfield	282	6.2%	\$149,668,630	13.9%
New Canaan	224	3.0%	\$556,342,490	6.7%
Mixed Base				
Hamden	552	2.8%	\$729,263,877	16.7%
Middletown	974	6.3%	\$1,278,282,835	32.5%
Norwich	875	6.3%	\$556,955,051	27.1%
Windsor	448	3.7%	\$264,333,790	10.3%
Rural				
Bozrah	51	3.8%	\$13,710,670	7.0%
Durham	139	4.4%	\$48,143,410	6.9%
Killingly	274	3.7%	\$179,443,790	15.1%
North Canaan	80	4.8%	\$48,063,690	15.3%
Plainfield	186	3.0%	\$120,379,160	14.1%
Union	85	11.7%	\$9,941,520	11.3%
Washington	179	6.8%	\$179,899,646	14.7%
Source: Author calculations based on the real property portion of the Grand List from each municipality as provided by Quality Data Services, Inc.				

⁷ The real property of the Grand List for these representative municipalities was obtained through Quality Data Service, Inc.

In terms of the relative importance of parcels exempt from paying property taxes, there is not much variation across these 19 municipalities. Union is the only town where the number of parcels exempt from paying property taxes is more than 10 percent of all parcels, 11.7 percent. All other municipalities have between 2.8 (Torrington and Hamden) and 6.8 (Washington) percent of their real property parcels exempt from property taxation. Both large cities have a high share of total parcels exempt from taxation while small cities have a relatively low share of total parcels exempt from taxation. The other three groups of municipalities have more variation across the representative cities examined.

There is more variation across these municipalities in the relative importance of exempt properties in terms of their share of total gross assessed value. In all cases, except for Union and Guilford, the exempt share of total gross assessed value is significantly higher than the exempt share of the number of parcels. For example, in Hartford 6.3 percent of the cities parcels are exempt from paying property taxes, but they represent 59 percent of gross assessed value in the city.⁸ Similarly, exempt properties are 5.5 percent of parcels in Bridgeport, but account for nearly 34 percent of gross assessed value.

For small cities, wealthy suburbs and rural towns properties exempt from taxation account for 15 percent or less of gross assessed value (except Killingly, 15.1 percent, and North Canaan, 15.3 percent). For municipalities with a mixed tax base only Windsor had exempt properties that account for less than 15 percent of assessed value. Exempt properties account for over a fourth of assessed value in Norwich and nearly a third of assessed value in Middletown.

Table 4 presents the average relative importance of exempt property in terms of the number of parcels and assessed value for the 5 groups of representative municipalities examined. Exempt properties tend to be more valuable properties accounting for a higher percentage of gross assessed value than the number of parcels.

Table 4 Average Relative Importance of Exempt Properties		
	Share of Parcels	Share of Value
Large Cities	5.9%	46.5%
Small Cities	3.0%	12.3%
Wealthy Suburbs	4.6%	8.2%
Mixed Base	4.8%	21.7%
Rural	5.6%	12.1%

Types of Exempt Properties in Representative Municipalities

While the relative importance of the *number* and *value* of exempt properties varies across the representative municipalities examined, the *composition* of exempt properties also varies significantly across these municipalities. Chapter 11 of the Connecticut Assessors Handbook identifies 58 categories of property that are totally exempt from paying property taxes. Each exempt property is given a four

⁸ The exempt share of total gross assessed value in Hartford is artificially high because residential properties are assessed at 31 percent of estimated market value and all other properties in Hartford are assessed at 70 percent of market value.

letter exempt code to identify why the property is classified as totally exempt. For example, properties with an exempt code of AAAX are properties owned by the federal government and properties with an exempt code of DEAX are properties owned by charitable organizations. Appendix Table 2 lists the codes for properties exempt from paying property taxes in Connecticut.

The real property portion of the grand lists for the 19 representative municipalities includes both taxable and exempt real properties. The exempt properties were sorted by the four-digit exempt code to determine the number of parcels with each exempt code. Each property also has an estimated gross assessed value.

The 19 municipalities, in the aggregate, report properties with 47 different exempt codes, i.e., forty-seven different exempt land uses were reported. Table 5 presents information on the number and value of the top five exempt land uses across the 19 representative municipalities and their share of the total number and value of exempt properties in each town.

All 19 municipalities have properties identified as owned by the municipality, a church organization and state lands. For example, Bridgeport has 1,129 exempt properties owned by the municipality and they account for 59.9 percent of all exempt parcels and 61.2 percent of total gross assessed value of exempt properties in Bridgeport. At the other extreme is Union which has only 12 properties classified as municipally owned (14.1 percent of total exempt properties) which account for 31.6 percent of total assessed value of exempt properties in Union. Eleven of the 19 municipalities have municipally owned properties with a larger share of total assessed value of exempt properties than the share of total exempt parcels, including all four municipalities in the wealthy suburbs group.

Seventeen of the representative municipalities have properties classified as tax exempt because they are owned by charitable organizations (except for Bozrah and Union). The highest number of exempt charitable parcels is 156 in Hartford. The share of exempt properties classified as charitable range from 31.8 in New Canaan to 1.8 percent in Litchfield. In every case, except Litchfield, charitable properties account for a larger share of the number of exempt properties than they do the value of exempt properties.

All 19 municipalities have properties classified as tax exempt because they are owned by churches. The range in the number of parcels owned by churches is from 364 in Bridgeport to 1 in Durham. The church share of all exempt parcels ranges from 19.3 percent in Bridgeport to less than 1 percent in Durham. Nine of the municipalities have church properties that account for a larger share of the value of exempt properties than the number of exempt properties, including all four municipalities in the wealthy suburbs group.

All 19 representative municipalities have some property owned by the state of Connecticut. The range is from 169 in Hartford to just 12 in Bozrah. The state share of exempt parcels ranges from 62.4 percent in Union to just 5.9 percent in Bridgeport and Guildford. In 12 of the representative municipalities the state share of exempt parcels is greater than the state share of the value of exempt properties.

Table 5

Top Five Exempt Categories for Nineteen Representative Cities, 2014 Grand List

Municipalities	Owned by Municipality				Educational Institutions				Charitable Organizations				Churches				State Owned Land			
	BAAX				DBAX				DEAX				HAAX							
	Number	% of Exempt Parcels	Value	% of Exempt Value	Number	% of Exempt Parcels	Value	% of Exempt Value	Number	% of Exempt Parcels	Value	% of Exempt Value	Number	% of Exempt Parcels	Value	% of Exempt Value	Number	% of Exempt Parcels	Value	% of Exempt Value
Large Cities																				
Bridgeport	1,129	59.9%	\$1,888,633,715	61.2%	5	0.3%	\$ 9,899,380	0.3%	143	7.6%	\$ 65,654,766	2.1%	364	19.3%	\$ 222,998,653	7.2%	111	5.9%	\$ 252,134,007	8.2%
Hartford	471	32.8%	\$1,117,914,560	29.8%	16	1.1%	\$ 55,630,470	1.5%	156	10.9%	\$133,741,530	3.6%	196	13.7%	\$ 170,557,461	4.5%	169	11.8%	\$ 843,705,520	22.5%
Small Cities																				
Manchester	329	55.0%	\$162,143,830	36.0%	5	0.8%	\$ 8,666,200	1.9%	37	6.2%	\$ 10,175,640	2.3%	72	12.0%	\$ 51,945,450	11.5%	39	6.5%	\$ 96,419,200	21.4%
Torrington	155	37.7%	\$105,410,390	46.7%	8	1.9%	\$ 2,609,980	1.2%	88	21.4%	\$ 16,246,100	7.2%	34	8.3%	\$ 23,608,210	10.4%	50	12.2%	\$ 32,676,780	14.5%
Wealthy Suburbs																				
Glastonbury	356	63.8%	\$213,849,580	85.7%	9	1.6%	\$ 708,300	0.3%	41	7.3%	\$ 3,675,800	1.5%	18	3.2%	\$ 11,988,500	4.8%	54	9.7%	\$ 6,258,700	2.5%
Guilford	208	36.0%	\$105,811,720	65.1%	236	40.8%	\$ 19,794,690	12.2%	14	2.4%	\$ 3,783,240	2.3%	17	2.9%	\$ 12,977,680	8.0%	34	5.9%	\$ 3,283,890	2.0%
Litchfield	68	24.1%	\$39,769,400	26.6%	19	6.7%	\$ 51,665,530	34.5%	5	1.8%	\$ 3,994,200	2.7%	17	6.0%	\$ 11,115,600	7.4%	46	16.3%	\$ 13,119,240	8.8%
New Canaan	80	35.9%	\$301,665,810	54.2%	12	5.4%	\$ 35,891,870	6.5%	71	31.8%	\$ 62,330,030	11.2%	12	5.4%	\$ 38,638,620	6.9%	28	12.6%	\$ 10,889,410	2.0%
Mixed Base																				
Hamden	159	28.8%	\$205,525,460	28.2%	18	3.3%	\$ 31,417,610	4.3%	29	5.3%	\$ 9,434,180	1.3%	69	12.5%	\$ 48,987,357	6.7%	115	20.8%	\$ 109,674,600	15.0%
Middletown	396	40.7%	\$226,315,280	17.7%	45	4.6%	\$ 5,578,930	0.4%	33	3.4%	\$ 16,293,920	1.3%	56	5.7%	\$ 50,220,200	3.9%	75	7.7%	\$ 329,782,480	25.8%
Norwich	554	63.3%	\$210,316,744	37.8%	20	2.3%	\$ 31,591,800	5.7%	59	6.7%	\$ 34,748,157	6.2%	82	9.4%	\$ 42,106,550	7.6%	65	7.4%	\$ 121,329,000	21.8%
Windsor	201	44.9%	\$121,949,520	46.1%	26	5.8%	\$ 77,952,630	29.5%	34	7.6%	\$ 6,189,050	2.3%	32	7.1%	\$ 22,883,630	8.7%	97	21.7%	\$ 8,042,580	3.0%
Rural																				
Bozrah	18	35.3%	\$1,702,940	12.4%	2	3.9%	\$ 5,588,700	40.8%	0	0.0%	\$ -	0.0%	7	13.7%	\$ 2,145,180	15.6%	12	23.5%	\$ 971,540	7.1%
Durham	70	50.4%	\$13,751,430	28.6%	4	2.9%	\$ 19,543,090	40.6%	3	2.2%	\$ 548,380	1.1%	1	0.7%	\$ 291,060	0.6%	30	21.6%	\$ 2,546,810	5.3%
Killingly	131	47.8%	\$115,646,090	64.4%	1	0.4%	\$ 93,800	0.1%	26	9.5%	\$ 4,018,140	2.2%	20	7.3%	\$ 7,818,090	4.4%	53	19.3%	\$ 41,401,760	23.1%
North Canaan	22	27.5%	\$15,579,920	32.4%	0	0.0%	\$ -	0.0%	5	6.3%	\$ 1,010,960	2.1%	6	7.5%	\$ 3,989,190	8.3%	28	35.0%	\$ 4,119,040	8.6%
Plainfield	59	31.7%	\$87,133,230	72.4%	5	2.7%	\$ 922,960	0.8%	15	8.1%	\$ 2,319,700	1.9%	14	7.5%	\$ 6,326,490	5.3%	48	25.8%	\$ 10,006,240	8.3%
Union	12	14.1%	\$3,139,010	31.6%	0	0.0%	\$ -	0.0%	0	0.0%	\$ -	0.0%	3	3.5%	\$ 512,250	5.2%	53	62.4%	\$ 4,472,660	45.0%
Washington	29	16.2%	\$21,729,650	12.1%	25	14.0%	\$ 87,438,486	48.6%	12	6.7%	\$ 1,999,680	1.1%	10	5.6%	\$ 7,125,450	4.0%	14	7.8%	\$ 9,287,880	5.2%

Table 6 summarizes the relative importance of these five exempt land use types across the 19 municipalities. In all 19 representative municipalities these five exempt land uses account for the majority of exempt parcels, ranging from 92.4 percent of exempt parcels in Bridgeport to 50.3 percent in Washington.

Table 6 Top Five Exempt Land Uses As Share of the Number and Value of all Exempt Properties		
	Share #	Share Val
Large Cities		
Bridgeport	92.9%	79.1%
Hartford	70.3%	61.8%
Small Cities		
Manchester	80.6%	73.0%
Torrington	81.5%	79.9%
Wealthy Suburbs		
Glastonbury	85.7%	94.8%
Guilford	88.1%	89.6%
Litchfield	55.0%	80.0%
New Canaan	91.0%	80.8%
Mixed Base		
Hamden	70.7%	55.5%
Middletown	62.1%	49.1%
Norwich	89.1%	79.0%
Windsor	87.1%	89.7%
Rural		
Bozrah	76.5%	75.9%
Durham	77.7%	76.2%
Killingly	84.3%	94.2%

North Canaan	76.3%	51.4%
Plainfield	75.8%	88.6%
Union	80.0%	81.7%
Washington	50.3%	70.9%

In all of the 19 representative municipalities (except Middletown) these five exempt land uses account for the majority of the value of exempt properties. The range is from 94.8 percent in Glastonbury to 49.1 percent in Middletown.

Paying for Local Services Provided to Exempt Properties: Connecticut Experience

Properties exempt from paying property taxes consume services provided by the local government where the property is located, but reduce the property tax base relied on to finance the delivery of those services. In a recent national study, Connecticut was identified as one of only two states that reimburse local governments for a portion of property tax revenues foregone because of such exemptions -- Rhode Island was the other [Kenyon and Langley, 26]. The state programs which partially reimburse local governments for property taxes foregone because of state created exemptions are commonly referred to as PILOTs, or payments-in-lieu-of-taxes.

It can be argued that state reimbursement of local property taxes foregone because of state created exemptions might be appropriate since the state created the exemption. In addition, state partial reimbursement of foregone property tax revenues might be appropriate because the benefits provided by the exempt organization might extend beyond the municipal borders. Kenyon and Langley also argue that statewide treatment of local revenues foregone because of exempt properties can be more systematic and uniform than ad hoc local PILOTs.

The down side to state reimbursements for foregone local property tax revenues is that during periods of state budget pressure aid to local governments can be vulnerable. Such grants help the local government fund services provided to exempt properties, but it makes those grant payments subject to state budget decisions as local grants compete with Medicaid, transportation and other state priorities. In addition, Kenyon and Langley point out that a state reimbursement for foregone property tax revenues may provide an incentive to overstate the value of exempt properties since this might increase the amount of the state reimbursement.

Finally, this type of property tax relief is often poorly targeted because it benefits exempt properties that are the most valuable, rather than those providing the greatest public benefits.

Defining PILOTs

It is important to clarify terms when talking about PILOTs because the term may mean different things to different people. There are at least 3 ways the term PILOTs can be used. First, PILOTs can be defined as voluntary payments by nonprofits, in lieu of property tax payments, to the local government where the exempt property is located. Second, PILOTs could be payments by governmental agencies (generally state owned property), in lieu of property tax payments, to the local government where the

exempt property is located. Finally, PILOTs could be payments by the state government to reimburse local governments for the loss of property taxes due to nonprofits or governmental entities that don't pay property taxes.

The first definition of PILOTs is how most states define PILOTs, as a voluntary payment to the local government *by the owner of the exempt property*. Connecticut approaches PILOTs differently than other states. In Connecticut, the term refers to the third definition of PILOT. These state reimbursement programs are, in essence, state grants to local governments, which are more accurately referred to as grants in lieu of taxes, or GILOTs. These state reimbursement programs are state grants to local governments and, as such, are state expenditure programs. The focus of the tax panel is on state and local revenues. This paper does not address the issue of the adequacy of these state reimbursement programs, which are discussed in more detail in Appendix B.

The difference between traditional PILOTs and Connecticut's GILOTs, however, are important. Specifically, the Tax Revision Panel adopted a set of criteria for evaluating changes in the system of financing state and local governments in Connecticut. The criteria included

- Taxes should be designed to avoid unintended interference with private economic decisions; and
- The structure of the tax system should treat taxpayers in similar circumstances similarly.

Exempting individual properties from paying the real property tax violates these criteria. Eliminating property taxes for some uses and property owners subsidizes the ownership of such real property and provides an incentive to buy more real property, or more expensive real property, than would be the case if the property were not exempt from paying property taxes.

In addition, if some real estate is exempt from paying property taxes, the cost of providing government services must be spread across a smaller tax base requiring a higher tax rate to collect a given amount of revenue. This results in higher taxes, on properties not receiving preferential treatment, than they would pay if the property tax had a broader tax base and collected the same revenue with a lower tax rate. In addition, two similar properties, one exempt the other not, are not treated equally thereby violating the equity criteria adopted by the Tax Panel.

Finally, providing property tax relief by totally exempting some properties from paying property taxes is often poorly targeted because it benefits exempt properties that are the most valuable, rather than those providing the greatest public benefits.

The state's GILOT programs reimburse foregone local property tax revenue with a grant of state resources to local governments. This is a state expenditure which goes through the traditional appropriation process. GILOTs, however, do not address the efficiency and equity concerns associated with exempting individual properties from paying property taxes and do not address the poor targeting of such property tax relief.

On the other hand, traditional PILOTs are payments by the owner of an exempt property to the host local government to help fund the delivery of local services they consume. Such a payment by the owners of exempt properties addresses, to some extent, the efficiency and equity concerns with exempting individual properties from paying property taxes. The more valuable the property, the greater the potential payment to the host local government.

Distributional Impacts of Tax Exempt Properties in Connecticut

As discussed above, there are efficiency and equity implications of exempting some real property from paying property taxes. In addition, there are distributional implications of exempting some properties from paying property taxes as well. Table 7 presents information on the distribution of property tax liabilities under two different scenarios. Scenario 1 is the current system of property taxation for the representative municipalities analyzed here. Scenario 2 assumes that exempt properties would pay property taxes on 25 percent of the value of their property to help finance public services they consume. The municipality would not pay property taxes on municipally owned property and would not collect property taxes from federal properties. Under the current system residential and commercial properties combined pay 81.7 and 74.7 percent of total property tax liabilities in Bridgeport and Hartford, respectively. Under Scenario 2 they pay 78.3 and 59.9 percent in Bridgeport and Hartford, respectively.

For 11 of the 19 representative municipalities listed in Table 7, the share of property taxes paid by residential and commercial properties combined under Scenario 2 is reduced by 2 percent or less than their share under the current scenario. Taxing 25 percent of the value of non-municipal and non-federal properties reduces the residential and commercial share of tax liabilities only marginally. Only three municipalities have combined residential and commercial shares under Scenario 2 that are 5 percent or more below their share under the current scenario -- Hartford saw the residential and commercial share fall by 14.8 percent under Scenario 2, in Hamden the combined share fell by 6 percent and in Middletown the combined share fell by 7 percent.

All of the cities in the Mixed Base group, except Windsor, have exempt properties accounting for a relatively high share of total assessed value. As a result, they have relatively large reductions in the combined residential and commercial share of liabilities under Scenario 2. Otherwise, having non-governmental exempt organizations pay property taxes on 25 percent of their value would not generate significant revenues and would not change the distribution of property tax liabilities significantly, but it would start to address the efficiency and equity concerns with property tax exemptions.

Table 7						
Residential and Commercial Share of Property Tax Liabilities Under Two Alternative Scenarios						
	Scenario 1		Scenario 2			
	Share of Property Taxes Paid		Share of Property Taxes Paid		Residential + Commercial	
	Residential	Commercial	Residential	Commercial	Scenario 1	Scenario 2
Large Cities						
Bridgeport	67.4%	14.3%	64.6%	13.7%	81.7%	78.3%
Hartford	29.4%	45.3%	23.6%	36.3%	74.7%	59.9%
Small Cities						
Manchester	64.3%	22.8%	63.0%	22.3%	87.1%	85.3%
Torrington	76.6%	17.1%	75.2%	16.8%	93.7%	92.0%
Wealthy Suburbs						
Glastonbury	81.4%	14.5%	81.2%	14.4%	95.9%	95.7%
Guilford	91.8%	6.7%	91.4%	6.7%	98.5%	98.1%
Litchfield	85.3%	9.1%	82.8%	8.9%	94.4%	91.7%
New Canaan	93.0%	4.8%	92.2%	4.7%	97.7%	97.0%
Mixed Base Cities						
Hamden	77.7%	17.3%	75.0%	14.0%	95.0%	89.0%
Middletown	65.9%	13.0%	60.0%	11.9%	79.0%	71.9%
Norwich	68.4%	19.1%	64.7%	18.0%	87.5%	82.7%
Windsor	61.3%	18.5%	60.4%	18.2%	79.8%	78.6%
Rural Towns						
Bozrah	79.9%	6.2%	78.6%	6.1%	86.1%	84.7%
Durham	76.9%	2.9%	75.9%	2.9%	79.8%	78.8%
Killingly	58.4%	13.6%	57.5%	13.4%	72.1%	70.9%
North Canaan	60.2%	21.8%	58.4%	21.2%	82.0%	79.6%
Plainfield	70.7%	10.5%	69.9%	10.4%	81.2%	80.3%
Union	87.4%	2.1%	85.6%	2.1%	89.6%	87.7%
Washington	90.1%	4.6%	86.8%	4.4%	94.7%	91.2%

The next section discusses options for raising revenues from exempt properties to help pay the cost of providing the local goods and services they consume.

Raising Revenues from Exempt Properties: National Experience

Connecticut is the leader in the nation, and sets the standard, for taking responsibility for the impact of state mandated property tax exemptions created by the state by reimbursing local governments for some portion of the revenues foregone as a result of these exemptions. The majority of these funds are transferred to local governments through three state grant programs – Pequot, state owned property and college/hospitals. These state grants to local governments, however, do not address the issues associated with tax exempt properties discussed above. If Connecticut is to address the economic efficiency and equity concerns associated with exempting individual properties from paying property taxes, it will need to consider options for collecting revenues from the individual exempt property owners. This section examines national experiences in this effort.

Properties exempt from paying the local property tax consume publicly provided community goods and services. Unless they help pay the cost of providing those services, other taxpayers who do not

get preferential treatment by the property tax system (or other tax adjustments) end up paying a larger share of those costs.

Often universities, hospitals, and other large nonprofits are seen as an easy target for policymakers because their wealth is known to the public. As one expert stated “Even if a college or university is only one of many nonprofits in the municipality, the larger the nonprofit exempt footprint, the greater the pressure will be on the ones which look like they have the financial wherewithal to pay.” (Brody 2010, 665).

For these reasons, local governments often focus their attention on large exempt organizations such as universities and hospitals when seeking revenue. Such organizations often argue that singling them out is unfair, and some commentators agree: Professor Brody observes that they “have a strong argument about unfairness. While [colleges and hospitals] garner much of the focus of revenue-starved and geographically bounded municipalities, focusing just on a sub sector raises troubling questions.” (Brody 2010, 665).

Yet others point out that tax exemptions disproportionately benefit such organizations. Kenyon and Langley of the Lincoln Institute of Land Policy argue that “the exemption is poorly targeted, since it mainly benefits nonprofits with the most valuable property holdings, rather than those providing the greatest public benefits.” (Kenyon and Langley 2010, 42). They further note that “there are no tax savings for nonprofits that rent office space and the greatest tax savings go to large nonprofits, especially hospitals, universities, and long-term housing facilities.” (Kenyon and Langley 2010, 42) Regardless of one’s opinion on the fairness of targeting such entities, the fact remains that they possess far more wealth than other exempt organizations, disproportionately erode the tax base by owning large pieces of real estate, consume more municipal services, but also have the financial resources to contribute to the cost of delivering the public services they consume. Thus, they offer more potential for raising revenue, and are arguably more indebted to their host municipalities.

Nationally, there are a number of options available to local governments for generating revenue from exempt properties to help pay for the cost of the publicly provided services they consume. These include

- 3) Payment-in-lieu-of-taxes (PILOTs).
- 4) Services-in-lieu-of-taxes (SILOTs);
- 3) User fees and charges;
- 4) Other direct taxes;
- 5) Retaining revenue from properties sold to exempt entities

These options are discussed in more detail below.

I. Payment-In-Lieu-Of-Taxes

*Payments in lieu of taxes (PILOTs) are voluntary payments made by exempt organizations in place of property taxes.*⁹ PILOTs have grown in frequency over the past few years, as budgetary pressures on local governments have increased during the recession. Over the past ten years PILOTs have appeared in at least 218 municipalities and 28 states (Kenyon et al, 2012). Several large cities have PILOT agreements, including Boston, Philadelphia, Providence, Baltimore, Detroit, Indianapolis,

⁹ Some organizations voluntarily keep otherwise exempt property on the tax rolls. For example, Rice University pays property taxes on the president’s residence. Kenyon and Langley treat situation as a PILOT.

Minneapolis, and Pittsburgh. Payments in Lieu of Taxes remain the preferred method of getting tax exempt organizations to contribute to the cost of providing local public services they consume.

PILOTs generally do not raise enough money to compensate fully for revenue lost to tax exemptions. In 2009, Boston raised \$14.9 million in PILOTs from nonprofit universities and hospitals, which is only 4.3 percent of what they would have paid in property taxes (City of Boston 2009). On average, PILOTs comprise less than one percent of municipal budgets (Kenyon and Langley 2010). But, while PILOTs may compose a fraction of what would have been raised through property taxes, they can still be significant. Though the money raised in 2009 by Boston's PILOT program was far short of what tax revenues would have been, it was still enough to pay for snow removal for an entire winter (City of Boston 2009). Furthermore, some municipalities—especially small towns that host colleges or universities—will benefit disproportionately from PILOTs. For example, Bristol, Rhode Island's PILOT agreement with Roger Williams University comprises almost 5 percent of the city's budget (City of Boston 2009). PILOTs may seem negligible in comparison to lost tax revenue, but they can still be a valuable revenue source for cash-strapped municipalities.

When are PILOTs “required” of a tax exempt organizations?

Only three states have mandatory PILOT laws specifically addressing tax exempt non-profit entities, however, these laws generally apply when a non-profit entity derives income from rental activities. For example, Delaware Code Section 8156 provides: “Any church, religious society, charitable corporation or nonprofit organization granted a tax exemption pursuant to this subchapter, shall pay to the county and other political subdivision in which the project is situate, in lieu of taxes, a special assessment in an amount not less than 10% of the gross rentals derived from the project, less the cost of utilities and the cost of providing special social services to the elderly persons residing in the project.” This statute was applied to the specific circumstance when an organization provided housing to the elderly.

Two states legislatively authorize local governments to enter into PILOT agreements for housing authorities. But these states only grant the power to negotiate PILOTs. In South Carolina, Code Section 12-37-240 states, “When any non-profit housing corporation owns property within a county or municipality which is exempted from ad valorem taxes under an act of the General Assembly, the county or municipality or both are authorized to contract with such corporation for payments in lieu of taxes for services rendered by the county or municipality.”

Similarly, Connecticut requires PILOTs in certain circumstances. Specifically, CGS Section 8-265b and Section 12-76 require the property owner to make in lieu of tax payments to the municipality where the property is located. The PILOT is based on what taxes would have been paid if the property had not been exempt. CGS Section 22a-270a exempts real and personal property leased by the Materials Innovation and Recycling Authority from paying property taxes *if* the real and personal property are subject to an agreement where the lessee makes payments in lieu of taxes to the municipality where the property is located.

Many states have a variety of statutes authorizing payments in lieu of taxes by governmental or quasi-governmental entities. For example, Kansas law states that cities may impose payments in lieu of taxes on state industrial revenue bond property, but imposition of such payments are not mandatory. (K.S.A. 12-174). Kentucky allows local governments to enter into PILOT agreements with government utilities. (Kent. Stat. Ann. 247.968).

PILOTs, however, are more appropriate for some municipalities than others. They are best-fitted for areas that rely heavily on the property tax and host large non-profits that own significant portions of real estate. PILOTs maybe less appropriate for every exempt organization. As one observer notes,

“PILOTs are most suitable for non-profits that own large amounts of tax-exempt property and provide modest benefits to local residents relative to their tax savings” (Kenyon and Langley 2010, 3). Such organizations may feel an obligation to reimburse local taxpayers for the services they consume, and are wealthy enough to contribute. As such, municipalities usually target hospitals, colleges and universities, and nursing or retirement homes.

Challenges Designing PILOTs

There are a number of challenges in designing PILOTs which must be addressed in developing best practices used.

i. Maintaining Good Relations with Exempt Organizations

The first impediment to PILOT programs is simply convincing exempt organizations to participate: since PILOTs are voluntary, exempt organizations are free to ignore cities’ requests for payments. Boston is a leading example in this regard. In 2009 Mayor Thomas Menino established a PILOT Task Force to review and improve the city’s existing PILOT program. He invited representatives from Boston’s largest exempt organizations to participate in the formulation of new policies. The list of invitees included university presidents, hospital executives, and other high-level figures in the nonprofit community. Despite their divergent interests, the inclusion of nonprofit representatives allowed Boston’s PILOT initiatives to be “collaborative and driven by consensus” (Lustig 2010, 609).

Boston’s nonprofits also favor this arrangement because it reduces uncertainty by participating in PILOT policymaking. They know what to expect from the city and can plan their budgets accordingly. Conversely, nonprofits in other cities sometimes express frustration when the government makes unanticipated PILOT demands (Kenyon and Langley 2010).

Boston’s creation of the Task Force also had unforeseen political benefits. By inviting nonprofits to participate, the City created publicity and raised awareness about the negative impact tax exemptions have on the surrounding community (Lustig 2010). This increased public pressure on nonprofits to make PILOTs. The Task Force has also used transparency as a political tool. Nonprofits complain that “PILOTs are often haphazard, secretive, and calculated in an ad hoc manner . . .” (Kenyon and Langley 2010, 3).

Appealing to this sentiment, the Task Force adopted “transparency and consistency” as one of its core principles. This appeased exempt organizations, but it also left them accountable to both the public and to other nonprofits if they decide not to contribute (Lustig 2011). The Task Force periodically publishes data on PILOT payments, which allows citizens to see which organizations do not make PILOTs.

Boston’s inclusion of representatives from the nonprofit community could be considered a best practice for maintaining healthy relations with PILOT participants. Nonprofits appreciate being able to participate in the Task Force because it allows them to voice their concerns and avoid surprises. At the same time, it creates publicity about PILOTs and exemptions, which ramps up public pressure for nonprofits to make payments. The Task Force’s commitment to transparency eases concerns of unfair or coercive tactics, but it also forces nonprofits to face disapproval from the public and from fellow exempt organizations if they do not contribute. Because it appeases nonprofits while benefiting municipalities, local governments would be wise to invite exempt organizations to participate in PILOT policymaking.

As a result of the Task Force report, the Boston PILOT program applies to all nonprofits except churches, social service organizations and nonprofits with assessed value less than \$15 million.

ii. Calculating the Proper Amount for PILOT Payments

Another common issue is deciding on the appropriate amount to ask from each exempt organization. One method involves assessing the community benefits offered by each organization, and reducing the requested amount if an organization provides substantial levels of community service (Kenyon and Langley 2010). For example, Philadelphia's Voluntary Contribution Program in the 1990s sought PILOTs from charities that did not meet the Pennsylvania Supreme Court's definition of a "purely public charity" (Glancey 2002, 214). In other words, Philadelphia exempted organizations from PILOTs if they provided a high level of public services to local residents.

Similarly, Boston's program allows for deductions for "extraordinary community services" (City of Boston 2009). The criteria for considering such services include: whether they directly benefit Boston residents, whether they support the City's mission and priorities, whether they are quantifiable, and whether they "emphasize ways in which the City and the institution can collaborate to address shared goals." Examples of such services include academic scholarships, free medical care, volunteer workshops, youth employment, job initiatives, and job training programs (City of Boston 2009). Reducing PILOTs in exchange for community services allows cities to improve their residents' quality of life, while simultaneously allowing exempt organizations to reduce the amount of money they are expected to contribute.

PILOTs can also be calculated based on a measure of an exempt organization's value (Kenyon and Langley 2010). In structuring its PILOT program, Boston's PILOT Task Force considered three such methods:

1. payments based on square footage of property;
2. payments based on units, such as number of students enrolled or number of hospital beds; and
3. payments based on property value.

It decided that the property value method was most appropriate, because PILOTs are meant to compensate for lost property taxes. Alternatively, Cambridge, Massachusetts uses square footage of real estate to determine PILOT requests, whereas Baltimore uses an organization's annual income (Kenyon and Langley 2010, 39).

When adopting a methodology for calculating PILOTs, municipalities should consider an exempt organization's footprint, as reflected by the property value and square footage methods used by Boston and Cambridge. Their ability to pay, which is a primary consideration behind Baltimore's annual income criterion, is also an important factor. Finally, reducing PILOT amounts for public benefits provided, as seen with Boston's "extraordinary community services" standard, is a useful tool for improving a city's quality of life and reducing the burdens of government. Using concrete and quantifiable methods reduces the appearance of unfairness, which increases exempt organizations' willingness to comply with municipal PILOT requests.

Exempt organizations in general, and universities and hospitals in particular, argue for tax exemptions, in part, because they contribute to the economic livelihood of local governments. There are several methods of identifying and measuring the economic impact of nonprofits, specifically universities and hospitals, on state and local governments and economies.¹⁰ The studies cover four main areas:

¹⁰ There are numerous studies commissioned by universities and non-profit hospitals illustrating the economic benefits of such institutions. Invariably, these studies show that the particular university or hospital has a significant impact on economic development.

1. studies on the impact of hospitals, hospital complexes, and educational medical complexes;
2. studies on the economic impact of universities;
3. studies on the impact of non-profits at the state or municipal level; and
4. general studies on the economic impact of non-profits.

The most comprehensive discussion of the topic is set forth in Doekson, et. al. (1997). This study reviewed the most widely accepted methods for ascertaining the *economic impact* of non-profit health organizations. The review resulted in the conclusion that the direct and secondary impacts on community employment and income account for 15 to 20 percent of the total community's employment and income. For universities, the most widely cited research is Drucker and Goldstein (2007). The authors conclude, based on their review that university activities, particularly knowledge-based activities such as teaching and basic research, have been found to have substantial positive effects on a variety of measures of regional economic progress (Drucker and Goldstein, 23-24.)

Private for-profit companies, however, provide similar economic benefits to a local economy. There must be other ways to measure the contributions of exempt organizations beyond the economic impact on the community in order to justify exempting individual properties from property taxation. Nicholson, et. al., (2000) identified community benefits by using the economic concept of a public good. Typically this benchmark is higher than the conventional standard – exempt organizations should provide community benefits that are at least as large as the taxes it would pay if it were a for-profit hospital.

In the medical field, an example of such a public good would be flu vaccinations for local school children. The vaccinations would provide benefits to all of the people living in the area by helping to contain the spread of the flu. The use of medical care by either low-income or high-risk individuals can be an important type of public good. Many times public goods are furnished in insufficient quantities because it is difficult to convince many of the people who benefit from it to pay for it.

The concept of a public-good provides a verifiable measure of potential community benefits. However, the determination of what is a public good is subjective rather than objective. Nicholson (2000) used the public-good framework to determine a set of hospital activities that could constitute community benefits. The activities included in the study are 1) uncompensated care, 2) the cost of other unbilled public-good services, 3) losses on medical research, 4) taxes, 5) Medicaid shortfalls, 6) Medicare shortfalls, 7) price discounts to privately insured patients, and 8) losses on medical education. As the study acknowledges, the first four have strong justification for why they should be considered public benefits, whereas the last four are more debatable.

iii. Reducing Uncertainty: Trigger Provisions and Long-term v. One-time PILOT Agreements

As mentioned above, Boston's nonprofits enjoy their positions on the PILOT Task Force in part because such participation reduces uncertainty. Governments feel the same: predictability in PILOT payments facilitates the process of designing a budget. (Brody 2010, 45). Municipalities have at least two tools available to reduce uncertainty surrounding PILOTs. The first is to establish trigger provisions for inclusion in a PILOT program (Kenyon and Langley 2010). One method currently used by the City of Boston is to approach exempt organizations subject to the PILOT when they purchase new, non-exempt property. This is favorable for exempt organizations because they can take such costs into consideration when planning expansions. Municipalities favor this method because it allows them to mitigate sudden drops in their tax base. It also improves municipalities' bargaining power, because organizations under expansion will likely need zoning or building permits from the government. However, trigger provisions

raise the cost of entry for new exempt organizations, and might discourage exempt entities from making expansions and investments that would benefit the community.

The second method for reducing uncertainty is to pursue multiyear contracts instead of one-time payments (Kenyon and Langley 2010, 40). This gives both exempt organizations and municipalities concrete figures to work with during long-term budget planning. Several such agreements currently exist: the Massachusetts Institute of Technology, for example, has a multi-year agreement with Cambridge that is subject to a 2.5 percent annual increase (Kelderman 2010). Similarly, Harvard University agreed to pay Watertown, Massachusetts \$3.8 million per year until 2054, with a three percent annual increase (Flint 2002).

While such arrangements reduce uncertainty for both parties, exempt organizations still may oppose agreeing to future payments. They may also worry about creating a “slippery slope” that allows municipalities to increase PILOT requests year after year. For example, in Pittsburgh several nonprofits make an annual PILOT to the city and insist that each year’s payment is a “gift” that establishes no precedent for future contributions (Brody 2010, 45). Nonetheless, long-term contracts are preferable to one-time payments for municipalities, and should be pursued where nonprofits are willing to agree to such arrangements.

The world of PILOTs is vast and research on such programs has been scarce.¹¹ And despite the general view that PILOTs are an effective method for raising revenue, only a small percentage of non-profits actually make such payments. One recent study found that only 9 percent of non-profits nationwide were making payments under PILOT agreements (Salamon, et. al. 2010 and Lustig, 2010) and only 26 percent of localities with exempt property received PILOTs. While these small numbers reflect the fact that most non-profits do not have the financial resources to make voluntary payments, two thirds of the largest research universities do not make routine PILOT payments (Lemov 2010).

II. Services-in-lieu-of-taxes and other forms of alternatives to PILOTS

Local governments use several methods, apart from PILOTs, to raise revenue from organizations otherwise exempt from property taxation. However, local governments raise significantly less revenue from these alternate sources than they can and do from PILOTs. The most recent literature on the subject is two reports by the Lincoln Institute of Land Policy which include discussion of PILOT alternatives as a method of changing the conventional debate about the issue of taxation of non-profits (Kenyon and Langley 2010; Kenyon, Langley and Bailin, 2012).

Services-In-Lieu-Of-Taxes (SILOTs) are arrangements that non-profits make with municipalities to directly provide or subsidize community services (Kenyon and Langley 2010). In addition to directly providing services, sometimes SILOTs are defined as monetary contributions for specific government services such as fire, police or schools.

There are several examples of monetary payments for specific services in the higher education community. Duke University gives money annually to the city of Durham, NC for fire protection services. These payments are based on a formula (Nelson, 2010). Stanford University has contributed to the Palo Alto community with periodic gifts such as a donation of \$10 million to the local school district to help fund a new middle school (Nelson 2010). Other non-profits purchase equipment (usually public safety related) and donate the equipment to the local government. For example, the University of Michigan and Northwestern University both have purchased fire trucks for their respective local municipalities. The

¹¹ Kenyon and Langley 2010 was the first study to comprehensively gather information on PILOT activity nationwide.

University of Pennsylvania has donated land to the city for a public school. Washington University pays for part of the costs of city police patrols on or near campus (Nelson 2010).

Similarly, Yale University entered into an agreement with New Haven to make an annual PILOT. In 2009 Yale agreed to increase its PILOT to the city and is now contributing around \$7.5 million per year since 2010. Yale also has been involved in local economic development in New Haven. In addition to its role as a major employer and an incubator for the biomedical sector, Yale has contributed to the city's revitalization effort in a number of ways, including

- funding The Center for the City, an organization aimed at accessing New Haven's local resources to address social problems;
- redeveloping several blocks of the City's retail center; and
- paying stipends to Yale employees to buy homes in the city.

A SILOT may also involve an exempt organization directly providing a municipal service, although this appears to be a much rarer occurrence than monetary contributions. The most common example of such a service involves police and public safety. In Nashville, Tennessee, Vanderbilt University has taken on the responsibility of police protection for the areas and neighborhoods surrounding campus (Nelson 2010). This relieves the city of some of its public safety costs. Emory University has an agreement with DeKalb County to provide certain amounts of health care to county residents in addition to PILOT payments to the school district.

In the case of the District of Columbia, the federal government provides a number of services to the District. For example, the federal government provides

1. park services to District residents – e.g., Rock Creek Park, Anacostia Park, National Mall and Haines Point, other center city and neighborhood parks;
2. government services that are traditionally provided by state governments
 - a. incarceration of felony prisoners
 - b. funding and administration of the courts (Court of Appeals, Superior Court and DC Court system)
 - c. pre-trial services for defendants awaiting trial
 - d. public defender service and parole services for adult offenders.

III. User Fees

Local governments replace property tax revenue through municipal service fees and user fees. Municipal service fees directly target non-profits as they are only required to be paid by the owners of tax-exempt properties. Such service fees are rare. The best example is the city of Minneapolis, which since 1973 has charged street maintenance fees on tax-exempt properties based on the square footage of the property (Hjelle 2009, Kenyon and Langley 2010).

User fees, which are levied on all properties, are a more popular option for local governments to levy. Municipalities generally impose user fees as a replacement or addition to property tax revenue to fund individual services such as trash collection, park maintenance, and street repairs. They are widely used by local governments throughout the United States. Indeed, local governments raised over \$260 billion in user fees and charges in 2013 (U.S. Census). A study by Johns Hopkins University in 2010 found that 42 percent of non-profits nationwide paid some form of user fee to local governments (Salamon, et. al. 2010).

User fees, however, are not without controversy as it can often be unclear whether a fee is legally a fee or a tax that, in some states, cannot be enforced on non-profits. For example, in 2010, the City of Houston adopted a “drainage fee” designed to raise \$125 million a year toward improving storm water systems. The city charges the fee to all property owners and has indicated that no exemptions will be granted to charities or other non-profit organizations. The non-profit community in Houston is challenging the fee as an illegal tax. In 2011 the Houston City Council exempted churches, schools and court government facilities from paying the drainage fee.

Similar fees have been adopted in Richmond, VA., Lafayette, Ind., and Verona, Wisconsin. State laws interpret similar fees differently; for example, requiring non-profits to pay a fire protection fee is legally permissible in West Virginia but is unconstitutional in Massachusetts (Youngman 2002). But more importantly, user fees fall on all organizations within the city, taxable and exempt.

IV. Other Direct Taxes

Municipalities often have the legal authority to enact alternative taxes on exempt organizations in lieu of traditional property taxes. Unlike user fees, these are legally defined as taxes. This option is only permissible in states that allow local governments to impose any kind of taxes on exempt organizations. The constitutions of 17 states (UT, NM, OK, AK, NE, ND, SD, MS, LA, AL, SC, KY, MI, NJ, NY, VT, and ME) prohibit any taxation of charitable non-profits (Kenyon and Langley 2010).

Cities with large universities and hospitals have contemplated alternative taxes, including tuition taxes on colleges and universities and hospital bed taxes. Pittsburgh, Pennsylvania recently proposed tuition taxes. In Pittsburgh, the mayor proposed a one percent Fair Share Tax on the tuition paid by the city’s 100,000 students (Fischer 2010). The mayor was prompted by the fact that one third of the city’s property was exempt from tax and about 20 percent was owned by universities and colleges. If approved the tax would have raised approximately \$16 million a year. The tax proposal was withdrawn after protests by students and parents and an agreement by the universities to pay PILOTs to the city. Those taxes would have been levied on a percentage of tuition paid by students enrolled in universities within the city. But the tax proposals were abandoned after the city managed to establish PILOT arrangements with local colleges and universities.

Providence, Rhode Island also considered a tuition tax on universities and colleges in its boundaries. Brown University owns real property worth about \$1 billion and saves about \$38 million from its tax exempt status. In 2011, Brown made contributions of about \$4 million to the city which included property taxes on land used for commercial purposes. Faced with a large budget deficit, the city requested Brown pay an additional \$40 million over ten years effectively doubling the universities payments. The city held out the possibility of seeking a tuition tax if a new PILOT was not negotiated. The tax would have been a flat \$150 per semester for every student at the four colleges in the city. Eventually, Brown University agreed to a Memorandum of Understanding with the city agreeing to pay the city \$31.5 million over 11 years. It also agreed to add some properties back onto the property tax roll.

In December 2009 Jerry Fried, the mayor of Montclair, New Jersey, asked the state legislature to pass a law that would require universities to charge all students \$50 per semester to pay for municipal services. This initiative was backed by almost one hundred mayors, who offered their support at New Jersey’s League of Municipalities’ convention in November 2009. In explaining his request, Fried said he wished to recoup some costs of municipal services that university students and staff members enjoy for free “Obviously we provide a lot of services and don’t get paid back from that. There’s significant costs involved.” (Khavkine 2009) The legislature has not passed such a student charge.

Beyond tuition taxes, cities have also proposed levying special energy taxes on non-profits.¹² Three Maryland counties levy energy taxes—a tax based on an organization’s utility bills—solely on non-profits classified under 501(c)(3), including churches, universities, and hospitals (Anft 2001). In 2001 and 2004, the Mayor of Baltimore proposed a similar energy tax on non-profits. The city later abandoned the efforts after negotiating PILOT agreements with the city’s nonprofit hospitals, colleges, universities, and nursing homes.

V. Options for retaining tax revenues from properties being sold by taxpaying property owners to entities exempt from taxation.

There are no statutory or other legal authorities for a local government to retain tax revenue from properties sold by a taxable entity to a non-taxable entity. Moreover, there is no legal or policy literature discussing the issue. In every state, whether the purchased property is taxable or not depends on its ownership and use. If the purchased property will be used exclusively for exempt purposes it remains exempt from taxation. The only recourse a local government may have is to challenge the use of the property. For example, if a non-profit purchases property and uses it for commercial purposes, the local government would be able to revoke or partially revoke the non-profit’s exemption.

There are, however, other methods utilized to control the growth of exempt property. For example, in October 2002 the supervisors of Fairfax County, VA., approved a moratorium on any new non-profit tax exemption, citing the need to preserve resources in the face of likely budget cuts. This was in response to an earlier decision to grant the World Wildlife Federation a \$300,000 annual exemption for its new headquarters (Rein 2002). In November 2002, voters in Virginia then approved a referendum to transfer approval of new exemptions from the legislature to local authorities (Salmon 2003). Fairfax County, Virginia has not approved a property tax exemption for any taxable property purchased by an exempt organization since that time.

The idea of local consent before acquired property can be exempt has been discussed in other jurisdictions. A Cleveland research body proposed as "alternatives for balancing the valuable services contributed by tax-exempt organizations and the revenue needs of local governments" a variety of changes, including: requiring local jurisdiction consent before a tax-exempt entity can buy taxable property; phasing in tax exemption on newly acquired property; phasing out exemption after a specific period; limiting acreage eligible for exemption; adopting a dollar cap on exempt property; and including an allowance in state intergovernmental aid to jurisdictions with a large amount of exempt property (Sheridan, et. al. 2002). Similar recommendations were suggested by Pomp (2002) as a means of easing the financial burden on municipal governments.

While the concept of local approval for non-profits to expand their exempt holdings is endorsed by scholars and policy experts, few local governments actually have this authority. But as Fairfax, Virginia illustrates, such authority can be very successful in curbing the expansion of exempt property.¹³

¹² Energy taxes have been proposed in several states. Typically, an energy tax proposal would impose a rate as a percentage of a non-profit organization’s utility costs. The rates proposed in Maryland were, for example, eight percent.

¹³ A survey of public officials by Brunori and Bell (2012) in ten jurisdictions with populations of 500,000 to 1,000,000 found unanimous support for the concept of local approval of exemptions for property purchased by non-profits.

Policy Options

Connecticut was identified in a recent national study of exempt properties and PILOTs as one of only two states in the nation where the state reimburses local governments for property tax exemptions created by the state [Kenyon and Langley, 26]. It is important for a state creating tax exemptions that result in foregone revenues by local governments to take some responsibility for those actions and reimburse local governments for lost revenues resulting from state imposed exemptions. Connecticut is a model for the nation for such state-funded grant programs.

The down side of such state-funded grant programs is that they compete with other state budget priorities. Too often, when states are confronted with budget pressures they tend to cut aid to local governments.

Policy Option 1: Maintain the Status Quo

The current practice in Connecticut regarding how the state government takes responsibility for reimbursing some revenue foregone by local governments because of state mandated property tax exemptions is a model for other states. The stakeholders in the current system – owners of exempt property, the state of Connecticut and local governments in the state – are familiar with the current system and have made decisions in the context of that system.

The current system does not fully compensate local governments for the revenues foregone because of state mandated property tax exemptions. The state does not fully fund the target reimbursement rates for various types of exempt property. Any state reimbursement competes with other state spending priorities complicating local budgeting efforts. The current system does not address the current efficiency and equity concerns associated with property tax exemptions.

Policy Option 2: Develop a traditional PILOT program along the lines of the program in Boston which has been characterized as “best practices.”

Connecticut might consider the development of a traditional¹⁴ PILOT program to generate revenues from tax exempt properties to help finance the delivery of public services benefiting those properties. This would address directly the efficiency and equity issues associated with exempting some properties from paying property taxes outlined above.

Boston has a PILOT program intended to better match the property tax revenue foregone because of a tax exemption and the benefits received by the community from the exempt organization. By contributing to the cost of publicly provided goods and services benefiting the exempt organization the City’s PILOT program reduces the inefficiencies and inequities in the system of property tax exemptions.

In Boston, when a nonprofit subject to the PILOT program acquires property (especially property that was formerly taxable), begins new construction, or applies for a property tax exemption the Boston city government initiates a conversation with the exempt organization in an effort to reach an agreement between the City and the nonprofit on an appropriate PILOT payment. The City starts with the view that tax exempt organizations should contribute some amount toward their consumption of publicly provided services such as police and fire protection and public works such as street cleaning and snow removal.

¹⁴ A traditional PILOT program would involve a voluntary payment from the owner of exempt properties to the local government in lieu of paying property taxes on the exempt property.

In Boston, these services account for approximately 25 percent of the City's budget. Thus, the City's starting point for negotiations is that each tax exempt organization should pay a PILOT equal to 25 percent of what they would pay if they were totally taxable.¹⁵ This estimated liability is then balanced against community benefits provided by each tax exempt organization. The credit for community services is limited to 50 percent of the proposed PILOT to ensure each tax exempt organization makes some cash contribution. (Rakow, 5)

A tax exempt organization may have its proposed property tax payment reduced if the services they provide

- directly benefit Boston residents;
- support the City's mission and priorities;
- are quantifiable; and
- emphasize ways in which the City and the institution can collaborate to address shared goals.

Examples of such services include academic scholarships, free medical care, volunteer workshops, youth employment, job initiatives, and job training programs (City of Boston 2009). Deducting from a proposed PILOT in exchange for community services allows cities to improve their residents' quality of life, while simultaneously allowing exempt organizations to reduce the amount of money they are expected to contribute.

Developing a traditional PILOT program along the lines of the Boston model will

- provide transparency of the PILOT program,
- improve the public image of non-profits paying the PILOT,
- help fund the delivery of services which will make the environment safer and cleaner to help attract employees and students,
- provide certainty for the exempt organizations on what exactly their responsibilities will be,
- better align the property tax revenues foregone by local governments and the benefits to local residents and businesses provided by organizations with exempt property, and
- improve the efficiency and equity of the system of granting property tax exemptions to nonprofit organizations.

Kenyon and Langley (pp 29-32) summarize the main arguments supporting the development of a PILOT program:

- Nonprofits should pay for the public services they consume which will reduce the inefficiencies and inequities in the current system of providing property tax exemptions;
- PILOTs can generate essential revenues that can help improve the level and quality of publicly provided goods and services benefiting the exempt properties and to a large extent these revenues might be exported to non-residents;

¹⁵ This approach relies on reasonable estimates of the market value of property owned by individual tax exempt organizations. Boston gathered data from a particular type of tax form filed annually by tax exempt organizations. Data were collected from these forms and then assessors used these data to estimate market values using their CAMA model. (Rakow, 4)

- PILOTs can ameliorate some of the inequities created by the charitable property tax exemption which gives the greatest tax savings to large nonprofits with the most valuable real estate because large nonprofits are the ones most likely to pay PILOTs;
- PILOTs reduce the subsidies going to properties receiving preferential treatment which, in turn, can reduce market inefficiencies in land use.

On the other hand, some argue that PILOTs

- can too often be ad hoc, secretive and contentious,
- provide limited and unreliable revenue, and
- could lead some nonprofits to raise fees, cut services and/or reduce employment.¹⁶

Some PILOT payment by non-profit organizations could reduce property taxes on for-profit businesses and other non-exempt properties which, in turn, could increase employment in the private sector.

Policy Option 3: Limit the value of real property exempt from taxation for individual properties.

One possibility for limiting property tax revenues foregone because of exemptions would be to simply include some portion of the estimated market value of tax exempt property in the taxable property tax base. The owner of the exempt property would make a payment to the local government based on the value of the property. This would be a required payment, not a voluntary PILOT. For example, Representative Michael Moran (D-Boston) sponsored a bill in the Massachusetts Legislature to assess all nonprofits at 25% of the estimated market value of their properties.

Table 8 compares the payment state owned exempt property would pay in FY 2016 to each of the 19 representative cities examined here if they were assessed the 2016 mill rate on 25 percent of the value of their property, compared with their FY 2016 state owned state PILOT payment. In every case but one – Middletown – the 2016 payment on 25 percent of the value of exempt state owned property would be greater than the 2015 state owned PILOT payment. In part, this results from the fact that the 2016 state owned PILOT is based on assessed values on the 2013 Grand List and the 25 percent payment is based on assessed values on the 2014 Grand List. Also a number of municipalities have their state owned PILOT go to zero as a result of state grants for state owned PILOTs being reduced by \$12 million in 2016.

¹⁶ Some argue that large non-profits should receive a property tax exemption because of the significant economic impact the organization has on the community. Kenyon and Langley, however, point out that for-profit businesses also generate employment and other economic benefits to the community, but they do pay property taxes.

Table 8				
Alternative Measures of Payments for State Owned Exempt Properties, FY2016				
	GL2014; FY2016			GL2013/FY2016
Municipalities	State Owned Total		Tax on	State Owned
	Parcels	Values	25% Value	Current PILOT
Large Cities				
Bridgeport	112	\$ 252,134,007	\$2,659,888	\$ 2,353,126
Hartford	169	\$ 843,705,520	\$15,669,721	\$13,887,253
Small Cities				
Manchester	39	\$ 96,419,200	\$949,729	\$566,228
Torrington	48	\$ 32,676,780	\$373,741	\$104,211
Wealthy Suburbs				
Glastonbury	54	\$ 6,258,700	\$56,485	\$ -
Guilford	34	\$ 3,283,890	\$23,184	\$ -
Litchfield	46	\$ 13,119,240	\$85,931	\$28,313
New Canaan	28	\$ 10,889,410	\$43,517	\$ -
Mixed Base				
Hamden	114	\$ 109,674,600	\$1,120,600	\$715,955
Middletown	75	\$ 329,782,480	\$2,298,584	\$3,252,694
Norwich	63	\$ 121,329,000	\$1,240,589	\$910,659
Windsor	97	\$ 8,042,580	\$62,169	\$ -
Rural				
Bozrah	12	\$ 971,540	\$6,558	\$ -
Durham	30	\$ 2,546,810	\$21,482	\$ -
Killingly	53	\$ 41,401,760	\$282,671	\$60,358
North Canaan	28	\$ 4,119,040	\$28,318	\$8,147
Plainfield	48	\$ 10,006,240	\$70,944	\$ -
Union	53	\$ 4,472,660	\$33,098	\$23,968
Washington	14	\$ 9,287,880	\$31,927	\$ -

In addition, such an approach would impact the distribution of property tax liabilities across individual municipalities. For example, if exempt properties¹⁷ paid property taxes on 25 percent of their property value it would reduce the combined residential and commercial share of property tax liabilities. Table 7 indicates that under such a scenario the combined residential and commercial share of property tax liabilities would be reduced by 14.8 percent in Hartford, in Hamden the combined share fell by 6 percent and in Middletown the combined share fell by 7 percent.

Not all exempt properties would have sufficient resources to make such a required payment. As a result, the number of exempt properties and the level and quality of services available to citizens in the community might be reduced if some nonprofits paid a portion of property taxes due on their property. This potential problem could be mitigated by exempting the first \$10 million of value from these calculations.

¹⁷ Excluding property owned by the municipality and the federal government.

Policy Option 4: Phase out property tax exemptions for selected properties

Connecticut might decide to re-examine certain tax exemptions for specific categories or uses of property. For example, property tax exemptions might be retained for federal, state and municipal properties, as well as religious and educational organizations, hospitals and non-profit organizations providing services to local residents. Other property tax exemptions could be reexamined. For example, PA 15-5 SS, Section 244, which becomes effective October 1, 2015 provides for the taxation of residential real property (not dormitories with 20 beds or more) held by private nonprofit institutions of higher learning.

Kenyon and Langley (2010) identify several considerations in developing a rationale for exempting some real estate from paying local property taxes. Their main argument for granting exemptions is referred to as the *quid pro quo* argument which says that since nonprofits provide benefits to society, including some services that might typically be provided by government, they should be subsidized to some extent. This notion has become increasingly popular as states review and tighten their determination of which properties will receive a property tax exemption.

This approach relies on a narrower definition of which organizations should be eligible for exemption than those used at the federal level. This is particularly important, as Kenyon and Langley argue, because too often the benefits of being exempt from the local property tax go to nonprofits with the most valuable property, not those providing the greatest public benefits. They also argue there can be a geographic mismatch between the benefits provided by nonprofits, which can be geographically dispersed throughout a metropolitan area, and the cost of the exemption foregone by one local government.

Such an approach might limit the number and types of properties being classified as exempt emphasizing those that provide direct benefits to local citizens. Limiting the number of tax exempt organizations would reduce revenues foregone by local governments, thereby reducing additional taxes paid by non-exempt properties.

Such a change would need to be phased in over a period of time so if any organizations lose all or part of their exemptions they can make necessary adjustments. Thus, their tax exempt status could be phased out at 10% annually over a 10-year period. To allow for adjustments, the phase out might start in 10 years – 2025.

Policy Option 5: Return Responsibility for Establishing Property Tax Exemptions to Local Governments

Giving some policy making responsibilities to local governments aligns the decision to establish property tax exemptions to the governments that will foregone property tax revenues as a result of those decisions. Some local governments might limit exemptions because of their limited property tax base while other local governments might be more generous in providing exemptions. As a result, this could create a mosaic of property tax exemptions across the 169 municipalities in Connecticut. Finally, this does not address the efficiency and equity concerns associated with property tax exemptions.

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Appendix A

Tables

Appendix Table 1 Descriptive Statistics for Representative Cities														
Case Study Cities	Population		Unemployment		TANF Recipients		Net Grand List		Mill Rate		Property Tax Revenues		Total Revenues	
	2013	2009	2013	2009	2013	2009	2013	2009	2013	2009	2013	2009	2013	2009
Large Cities														
Bridgeport	147,216	137,298	11.8%	12.3%	2.3%	2.6%	\$ 6,980,962,874	\$ 5,540,265,609	41.11	44.58	\$ 285,962,925	\$ 248,743,175	\$ 539,075,595	\$ 484,340,418
Hartford	125,017	124,060	14.7%	14.3%	4.3%	5.5%	\$ 3,398,455,123	\$ 3,451,438,441	74.29	68.34	\$ 255,546,000	\$ 250,668,000	\$ 549,643,000	\$ 540,958,000
Small Cities														
Manchester	58,211	56,388	7.4%	8.2%	1.1%	1.4%	\$ 3,887,671,584	\$ 3,836,745,478	35.83	32.98	\$ 122,293,000	\$ 112,758,000	\$ 172,932,000	\$ 161,447,000
Torrington	35,611	35,408	8.5%	10.3%	0.8%	1.1%	\$ 2,359,143,335	\$ 1,928,040,634	33.47	35.33	\$ 79,225,876	\$ 68,667,819	\$ 120,661,061	\$ 110,585,183
Rich Suburbs														
Glastonbury	34,768	33,353	5.3%	5.8%	0.1%	0.2%	\$ 4,207,613,915	\$ 4,073,691,008	30.50	28.35	\$ 128,472,632	\$ 115,600,163	\$ 156,351,083	\$ 136,516,782
Guilford	22,417	22,469	5.6%	5.6%	0.1%	0.2%	\$ 3,489,689,577	\$ 3,455,346,343	22.36	19.19	\$ 77,165,575	\$ 65,708,244	\$ 89,452,878	\$ 77,344,574
Litchfield	8,333	8,686	6.5%	7.1%	0.2%	0.1%	\$ 1,108,810,149	\$ 900,934,511	22.20	25.50	\$ 24,794,000	\$ 23,034,000	\$ 28,877,000	\$ 26,634,000
New Canaan	20,194	20,000	5.4%	5.9%	0.0%	0.0%	\$ 8,248,622,291	\$ 7,048,694,152	14.08	15.12	\$ 116,615,121	\$ 106,922,056	\$ 133,648,238	\$ 119,235,356
Mixed Base														
Hamden	61,607	58,119	7.7%	7.6%	0.8%	0.7%	\$ 4,048,765,885	\$ 4,310,303,371	37.14	29.42	\$ 149,054,322	\$ 126,262,807	\$ 200,852,851	\$ 181,482,068
Middletown	47,333	48,383	7.7%	7.6%	1.0%	1.0%	\$ 3,581,095,639	\$ 3,474,901,263	26.90	25.50	\$ 95,674,000	\$ 88,788,000	\$ 140,113,000	\$ 131,212,000
Norwich	40,347	36,639	9.0%	9.1%	2.1%	2.3%	\$ 2,432,705,109	\$ 1,851,822,425	26.90	29.66	\$ 64,821,000	\$ 53,978,000	\$ 112,150,000	\$ 100,989,000
Windsor	29,142	29,014	7.6%	8.0%	0.6%	0.7%	\$ 2,907,640,693	\$ 2,590,737,631	27.95	29.30	\$ 8,215,159	\$ 76,562,176	\$ 108,233,721	\$ 100,503,089
Rural														
Bozrah	2,639	2,466	7.7%	7.2%	0.4%	0.5%	\$ 244,343,654	\$ 239,248,220	22.50	19.50	\$ 5,417,756	\$ 4,659,142	\$ 7,665,514	\$ 7,143,311
Durham	7,361	7,469	5.8%	5.9%	0.0%	0.0%	\$ 732,475,338	\$ 769,113,546	32.19	26.25	\$ 23,550,213	\$ 20,235,497	\$ 28,562,809	\$ 25,180,626
Killingly	17,233	17,828	9.5%	10.4%	1.1%	1.1%	\$ 1,365,179,309	\$ 1,257,004,017	19.70	17.80	\$ 28,731,952	\$ 25,855,982	\$ 54,327,437	\$ 50,016,249
North Canaan	3,241	3,366	7.0%	8.0%	0.1%	0.5%	\$ 344,468,300	\$ 345,720,170	21.50	21.00	\$ 7,494,900	\$ 7,220,165	\$ 10,831,672	\$ 10,617,840
Plainfield	15,228	15,442	10.1%	10.4%	1.1%	1.1%	\$ 1,034,874,050	\$ 1,007,056,237	21.52	19.94	\$ 22,460,749	\$ 20,245,338	\$ 47,189,996	\$ 44,662,423
Union	848	761	5.5%	6.7%	0.0%	0.0%	\$ 97,609,850	\$ 73,389,783	23.59	28.93	\$ 2,312,286	\$ 2,231,853	\$ 2,882,477	\$ 2,785,772
Washington	3,526	3,689	5.8%	6.2%	0.1%	0.1%	\$ 1,254,868,260	\$ 980,907,210	11.50	13.00	\$ 14,378,729	\$ 12,282,253	\$ 15,650,048	\$ 13,908,040
Source: Municipal Fiscal Indicators, 2009-2013, Office of Policy and Management.														

Appendix Table 2
EXEMPT REAL PROPERTY CODES

AAAX §12-81(1) Federal
BAAX §12-81(4) Municipal
BBAX §12-81(67) Municipally Owned Beach Property
BCBX §12-74 Municipal Airport in other Town
BDHX §12-76 Water supply land
BEAX §12-81(5) Public purpose by will or trust
BFBX §12-81(4) Municipal Airport
BGCX §7-329l Municipal Port Authority
CAAX §12-81(6) Volunteer Fire Company
DAAX §12-81(7) Scientific
DBAX Educational
DCAX Literary
DDAX Historical
DEAX Charitable
DECX §12-81(58) Charitable, local option
DFAX §12-81(75) Nursing, Rest & Residential Care Facility Owned By Federally Tax Exempt Organization
EBAX §10a-209 CT Student Loan Foundation
FAAX §12-81(10) Agricultural
FBAX Horticultural
GAAX §12-81(11) Cemetery
HAAX §12-81(13) House of Religious Worship
IAAX §12-81(14) Parish house
IBAX Church School
ICAX Nonprofit camp
IDAX Recreational facility
IEAX Orphan asylum
IFAX Thrift shop

IGAX Reformatory
IHAX Infirmary
JAAX §12-81(15) Houses used by officiating clergymen
KAAX §12-81(16) Hospitals
KBAX Sanatoriums
KCAX §33-179p Health care facility, i.e. HMO
LAAX §12-81(18) Veteran's organizations
MAAX §12-81(29) American National Red Cross
NAAX §12-81(49) Nonprofit camps
NBAX Recreational facilities

EXEMPT CODES FOR STATE OWNED PROPERTY

OABX §12-81(2) Administration
OBBX Child Care
OCBX Correction
ODBX Education
OEBX Hospitals & Health care
OFBX Department of Public Safety
OGBX Recreation
OHBX Department of Transportation
OIBX Miscellaneous
OJAX Property taken for highway, but not used
OKBX Mashantucket Pequot Tribal Nation land held in trust by federal government
PABX §12-20a Private College
PBBX General Hospitals
PCBX Campus of the US Dept. of Veterans Affairs Connecticut Healthcare Systems
QAAX §12-255 Public Service Co., Railroad
RAAX §22a-270a CT Resource Recovery Authority
RAHX §22a-270a CT Resource Recovery Authority-Reimbursed
RBAX §32-46 Connecticut Innovations, Inc.
SAAX §28-58 Property of any authority (i.e., Municipal

SAHS §28-58 Housing Authority

Appendix Table 3

State Grants to Municipalities for Property Taxes Foregone Because of Certain Exempt Properties									
	Mashantucket, Pequot Mohegan			State Owned			College/Hospital		
Town	2014	2015	PCT CHNG	2014	2015	PCT CHNG	2014	2015	PCT CHNG
Andover	\$ 14,230	\$15,990	12.4%	\$ 18,767	\$ 20,165	7.5%			
Ansonia	\$ 164,988	\$171,557	4.0%	\$ 94,497	\$ 116,975	23.8%			
Ashford	\$ 23,610	\$24,198	2.5%	\$ 5,629	\$ 6,171	9.6%			
Avon	\$ 14,907	\$16,844	13.0%	\$ 86,889	\$ 95,895	10.4%			
Barkhamsted	\$ 14,403	\$16,417	14.0%	\$ 16,897	\$ 20,534	21.5%			
Beacon Falls	\$ 29,538	\$29,604	0.2%	\$ 45,747	\$ 50,469	10.3%			
Berlin	\$ 48,353	\$52,750	9.1%	\$ 24,302	\$ 26,032	7.1%			
Bethany	\$ 17,533	\$19,171	9.3%	\$ 34,258	\$ 38,215	11.6%	\$ 15,056	16,126	7.1%
Bethel	\$ 46,704	\$51,561	10.4%	\$ 25,210	\$ 36,007	42.8%	\$ 15,783	16,551	4.9%
Bethlehem	\$ 12,917	\$15,431	19.5%	\$ 1,115	\$ 1,199	7.6%			
Bloomfield	\$ 156,846	\$157,761	0.6%	\$ 119,017	\$ 128,055	7.6%	\$ 195,473	203,625	4.2%
Bolton	\$ 17,835	\$20,238	13.5%	\$ 38,025	\$ 42,491	11.7%			
Bozrah	\$ 16,481	\$18,044	9.5%	\$ 4,619	\$ 5,304	14.8%			
Branford	\$ 57,720	\$57,869	0.3%	\$ 53,089	\$ 58,565	10.3%	\$ 113,086	113,861	0.7%
Bridgeport	\$ 6,160,637	\$6,196,581	0.6%	\$ 2,754,074	\$ 3,012,598	9.4%	\$ 7,563,747	7,962,794	5.3%
Bridgewater	\$ 6,770	\$8,688	28.3%	\$ 1,321	\$ 1,421	7.6%			
Bristol	\$ 588,739	\$592,174	0.6%	\$ 84,687	\$ 95,901	13.2%	\$ 521,930	581,447	11.4%
Brookfield	\$ 22,495	\$24,761	10.1%	\$ 27,360	\$ 30,459	11.3%			
Brooklyn	\$ 245,187	\$225,240	-8.1%	\$ 142,639	\$ 153,425	7.6%			
Burlington	\$ 19,893	\$21,866	9.9%	\$ 50,286	\$ 55,498	10.4%			
Canaan	\$ 7,197	\$9,493	31.9%	\$ 94,742	\$ 108,377	14.4%	\$ 2,027	2,093	3.3%
Canterbury	\$ 33,623	\$37,279	10.9%	\$ 9,767	\$ 10,752	10.1%			
Canton	\$ 22,155	\$24,270	9.5%	\$ 27,665	\$ 31,365	13.4%			
Chaplin	\$ 83,102	\$83,587	0.6%	\$ 62,340	\$ 63,647	2.1%			
Cheshire	\$ 1,984,705	\$2,154,316	8.5%	\$ 1,962,731	\$ 2,139,715	9.0%	\$ 123,841	129,632	4.7%
Chester	\$ 11,782	\$14,917	26.6%	\$ 13,495	\$ 14,716	9.1%			
Clinton	\$ 37,791	\$38,993	3.2%	\$ 33,632	\$ 36,598	8.8%			
Colchester	\$ 67,828	\$71,476	5.4%	\$ 52,351	\$ 58,291	11.3%			
Colebrook	\$ 8,400	\$10,461	24.5%	\$ 25,012	\$ 7,370	-70.5%			
Columbia	\$ 19,167	\$21,149	10.3%	\$ 7,045	\$ 7,577	7.6%			
Cornwall	\$ 6,467	\$8,442	30.5%	\$ 18,085	\$ 19,318	6.8%			
Coventry	\$ 47,324	\$48,216	1.9%	\$ 46,274	\$ 51,559	11.4%			
Cromwell	\$ 41,710	\$45,990	10.3%	\$ 14,089	\$ 19,754	40.2%	\$ 51,355	57,827	12.6%
Danbury	\$ 945,549	\$951,066	0.6%	\$ 2,127,391	\$ 2,413,997	13.5%	\$ 1,305,855	1,344,343	2.9%
Darien	\$ 7,521	\$9,582	27.4%	\$ 97,209	\$ 108,594	11.7%			
Deep River	\$ 13,629	\$15,373	12.8%	\$ 10,215	\$ 11,165	9.3%			
Derby	\$ 253,404	\$254,883	0.6%	\$ 42,387	\$ 45,385	7.1%	\$ 870,460	894,901	2.8%
Durham	\$ 21,968	\$23,579	7.3%	\$ 18,142	\$ 19,798	9.1%			
East Granby	\$ 15,693	\$17,361	10.6%	\$ 762,573	\$ 28,828	-96.2%			
East Haddam	\$ 26,978	\$29,779	10.4%	\$ 28,552	\$ 44,042	54.3%			
East Hampton	\$ 59,349	\$61,488	3.6%	\$ 107,111	\$ 117,636	9.8%			
East Hartford	\$ 306,329	\$308,116	0.6%	\$ 716,788	\$ 790,945	10.3%	\$ 482,178	520,320	7.9%
East Haven	\$ 165,781	\$161,177	-2.8%	\$ 351,907	\$ 379,020	7.7%			
East Lyme	\$ 329,119	\$333,126	1.2%	\$ 933,077	\$ 1,028,645	10.2%	\$ 40,548	42,921	5.9%
East Windsor	\$ 43,507	\$48,441	11.3%	\$ 85,311	\$ 118,146	38.5%			
Eastford	\$ 13,099	\$14,309	9.2%	\$ 6,659	\$ 7,020	5.4%			
Easton	\$ 8,568	\$10,636	24.1%	\$ 58,716	\$ 63,586	8.3%			
Ellington	\$ 52,634	\$54,191	3.0%	\$ 7,217	\$ 7,900	9.5%			
Enfield	\$ 1,322,295	\$1,449,946	9.7%	\$ 1,144,958	\$ 1,301,831	13.7%	\$ 21,677	27,107	25.0%
Essex	\$ 11,463	\$13,555	18.2%	\$ 9,675	\$ 10,949	13.2%	\$ 14,207	15,085	6.2%

State Grants to Municipalities for Property Taxes Foregone Because of Certain Exempt Properties									
	Mashantucket, Pequot Mohegan			State Owned			College/Hospital		
Town	2014	2015	PCT CHNG	2014	2015	PCT CHNG	2014	2015	PCT CHNG
Fairfield	\$ 286,875	\$292,353	1.9%	\$ 31,989	\$ 35,231	10.1%	\$ 2,409,013	2,641,401	9.6%
Farmington	\$ 30,763	\$31,383	2.0%	\$ 2,745,281	\$ 3,507,095	27.7%	\$ 27,675	31,718	14.6%
Franklin	\$ 12,744	\$15,254	19.7%	\$ 15,826	\$ 17,426	10.1%			
Glastonbury	\$ 38,732	\$40,105	3.5%	\$ 59,986	\$ 50,469	-15.9%	\$ 1,377	1,728	25.5%
Goshen	\$ 8,456	\$10,588	25.2%	\$ 24,990	\$ 18,576	-25.7%			
Granby	\$ 26,770	\$28,113	5.0%	\$ 15,566	\$ 13,381	-14.0%			
Greenwich	\$ 97,989	\$98,189	0.2%	\$ 23,320	\$ 25,772	10.5%	\$ 849,791	897,965	5.7%
Griswold	\$ 101,751	\$103,449	1.7%	\$ 58,680	\$ 66,244	12.9%			
Groton	\$ 1,373,412	\$1,390,133	1.2%	\$ 1,003,772	\$ 1,104,583	10.0%	\$ 37,989	40,203	5.8%
Guilford	\$ 29,116	\$31,929	9.7%	\$ 18,738	\$ 20,785	10.9%	\$ 18,237	19,423	6.5%
Haddam	\$ 21,344	\$23,384	9.6%	\$ 63,832	\$ 69,812	9.4%			
Hamden	\$ 933,650	\$939,097	0.6%	\$ 899,598	\$ 1,015,382	12.9%	\$ 2,724,546	3,026,411	11.1%
Hampton	\$ 12,717	\$14,750	16.0%	\$ 28,530	\$ 30,686	7.6%			
Hartford	\$ 6,668,829	\$6,652,860	-0.2%	\$ 13,792,383	\$ 14,816,241	7.4%	\$ 24,234,225	25,279,198	4.3%
Hartland	\$ 12,304	\$13,886	12.9%	\$ 95,487	\$ 104,841	9.8%			
Harwinton	\$ 16,721	\$17,719	6.0%	\$ 9,237	\$ 7,749	-16.1%			
Hebron	\$ 29,206	\$30,564	4.7%	\$ 13,991	\$ 15,564	11.2%			
Kent	\$ 7,817	\$10,105	29.3%	\$ 56,452	\$ 61,484	8.9%			
Killingly	\$ 150,886	\$158,610	5.1%	\$ 234,866	\$ 265,435	13.0%			
Killingworth	\$ 16,757	\$18,280	9.1%	\$ 97,567	\$ 103,880	6.5%			
Lebanon	\$ 30,160	\$36,533	21.1%	\$ 30,428	\$ 33,143	8.9%			
Ledyard	\$ 940,254	\$949,184	0.9%	\$ 445,631	\$ 693,548	55.6%			
Lisbon	\$ 28,967	\$29,329	1.2%	\$ 7,118	\$ 7,577	6.5%			
Litchfield	\$ 20,483	\$21,685	5.9%	\$ 72,321	\$ 79,188	9.5%			
Lyme	\$ 6,940	\$9,113	31.3%	\$ 15,463	\$ 16,461	6.5%	\$ 182	195	7.1%
Madison	\$ 18,247	\$20,366	11.6%	\$ 487,447	\$ 540,719	10.9%			
Manchester	\$ 594,716	\$598,186	0.6%	\$ 751,664	\$ 844,806	12.4%	\$ 802,713	866,237	7.9%
Mansfield	\$ 205,985	\$207,662	0.8%	\$ 6,784,862	\$ 7,656,351	12.8%			
Marlborough	\$ 16,617	\$18,229	9.7%	\$ 16,016	\$ 16,534	3.2%			
Meriden	\$ 901,769	\$907,031	0.6%	\$ 398,534	\$ 432,065	8.4%	\$ 1,206,728	1,256,048	4.1%
Middlebury	\$ 16,449	\$18,094	10.0%	\$ 20,703	\$ 20,089	-3.0%			
Middlefield	\$ 18,712	\$21,025	12.4%	\$ 9,362	\$ 10,411	11.2%			
Middletown	\$ 1,246,000	\$1,253,270	0.6%	\$ 2,312,094	\$ 2,573,487	11.3%	\$ 3,747,147	4,087,232	9.1%
Milford	\$ 396,696	\$399,010	0.6%	\$ 517,359	\$ 556,477	7.6%	\$ 423,118	448,475	6.0%
Monroe	\$ 32,426	\$35,497	9.5%	\$ 10,692	\$ 11,952	11.8%			
Montville	\$ 1,486,051	\$1,068,665	-28.1%	\$ 1,489,650	\$ 1,979,859	32.9%			
Morris	\$ 9,386	\$11,262	20.0%	\$ 16,506	\$ 17,550	6.3%			
Naugatuck	\$ 211,746	\$218,529	3.2%	\$ 62,990	\$ 91,305	45.0%			
New Britain	\$ 2,285,315	\$2,298,649	0.6%	\$ 2,904,607	\$ 3,710,093	27.7%	\$ 2,095,011	2,692,730	28.5%
New Canaan	\$ 7,292	\$9,293	27.4%	\$ 42,306	\$ 47,151	11.5%			
New Fairfield	\$ 22,908	\$26,468	15.5%	\$ 18,427	\$ 20,607	11.8%			
New Hartford	\$ 20,324	\$21,796	7.2%	\$ 18,164	\$ 19,654	8.2%			
New Haven	\$ 7,417,028	\$6,537,304	-11.9%	\$ 5,070,786	\$ 6,879,419	35.7%	\$ 38,567,488	43,465,332	12.7%
New London	\$ 1,786,210	\$1,807,956	1.2%	\$ 376,342	\$ 414,949	10.3%	\$ 4,698,208	5,032,102	7.1%
New Milford	\$ 85,724	\$84,077	-1.9%	\$ 33,027	\$ 32,756	-0.8%	\$ 210,932	221,957	5.2%
Newington	\$ 275,049	\$254,786	-7.4%	\$ 688,546	\$ 749,383	8.8%	\$ 1,753,757	1,633,915	-6.8%
Newtown	\$ 797,498	\$952,649	19.5%	\$ 812,386	\$ 946,060	16.5%			
Norfolk	\$ 11,993	\$14,208	18.5%	\$ 83,742	\$ 90,248	7.8%	\$ 44,163	47,767	8.2%
North Branford	\$ 43,533	\$45,449	4.4%	\$ 5,040	\$ 5,680	12.7%	\$ 2,249	2,434	8.2%
North Canaan	\$ 27,007	\$25,740	-4.7%	\$ 21,777	\$ 25,017	14.9%			
North Haven	\$ 157,487	\$158,406	0.6%	\$ 104,823	\$ 119,369	13.9%	\$ 331,749	647,579	95.2%
North Stonington	\$ 885,206	\$893,855	1.0%	\$ 20,445	\$ 23,626	15.6%			
Norwalk	\$ 851,029	\$855,995	0.6%	\$ 333,955	\$ 404,528	21.1%	\$ 1,465,920	1,571,461	7.2%
Norwich	\$ 1,982,596	\$2,002,692	1.0%	\$ 783,722	\$ 804,821	2.7%	\$ 748,855	810,449	8.2%
Old Lyme	\$ 13,598	\$15,319	12.7%	\$ 28,161	\$ 30,352	7.8%	\$ 34,022	35,059	3.0%
Old Saybrook	\$ 15,545	\$18,009	15.9%	\$ 55,471	\$ 60,807	9.6%			
Orange	\$ 42,711	\$49,247	15.3%	\$ 14,827	\$ 11,829	-20.2%	\$ 191,724	248,668	29.7%
Oxford	\$ 32,442	\$34,509	6.4%	\$ 228,601	\$ 252,505	10.5%			

Tax Exempt Properties

State Grants to Municipalities for Property Taxes Foregone Because of Certain Exempt Properties									
	Mashantucket, Pequot Mohegan			State Owned			College/Hospital		
Town	2014	2015	PCT CHNG	2014	2015	PCT CHNG	2014	2015	PCT CHNG
Plainfield	\$ 160,114	\$182,340	13.9%	\$ 41,376	\$ 57,395	38.7%	\$ 31,246	41,283	32.1%
Plainville	\$ 84,669	\$86,023	1.6%	\$ 16,167	\$ 17,664	9.3%			
Plymouth	\$ 73,672	\$71,534	-2.9%	\$ 11,697	\$ 12,212	4.4%			
Pomfret	\$ 20,304	\$22,648	11.5%	\$ 43,176	\$ 48,075	11.3%			
Portland	\$ 32,583	\$33,088	1.6%	\$ 25,264	\$ 27,556	9.1%			
Preston	\$ 1,173,412	\$1,183,656	0.9%	\$ 11,015	\$ 16,402	48.9%			
Prospect	\$ 33,489	\$37,247	11.2%	\$ 1,877	\$ 2,055	9.5%			
Putnam	\$ 114,011	\$119,285	4.6%	\$ 30,771	\$ 33,309	8.2%	\$ 223,733	232,405	3.9%
Redding	\$ 9,433	\$11,694	24.0%	\$ 172,868	\$ 179,434	3.8%			
Ridgefield	\$ 14,278	\$16,612	16.4%	\$ 163,023	\$ 148,889	-8.7%			
Rocky Hill	\$ 280,253	\$281,888	0.6%	\$ 711,846	\$ 933,775	31.2%			
Roxbury	\$ 6,298	\$8,370	32.9%	\$ 3,862	\$ 4,281	10.8%			
Salem	\$ 19,051	\$21,968	15.3%	\$ 58,794	\$ 71,139	21.0%			
Salisbury	\$ 7,397	\$9,433	27.5%	\$ 7,524	\$ 8,251	9.7%			
Scotland	\$ 15,677	\$17,604	12.3%	\$ 23,208	\$ 25,202	8.6%			
Seymour	\$ 75,403	\$78,393	4.0%	\$ 20,512	\$ 22,331	8.9%			
Sharon	\$ 6,782	\$8,891	31.1%	\$ 16,201	\$ 18,730	15.6%			
Shelton	\$ 77,086	\$80,088	3.9%	\$ 14,633	\$ 15,668	7.1%			
Sherman	\$ 8,184	\$10,408	27.2%	\$ 12	\$ 14	16.2%			
Simsbury	\$ 31,434	\$33,613	6.9%	\$ 106,093	\$ 123,399	16.3%			
Somers	\$ 1,562,239	\$1,700,850	8.9%	\$ 1,379,316	\$ 1,499,575	8.7%			
South Windsor	\$ 56,236	\$60,215	7.1%	\$ 9,825	\$ 13,220	34.6%			
Southbury	\$ 36,930	\$42,711	15.7%	\$ 269,239	\$ 298,743	11.0%			
Southington	\$ 144,792	\$151,250	4.5%	\$ 24,949	\$ 26,815	7.5%	\$ 137,108	141,493	3.2%
Sprague	\$ 30,899	\$31,144	0.8%	\$ 11,431	\$ 12,257	7.2%			
Stafford	\$ 98,523	\$98,483	0.0%	\$ 49,948	\$ 55,003	10.1%	\$ 215,981	228,369	5.7%
Stamford	\$ 921,041	\$926,415	0.6%	\$ 1,217,778	\$ 1,510,039	24.0%	\$ 1,747,011	1,963,214	12.4%
Sterling	\$ 33,461	\$35,406	5.8%	\$ 6,843	\$ 5,952	-13.0%			
Stonington	\$ 36,076	\$40,283	11.7%	\$ 20,554	\$ 21,561	4.9%			
Stratford	\$ 163,807	\$168,339	2.8%	\$ 367,403	\$ 400,622	9.0%			
Suffield	\$ 2,675,180	\$2,976,971	11.3%	\$ 3,229,943	\$ 2,657,588	-17.7%			
Thomaston	\$ 42,299	\$41,317	-2.3%	\$ 34,950	\$ 40,663	16.3%			
Thompson	\$ 69,723	\$70,913	1.7%	\$ 10,624	\$ 11,540	8.6%	\$ 2,379	2,482	4.3%
Tolland	\$ 42,069	\$43,715	3.9%	\$ 48,842	\$ 52,883	8.3%			
Torrington	\$ 262,158	\$257,271	-1.9%	\$ 225,390	\$ 249,421	10.7%	\$ 239,622	254,799	6.3%
Trumbull	\$ 47,763	\$53,557	12.1%	\$ 88,414	\$ 96,878	9.6%		18,591	#DIV/0!
Union	\$ 22,341	\$22,471	0.6%	\$ 28,809	\$ 32,010	11.1%			
Vernon	\$ 177,261	\$177,683	0.2%	\$ 197,996	\$ 239,453	20.9%	\$ 310,249	339,449	9.4%
Voluntown	\$ 105,784	\$92,538	-12.5%	\$ 134,123	\$ 87,923	-34.4%	\$ 60,000	60,000	0.0%
Wallingford	\$ 174,548	\$172,355	-1.3%	\$ 50,523	\$ 55,743	10.3%	\$ 339,818	354,183	4.2%
Warren	\$ 6,585	\$8,782	33.4%	\$ 12,892	\$ 14,319	11.1%			
Washington	\$ 7,331	\$9,438	28.7%	\$ 31,545	\$ 34,664	9.9%			
Waterbury	\$ 3,037,163	\$3,054,884	0.6%	\$ 3,735,301	\$ 4,498,583	20.4%	\$ 5,433,960	5,773,418	6.2%
Waterford	\$ 46,897	\$51,184	9.1%	\$ 367,117	\$ 286,127	-22.1%	\$ 46,015	65,721	42.8%
Watertown	\$ 82,610	\$85,337	3.3%	\$ 31,976	\$ 35,613	11.4%			
West Hartford	\$ 242,387	\$220,032	-9.2%	\$ 275,699	\$ 301,092	9.2%	\$ 1,031,732	1,084,554	5.1%
West Haven	\$ 1,009,243	\$985,721	-2.3%	\$ 18,125	\$ 59,579	228.7%	\$ 5,313,329	5,476,449	3.1%
Westbrook	\$ 14,942	\$18,948	26.8%	\$ 28,184	\$ 30,313	7.6%		18,861	#DIV/0!
Weston	\$ 7,239	\$9,369	29.4%	\$ 6,173	\$ 6,604	7.0%			
Westport	\$ 26,668	\$27,989	5.0%	\$ 763,032	\$ 828,016	8.5%	\$ 176,738	184,153	4.2%
Wethersfield	\$ 217,910	\$219,181	0.6%	\$ 223,496	\$ 247,201	10.6%	\$ 8,654	9,178	6.1%
Willington	\$ 25,917	\$28,762	11.0%	\$ 42,154	\$ 46,133	9.4%			

State Grants to Municipalities for Property Taxes Foregone Because of Certain Exempt Properties									
	Mashantucket, Pequot Mohegan			State Owned			College/Hospital		
Town	2014	2015	PCT CHNG	2014	2015	PCT CHNG	2014	2015	PCT CHNG
Wilton	\$ 9,013	\$11,265	25.0%	\$ 93,451	\$ 96,400	3.2%			
Winchester	\$ 72,704	\$74,635	2.7%	\$ 75,292	\$ 80,035	6.3%	\$ 36,009	43,134	19.8%
Windham	\$ 881,841	\$892,577	1.2%	\$ 2,787,866	\$ 3,047,008	9.3%	\$ 637,832	668,312	4.8%
Windsor	\$ 109,863	\$108,632	-1.1%	\$ 58,247	\$ 55,006	-5.6%			
Windsor Locks	\$ 442,607	\$445,189	0.6%	\$ 3,899,300	\$ 94,693	-97.6%			
Wolcott	\$ 64,320	\$71,260	10.8%	\$ 1,936	\$ 2,136	10.3%			
Woodbridge	\$ 11,276	\$13,164	16.7%	\$ 16,126	\$ 17,555	8.9%	\$ 94	98	4.5%
Woodbury	\$ 17,369	\$19,476	12.1%	\$ 522	\$ 571	9.4%			
Woodstock	\$ 32,500	\$33,642	3.5%	\$ 8,634	\$ 9,499	10.0%			

Appendix Table 4

Per Capita Fiscal Gap and Per Capita Grant Amounts by Municipality				
Municipality	Gap	Pequot	State Prop	College/Hospital
ANDOVER	16	4.35	5.73	0.00
ANSONIA	734	8.67	4.97	0.00
ASHFORD	291	5.52	1.31	0.00
AVON	-631	0.81	4.73	0.00
BARKHAMSTED	-95	3.85	4.51	0.00
BEACON FALLS	65	4.88	7.56	0.00
BERLIN	-207	2.35	1.18	0.00
BETHANY	-183	3.16	6.18	2.72
BETHEL	-85	2.42	1.31	0.82
BETHLEHEM	-265	3.64	0.31	0.00
BLOOMFIELD	159	7.59	5.76	9.46
BOLTON	-36	3.60	7.68	0.00
BOZRAH	-44	6.25	1.75	0.00
BRANFORD	-319	2.06	1.90	4.04
BRIDGEPORT	1168	41.85	18.71	51.38
BRIDGEWATER	-1800	3.99	0.78	0.00
BRISTOL	428	9.72	1.40	8.62
BROOKFIELD	-658	1.33	1.62	0.00
BROOKLYN	327	29.61	17.23	0.00
BURLINGTON	-138	2.10	5.30	0.00
CANAAN	-805	5.93	78.04	1.67
CANTERBURY	237	6.60	1.92	0.00
CANTON	-227	2.14	2.67	0.00
CHAPLIN	416	36.51	27.39	0.00
CHESHIRE	-112	68.09	67.33	4.25
CHESTER	-193	2.71	3.11	0.00
CLINTON	-334	2.87	2.55	0.00
COLCHESTER	158	4.18	3.23	0.00
COLEBROOK	-292	5.77	17.17	0.00
COLUMBIA	-62	3.51	1.29	0.00
CORNWALL	-2159	4.58	12.81	0.00
COVENTRY	121	3.81	3.73	0.00
CROMWELL	19	2.94	0.99	3.62
DANBURY	198	11.30	25.42	15.60
DARIEN	-3782	0.35	4.56	0.00

DEEP RIVER	-296	2.97	2.23	0.00
DERBY	632	19.80	3.31	68.00
DURHAM	-231	2.98	2.46	0.00
EAST GRANBY	-266	3.01	146.31	0.00
EAST HADDAM	-139	2.95	3.12	0.00
EAST HAMPTON	-31	4.60	8.30	0.00
EAST HARTFORD	740	5.98	14.00	9.42
EAST HAVEN	343	5.69	12.08	0.00
EAST LYME	-321	17.38	49.27	2.14
EAST WINDSOR	112	3.81	7.48	0.00
EASTFORD	43	7.55	3.84	0.00
EASTON	-1132	1.12	7.71	0.00
ELLINGTON	73	3.33	0.46	0.00
ENFIELD	321	29.55	25.59	0.48
ESSEX	-1063	1.73	1.46	2.14
FAIRFIELD	-885	4.71	0.53	39.59
FARMINGTON	-517	1.20	107.18	1.08
FRANKLIN	-95	6.41	7.96	0.00
GLASTONBURY	-317	1.11	1.73	0.04
GOSHEN	-1328	2.87	8.49	0.00
GRANBY	-78	2.36	1.37	0.00
GREENWICH	-5110	1.57	0.37	13.62
GRISWOLD	376	8.51	4.91	0.00
GROTON	-61	34.18	24.98	0.95
GUILFORD	-641	1.30	0.84	0.81
HADDAM	-291	2.55	7.63	0.00
HAMDEN	336	15.15	14.60	44.22
HAMPTON	204	6.81	15.27	0.00
HARTFORD	1330	53.34	110.32	193.85
HARTLAND	126	5.77	44.81	0.00
HARWINTON	-144	2.99	1.65	0.00
HEBRON	70	3.05	1.46	0.00
KENT	-1334	2.66	19.21	0.00
KILLINGLY	369	8.76	13.63	0.00
KILLINGWORTH	-350	2.58	15.03	0.00
LEBANON	111	4.12	4.16	0.00
LEDYARD	249	62.29	29.52	0.00
LISBON	63	6.66	1.64	0.00
LITCHFIELD	-497	2.46	8.68	0.00

LYME	-2147	2.89	6.44	0.08
MADISON	-1145	1.00	26.64	0.00
MANCHESTER	375	10.22	12.91	13.79
MANSFIELD	730	7.99	263.24	0.00
MARLBOROUGH	35	2.58	2.49	0.00
MERIDEN	607	14.92	6.59	19.96
MIDDLEBURY	-357	2.17	2.73	0.00
MIDDLEFIELD	-92	4.23	2.12	0.00
MIDDLETOWN	306	26.32	48.85	79.17
MILFORD	161	7.47	9.74	7.96
MONROE	-210	1.63	0.54	0.00
MONTVILLE	299	75.38	75.57	0.00
MORRIS	-842	4.00	7.04	0.00
NAUGATUCK	506	6.68	1.99	0.00
NEW BRITAIN	1056	31.33	39.82	28.72
NEW CANAAN	-3703	0.36	2.09	0.00
NEW FAIRFIELD	-353	1.62	1.30	0.00
NEW HARTFORD	-110	2.95	2.64	0.00
NEW HAVEN	1101	56.77	38.81	295.17
NEW LONDON	896	64.85	13.66	170.56
NEW MILFORD	-178	3.09	1.19	7.60
NEWINGTON	94	8.94	22.39	57.02
NEWTOWN	-289	28.37	28.90	0.00
NORFOLK	-1006	7.15	49.91	26.32
NORTH BRANFORD	-67	3.03	0.35	0.16
NORTH CANAAN	-2	8.33	6.72	0.00
NORTH HAVEN	-254	6.58	4.38	13.86
NORTH STONINGTON	-245	167.30	3.86	0.00
NORWALK	-318	9.70	3.80	16.70
NORWICH	619	49.14	19.42	18.56
OLD LYME	-1698	1.79	3.71	4.48
OLD SAYBROOK	-1647	1.52	5.41	0.00
ORANGE	-247	3.06	1.06	13.74
OXFORD	-142	2.52	17.76	0.00
PLAINFIELD	410	10.51	2.72	2.05
PLAINVILLE	298	4.75	0.91	0.00
PLYMOUTH	361	6.12	0.97	0.00
POMFRET	172	4.84	10.28	0.00
PORTLAND	92	3.45	2.67	0.00

PRESTON	59	246.77	2.32	0.00
PROSPECT	14	3.46	0.19	0.00
PUTNAM	573	12.05	3.25	23.64
REDDING	-1096	1.01	18.56	0.00
RIDGEFIELD	-1350	0.57	6.48	0.00
ROCKY HILL	-32	14.07	35.74	0.00
ROXBURY	-2679	2.83	1.73	0.00
SALEM	-75	4.53	14.00	0.00
SALISBURY	-2531	2.00	2.04	0.00
SCOTLAND	202	9.23	13.66	0.00
SEYMOUR	331	4.55	1.24	0.00
SHARON	-1953	2.47	5.91	0.00
SHELTON	-128	1.88	0.36	0.00
SHERMAN	-1385	2.23	0.00	0.00
SIMSBURY	-211	1.32	4.45	0.00
SOMERS	257	138.01	121.85	0.00
SOUTH WINDSOR	-105	2.18	0.38	0.00
SOUTHBURY	-124	1.86	13.56	0.00
SOUTHINGTON	-3	3.32	0.57	3.14
SPRAGUE	332	10.37	3.84	0.00
STAFFORD	367	8.26	4.19	18.11
STAMFORD	-643	7.28	9.63	13.82
STERLING	315	8.85	1.81	0.00
STONINGTON	-875	1.95	1.11	0.00
STRATFORD	299	3.14	7.05	0.00
SUFFIELD	37	169.44	204.58	0.00
THOMASTON	284	5.45	4.50	0.00
THOMPSON	369	7.45	1.14	0.25
TOLLAND	86	2.82	3.27	0.00
TORRINGTON	403	7.36	6.33	6.73
TRUMBULL	-281	1.31	2.42	0.00
UNION	48	26.35	33.97	0.00
VERNON	503	6.08	6.79	10.64
VOLUNTOWN	257	40.51	51.37	22.98
WALLINGFORD	-58	3.87	1.12	7.53
WARREN	-1734	4.55	8.91	0.00
WASHINGTON	-3100	2.08	8.95	0.00
WATERBURY	849	27.69	34.06	49.55
WATERFORD	-1073	2.40	18.82	2.36

WATERTOWN	69	3.72	1.44	0.00
WEST HARTFORD	250	3.82	4.35	16.28
WEST HAVEN	750	18.33	0.33	96.53
WESTBROOK	-1183	2.16	4.08	0.00
WESTON	-1908	0.70	0.60	0.00
WESTPORT	-3622	0.98	27.94	6.47
WETHERSFIELD	140	8.22	8.43	0.33
WILLINGTON	206	4.34	7.07	0.00
WILTON	-1791	0.48	5.01	0.00
WINCHESTER	256	6.60	6.84	3.27
WINDHAM	771	34.98	110.57	25.30
WINDSOR	107	3.77	2.00	0.00
WINDSOR LOCKS	-27	35.20	310.13	0.00
WOLCOTT	79	3.85	0.12	0.00
WOODBIDGE	-467	1.26	1.80	0.01
WOODBURY	-379	1.77	0.05	0.00
WOODSTOCK	78	4.12	1.09	0.00

Appendix B

State Grant Programs to Reimburse Local Governments for Foregone Revenues Resulting from State Mandated Property Tax Exemptions

State Grants-In-Lieu-Of-Taxes

Table 1 lists the major state programs that reimburse local governments a portion of foregone local real property taxes on some properties. The programs outlined in Section 12-19a and Section 12-20a of the Connecticut Statutes describe the two largest programs providing state reimbursement for foregone local property tax revenues resulting from state exemption of certain properties. Section 12-19a provides for reimbursement of foregone property taxes for state owned real property including

1. 100 percent reimbursement of property taxes foregone for facilities designated by the Commissioner of Correction to be correctional facilities administered under the auspices of the Department of Correction;
2. 100 percent reimbursement of taxes foregone by a juvenile detention center under the direction of the Department of Children and Families that is used for incarcerative purposes;
3. 65 percent of property taxes that would have been paid with respect to the buildings and grounds comprising Connecticut Valley Hospital in Middletown; and
4. 100 percent of property taxes foregone by that portion of the John Dempsey Hospital located at the University of Connecticut Health Center in Farmington that is used for permanent medical ward for prisoners.

Table 1	
CONNECTICUT STATE “PILOT” PROGRAMS	
	GRANTS IN LIEU OF PROPERTY TAXES
Sec 12-19a	Grants in lieu of taxes on state-owned real property, reservation land held in trust by the state for an Indian tribe, municipally owned airports and land taken into trust by the federal government for the Mashantucket Pequot Tribal Nation and the Mohegan Tribe of Indians of Connecticut
Sec 12-20a	Grants in lieu of taxes on real property of private colleges, general hospitals, chronic disease hospitals and certain urgent care facilities
Sec 12-94a	State reimbursement in lieu of tax revenue from totally disables persons
PAYMENTS-IN-LIEU-OF-TAXES	
Sec 12-94d	Payments in lieu of tax revenue from electric generation facilities
Sec 8-265b	Tax-exempt status of housing authority. Payment in lieu of taxes
Sec 12-76	Payments in lieu of taxes by certain municipal corporations re water supply land in another municipality
Sec 22a-270a	Lessee under Materials Innovation and Recycling Authority project not liable for taxes on property leased from authority if payments in lieu of taxes are made per agreement

In addition, this section provides for 100 percent reimbursement of foregone property taxes that would have been paid on any **land** designated within the 1983 Settlement Boundary and taken into trust by the federal government for the Mashantucket Pequot Tribal Nation. Finally, the programs make provisions for a 100 percent reimbursement of property taxes on state owned property in any town where more than 50 percent of the property is owned by the state.

The program described in Section 12-20a provides for reimbursement of foregone local property taxes by the state for

1. Real property owned by any private non-profit institution of higher learning;
2. Any non-profit general hospital facility;
3. Freestanding chronic disease hospital; or
4. An urgent care facility that operates for at least 12 hours a day and that had been the location of a nonprofit general hospital for at least a portion of the calendar year 1996.

Table 2 summarizes target reimbursement rates for various types of exempt properties.

Table 2: PILOT Rates for Specified Property Types under Existing Law and the Act

<i>Type of Property</i>	<i>PILOT (% of lost tax revenue)</i>
<i>State, Municipal, or Tribal Property</i>	
Correctional facility or juvenile detention center	100%
John Dempsey Hospital permanent medical ward for prisoners	100
Mashantucket Pequot reservation land (1) designated within 1983 settlement boundary and (2) taken into trust by the federal government for the Mashantucket Pequots on or <i>after</i> June 8, 1999	100
Land in any town where more than 50% of the land is state-owned	100
Connecticut Valley Hospital	65
Mashantucket Pequot reservation land (1) designated within the 1983 settlement boundary and (2) taken into trust by the federal government for the Mashantucket Pequots <i>before</i> June 8, 1999	45
Mohegan reservation land taken into trust by the federal government	45
Municipally owned airports	45
State-owned property	45
<i>College and Hospital Property</i>	
U. S. Department of Veterans Affairs Connecticut Healthcare Systems campuses	100
Private, nonprofit colleges and universities	77
Nonprofit general and chronic disease hospitals	77
Certain urgent care facilities	77
Source: Office of Legislative Research, summary of analysis of PA 15-244, https://www.cga.ct.gov/2015/SUM/2015SUM00244-R02HB-07061-SUM.htm	

These two programs provide state grant payments in lieu of taxes (GILOTs) for specific types of property. There are other provisions in the Connecticut General Statutes that are traditional PILOT payments where the property owner, not the state, makes a payment to the municipality where the property is located.¹⁸ The four programs listed at the bottom of Table 1 require payments be made by the property owner to the local government in lieu of paying property taxes.¹⁹

¹⁸ Connecticut statutes require a PILOT in certain circumstances and describe how the amount of the payment is determined. Section 8-265b does allow for a negotiated payment and the payment referred in Section 22a-270a seems to be a negotiated payment as well.

¹⁹ The provisions of Section 12-94d seem to have expired in 2015.

The following discussion focuses on three specific state GILOTs – reimbursements for state-owned real property, private colleges and hospitals, and the Mashantucket Pequot and Mohegan Fund. Each of these programs is described below.²⁰

State-owned real property payment-lieu-of-taxes

The Office of Policy and Management administers this PILOT program. This program provides payments for real property tax losses due to exemptions applicable to state-owned real property, certain real property that is the subject of a state lease or long-term financing contract, municipally-owned airports and certain land held in trust by the federal government. Payments in FY 2015 relate to exemptions on the 2012 Grand List; FY 2016 and FY 2017 payments are for exemptions on the 2013 and 2014 Grand Lists.

A property's use and the amount of state-owned real property in a town determine reimbursement percentages, which are:

(1) 100% for state prison facilities used for purposes of incarceration in the prior fiscal year, that portion of the John Dempsey Hospital used as a permanent medical ward for prisoners, the Connecticut Juvenile Training School, land designated under the 1983 settlement boundary and taken into trust by the federal government for the Mashantucket Pequot Tribal Nation on or *after* June 8, 1999, and all state-owned property in a town in which the State of Connecticut owns more than 50% of the property within the town's boundaries;

(2) 65% for the Connecticut Valley Hospital; and

(3) 45% for all other state-owned real property, certain real property leased by the state as described in §4b-39, municipally owned airports and certain other real property owned or controlled by the federal government.

There is a proportionate reduction of grant payments when the amount of the appropriation in any year is insufficient. Grantees receive grant payments on or before September 30th.

Private Colleges and General and Free Standing Chronic Disease Hospitals

The Office of Policy and Management administers this state grant program. This program provides payments for real property tax losses due to exemptions applicable to eligible private colleges and general and free standing chronic disease hospitals. Payments in FY 2015 relate to exemptions on the 2012 Grand List; FY 2016 and FY 2017 payments are for exemptions on the 2013 and 2014 Grand Lists.

The calculation of the grant payment for towns and certain fire districts reflects 77% of their tax losses for the appropriate grand list. Exceptions to this calculation include the campuses of the Connecticut Healthcare Systems located in Newington and West Haven and owned by the United States Department of Veterans' Affairs. Additionally, CGS §12-20b and §12-19b specify the following payments: \$100,000 for the Connecticut Hospice in Branford; \$1,000,000 for the United States Coast Guard Academy in New London; and \$60,000 for the state-owned forest in Voluntown. There is a proportionate reduction of grant payment when the amount of the appropriation is insufficient. Grantees receive payments on or before September 30th.

Mashantucket Pequot and Mohegan Fund

²⁰ These descriptions draw on material in OPM [2015].

The Office of Policy and Management administers this program under which payments from the proceeds of the Mashantucket Pequot and Mohegan Fund. There is an allocation to the statutory amount cited for each formula, calculations for which are:

(1) \$20 million on the basis of the PILOT for State-owned Real Property – the amount for each town is calculated at one third of the difference between what the town receives as a PILOT (excluding prior year adjustments), and what it would have received if the PILOT program had been funded at \$85,205,085. After required minimum payments are reflected, town-specific amounts are prorated to \$20 million. In accordance with Public Act 15-244 §192(a), beginning in FY 2016, the amount provided through this portion of the formula is equal to the amount provided in FY 2015.

(2) \$20.1 million on the basis of the PILOT for Private Colleges and General and Free Standing Chronic Disease Hospitals – the percent of each town’s PILOT (excluding prior year adjustments) to the total PILOT for all towns is calculated and the result is multiplied by the \$20,123,916 allocated for this portion of the formula. In accordance with Public Act 15-244 §192 (c), beginning in FY 2016, the amount provided through this portion of the formula is equal to the amount provided in FY 2015.

(3) \$35 million on the basis of CGS §3-55j(e) – a modification of the Property Tax Relief Fund formula in CGS §7-528.

(4) \$5.475 million allocated to certain designated municipalities on the basis of said Property Tax Relief Fund formula.

(5) An additional \$47.5 million for all towns, distributed pro rata on the basis of each town’s grant determined under (1) through (4) above, to the total of all such grants, pursuant to CGS §3-55j(j). Regardless of the formulas described in (1) through (4) above, the amounts allocated to 28 towns are specifically set forth in CGS §3- 55j(g). In addition, Ledyard, Montville, North Stonington, Norwich and Preston each receive an additional \$750,000, annually. Towns received a proportionate share of an additional \$1.6 million. These towns are members of the Southeastern Connecticut Council of Governments, or Distressed Municipalities that are members of either the Northeastern Connecticut Council of Governments or the Windham Region Council of Governments.

A town’s grant is its total formula-derived amount reduced proportionately to the program’s annual appropriation, although the additional amounts payable to the towns described in the preceding paragraph are not subject to this provision. Grantees receive payments in three installments on or before January 1, April 1 and June 30th.

Appendix Table 3 presents information on state grants paid to individual municipalities under the three grant programs just described for FY 2014 and FY2015. The three main state grants to local governments are reimbursement for foregone revenues from state owned property, non-profit private colleges and hospitals, and the Mashantucket Pequot distribution.

Sixty-one municipalities receive \$123.9 million through the college/hospital grant program. Two of those municipalities – Hartford (\$25.3 million) and New Haven (\$43.5 million) – account for 55.5 percent of state payments under this program. Trumbull received a payment in 2015, but not 2014, because Sacred Heart University acquired land in Trumbull in 2015. In addition, Westbrook received a payment in 2015, and not 2014, because Middlesex Hospital acquired land.

Thirty-five municipalities experienced an increase in state reimbursement for one or more grant program between 2014 and 2015. Twelve of those increases were a result of revaluation at the end of the 5-year revaluation cycle and one resulted from an increase in the town’s mill rate. Six municipalities

experienced decreases in state reimbursement for one or more grant program between 2014 and 2015. One was due to revaluation, one to adjustment of PA-490 properties and other to new designation of 5 PA-490 properties and two for the removal of Connecticut Airport Authority property.

These grant programs are not fully funded and do not reach the intended level of reimbursement, but funding has increased for reimbursements for state owned property and for private, non-profit colleges and universities. Table 3 presents the trend in funding for the three major grant programs for 2005, 2010 and 2015. The Pequot grant program experienced a decline of 27 percent in funding, while the state-owned and college and hospital grant programs experienced increases of 14.5 and 8.7 percent, respectively.

Table 3 Municipal Aid Payments				
Program	2005	2010	2015	%Chng 2005-2015
State owned	\$ 72,493,392	\$ 73,519,215	\$ 83,641,646	15.4%
Pequot	\$ 85,000,000	\$ 61,779,907	\$ 61,779,907	-27.3%
Colleges/hospitals	\$ 115,431,737	\$ 115,431,737	\$ 125,431,737	8.7%
Source: Office of Policy and Management.				

Finally, it is important to consider the impact of these three grant programs on the fiscal disparities that exist across municipalities in Connecticut. The New England Public Policy Center at the Federal Reserve Bank of Boston recently completed a study of municipal fiscal disparities in Connecticut [Zhao and Weiner]. They first measure the capacity of local governments to raise revenue to finance non-education expenditures. The approach calculates the amount of revenue each municipality would raise if all municipalities used the same standard mill rate. This standard mill rate is applied to the value of taxable real and personal property in each municipality measured by the equalized net grand list.

The second part of the process is to estimate the cost of providing a common quality and quantity of non-education public services. Their analysis identifies and assigns weights to five cost factors: the unemployment rate, population density, private-sector wage index, town maintenance road mileage and jobs per capita.

The study then calculates a fiscal gap by subtracting per capita revenue capacity from per capita costs. A positive gap means a municipality lacks sufficient revenue-raising authority to provide a given level and quality of public services. They find a wide range of municipal gaps across the 169 municipalities in Connecticut documenting significant variation in fiscal disparities across the state. They conclude that these gaps are driven primarily by the disparities in the property tax base across municipalities [Zhao and Weiner, 8].

The tables below compare the calculated per capita fiscal gap for each municipality to the per capita state grant from the Pequot, State Owned Property and Colleges/Hospital reimbursement programs to explore the extent to which these state grant programs are equalizing. It must be remembered that these programs are not intended to be equalizing. Rather, they are intended to reimburse local governments for revenues foregone because of these state exemptions. There is no *a priori* expectation that these programs should be equalizing.

The first level of analysis is to simply see if the range from the highest and lowest per capita fiscal gap is increased or reduced by these three state grant programs. Table 4 indicates that each grant program reduces the range between highest to lowest capacity municipalities very slightly, with the college/hospital program reducing the range the most, but only modestly by less than 3 percent.

An alternative approach to determining the level of equalization provided by these state grant programs is to calculate the correlation coefficient between the per capita fiscal gap determined by the Boston Federal Reserve study and the various state grants to each municipality under the Pequot, state owned property and college/hospital programs. Table 5 reports these correlation coefficients for each state grant program.

Table 4 Impact of State Grants on Range of Fiscal Disparities Calculated by the Boston Federal Reserve Bank			
	Pequot	State Owned	College/ Hospital
Lowest Capacity	1277	1220	1136
Highest Capacity	-5112	-5110	-5124
Gap Between Lowest and Highest Capacities	-6388	-6330	-6260

The positive correlations indicate that municipalities with higher fiscal gaps (low capacity to provide a given level and quality of public services) tend to receive higher payments under all three grant programs. The relatively low values of the correlation coefficients indicate that this equalizing impact is modest at best. The college/hospital state grant program appears to have the greatest equalization impact, in large part because two of the three cities with the highest fiscal gaps (Hartford and New Haven) receive 55 percent of the funds under this program.

Table 5 Correlations Between Fiscal Gaps and State Grant Payments		
0.214582	correlation fiscal gap and Pequot grant payment	
0.140535	correlation fiscal gap and state owned property grant payments	
0.262972	correlation fiscal gap and college/hospital grant payments	

Changes in State Grants-In-Lieu-Of-Taxes²¹

²¹ This section draws on material in the PA 15-244 Summary prepared by the Office of Legislative Research, no date, available at <https://www.cga.ct.gov/2015/SUM/2015SUM00244-R02HB-07061-SUM.htm>.

PA 15-244, passed by the Connecticut legislature in June, overhauls the state grant programs reimbursing local governments for property tax revenues foregone because of state imposed property tax exemptions. Beginning in FY2017 the existing PILOT programs end and requires the GILOTs be paid under a new consolidated program. The new program reimburses municipalities for the same types of properties and at the same target reimbursement rates enumerated in Table 8 above. A number of other changes in the program will become effective in FY2017, including

- Extending the GILOTs to towns, boroughs, cities, consolidated towns and cities, and consolidated towns and boroughs, as well as village, fire, sewer or combination fire and sewer districts, and other municipal organizations authorized to levy and collect taxes;
- Continues the requirement to proportionally reduce grant payments if appropriated funds did not fully fund the programs, but for FY2017 adds two features:
 - Municipalities and districts are to receive GILOTs that equal or exceed the reimbursement rates they received in FY2015, and
 - Establishes an additional GILOT grant, funded from a select GILOT account, for specified municipalities and districts to receive additional grant amounts.

In FY2018 the act maintains the requirement that the GILOTs be proportionally reduced, but creates a new approach for doing so. Under the new approach OPM ranks each municipality based on 1) its mill rate and 2) the percentage of tax-exempt property on its 2012 grand list, excluding correctional and juvenile detention facilities. Using this ranking, municipalities are divided into three tiers with different reimbursement rates as listed in Table 6.

Table 6: Minimum PILOT Reimbursement Rates

<i>Municipalities</i>	<i>Select College and Hospital Property</i>	<i>Select State Property</i>
Tier one: 10 municipalities with the highest percentage of tax-exempt property and a mill rate of at least 25	42%	32%
Tier two: Next 25 municipalities with a mill rate of at least 25	37%	28%
Tier three: All other municipalities	32%	24%
Source: Office of Legislative Research, summary of analysis of PA 15-244, https://www.cga.ct.gov/2015/SUM/2015SUM00244-R02HB-07061-SUM.htm		

The act also creates a new Select GILOT account which is a non-lapsing General Fund account. The fund is capitalized with sales tax revenue transferred from the municipal revenue sharing account. OPM is directed to use this account to fund 1) the additional GILOT grants in FY2017 and 2) the portion of GILOT grants paid to tier one and two municipalities exceeding the reimbursement rates paid to tier three municipalities, beginning in FY2018.

The act also modifies the Mashantucket Pequot and Mohegan Fund distribution. Currently, municipalities have been allocated a portion of this fund according to two statutory formulas linked to the state's GILOT distributions. Specifically,

- \$20 million of the fund is allocated to municipalities so that each one received one-third of the difference between what it was eligible to receive as a state-owned property GILOT in a given year and what it would have received if that GILOT program had been funded at \$85,205,085, subject to a minimum grant amount of \$1,667; and
- \$20.1 million of the fund is allocated to municipalities according to the distribution formula for college and hospital GILOTs.

The act sets each municipality's allocation of the two pools of funds equal to the amount they received in total Pequot and Mohegan Fund distributions in FY2015. The act also provides that these grants, when added to the newly consolidated GILOTs, may not exceed 100 percent of the property taxes the municipalities would have received from such property based on the grand lists for the fiscal year preceding the year in which the grants were payable.

Chapter 3

Direct Property Tax Relief

A Report Prepared for the Connecticut Tax Panel

Presented November 17, 2015

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Executive Summary

This report on direct forms of property tax relief has been prepared for the Connecticut Tax Panel to consider as it conducts a comprehensive review of state tax policies. The purpose of the report is to provide an overview of Connecticut's current reliance on property tax financing and its relief programs and their effectiveness, followed by recommendations based on the analysis of the current programs. Highlights of the report are as follows:

- Property Tax Reliance--Connecticut is among the states most reliant on local property taxes.
 - Local property taxes as a share of own-source general revenue is the highest in the country.
 - Residential property accounts for 70 percent of the total property tax base, with commercial, industrial and public utility property accounting for 17 percent, and personal property (including automobiles) accounting for 11 percent.
- Current property tax relief mechanisms
 - CT currently has thirteen programs to reduce property tax burdens, including two circuit breakers, numerous exemptions, freezes, and a deferral program.
 - The net effect of these programs is to reduce property tax burdens by a modest amount. The total tax savings from property tax exemptions and credits as a percent of total property tax revenues in Connecticut has been estimated to be less than 0.5 percent in 2012.
 - In addition, Connecticut has a use-value assessment program (PA490) to provide reduced property taxes for rural properties which results in substantial tax relief and lost revenue for local government units.
- Options for Policy Reform:
 - Consider replacing the current complex set of property tax exemptions and circuit breakers with a single unified circuit breaker mechanism that provides property tax relief to homeowners and renters whose property taxes are high relative to their household resources.
 - Implement a single threshold type circuit-breaker credit on the Connecticut income tax to provide targeted relief (modification of the current CT property tax credit).
 - Fund that property tax relief with general revenues generated by state income and sales taxes, as well as with increased revenues from the elimination of other relief mechanisms (e.g. State-funded exemptions, and increased revenue from tightening PA490 provisions).
 - Consider tightening PA490 provisions to target tax relief more specifically.
 - Implement an objective test for agricultural use (e.g. *de minimus* level of net income from agricultural production).
 - Rationalize use-value assessment (UVA) computation methods used—a more accurate income measure and a more realistic capitalization rate.
 - Ideally, move away from general tax relief for agriculture and move toward strategic use of UVA to protect and preserve land that provides ecosystem services that are a form of public good or generates positive externalities.

- The Tax Expenditure Report should provide an estimate of the foregone revenue due to PA490.
- Consider modifications to the current property tax deferral program.
 - Reduce the threshold level of tax relative to income from eight percent to, perhaps, five percent.
 - Hold local governments harmless by having the State provide a low interest loan secured by a lien on the property that pays the property tax to the local government units.

Connecticut Property Tax Overview

The purpose of this chapter is to review the various forms of direct property tax relief provided in Connecticut and to make recommendations for changes or additional forms of direct relief.

The context for this study is a high degree of reliance on property tax funding for local public goods and services in Connecticut. The 169 cities and towns in Connecticut rely heavily on property taxes to fund the local public goods and services they provide to their citizens. Chief among those goods and services are public education, police and fire protection, and road maintenance. CT law authorizes use of local property taxes on an *ad valorem* basis to be applied to the following:

- Real estate
- Motor vehicles
- Business personal property
- Individual personal property

Properties in Connecticut are generally assessed at 70 percent of “present true and actual value,” or “fair market value.”¹ State statutes proscribe procedures for assessments of property subject to the property tax. Municipalities are required to revalue properties every five years. Generally accepted mass appraisal methods are required, employing market comparison, income capitalization, or cost approaches. Local tax assessors carry out the assessment, collections, and appeals functions.² Heavy reliance on the local property tax has not limited the number of ways in which the property tax base has been narrowed, however. State statutes provide for selective exemptions and abatements in addition to credits.

The 2014 CT tax incidence report estimates that 23 percent of property taxes are paid by out-of-state owners of CT property thereby exporting nearly a quarter of the property tax burden.³ That leaves 77 percent of the property tax burden to be borne by CT residents—a total of \$7.3 billion in tax burden or 40 percent of the total tax burden. That report also estimates a Suits Index of -0.39 for the property tax which indicates that the tax is regressive, falling harder on low income households than high income households.⁴

That report provides a table on page 20 titled Property Tax: Income Deciles in which property tax burdens for each income decile are reported. In addition, the table reports tax rates which is derived by computing the ratio of total property tax paid by households in the income decile to the total CT adjusted gross income (AGI) of households in the decile. The tax rates reported range from a high of 12.52 percent in the first decile to a low of 0.92 percent in the top decile. The tax rate pattern with respect to AGI indicates that as AGI rises the tax rates fall.⁵

¹ Source: Rappa (2008). <https://www.cga.ct.gov/2008/rpt/2008-r-0358.htm>

² Connecticut laws regarding property assessment and taxation are found in Chapter 201 which covers state and local revenue services, Chapter 203 which covers property tax assessment, Chapter 204 which covers local levy and tax collection, and Chapter 204a which covers property tax relief for elderly homeowners, renters, and the disabled.

³ Source: Department of Revenue Services (2104).

⁴ This estimate is based on the traditional view of property tax incidence (partial equilibrium) and does not take into account general equilibrium effects which would indicate the tax is more progressive.

⁵ ETRs computed in this way are subject to several flaws. First, CT AGI (form CT-1040 line 5) is a narrow measure of income because it is based on federal AGI, which is itself a narrow measure of income, and permits further subtractions (form CT-1040 line 4). Furthermore, these ETRs are average tax rates, not marginal tax rates.

The tax incidence report estimates that two-thirds of the property tax burden is borne by owners of residential property.⁶ Owners of motor vehicles bear about 7 percent of the tax burden. The incidence of the property tax is estimated to be shifted partially to labor, with 17.4 percent of the tax borne by workers.

Motor vehicles are taxed on an *ad valorem* basis in CT, as a form of personal property (rather than real property). Local assessors are responsible for valuation of vehicles. For most vehicles, the assessors are able to use NADA value estimates provided to them by OPM. For the remaining vehicles, the assessor must estimate values. The property tax base is 70 percent of the average retail value of the vehicle. October 15 is the uniform assessment date.⁷

Connecticut Property Tax Reliance

Connecticut local governments rely heavily on the property tax to fund the provision of local public goods and services. Evidence of the high degree of property tax reliance is provided in Figures 1-3.

Property Taxes as a Share of State Personal Income

Figure 1 illustrates local property taxes as a share of state personal income for the fifty states and the District of Columbia.⁸ Connecticut is illustrated in the red bar, with property taxes taking more than four percent of state personal income. Green bars illustrate the other New England states, using the Census regional definition. Among the other New England states, it is evident that Maine and New Hampshire have similarly high property taxes relative to personal income.⁹ Rhode Island property taxes are even higher, accounting for nearly five percent of personal income. Massachusetts is somewhat lower at just under four percent. Vermont is the lowest with property taxes accounting for less than two percent of personal income. The neighboring states of New Jersey and New York, shown in yellow, have property taxes as a share of personal income that are at higher than those in Connecticut.

Property Taxes as a Share of Own-Source General Revenue

Figure 2 illustrates local property taxes as a share of own-source general revenue. This measure reflects the extent to which property taxes play a role relative to all revenue generated by local governments, not including transfers from state or federal government. By this measure, Connecticut is more reliant on property taxes than all of the other states and the District of Columbia. Local property taxes account for 86 percent of own-source general revenues. Most of the other New England states are also highly reliant on property taxes by this measure. Maine, Massachusetts, New Hampshire, and Rhode Island are all in the range of 80 percent. Vermont is less reliant on local property taxes at 59 percent. The neighboring state of New Jersey is also high at 79 percent, but New York is less reliant on property taxes at 44 percent.

Property Taxes as a Share of Own-Source Taxes

Figure 3 illustrates local property taxes as a share of own-source taxes. This measure indicates the extent to which property taxes account for local tax revenues. Connecticut is among the highest states by this

⁶ It is noteworthy that the incidence of the tax on land is particularly small, only 0.3 percent.

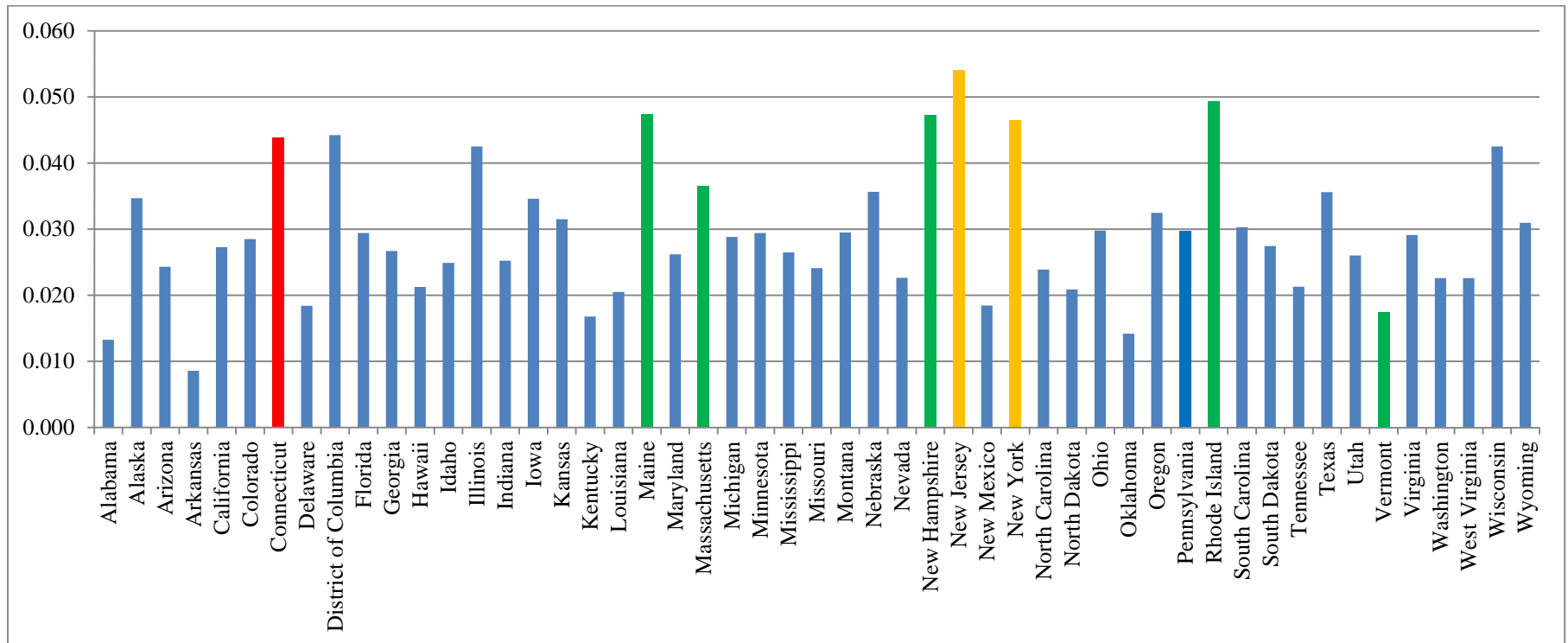
⁷ Source: <http://www.ct.gov/dmv/cwp/view.asp?a=814&q=245268>

⁸ Some states such as New Hampshire also have a state property tax which is not taken into account in this figure.

⁹ New Hampshire's share would be higher if its state property tax were included, but that is not reflected in this figure.

measure, very highly reliant on property taxes (99 percent). Property taxes account for virtually all local government taxes in Connecticut. The other New England states are similarly highly reliant on property taxes. Neighboring New Jersey (98 percent) is also highly reliant on property taxes by this measure, but New York (58 percent) has other tax revenue sources resulting in lower property tax reliance.

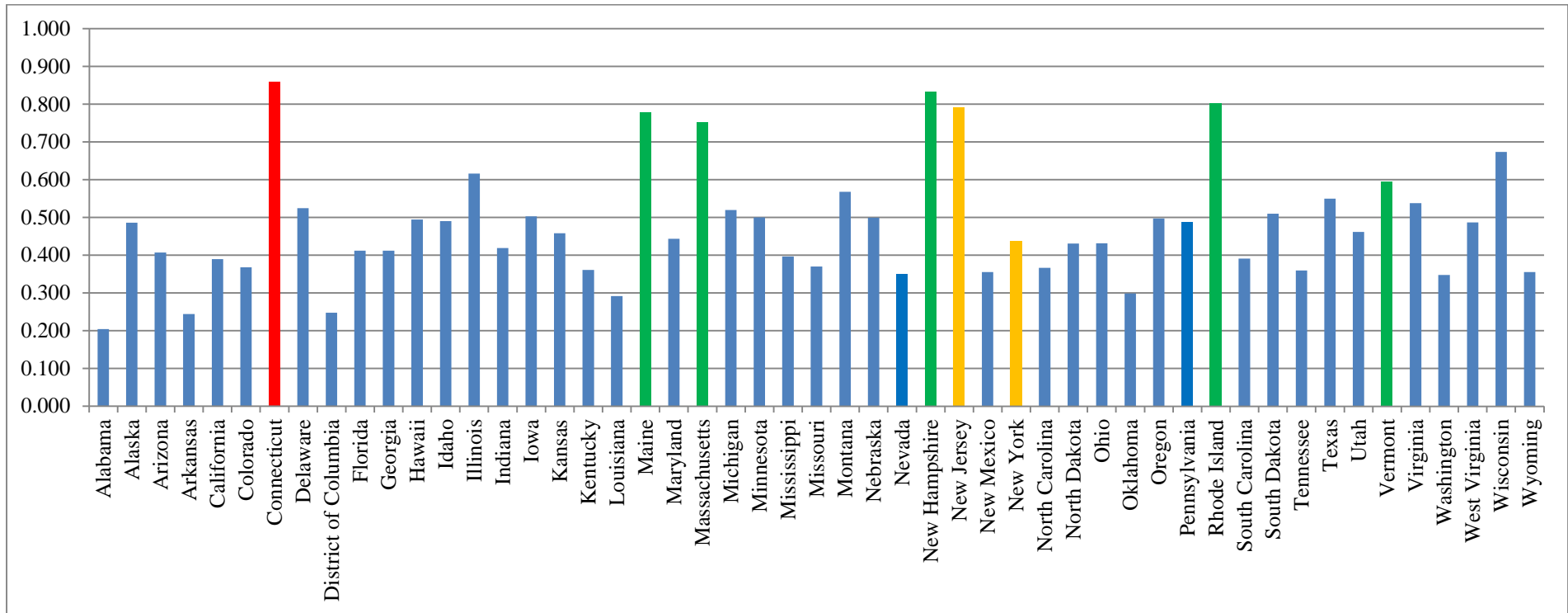
Figure 1: Local Property Taxes as a Share of State Personal Income, 2013



Note: States in the New England Census region are colored green and other states near CT are colored in yellow.

Source: Census Bureau.

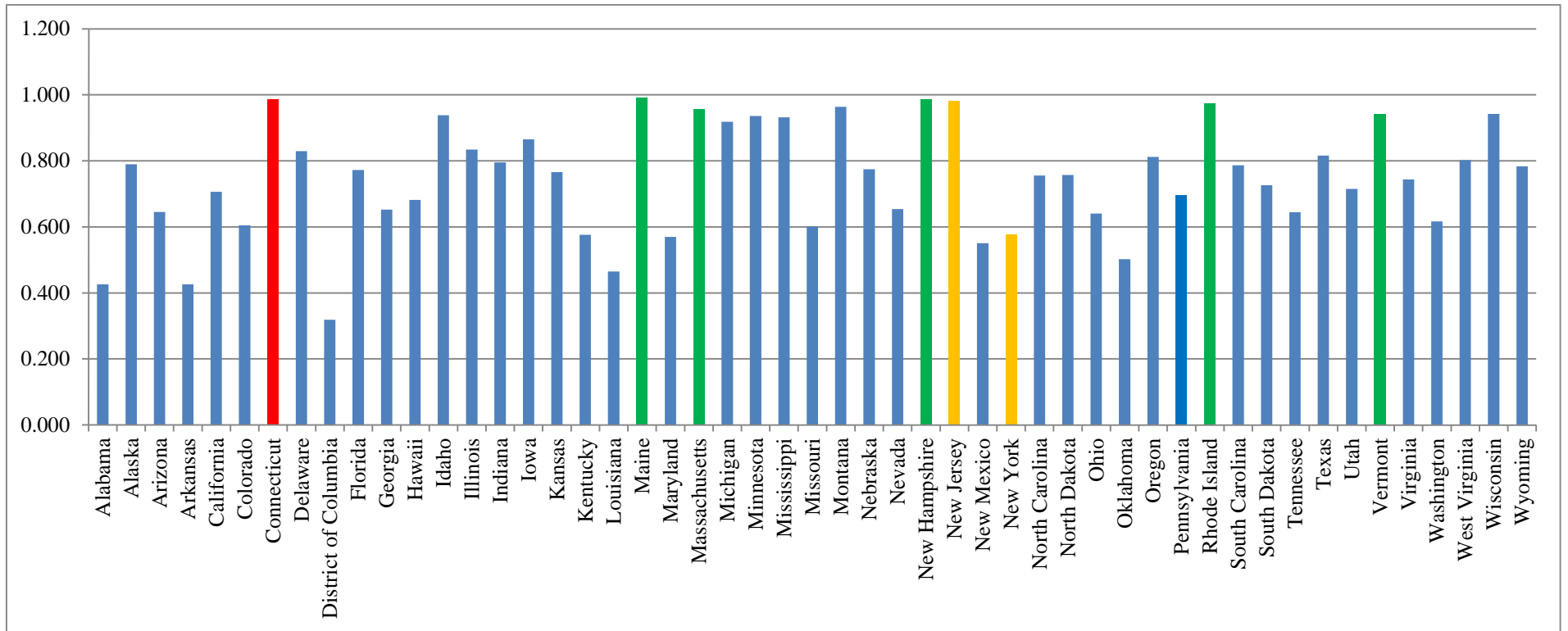
Figure 2: Local Property Tax as a Share of Own-Source General Revenue, 2013



Note: States in the New England Census region are colored green and other states near CT are colored in yellow.

Source: Census Bureau.

Figure 3: Local Property Tax as a Share of Own-Source Taxes, 2013



Note: States in the New England Census region are colored green and other states near CT are colored in yellow.

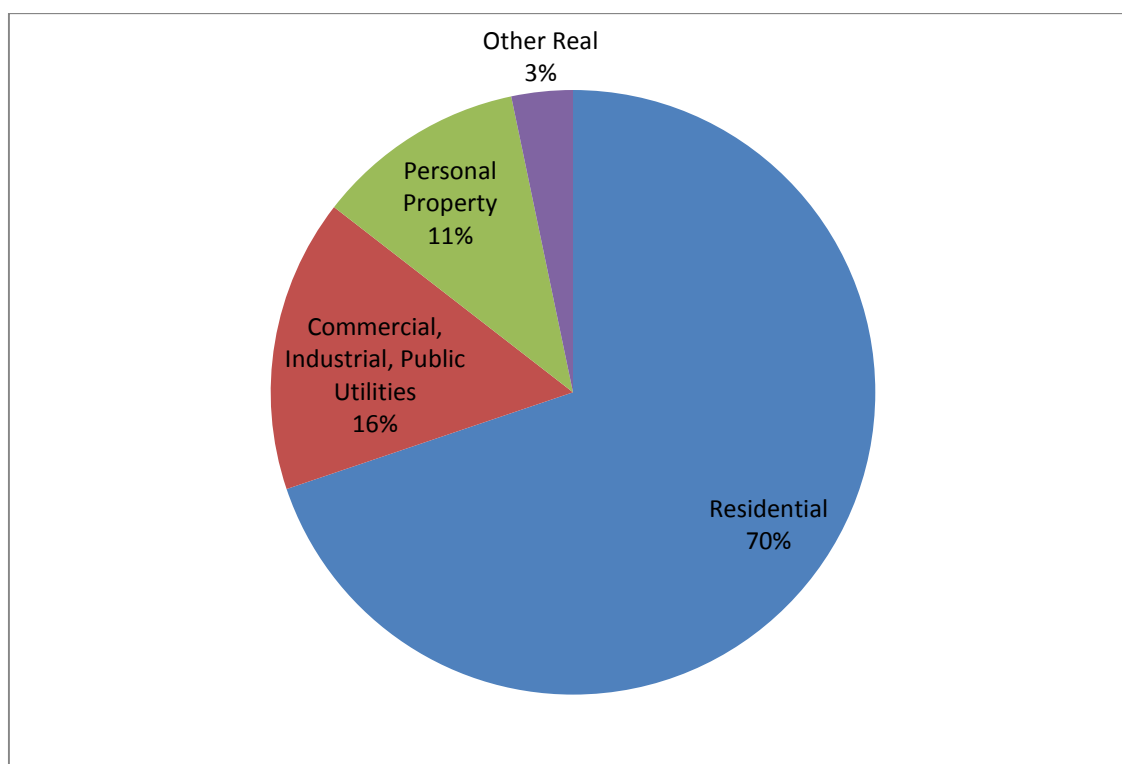
Source: Census Bureau.

Connecticut Property Tax Base and Assessment Practices

Property Tax Base

Figure 4 illustrates the composition of the property tax base in Connecticut. Residential property comprises a full 70 percent of the total property value in the state. The second most important class of property is commercial and industrial or public utilities, comprising 16 percent of the total. Personal property accounts for 11 percent of the total tax base, including motor vehicles.

Figure 4: Connecticut Property Tax Base, FY 2013



Source: [Connecticut Equalized Grand List 2013 GLY](http://www.ct.gov/opm/cwp/view.asp?a=2987&q=385970&opmNav_GID=1807).
http://www.ct.gov/opm/cwp/view.asp?a=2987&q=385970&opmNav_GID=1807

Assessment Practices¹⁰

A total of 169 cities and towns in Connecticut conduct property assessments. Municipalities assess real property on the basis of market value for tax purposes each year on October 1. Assessments are based on

¹⁰ Sources: Significant Features of the Property Tax, Rappa (2012).

70 percent of market value for all classes of property, with the exception of those properties eligible for use-value assessment under Connecticut's use-value assessment law (PA490).

Assessors are required to revalue property at least once every five years. Reappraisal cycles are staggered among cities so that municipalities are completing their reappraisals in different years from one another. Physical re-inspections of properties are required by the State but there is no fixed schedule of rotation proscribed. An assessor has the ability to inspect a parcel of improved property at any time. The State requires that inspections be conducted at least once every ten years.

Revaluation does not necessarily produce higher tax liabilities, depending on the corresponding changes in the mill rates applied. When revaluation has an impact on tax liabilities, however, State statutes allow municipalities to phase in the higher values over a five-year period. In some limited cases, State statutes permit shifting of the tax burden from residential to non-residential property classes. In addition, the legislature has permitted delays in revaluation implementation on a case-by-case basis.

Revaluation methods used by assessors include the traditional triad: market comparison, cost approach, and income capitalization. Assessors are allowed to use computer aided mass appraisal (CAMA) methods, and most assessors use the services of private vendors for this purpose.

Classification and Hartford Assessments

Generally speaking, Connecticut does not permit classification in the property tax system. All classes of property are assessed at 70 percent of market value. There are several exceptions to this general rule, however.

First, following revaluation, State statutes permit phase-in of increases in property assessed value by classes of property. Municipalities may phase in all or a portion of increased assessed value over a five-year period. The phase-in rates are permitted to differ by class of property.

For residential property, in particular, the Legislature authorized several alternative phase-in methods to deal with sudden increases in valuations, starting in 1989.¹¹ Municipalities were enabled to give tax credits to residential owners and impose surcharges on non-residential owners so long as the post-revaluation tax rate on residential property exceeded 1.5 percent. While this provision was made available to all municipalities, only Hartford implemented this phase-in method. The Legislature repealed the tax cap starting in 2010, but provided a new cap limiting annual residential tax increases to 3.5 percent per year for a period of five years. This limitation took the form of an assessment limit. The law also required any adopting municipality to reduce its non-residential surcharge to a maximum of 7.5 percent starting in 2010.

The City of Hartford has been permitted to assess residential real estate and apartments at lower rates than commercial and industrial properties. In 2013 the assessment ratio applied to commercial properties was 70 percent of market value while that for residential properties was 29.93 percent. Apartments and mixed-use properties were assessed at 60 percent.

¹¹ Source: Rappa (2012).

Starting in 2011, the City of Hartford has been required to alter its assessment ratio for residential property in such a way that the average annual tax increase falls below specified limits.¹² Hartford was also required to adjust assessments for apartments. The previously applied lower rate for apartments then began phasing out in 2012. The apartment assessment ratio rose from 37.602 percent in 2011 to 50 percent in 2012 and has risen 5 percent each year since in order to reach the target of 70 percent by the year 2015.¹³ Appendix Table A1 provides a tax rate history by class of property for Hartford.

Second, agricultural and rural property is assessed according to use value rather than market value, as discussed later in this report.

As a matter of general tax policy, classification is usually considered an undesirable feature of tax systems because it fundamentally violates the principle of uniformity of taxation. Coe (2009) indicates that uniformity is a commonly stated principle of taxation—such an important characteristic of tax systems that thirty-nine of the fifty states have constitutional requirements for uniform taxation. Connecticut is not among them. Uniformity requires that taxation be applied in an identical way to all similarly situated taxpayers.

Despite the policy view on the undesirable properties of classification, Sexton (2014) reports that 27 states and the District of Columbia have classified tax systems in some respect; this despite the fact that many of these states have uniformity requirements in their constitutions. Clearly, some of the uniformity requirements provide limited forms of uniformity, e.g. within specific classes of taxpayers, or in other ways limit the scope of the uniformity requirements.

Table A2 in the Appendix provides a list of states with uniformity requirements. It is notable that only two of the Northeast states, using the Census regional definition, have uniformity requirements: Pennsylvania and New Jersey.

Connecticut Current Property Tax Relief Mechanisms

Connecticut has a variety of existing programs, both State and local, which provide direct property tax relief. Significant Features of the Property Tax reports thirteen residential property tax relief programs in Connecticut, including two types of circuit breakers, numerous exemptions, and a tax deferral program.¹⁴ This section provides an overview of the main programs, starting with the major state-funded programs.¹⁵

¹² The limits are determined as follows. The residential assessment ratio adjustment must be calculated annually and is based on the difference between the taxes levied in the current year minus taxes levied in the previous year. An adjustment for inflation is made using the CPI-U in the Northeast region. The adjustment was first applied in the 2012 assessment year for taxes due in FY2013-14. Sources: Rappa (2012) and Significant Features of the Property Tax, https://www.lincolnst.edu/subcenters/significant-features-property-tax/Report_State_Summaries.aspx#assessment-administration

¹³ Source: Significant Features of the Property Tax, https://www.lincolnst.edu/subcenters/significant-features-property-tax/Report_State_Summaries.aspx#assessment-administration

¹⁴ Source: Significant Features of the Property Tax, http://www.lincolnst.edu/subcenters/significant-features-property-tax/Report_State_Summaries.aspx#residential-property-tax-relief-programs

¹⁵ Sources: De Boer (2012), and Connecticut's Legislative Commission on Aging (2015).

State-Funded Property Tax Relief Programs

Circuit Breaker for the Elderly and Disabled

Connecticut currently has a circuit breaker program of property tax relief for the elderly and disabled. Tax relief is provided in the form of a credit applied to a homeowner's property tax bill. Homeowners at least 65 years of age, or Social Security disability eligible if younger than 65, apply for a property tax credit with the local assessor. Credit amounts vary inversely with income, making this a sliding-scale circuit breaker. For 2014, the income qualification limits were \$34,600 for a single person and \$42,200 for a married couple. Income qualification brackets are indexed for inflation using the Social Security inflation adjustment. The maximum credit is \$1,000 for unmarried homeowners and \$1,250 for married homeowners.

Credit amounts begin at 50 percent of property tax for homeowners in the lowest income category and decline in increments of 10 percent for each of the five successive income categories, phasing out entirely at the income maximum.

Applicants for the credit must file their application forms (Form M-35H) with the local tax assessor's office between February 1 and May 15th. Homeowners must apply biennially. The state reimburses municipalities from its general fund for the revenue loss due to the tax credits provided. A total of 169 municipalities and 6 boroughs are eligible for state reimbursement. In FY2015 total credits amounted to \$20.5 million given to 39,374 individuals.¹⁶

The total state appropriate for this program in FY2015 was \$20.5 million, but the total reimbursements requested by local governments were \$22.5 million. The difference indicates that State appropriations for this program do not fully cover the cost of the program. Local government units do not receive full reimbursement. In recent history, State appropriations have generally covered from 88 to 95 percent of the cost of the program.¹⁷

Income Tax Credit for Property Taxes Paid

The CT income tax provides a credit for property taxes paid on residents' primary residence, motor vehicle, or both, on line 11 of Form CT-1040. While not specifically named a circuit breaker, this tax credit is rightfully considered as such.

The taxpayer must complete Schedule 3 on page 4 of CT-1040, reporting property tax paid and income. The amount of the credit is reduced for single filers with incomes in excess of \$62,500 and for married-joint filers with incomes in excess of \$100,500. A Property Tax Credit Table on p. 31 of the CT income tax instruction booklet provides the phase-out parameters. The maximum credit allowed has been \$300 until recently when the legislature voted to reduce the maximum credit to \$200. The credit is not fully refundable.¹⁸

¹⁶ Source: correspondence with Patrick Sullivan, Office of Policy and Management.

¹⁷ Source: conversation with Patrick Sullivan, Office of Policy and Management.

¹⁸ Source: Form CT-1040 and 2014 *Form CT-1040 Connecticut Resident Income Tax Return and Instructions*.

Elderly and Disabled Freeze Programs

Connecticut has both a current and previous tax freeze program for the elderly and disabled. The previous program froze property taxes for the elderly and disabled. That program provided State reimbursement to municipalities for lost revenue. That program has been closed to new enrollments since 1979. Total State appropriation for this program in FY 2015 was \$235,000. Total reimbursements requested and paid were \$120,870.80. Payments were made to 34 towns plus 3 boroughs/districts containing 63 individual applicants.¹⁹

The current freeze program, which began in 2006, permits municipalities the option to freeze property taxes for qualifying older taxpayers. The program is strictly optional for municipalities and it does not provide State reimbursement for lost revenues. This program freezes the property tax liability at the level of the year prior to application for the program.²⁰

Qualifications require: (1) that the taxpayer be at least 70 years of age (living with a spouse at least 70; or at least 62 years of age and a surviving spouse of a person who at the time of death was eligible for the program, provided the surviving spouse was living with the recipient at the time of death), (2) that the taxpayer has resided in CT for any one year prior to filing the claim and be currently residing in CT when filing the claim, (3) be occupying the property as the primary place of residence, and (4) have qualifying annual income as defined by the Circuit Breaker program.²¹ Municipalities are given the flexibility to establish their own asset limits for this program as well.

Disability Programs

The State disability program has a \$400,000 appropriation to provide property tax relief to totally disabled persons. Eligibility follows Social Security disability guidelines. There are no income qualification requirements. Eligible disabled persons receive a \$1,000 exemption reducing their assessment.

In FY 2015 total reimbursements requested by local governments amounted to \$470,678, of which \$400,000 was paid by the State. Payments were made to 169 towns plus 24 boroughs/districts containing 13,763 individual applicants.

Additional Veterans Exemption Program

Qualifying veterans may receive both a basic exemption, which is not reimbursed by the State to the local government unit. In addition, there is a State program that provides exemptions, with reimbursements to local units for the foregone revenue. Income qualification requirements for the State program are the same as those for the circuit breaker program.

¹⁹ Source: correspondence with Patrick Sullivan, Office of Policy and Management. Mr. Sullivan reports that there are currently 51 individuals remaining in this program.

²⁰ Chapter 204a, Property Tax Relief for Elderly Homeowners and Renters and Persons with Permanent Total Disability, Sec. 12-170v, paragraph (b).

²¹ Source: Connecticut's Legislative Commission on Aging (2015).

In FY 2015 total reimbursements from the State requested were \$3.11 million, whereas the State appropriation for this program was \$2.97 million. State reimbursements were provided to 169 towns plus 4 boroughs/districts containing 17,937 individual applicants.

State Grants to Renters

A separate program of State grants is provided for renters who are required to apply for the credit annually. Income qualification requirements are the same as those for the homeowner program. State payment is the lesser of: (1) the maximum amount listed in statute, and (2) 35 percent of the sum of all charges for rents, electricity, gas, water, and fuel actually paid during the preceding year, less 5 percent of the qualifying income received in the previous year. The maximum credit provided is \$900 for a married couple and \$700 for a single renter.²²

In addition to the above state-funded programs, there are a wide range of local option property tax relief programs for the disabled, blind, and veterans, most of which are provided in the form of exemptions.²³ Qualifying homeowners are given exemptions, thereby reducing their assessed values and their property tax liabilities. Revenue losses to the local government units are not reimbursed by the State.

Municipal Exemptions

Exemption for the Disabled

Municipalities are required to provide qualified disabled homeowners a \$1,000 property tax exemption. Municipalities have the option to provide an additional exemption of up to \$1,000.

Exemption for the Blind

Municipalities are required to provide qualified blind homeowners a \$3,000 property tax exemption. Municipalities have the option to provide an additional exemption of up to \$2,000.

Standard Exemption for Veterans

Municipalities are required to provide qualified veterans or their survivors a \$1,000 property tax exemption. Municipalities have the option to provide an additional exemption of up to \$10,000, or 10 percent of the property value, subject to statutory income limits.

Additional Exemption for Veterans

Municipalities are required to provide eligible veterans who receive the standard exemption an additional exemption based on qualifying income.

²² Source: Chapter 204a, Property Tax Relief for Elderly Homeowners and Renters and Persons with Permanent Total Disability, Sec. 12-170e.

²³ A total of 38 state-provided relief options are available to local governments in Connecticut. An informal survey conducted by the Connecticut Conference of Municipalities (CCM) in 2015 indicates that most of these relief programs are used by very few local governments. No one option is used by a majority of municipalities.

Exemption for Disabled Veterans

Municipalities are required to provide disabled veterans or their surviving spouses a \$3,000 property tax exemption.

Exemption for Severely Disabled Veterans

Municipalities are required to provide severely disabled veterans or their surviving spouses a \$10,000 property tax exemption and an additional exemption based on their qualifying income.

Property Tax Deferral Program²⁴

Connecticut gives municipalities the option to defer property taxes for a homeowner's principal residence. Municipalities that adopt deferral programs may defer taxes that exceed 8 percent of income. The deferred tax plus 6 percent interest is secured by a lien on the property.

The optional property tax relief provided through the deferral program is in addition to the tax relief required of municipalities, described above.

Summary of Relief Provided

The vast array of relief programs provided in Connecticut actually provides very modest relief for property tax payers. Significant Features of the Property Tax lists 13 distinct property tax relief programs in Connecticut, including various exemptions, circuit breakers, deferrals, and other programs.²⁵ Despite this range of tax relief programs, the amount of tax relief provided is quite limited.

Bell (2015) provides an overview of property taxes in Connecticut prepared for the CT Tax Panel and indicates that the relief programs reduce effective tax rates by a very modest amount. For example, in a large city like Bridgeport, the effective tax rate for residential properties, without any relief programs taken into account, is 2.95 percent. Relief programs reduce that rate to 2.90 percent. In a smaller city such as Manchester, the rate without relief is 2.76 percent, and with relief programs it is 2.64 percent.

Langley (2015) estimates that the total tax savings from property tax exemptions and credits as a percent of total property tax revenues in Connecticut was under 0.5 percent in 2012. Overall, the evidence is that the wide variety of relief programs does little to reduce the effective property tax rates in Connecticut.

Connecticut Use-Value Assessment of Rural Property

Connecticut's land use-value assessment law is known as Public Act 490 (PA490). Under the provisions of this law, landowners pay tax based on the current use value of the property rather than based on the "highest and best use," or market value of the property. The Tax Expenditure Report (2014) provides no estimate of the foregone revenues due to PA490, so there is no comprehensive estimate of the foregone revenues involved with this policy. Case studies of the assessment effects of PA490 in two communities are provided later in this section.

²⁴ Source: Pinho (2012).

²⁵ Source: http://www.lincolnst.edu/subcenters/significant-features-property-tax/Report_Residential_Property_Tax_Relief_Programs.aspx

By taxing rural land based on its current use rather than on the basis of its market value, use-value assessment (UVA) confers substantial tax reductions for some properties, but may have little impact for others. We would expect that near urban areas where there are competing land uses, the difference between market value and use value is large. But, in more remote rural areas lacking competing land uses, the difference may be non-existent.

This form of tax treatment was developed in the 1960s and by the 1990s it had become pervasive in the United States. Anderson and England (2014) provides a history and review of state UVA programs. Anderson, Giertz and Shimul (2015) provides analysis of the spread of this tax policy across the states.

As a form of preferential tax treatment for the agricultural, forest, marine trust, and other rural land uses, UVA has the potential to alter land use in some cases. The stated purposes of Connecticut's PA490, for example, are (a) that it is in the public interest to encourage the preservation of farmland, forest land and open space land in order to maintain a readily available source of food and farm products close to the metropolitan areas of the state, to conserve the state's natural resources and to provide for the welfare and happiness of the inhabitants of the state, and (b) it is in the public interest to prevent the forced conversion of farmland, forest land and open space land to more intensive uses as the result of economic pressures caused by the assessment thereof for purposes of property taxation at values incompatible with their preservation as such farmland, forest land and open space land.²⁶

There are no minimum acreage requirements or specific income requirements for farmland to qualify for PA490 preferential tax treatment. While evidence of *bona fide* agribusiness and farming activity is required, guidelines regarding such evidence provide a wide degree of latitude for the assessor to consider.²⁷

A conveyance tax is applied to landowners who sell land enrolled in PA490 for development purposes within ten years of initial enrollment of the land. The tax is 10 percent for land withdrawn in the first year after enrollment, declining to one percent in the tenth year. There is no conveyance tax after the tenth year.²⁸

Table 1 reports the recommended land values applied under PA490 for various types of land. Tillable types of land of with declining qualities are listed as types A through D, followed by orchard land, pasture land, swamp, and forest land. The table makes a distinction between statewide values and values in the River Valley which is generally more fertile. The values listed in this table are notably low, indicating that PA490 reduces property taxes substantially.

²⁶ Connecticut Farm Bureau (2010, p.1)

²⁷ Connecticut Farm Bureau (2010, p. 11)

²⁸ Connecticut Farm Bureau (2010, p. 21)

Table 1: Recommended Land Use Values in Connecticut, 2010

Category	Statewide	River Valley
Tillable A	\$2,400	\$2,800
Tillable B	\$1,600	\$2,000
Tillable C	\$400	\$1,100
Tillable D	\$225	\$600
Orchard E	\$750	\$750
Pasture F	\$90	\$90
Swamp, Ledge Scrub G	\$40	\$40
Woodland/Forest Land	\$130	\$130

Source: Connecticut Farm Bureau (2010) Appendix D: 2010 PA 490 Land Use Values.

The income capitalization method is used to estimate use-value assessments in Connecticut, as is done in most states. As described in the PA490 manual published by the Connecticut Farm Bureau, income estimates are obtained from a survey of rental values. The average rental value for each type of land is then capitalized using capitalization rates based on several methods. The PA490 Summary Grid provided on p. 6 of that manual indicates that a capitalization rate of 12.5 percent is used to compute use value. For example, Tillable A land with average rent of \$291/acre is capitalized at a 12.5 percent rate to obtain use value of \$2,328 ($\$291/.125$).

There are two difficulties with this method of estimating use value. First, by relying on a survey of rental values, there may be a systematic downward bias in the use-value estimation. Rental values for land may be systematically lower than net incomes generated by owner-operators. Second, the capitalization rate used is biased upward which has the effect of reducing the estimate of use value. A capitalization rate of 12.5 percent in 2010 bears no direct resemblance to the actual opportunity cost of capital in that market circumstance.

The effect of these estimation methods is to produce use values that are very low, reducing the property tax base and shifting the property tax burden to other classes of property.

For perspective, the land values in Table 1 can be converted into the assumed net incomes using the traditional perpetuity formula. Using the perpetuity formula, the value of land is the annual net income generated by the land divided by the discount rate. Assuming a five percent discount rate, Table 2 converts the land values into the implied net incomes generated by each category of land. Clearly, the net incomes vary with the quality of the land and its productive capacity, but they are very low across the board.

Table 2: Recommended Land Use Values in Connecticut, 2010—Implied Net Income

Category	Statewide	River Valley
Tillable A	\$120.00	\$140.00
Tillable B	\$80.00	\$100.00
Tillable C	\$20.00	\$55.00
Tillable D	\$11.25	\$30.00
Orchard E	\$37.50	\$37.50
Pasture F	\$4.50	\$4.50
Swamp, Ledge Scrub G	\$2.00	\$2.00
Woodland/Forest Land	\$6.50	\$6.50

Source: Author's computations based on Connecticut Farm Bureau (2010)

Appendix D: 2010 PA 490 Land Use Value, and an assumed capitalization rate of 5 percent.

Comprehensive PA490 data are not readily available at the parcel level to conduct analysis of the impact of that program on tax liabilities, but two municipalities responded to the request to provide such data. The Town of Coventry and the Town of Union provided parcel-level data with both market values and PA490 assessments. In what follows, the data provided are analyzed to judge the impact of PA490 on assessed values in comparison with appraised values. While not representative, this analysis is informative.

Town of Coventry PA490 Property Tax Preference

The town of Coventry provided data for 129 properties in 2014 that benefit from PA 490 preferential tax treatment.²⁹ Analysis of these data indicates that for these properties the average percentage reduction in property tax (assessment without PA490 minus current total assessed parcel value as a percent of the assessment without PA490) is 57.14 percent. The median reduction is 51.28 percent, indicating that half of the parcels receive a reduction of at least that amount. The maximum reduction is 99.77 percent, virtually eliminating all of the property tax on that parcel. The minimum reduction is just 1.39 percent, indicating that PA490 had little impact on the assessment. These descriptive data reveal that PA490 has a highly variable effect on assessments.

In the aggregate, these parcels would have had total assessed value of \$27.9 million without PA490, but with PA490 preferential tax treatment the total assessed value is reduced to \$15.1 million. At a given mill rate, property tax revenues would be reduced accordingly. Of course, with a broader property tax base, the mill rate could be reduced with the effect that all non-PA490 properties would realize a reduction in property burden.

²⁹ Town of Coventry data provided by Tom Elsesser, Town Manager.

Town of Union PA490 Property Tax Preference

The Town of Union also provided data on the assessed and appraised values of 462 PA 490 properties classified as open space, farmland, or forestland.³⁰ The aggregate appraised value of these properties is \$51.6 million whereas the assessed value under PA490 for these properties is \$1.8 million. Most of the properties have PA 490 assessed values that are less than five percent of their appraised values. The maximum reduction in assessed value is a full 100 percent. In the aggregate, the assessed value of these properties is 3.5 percent of the appraised value.

PA 490 tax treatment is responsible for lost revenue amounting to 96.4 percent of the revenue that would otherwise have been collected on these properties. At the 29 mill rate applied in the Town of Union, the foregone revenue is \$1.4 million.

Regression analysis of the Town of Union data reveal that the assessed value per acre of land is unrelated to the appraised value per acre, as we would expect. Regression models also indicate that the assessed value per acre is significantly higher for farmland and open space, relative to forest land.

While the data on PA 490 parcels was only provided for these two towns, they are believed to be illustrative of the wide range of use-value tax preferences provided across the state. Variations from town to town are due to the urbanized nature of the towns and the prevalence of open space, farm, and forest land within their jurisdictions. Table 3 summarizes PA490 tax reductions in the Towns of Coventry and Union.

When viewed across the state geographically, PA490 is more heavily used in the northern part of the state, and is less prevalent along the shoreline (only about two percent of the land).³¹ Lebanon is the town with the highest agricultural land area, in excess of 10,000 acres, half of which is enrolled in PA490.³²

Gnedenko and Heffley (2014) have conducted empirical analysis of open space in Connecticut towns. They find that towns further from New York or Boston have more open space and lower public spending. Distance from New York and Boston also has an impact on property tax rates, with rates higher for towns further from those urban areas. This result is due to the fact that property values are lower with greater distance, so it takes higher mill rates to generate the desired level of public spending in those towns.

³⁰ Town of Union data provided by Mary Huda, Assessor.

³¹ Source: Barnes (2011)

³² Source: Barnes (2011)

Table 3: PA490 Tax Reductions in the Towns of Coventry and Union, 2014

	Town of Coventry	Town of Union
Number of parcels in data set	129	462
Average reduction in property assessment (percent)	57.1	96.4
Median reduction in property assessment (percent)	51.3	95.4
Maximum reduction (percent)	99.8	100.0
Total appraised value without PA490 (\$)	27.9 million	51.6 million
Total assessed value with PA490 (\$)	15.1 million	1.8 million
Aggregate PA490 assessments as a percent of aggregate appraised value without PA490 (percent)	54.1	3.5

Sources: Town of Coventry data provided by Tom Elsesser, Town Manager. Town of Union data provided by Mary Huda, Assessor.

PA490 Case Studies Summary

Analysis of these two Connecticut community cases indicates that PA490 provides substantial tax reductions, which then have the effect of either reducing the level or quality of public services provided or raising property tax bills for other property owners in those communities. Modifications of PA490 to target tax relief to those property owners who are intended to be beneficiaries of the policy, rather than a broad class of recipients may be needed. Furthermore, focusing PA490 tax relief to those properties that provides the greatest social benefit in terms of eco-system services may provide a more justifiable basis for the tax subsidy policy.

Alternate Forms of Tax Relief

Confronted with high property tax burdens, other states have implemented various measures in an attempt to reduce the tax burdens. In this section three alternative forms of tax relief are briefly considered.

Classification

Some states use classification as a means to reduce the property tax for a specific class of properties. For example, Nebraska has a classified system where the assessment ratio is 100 percent for all classes of property except agriculture to which it applies a 75 percent assessment ratio. In this way, the class of agricultural properties is provided a 25 percent discount. In the New England region, Massachusetts permits classification in the sense that the average property tax rate cannot exceed 2.5 percent, but commercial and industrial properties can be taxed at higher rates with residential properties taxed at lower rates.

The effect of classification is to shift the property tax burden among classes of property owners, but it does not reduce the overall burden of property taxes. Analysis of the ultimate effect of the tax burden shifts involved is complex because it is determined by the economic conditions in all of the real estate markets affected.

Assessment Limitations

Ever since the California Proposition 13 and Massachusetts Proposition 2.5 were implemented in the late 1970s and early 1980s, the use of assessment limitations has been a popular mechanism to reduce property tax burdens. Such limitations take two forms. First, they may limit the total assessment in the community. The Massachusetts Proposition 2.5 does this by limiting total assessments to 2.5 percent of property value in the community. Second, they may limit the rate of growth in annual assessments. The

Massachusetts Proposition 2.5 does this as well, limiting the rate of growth in total assessments to 2.5 percent per year. These programs do not solve the underlying problem of the rising cost of local public services, or provide a mechanism to assure adequate funding of those services. They merely limit the amount of property tax that can be raised.

The effect of assessment limitations has generally been to shift the funding of local public services to the state government. The limitations hobble local government units, constraining their revenue from the property tax. Unless state funding is provided to take up the slack, local public services must contract over time. Consequently, these programs are often coordinated with a shift in funding responsibility from local units to the state government, especially with reference to public education.

Homestead Exemptions

Homestead exemptions provide tax relief by exempting a specified portion of property value from taxation for owner-occupied homes. In this way all owner occupants gain a measure of tax relief. The magnitude of the tax relief depends on the size of the exemption. While providing relief, these programs do so without any regard for targeting the tax relief. All owner occupants are given a tax reduction—wealthy owners as well as poor owners. By providing tax relief in an indiscriminate fashion, these programs are a very expensive means of delivering tax relief to those who really need it. At the same time, wealthy homeowners fully capable of paying their property taxes are given tax relief.

Unless the homestead exemption program is state-funded, compensating local governments for the lost revenue, the local government units lose tax revenue, putting more pressure on property tax rates in order to raise adequate revenues to fund local public services.

On balance, homestead exemption programs are a highly inefficient way to provide property tax relief to those most in need. And, they do nothing to relieve the pressure on the property tax system. In fact, they generally place additional upward pressure on property tax rates.

Property Tax Deferral Programs

One of the difficulties with a property tax system is that the tax is levied on the basis of the property owner's wealth (i.e. the value of the real estate asset), whereas the tax payment comes out of the owner's income. This creates a potential mismatch between wealth and income, especially for liquidity constrained households such as senior citizens. Senior households may have paid off their mortgages long ago and own substantial real estate wealth as a result. But, in retirement their incomes may be relatively modest creating a strain to pay the annual property tax bill due on the property. The property tax system is based on ability from a property wealth point of view, not an income point of view.

While this problem may seem to be a garden variety capital markets issue, where the owner of the asset simply obtains a loan secured by the property, the problem is confounded by the fact that households differ in their ability to access credit in capital markets. Furthermore, states often wish to make it easier for property owners, not forcing them to go to the capital market. They also frequently provide below-market interest rates on deferred taxes. Of course, that involves a cost to the government.

Connecticut gives municipalities the option to defer property taxes for homeowners' principal residence. Municipalities that adopt deferral programs may defer taxes that exceed 8 percent of income. The deferred tax plus 6 percent interest is secured by a lien on the property.³³

The parameters of deferral programs differ among the states that have such programs, with some state programs being substantially more favorable to homeowners than the Connecticut program. For example, the Minnesota deferral program provides for senior citizens (at least 65 years of age) with incomes less than \$60,000 to pay 3 percent of their income for property tax, with the additional amount owed each year paid by the state. The senior citizen is given a low-interest loan by the state, secured with a lien on the homeowner's property. The interest rate is variable and capped at a maximum of 5 percent.³⁴

The relatively new North Carolina circuit breaker mechanism for senior and disabled citizens is a tax deferment program.³⁵ Property taxes are limited to a percentage of income. Eligible owners with income below the threshold have taxes limited to 4 percent of income. Taxes in excess of that amount are deferred. For owners with income above the threshold, but below 150 percent of the threshold, taxes are limited to 5 percent of income, with any excess deferred.

Circuit Breaker Tax Relief ³⁶

Connecticut currently uses two circuit breaker mechanisms to provide property tax relief, a circuit breaker for the elderly and disabled and an income tax credit for property taxes paid, as noted above. This section presents a review of the various types of circuit breaker mechanisms used by the states, and an analysis of their strengths and weaknesses. The purpose of this review is to inform the policy consideration of a comprehensive circuit breaker mechanism implemented in Connecticut. Simulation of such a policy option is included in this section.

Circuit breakers are tax mechanisms that provide income-based property tax relief for households that are overburdened with property taxes. The circuit breaker term for these mechanisms draws on the electrical breaker analogy--to provide property tax relief to households who are overburdened by their property tax bill. The distinctive element in providing property tax relief via a circuit breaker, however, is that the property tax relief falls as income rises. Hence, more general property tax relief programs such as classified property tax, homestead exemptions provided to all home owners, or use-value assessment programs for agricultural land owners, are not considered circuit breakers because they are not directly linked to the property tax paid as a share of household income.

The primary advantage of a circuit breaker approach to providing property tax relief is that state resources are targeted specifically to those who need the relief the most. A general property tax exemption would provide the same relief to all homeowners, whereas a circuit breaker can specifically target those whose property tax bills are high relative to their income. The result is that for a given amount of property tax

³³ Source: Significant Features of the Property Tax: http://www.lincolnst.edu/subcenters/significant-features-property-tax/Report_Residential_Property_Tax_Relief_Programs.

³⁴ Source: http://www.revenue.state.mn.us/propertytax/factsheets/factsheet_03.pdf

³⁵ Source: Significant Features of the Property Tax, http://www.lincolnst.edu/subcenters/significant-features-property-tax/Report_State_Summaries.aspx#residential-property-tax-relief-programs

³⁶ The material in this section is taken from Anderson (2014) with modifications.

relief provided by the state (\$100 million, say), more substantial relief for those who need it most can be provided using a circuit breaker. Alternatively, we can say that the circuit breaker is a less expensive way to provide property tax relief because it does not waste relief on those who do not need it. Of course, defining need is a central issue in the design of any circuit breaker mechanism.

The majority of circuit breaker programs in the United States are focused on providing relief to elderly homeowners and renters. Table 4 lists the state funded circuit breakers by type of coverage. Twenty-one states, including Connecticut, provide relief to the elderly only. Beyond coverage for the elderly, another thirteen states (including the District of Columbia) provide relief to homeowners and renters of all ages. There are seventeen states without any form of state-funded circuit breaker property tax relief.³⁷

Recent studies of circuit breakers include Anderson (2005), Augustine et al (2009), Bell et al (2010), Bowman (2008), Bowman et al (2009), Langley (2009), and Lyons et al (2007).

Table 4: State-Funded Circuit Breakers in the United States

Type of Coverage	States
Elderly only (21)	Arizona, California ^a , Colorado, Connecticut, Idaho, Illinois, Iowa, Kansas, Massachusetts, Missouri, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, Pennsylvania, South Dakota, Washington, Wyoming, Utah
All ages (13)	District of Columbia, Hawaii, Maine, Maryland, Michigan, Minnesota, Montana, New Hampshire, New Jersey, New York, Rhode Island, Vermont, West Virginia, Wisconsin
No circuit breaker (17)	Alabama, Alaska, Arkansas, Delaware, Florida, Georgia, Indiana, Kentucky, Louisiana, Mississippi, Ohio, South Carolina, Tennessee, Texas, Virginia

Notes: (a) California suspended funding for its circuit breaker in 2008 due to the severe state fiscal crisis. (b) Virginia permits local governments to implement and fund their own circuit breakers. Source: Bowman et al (2009) supplemented by data in Significant Features of the Property Tax (2013).

Circuit Breaker Features

A variety of circuit breaker mechanisms are used in the United States. In this section the various types of circuit breakers are presented based on their differing design features.

³⁷ Some states, notably Virginia, permit local governments to implement and fund their own circuit breakers. Table 4 lists state-funded circuit breakers, so Virginia is listed as having no state-funded circuit breaker.

Circuit breakers can be classified by type: threshold type (single, or multiple), sliding scale type, or hybrid and quasi type. Table 5 provides a taxonomy of circuit breakers describing each type. Langley (2009) reports that for elderly homeowners and renters in 2008 five states used a single threshold circuit breaker, 9 states used multiple thresholds, 10 used a sliding scale type of circuit breaker, 7 states applied quasi circuit breakers, and 3 states employed a hybrid form of circuit breaker. Allen and Woodbury (2006) provide a good overview of circuit breakers and a case study of the Maine circuit breaker expansion that took place in 2005. It should be noted, however, that since that time Maine has significantly reduced its state property tax relief. Table 6 lists the primary type of state-funded circuit breaker used by states for both elderly and non-elderly homeowners.

Threshold-type circuit breakers define a level of property tax relative to income and then provide tax relief for all or a portion of the property taxes in excess of that threshold. Advocates of this type of circuit breaker promote the view that taxpayers should not have to pay more than a maximal amount of income in property tax. Above that level, relief is provided. Critics of this type of circuit breaker argue that homeowners with more expensive homes should pay more tax, even after the relief provided by the circuit breaker. Homeowners in communities that choose to provide high levels of public services, and consequently have high property taxes, should have to bear the burden of the higher tax rates and not be held harmless by a threshold type circuit breaker.

Sliding-scale type circuit breakers, as used in Connecticut, provide property tax relief based on the income of the taxpayer, with the amount of relief declining as income rises. This type of circuit breaker provides tax relief for low-income homeowners without leveling the net tax burden relative to income, thereby retaining (although muting) difference across communities due to voter choices regarding public services. Advocates of this form of tax relief argue that the differences in housing markets and public service levels are maintained with this mechanism, unlike the threshold-type circuit breakers.

Table 5: Circuit Breaker Taxonomy

Type of circuit breaker	Comments
Threshold type	This is the classic type of circuit breaker, providing relief when the property tax burden exceeds a threshold level, relative to household income
<i>Single threshold</i>	When property tax relative to income rises above the threshold, the circuit breaker trips and property tax relief is provided
<i>Multiple threshold</i>	Adds progressivity to the circuit breaker mechanism by providing more generous relief at lower income levels or at higher threshold levels of property tax relative to income

Sliding scale type	Income brackets are specified with all qualifying households in each bracket eligible for a given percentage reduction in property taxes, regardless of the size of their property tax bill
Hybrid and quasi type	Hybrids combine elements of threshold and sliding scale mechanisms. Quasi circuit breakers typically use multiple income brackets to provide benefits that decline as income rises. But, benefits are generally not related to actual property tax liabilities.

Source: Adapted from Bowman et al (2009).

Table 6: Types of State-Funded Circuit Breakers used by States

Type of circuit breaker	States using this type of circuit breaker for elderly homeowners	States using this type of circuit breaker for non-elderly homeowners
Single threshold type	(6) Hawaii, Illinois, Maine, Massachusetts, Oklahoma, West Virginia	(4) Hawaii, Maine, Michigan, West Virginia
Multiple threshold type	(10) District of Columbia, Maryland, Michigan, Missouri, Montana, New Mexico, North Carolina, Rhode Island, Wisconsin, Vermont	(5) District of Columbia, Maryland, Rhode Island, Vermont, Wisconsin
Sliding scale type	(10) Connecticut, Iowa, Kansas, Nebraska, Nevada, New Hampshire, New Jersey, North Dakota, South Dakota, Washington	(3) Montana, New Hampshire, New Jersey
Hybrid and quasi type	(7 quasi) Arizona, California, Colorado, Idaho, Pennsylvania, Utah, Wyoming (3 hybrid) Minnesota, New York, Oregon	(0 quasi) (2 hybrid) Minnesota, New York

Source: Bowman et al (2009) supplemented by data in Significant Features of the Property Tax (2013).

Single Threshold Circuit Breaker Design

A simple single threshold type of circuit breaker usually takes the form of an income tax credit for which a taxpayer qualifies if her property tax liability exceeds a threshold share of her income. The credit is then a fraction of the amount by which the property tax exceeds the specified share of income. This type of circuit breaker can easily be implemented in Connecticut, as an adaptation of the current property tax credit.

The credit can be written as $C = a(P - bY)$ where P is the property tax, Y is income, and a , b are parameters specified by policymakers. If the property tax exceeds a threshold level of income, $P > bY$, the taxpayer qualifies for the credit; otherwise no credit is provided. The parameter b , defines the threshold where the circuit breaker is triggered and is therefore viewed as the critical factor in determining the credit. The parameter a specifies how much of the property tax liability in excess of the threshold is covered by the credit. The polar case for the parameter a is a credit that provides relief for all

property taxes paid in excess of the threshold level: $a = 1$. In that case the credit pays the entire property tax bill in excess of the threshold level of income. While states vary widely in their credit mechanism specifications, as reported in Lyons et al (2007), the parameter b is often in the range of .03 to .05 and the parameter a is often .50 to .75. States may also set a cap for the credit, limiting the credit to a maximum amount.

Consider an example where policymakers specify the credit as 50% of the property tax paid in excess of 5% of income, subject to a cap of \$1,000. In that the credit can be written as, $C = .5(P - .05Y)$. The taxpayer qualifies for the credit if her property tax bill exceeds 5 % of her income: $P > .05Y$. A qualifying taxpayer then receives a credit of one-half of the amount by which her property tax exceeds 5% of her income, up to a maximum of \$1,000.

Policymakers may make the credit more generous by (1) making the threshold easier to reach, (2) by making the credit a larger share of the property tax in excess of the threshold, or (3) increasing the credit cap. All of these actions increase the property tax relief cost to the state, however. It should be recognized that all three ways to make the credit more generous also have the effect of lowering the taxpayer net cost of an additional dollar of property tax, and do so for more taxpayers by the first method. This may have the unintended consequence of encouraging recipients to support additional increases in the property tax rate.³⁸

Alternative Circuit Breaker Designs

The single threshold circuit breaker discussed above is the classic circuit breaker, but there are alternative mechanism designs for providing property tax relief used by states, as indicated in Table 6. In this section we briefly discuss multiple threshold and sliding scale circuit breaker designs.

Multiple threshold circuit breakers allow for more progressive tax relief. As income rises, the size of the property tax credit is scaled down and eventually disappears. With this type of circuit breaker, as income increases the level of property tax burden relative to income where tax relief is provided also increases. Progressivity is provided with a lower threshold level of property tax burden for low income households than for high income households

Sliding scale circuit breakers have income brackets that are specified with all households in the group eligible for tax relief (e.g., elderly owners, owners of all ages). In each bracket of the circuit breaker mechanism tax relief is a given percentage reduction in property taxes, regardless of the size of the homeowner's property tax bill. The sliding scale form of circuit breaker provides property tax relief based on income with the explicit intention of leaving remaining differences across taxpayers in place. Those differences may be due to individual choices regarding the amount of housing to consume, or may be due to differences in voter preferences for public services.

The Appendix provides additional information on the design of multiple threshold and sliding scale circuit breaker mechanisms.

³⁸ Bell and Bowman (1987) document such an effect in Minnesota.

Hybrid or Quasi Circuit Breakers

Hybrid forms of circuit breakers combine elements of threshold and sliding scale mechanisms. Quasi circuit breakers typically use multiple income brackets to provide benefits that decline as income rises. But, in this case the benefits are generally not related to actual property tax liabilities. For example, the Idaho quasi circuit breaker provides tax relief based on the taxpayer's income, but the tax relief is not based on the property tax paid by the homeowner.

Relief is provided based on the taxpayer's income, often finely tuned to income scales. Bowman et al (2009) report the number of income brackets for several state quasi circuit breakers as follows: Arizona 21, California 38, Idaho, 36, Pennsylvania 4, Utah 7. In the case of Idaho, the 36 income brackets range from a minimum of zero to a maximum of \$28,000 of income. The number of brackets for Colorado and Wyoming is determined by formula and is, therefore, effectively infinite.

Circuit Breaker Design Considerations

Design of a circuit breaker mechanism first requires a decision on whether to level the property tax share of income for recipients, in which case the threshold-type program is appropriate, or to leave property tax differences in place and simply provide relief for the low income homeowners, in which case a sliding-scale program is appropriate.

The second step in circuit breaker program design is to make a decision regarding what it means to be over-burdened by the property tax. In what follows we will emphasize the threshold-type circuit breaker program for illustrative purposes, although we will also comment on sliding scale programs where appropriate.

With a threshold-type circuit breaker the key issue is to specify a threshold share of household income spent on property taxes, beyond which the taxpayer is considered overburdened by the tax. Hence, property tax relief is provided to only those taxpayers whose property tax bill exceeds a specified percentage of their income. For this purpose, the definition of income should be very broad in order to make the circuit breaker as fair as possible. For example, if a narrow definition of income were used that included only wage and salary income, as is used for the payroll tax, then very wealthy taxpayers whose primary source of income is interest income or dividends could qualify for property tax relief when such taxpayers do not really need that relief. States using an income tax credit to administer their circuit breaker should use the broadest measure of income reported on the state income tax form (e.g. adjusted gross income, AGI, from the federal tax return) and should also require taxpayers add other income sources as well. For example, tax-exempt municipal bond interest should be included. This is critical to assuring equity in the program, treating equals (in regards to income levels regardless of income sources) equally. Issues of equity related to in-kind, barter, and informal market income are also important to consider and provide additional reasons to define the income measure as broadly as is feasible.

In addition, the size of the credit, refund, or direct tax property tax reduction must be specified. Policymakers must determine how much of the property tax paid in excess of the threshold level of income should be refunded. While it might be tempting to refund all of the excess, there are several considerations to examine. First, the higher the share of the excess refunded the more expensive is the circuit breaker program. The state must pay for the property tax relief and the more generous the circuit breaker formula, the more expensive is the program. Second, it is important to consider how the circuit

breaker mechanism may affect incentives. The more generous the circuit breaker, the lower the cost of additional local public services to program beneficiaries.

Taxpayers qualifying for the circuit breaker tax relief may therefore have an incentive to vote in favor of additional local property taxes because their tax price is being reduced. That is, the effective price paid for an additional dollar's worth of public spending is less than a dollar due to the way the circuit breaker returns a portion of the property tax paid for that service. In addition, a more generous program may lower the tax price of public services for a larger share of the electorate. While the demand for local public services may not be highly responsive to the tax price, it is nevertheless important to be cautious about making the tax price of additional services low via a circuit breaker.

With a sliding-scale type of circuit breaker program, it is necessary to determine the income levels at which homeowners will receive relief and how that relief will decline and taper off at higher income levels. The income levels, number of income brackets, and the phase-out mechanism are critical design issues to be determined.

Additional Circuit Breaker Design Issues

Non-elderly coverage: States must consider whether they want to provide property tax relief only for elderly households, or to include low income non-elderly households in their circuit breaker program. There is often a presumption that elderly households are living on fixed incomes and therefore need some form of property tax relief. That generalization is not fully accurate, however, as there are wealthy elderly households as well. A political decision to provide relief for all elderly households may therefore include non-deserving wealthy households. Furthermore, states sometimes include disabled, blind, veteran, and other categories of non-elderly households in their circuit breaker coverage due to policy concerns. If the primary policy objective is to provide property tax relief to those who are overburdened, then the only factors considered should be property tax liability relative to a broad measure of income.

Renter coverage: Another policy issue to consider is how to include renters in the property tax relief program. While the landlord technically pays the property tax to the local government units, the effective burden of the property tax is often passed on to the renters. Hence, many state circuit breakers include renters who are able to count a certain percentage of their annual rent as property tax paid. States use percentages from 15 to 35% as their assumed proportion of rent paid that is effectively property tax paid by the renters. Bowman et al (2009) have reviewed the data and suggest that these percentages are probably too high, overstating the extent to which renters are actually paying property taxes.

Income ceiling: The maximum income level at which homeowners may receive circuit breaker tax relief is an important design issue. Bowman et al (2009) indicates that 22 of 34 states (including the District of Columbia) with circuit breakers have income ceilings below \$40,000. As a consequence, the property tax relief is targeted to relatively low income households in these states. Other states with higher income ceilings provide tax relief to a wider range of households across the income distribution. Tax relief is provided in a less progressive manner the higher the income ceiling. Most of these income ceilings are not indexed for inflation, but should be.

Credit cap: In order to limit the cost of a circuit breaker program, the state may wish to cap the size of credit that any individual taxpayer may receive. A cap on the credit effectively overrides the circuit breaker mechanism, limiting the amount of property tax relief provided regardless of the program's other

design features. A credit cap limits relief to any one claimant and thereby avoids the problem of giving too much tax relief to owners of very large or very valuable properties.

Refundable credit: If the circuit breaker tax relief is provided via state income tax credit that is fully refundable, a taxpayer who has zero income tax liability can still receive the full amount of the property tax credit. That makes the income tax more progressive than it would be otherwise. In fact, for states with a flat rate income tax, the presence of a circuit breaker can make the tax progressive (in addition to other income tax features such as its personal exemptions and standard deduction). Some states choose to keep the circuit breaker tax relief distinct from the state income tax, avoiding potential confusion on the part of taxpayers. States without an income tax must design their circuit breakers to operate independently.

Capitalization: To the extent that a circuit breaker mechanism lowers property tax burdens generally in a local government jurisdiction, we can expect that the tax relief may be at least partially capitalized into higher property values (assuming the tax relief is continuing or permanent).³⁹ That provides a one-time increase in wealth for current property owners who benefit from the tax relief. Subsequent buyers of homes pay prices that presumably take the property tax relief into account so there is no effect for them. If the tax relief is more highly targeted to a relatively small number of individual homeowners in need of relief, however, there is little likelihood of a capitalization effect. This is the case of a circuit breaker mechanism targeted to the elderly, for example.

Who pays the tax? Circuit breaker mechanisms can be either state funded or locally funded. With state-funded circuit breakers the state government pays for the property tax relief provided. In the case of a circuit breaker administered as an income tax credit, for example, the property owner first pays the full property tax bill to the local government units levying a property tax and then receives a credit from the state government providing property tax relief. With this mechanism the local governments receive the full amount of property tax due and the state pays the cost of tax relief independently of the local units. Administratively, this is a clean mechanism.

When is the credit received? One potential problem with implementation of circuit breaker mechanisms is that the property owner must pay the full tax bill and only later receive the tax relief. This is a *back-loaded* mechanism in terms of providing tax relief. Various mechanisms for *frontloading* the tax relief are possible, although they are administratively more difficult. Some states provide a credit against the next year's property tax bill, for example. With a locally funded circuit breaker, the local government units that levy the property tax provide direct relief to qualifying homeowners or renters. But, in this case, they do not receive any payment from the state government to make them whole. The loss of property tax revenue due to the circuit breaker mechanism must be made up in some other way. Generally speaking, the local government units are most likely to spread the property tax burden over the remaining property taxpayers by raising property tax rates, thereby shifting the tax burden to them.

Incomplete coverage: Another problem with circuit breaker forms of tax relief is the issue of potentially incomplete coverage. Experience shows that not all eligible households receive tax relief via circuit breakers. In the case of the circuit breaker mechanism designed as a state income tax credit, for example,

³⁹ Evidence on tax capitalization is mixed, with most studies indicating partial capitalization, not complete capitalization. The reasons for partial capitalization may include uncertainty regarding the permanence of the tax program, or sources of market failure.

receipt of the tax relief requires filing a state income tax return. Even though the credit may be fully refundable, as in Michigan, taxpayers with no income tax liability may not file a return and therefore they forego the property tax relief to which they are eligible. In other cases where the circuit breaker is administered via the local assessor's office, tax relief still requires an application process. Consequently, some taxpayers deserving of tax relief get none. Public awareness programs may improve coverage, but there is still likely to be incomplete coverage due to barriers in the administration of the program. In comparison, a property tax exemption may provide more complete coverage.

Circuit Breaker Administration

There are three mechanisms used by states in administering their circuit breaker programs: direct rebate checks, income tax credits, and property tax exemptions or credits. Table 7 illustrates the states using each approach and summarizes some of the policy concerns associated with each approach (listed in the three columns of the table).

A direct rebate check is provided by seventeen states. This mechanism requires an independent mechanism (separate from the state income tax) by which taxpayers document their income and property tax bills. This mechanism may be administered at either the state or local level, but requires taxpayers to submit tax return information and property tax bill information. While any circuit breaker mechanism requires both income tax and property tax data for implementation, mechanisms of delivery other than a state income tax credit require this information and an independent administration system. In the case of a rebate, the state must create an independent rebate administration mechanism. Notably, the states without a broad based personal income tax (New Hampshire, Nevada, South Dakota, and Wyoming) administer their property tax relief in this way.

Configuring the property tax relief as an income tax credit, as is done by eleven states and the District of Columbia, eliminates the need for an independent mechanism, but that advantage is counterbalanced by the experience that such a mechanism results in poor awareness among taxpayers that the state is providing local property tax relief. Also, an income tax credit mechanism provides back-loaded relief, requiring the taxpayer to first pay the entire property tax bill and only later receive an income tax credit. Methods of front loading the credit are possible but require more complex administrative processes.

With this and other circuit breaker mechanism designs, taxpayers may or may not recognize that they are receiving property tax relief. Of course, policymakers want taxpayers to know that their property taxes are being reduced. Hence, mechanisms that make that clear to taxpayers are generally preferred. The only potential problem with that recognition, however, is that there may be an incentive for recipients to vote in favor of higher local property taxes as they realize the marginal tax prices of public services is being reduced.

Finally, a property tax exemption or credit mechanism is provided by ten states. This mechanism requires that taxpayers document their income to the local assessor or other administrative officer. The advantages of this approach include the fact that the local government unit already has the property tax information and delivery of the property tax relief in this form may make it more apparent to the taxpayer that relief is being provided. If the mechanism is state funded, it also requires that the state have in place or create a mechanism by which it can reimburse local government units for the lost property tax revenue.

Regardless of the mechanism used, with a state-funded mechanism the state is placing itself in the role of providing a degree of local property tax relief. Consequently, policy decisions regarding the circuit breaker mechanism should be made taking into account the larger context of the state's method of distributing other forms of aid to local governments. Grants to local governments, revenue sharing formulas, and state aid distribution mechanisms are other methods by which the state provides assistance to local government units. These mechanisms alter the local governments' needs for tax revenue, including property tax revenue. In the case of a state-funded circuit breaker, the state is also stepping in to alter the local property tax burden, if only for a select number of program recipients. Hence, a wider view of the entire array of intergovernmental transfers may be useful.

Table 7: Administrative Mechanisms

	Direct rebate check	Income tax credit	Property tax exemption or credit
States using this approach	California, Colorado, Connecticut (R), Illinois, Iowa (R), Kansas, Maine, Maryland (R), Minnesota, New Hampshire*, New Jersey, Nevada*, Oregon, Pennsylvania, South Dakota*, Vermont (R), Wyoming*	Arizona, District of Columbia, Massachusetts, Michigan, Missouri, Montana (E), New Mexico, New York, Oklahoma, Rhode Island, Wisconsin, West Virginia	Connecticut (O), Idaho, Iowa (O), Maryland (O), Montana (D), Nebraska, North Dakota, Utah, Vermont (O), Washington*
Administrative concerns about this approach	<ul style="list-style-type: none"> • Requires an independent mechanism by which taxpayers document their income and property tax bills • State must create an independent rebate administration mechanism 	<ul style="list-style-type: none"> • Awareness among taxpayers that the state is providing property tax relief tends to be low • Cannot be used by states with no income tax • Back loaded tax relief 	<ul style="list-style-type: none"> • Taxpayers must document their income to local assessor or other administrative officer • State must create mechanism by which to reimburse local government units for lost property tax revenue

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Notes: R indicates program applies to renters, O indicates program applies to owners, D indicates program applies to under 62 and disabled veterans. * indicates that the state has no broad based personal income tax.

Sources: Lyons et al (2007), Significant Features of the Property Tax (2011), and Bowman et al (2009) Tables 6.1 and 6.2.

Benefits, Costs, and Distributional Consequences of Circuit Breakers

Benefits

The direct benefits provided by a circuit breaker mechanism are measured in terms of the amount of property tax relief given to needy recipients. With circuit breakers, the benefit is simply the reduction in property taxes for low income households, reducing their tax burden. That may enable homeowners to remain in their homes when otherwise they would have been forced out due to high property tax burdens relative to their incomes. For renters qualifying for a credit, their after-tax income rises, enabling them to afford other necessities.

Since the tax relief is typically state-funded, the state government bears the burden of providing local property tax relief. Local government units are held harmless in the sense that they derive the full amount of property tax that their local rates would generate given the tax base. The state either provides the tax relief to needy homeowners and renters independently of the local tax administration mechanism (as with a credit applied via the state income tax) or reimburses the local government units if the relief is administered locally.

Indirect benefits may also be recognized, beyond the value of the direct property tax relief provided, but they are difficult to measure and quantify. For example, the benefit of enabling an elderly homeowner to stay in her home and afford her property tax payment is a very real benefit. Yet, it is difficult to know exactly how many recipients are able to stay in their homes due to the circuit breaker relief provided. We cannot assume that this is the case for all recipients. Glaeser and Shapiro (2003) find, for example, that there are externalities associated with homeownership that may justify subsidies. They find that homeownership is associated with political activism, social connection, increased home maintenance and gardening, among other factors. Evidence of the economic effect of homeownership on others is captured in their finding that a 10% increase in homeownership is associated with a 1.5% increase in home prices. That is, people seem to be willing to pay more to locate near homeowners. If homeownership creates these positive benefits for others in a community (besides the private benefits provided to the homeowner directly), and if a circuit breaker mechanism to provide property tax relief helps people become or remain homeowners, then there are indirect benefits to recognize.

Of course, there are other mechanisms available for homeowners to be able to stay in their homes despite the need to pay property taxes when their incomes are low. Many elderly homeowners have substantial home equity built into their portfolios, which they can draw upon to pay living expenses including

property taxes. Reverse mortgages allow homeowners to extract a portion of their wealth tied up in their homes without having to sell or move. Until recent years the reverse mortgage market was not very active, but in the past several years it has seen a substantial increase in activity (Shan 2011).

Costs

The direct cost of a circuit breaker mechanism is foregone state income or local property tax revenue. In addition, there is also the cost of administering the circuit breaker program. No matter what the delivery mechanism, any income-based method of providing property tax relief has an administrative cost. The size of that administrative cost depends on the delivery mechanism. Furthermore, the answer to the question of who bears that cost depends on the mechanism used. State-funded relief provided by way of an income tax credit, for example, increases the cost of administering the state income tax system. That additional cost is borne by the state tax administration. On the other hand, a local government method of delivering non-state funded property tax relief imposes additional costs on the local government units (typically municipalities and counties) that administer the program. In addition, the circuit breaker claimants bear a compliance burden.

Indirect costs also arise with a circuit breaker mechanism. To the extent that the property tax burden is partially shifted to other tax bases and therefore to other taxpayers, the higher tax rates that result bring with them additional excess burdens. The excess burden of a tax is the efficiency cost of the tax, in terms of how much it distorts economic decisions, over and above the revenue it raises. The marginal excess burdens created due to higher alternative tax rates necessary to raise revenue (assuming those taxes are applied to more elastically demanded or supplied goods than the land and structures property tax base) is a very real cost for the economy, but it is difficult to precisely identify and measure this cost.

Distributional Consequences

Because circuit breakers provide tax relief that is tied to household income, the usual presumption is that the distribution of benefits is progressive, making the property tax less regressive. That is, the circuit breaker provides proportionally more tax relief to low income households than to high income households. But, the actual distribution depends crucially on the definition of income used in the circuit breaker program. If adjusted gross income (AGI) or taxable income (TI) are used from the taxpayer's federal income tax form, important sources of income are likely to be missing resulting in a narrow income measurement and thereby less assurance that the program is benefitting truly low income households. Furthermore, the extent to which the circuit breaker has a progressive impact on the overall tax structure of a state depends on whether the circuit breaker is state funded or locally funded. It also depends on the replacement revenue used to fund local public goods and services, e.g. sales or income tax revenue (so the differential incidence matters). Policymakers designing circuit breakers must take these distributional considerations into account. In this section we briefly discuss these issues.

Table 8 illustrates Langley's (2009) simulated single threshold circuit breaker and its distributional properties. The mechanism simulated here is a single-threshold circuit breaker that provides a benefit of 100 percent of the property tax paid in excess of 5 percent of household income. Moving up the income distribution from the first decile (bottom 10%) to the top decile (top 10 %) in the table, the percentage of households that are eligible to receive circuit breaker benefits falls from about 80% to about 9%. Median

benefits provided by the circuit breaker vary as you move up the income distribution. The median amount is \$860 in the first decile, falls to a low of \$645 in the third decile, and then rises to a maximum of \$3,117 in the top decile. This distributional pattern is due to the way that housing expenditures, and thereby property taxes, vary with income. It should be noted, however, that the benefit *as a share of income* generally falls as you move up the income distribution (from the fourth decile up).

One feature to note in Table 8 is the distinction between owners and renters. At lower income levels, a larger share of renters is eligible for the circuit breaker. Owners typically receive larger benefits, however. Of course, this pattern depends crucially on Langley's circuit breaker design. His simulated mechanism provides a benefit of 100% of the property tax paid in excess of 5% of household income. In terms of the single threshold mechanism design the credit provided is $C = P - .05Y$. He also simulates a multiple threshold mechanism, a sliding scale program, and a fixed homestead exemption. Each form of property tax relief has a distinct set of distributional characteristics depending on the parameters of the mechanism. In general, however, we can say that a multiple threshold circuit breaker can be made to be more progressive than a single threshold mechanism. By defining multiple thresholds and allowing the parameters to vary with each threshold, policy makers can build more progressivity into the circuit breaker mechanism. In this way, a given amount of state funding for property tax relief can be more specifically targeted to households needing that relief. Similarly, a sliding scale mechanism can be made highly progressive. The least progressive tax relief mechanism (not a circuit breaker) is a simple homestead exemption of a fixed amount of property value.

A crucial factor to consider in a more in-depth policy analysis is the replacement, or non-replacement of lost revenue. If a circuit breaker is not state funded, the local government units must replace the lost revenue with other local own-source revenue. In the State of Indiana, for example, local income and sales taxes are permitted precisely to fund property tax relief. The remaining property owners bear the burden of locally provided property tax relief, so there is a resulting tax redistribution occurring that needs to be considered and estimated. All remaining property owners bear the cost of the program through higher rates than they would otherwise have to pay. The extent of that redistribution depends on the generosity of the circuit breaker program and the precise means by which the replacement revenue is defined. If the replacement revenue comes solely from residential property owners, for example, the distributional impact will be different than if the replacement revenue comes from all property owners, including agricultural, industrial and commercial property owners. Redistribution of tax burden across classes of property creates great difficulty in estimating the distributional impact of a circuit breaker program.

Table 8: Simulated Eligibility Rates and Median Benefits by Income Decile for a Single-Threshold Circuit Breaker

Income Decile	Income Range (\$)	Percent of Households Eligible for Benefits (%)			Median Benefit (\$)		
		Owners	Renters	Total	Owners	Renters	Total
1	Up to 11,900	68.6	86.3	79.5	955	832	860
2	11,901 to	51.8	79.8	66.0	905	590	672

	20,190						
3	20,191 to 29,160	41.8	61.6	50.4	945	484	645
4	29,161 to 38,000	34.6	41.5	37.3	975	452	680
5	38,001 to 48,100	28.1	26.0	27.4	1,010	515	830
6	48,101 to 60,000	23.7	17.3	21.9	1,095	580	945
7	60,001 to 74,100	18.7	11.3	17.1	1,200	575	1,050
8	74,101 to 94,000	15.9	7.5	14.5	1,425	730	1,330
9	94,001 to 130,000	14.5	4.7	13.3	1,525	795	1,500
10	Over 130,001	9.6	1.1	8.9	3,225	660	3,117
Total		26.6	49.2	33.7	1,100	625	820

Source: Langley (2009) Table A.1. Notes: (a) the income measure used in the Langley (2009) study is that contained in the American Community Survey (ACS). Survey respondents are asked to report wages, salary, commissions, bonuses, or tips from all jobs. In addition, they are asked to report self-employment income, interest, dividends, net rental income, royalty income, income from estates and trusts, social security or railroad retirement income, supplemental security income payments, public assistance or welfare payments, retirement, survivor or disability pensions, and other income. (b) Langley (2009) used the 2006 ACS data.

The ultimate distributional consequence of a state-funded circuit breaker program depends on the source of replacement revenue used. If the replacement revenue comes from the state's general fund sources, then the distributional impact will be linked to the state's major general fund revenue sources. Those sources are most often the state income tax and/or state sales tax, or fees/user charges. In most cases the state sales tax is less progressive (or more regressive) than the state income tax.

Estimating Tax Expenditures for Circuit Breakers

There are two ways for a government to spend money: directly via appropriation and indirectly through the tax code. When expenditures are made indirectly through the tax code, those expenditures are called tax expenditures. In the case of expenditures to assist homeowners or other property owners to pay their local property tax bills, it may be appropriate to estimate the foregone revenue as a tax expenditure and list it in the state tax expenditure report. Typically, a state tax expenditure report will only include estimates of state-level tax expenditures, not local government tax expenditures.

As explained in Poterba (2011) and Altshuler and Dietz (2011), the first step in estimating tax expenditures is to define what is normal in a tax system. With the property tax system, in particular, it is necessary to define what is normal in order to estimate the foregone revenue arising from deviations away from normal. If we begin with the widest possible definition of the tax base, we would include all property value in a state. Any exemptions would be the first form of tax expenditure, whether the exempt property is owned by the federal government, state government, other government units, or other tax exempt entities (e.g. churches, private universities, etc.) Partial exemptions such as homestead exemptions would also be considered tax expenditures. Beyond that, any property classification providing lower rates or reduced measures of value would be considered tax expenditures. Finally, circuit breakers or other forms of reduced property taxes would be considered tax expenditures.⁴⁰

If the circuit breaker program is state funded, the state budget may list the cost of the program directly, not necessarily in the state tax expenditure report. Circuit breakers that are not state funded, however, involve revenue losses for local government units and are therefore not generally reported in state budgets or state tax expenditure reports.

Unfortunately, the estimation of tax expenditures is fraught with complexity and subject to substantial uncertainty. This is due to both the fundamental question of tax system definition (i.e., what is normal) and the inherent problem of estimation of taxes not collected. Nowhere is this truer than in the realm of property taxation.

Bowman et al (2009) report that in 2008 there were 14 states that provided easily accessible data on circuit breaker tax expenditures. Based on that data, Table 9 provides an overview of the cost of state circuit breakers for a selected set of states. The largest circuit breaker, in terms of the number of homeowners and renters covered, is that of Michigan which provides tax relief to nearly 1.5 million. The most generous circuit breaker programs, in terms of the average benefit, are those of Maryland (all ages) at \$851 and Vermont at \$712. The most expensive program, in terms of the aggregate amount of tax relief provided, is that of New Jersey which spends approximately one billion. Even the most generous circuit breakers, however, provide tax relief that is a relatively small fraction of the total property tax collected in the state. Michigan's program has a cost that is 6.27% of the total property tax collected in that state while New Jersey's program costs 5.20%. The other states listed in Table 9 have program costs that are in the general range of 1%-3% of the property tax collected in the states.

⁴⁰ For more general recommendations on tax expenditure estimation see Connolly and Bell (2011) and Ladd (1994).

Table 9: Reported Cost of State-Funded Circuit Breakers, Selected States

State	Year	Eligibility	Number of Beneficiaries	Estimated Average Benefit (\$)	Cost of Total Program (\$ million)	Program Cost as a Percent of Total Property Tax Collected
MA	2006	65+			29.8	0.28
MD	2006	All ages/60+	56,818	851/265	42.5	0.71
ME	2006	All ages	92,000	443	42.8	1.94
MI	2010	All ages	1,488,757	544	809.4	6.27
MN	2006	All ages	301,406	630	190.0	3.56
MT	2005	62+	24,424	474	11.6	1.16
NJ	2006	All ages	1,106,871	966	1,069.0	5.20
NM	2005	65+	20,228	193	3.9	0.45
NY	2005	All ages	275,000	109	30.0	0.09
OK	2006	65+			0.1	0.004
PA	2007	65+	417,052	489	203.8	1.43
RI	2007	All ages	50,964	277	14.1	0.75
VT	2005	All ages	34,534	712	30.3	2.87
WI	2006	All ages	239,546	509	121.9	1.52

Source: Bowman et al (2009) p. 20.

Circuit Breaker Administration

Direct Rebate Check

For states administering their property tax relief using a direct rebate check, the method of estimating the tax expenditure will depend on the precise mechanism employed to document a taxpayer's property tax bill and income. For example, the State of New Hampshire, which lacks a state income tax, administers its "Low and Moderate Income Homeowners Property Tax Relief" (LMIHPTR) program through the

New Hampshire Department of Revenue Administration. Applicants must complete form DP-8, a four-page tax form, and submit the form to the Department for review and approval. The form requires homeowners to report both the federal adjusted gross income (AGI) (line 10(b)) and their property's assessed value (line 12(b)). This requirement illustrates the importance of taxpayer compliance costs as well as agency administrative costs in considering a circuit breaker program. Auditing claims for LMIHPTR for fraud may be difficult in such a case. While claimants are required to submit a copy of their federal tax return, the State of New Hampshire may not have the full advantage of using IRS data for New Hampshire residents to audit claims because the IRS data exchange agreement with states specifically provides that only federal income tax data necessary to administer the state's tax laws can be shared.

Income Tax Credit

In states that administer their circuit breaker tax relief through a state income tax credit, the estimation process is relatively straightforward. The revenue department compiles income tax data on the credit claimants and sums the total of the credits provided to obtain a tax expenditure estimate. This is the way it is done in Michigan, for example, where in CY2007 there were a total of 1,482,900 recipients (general plus seniors) receiving \$844.2 million in credits (Source: Executive Budget, FY2010). The ease and accuracy with which the tax expenditure can be estimated in this way is a major advantage of this administrative form of implementation. No estimation is required. The actual credits can be summed for an accurate total. Beyond certain knowledge of the total, distributional information can also be generated to illustrate the tax benefit and its incidence across the income distribution or across geographic areas of the state. Careful policy analysis can be conducted using such data to determine whether the circuit breaker is effectively achieving its policy objectives.

Property Tax Exemption or Credit

Income-based exemptions or credits must typically be administered locally because the property tax is administered locally. Consequently, it is usually the local assessor (county or municipal) who is required to administer an income-based property tax exemption or credit program. A simple (fixed amount for all taxpayers in a specific class) exemption would be easy to administer, but when that exemption or credit is tied to an income qualification the program is much more difficult to administer locally. An income qualification requires the local property tax administrator to collect information on income, which is not normally a part of administering the property tax system. Beyond collecting income information, the local property tax administrator must be able to audit and verify income information. That may pose a substantial difficulty unless there is an agreement for the state to share income data with local governments.

In order to estimate the tax expenditure of an income-based exemption or credit program, the local tax administrators must report the number of exemptions or credits and the amounts of each to a central government authority that collects the information, aggregates the data, and conducts an analysis of the total cost of the program. The central government authority must also provide consistency checks to assure that reporting practices of local administrators are uniform. This role can be provided by the state department of revenue, treasury, or other such unit.

This overview of the mechanisms used by states to provide income-based property tax relief, commonly called circuit-breakers leads to a recommendation for Connecticut.

Simulated General Circuit Breakers for CT

The State of Connecticut already has a property tax credit mechanism on its state income tax form. Hence, the simplest and most direct type of general circuit breaker to consider implementing is an income tax credit for property taxes paid. A single-threshold circuit breaker can easily be implemented via modification of the existing property tax credit on the CT income tax.

The prototype of this type of circuit breaker is the mechanism used in Michigan. The Michigan circuit breaker provides tax relief for owner-occupiers and renters. For homesteads, the tax relief is 60 percent of the property tax in excess of 3.5 percent of total household resources, subject to a cap of \$1,200. For renters, 20 percent of rent is counted as property tax paid. Households with total resources in excess of \$50,000 are not eligible for the circuit breaker.

In order to simulate a Michigan style circuit breaker for Connecticut, American Community Survey (ACS) data is used.⁴¹ Table 10 reports the simulation of a general circuit breaker for Connecticut based on the ACS sample. Institutional and non-institutional group quarters were omitted from the data set, leaving 7,477 housing units in the sample.⁴² Family income reported in the ACS was used along with the yearly amount of property tax paid by the family.⁴³ A total of 1,063 households are eligible to receive the circuit breaker credit, with property taxes in excess of 3.5 percent of income. For those eligible, total credits of \$1.2 million are provided, out of total tax payments of \$53 million. Credits are capped at \$1,200 per household, which is a binding constraint for 830 of the 1,063 eligible households.

When the ACS sample results are weighted (using the ACS reported household weights reflecting inverses of probabilities that households are sampled) and scaled to match the Connecticut total number of households and property taxes paid, the number of households eligible to receive the tax credit is 195,409. The credit is capped for 149,937 of those households, so they receive the maximum \$1,200 credit amount. The total amount of tax relief provided is \$211 million.

Table 10: Simulated General Circuit Breaker for Connecticut, Variant 1

	Unweighted ACS sample of households	Weighted ACS sample of households	Scaled for CT
Sample size-- households	7,477	652,811	1.3 million
Households eligible for circuit breaker credit	1,063	95,208	195,176
Number of eligible households with capped	830	73,053	149,937

⁴¹ Inquiries regarding the availability of Connecticut data on household property taxes and income from the Department of Revenue Services and the Office of Policy Management proved unfruitful. Consequently, the American Community Survey (ACS) data for households in Connecticut is used in this preliminary analysis.

⁴² Group quarters are facilities such as prisons, jails, nursing homes, college dormitories, and group homes.

⁴³ The property tax data in the ACS is reported in tax bins, not in the exact dollar amounts. Consequently, the midpoint of each bin is used to represent the tax payment. The top bin is open-ended so for that bin, the mean of the bin is estimated using the Pareto probability distribution method described in Ligon (1994).

credits			
Total amount of credits	\$1.12 million	\$102.9 million	\$211.2 million
Total property taxes paid by all households	\$53.0 million	\$4.5 billion	\$9.3 billion

Source: Author's estimates using ACS sample of Connecticut families living in single-family homes. Credit design requires household income to be less than \$50,000 and for property taxes to exceed 3.5 percent of family income. Credit amount is 60 percent of the difference between property taxes paid and 3.5 percent of family income, subject to a cap of \$1,200.

Alternative variants of this type of circuit breaker can be simulated by varying the eligibility threshold, the percent of taxes in excess of the threshold, and the credit cap. Those three parameters determine the generosity of the credit and thereby the total cost of the credit to the state. A higher threshold targets the credit more narrowly to households whose property taxes are high relative to income. A larger percentage of the tax in excess of the threshold paid by the credit also makes the circuit breaker more generous. Finally, a larger cap for the credit also makes the credit more generous. For a given total cost of the circuit breaker program, analysts can scale the three credit parameters to provide targeted relief.

Table 11 reports a less generous version of a single-threshold circuit breaker for CT, where the income and tax thresholds are the same as those in Table 10, but the share of tax paid in excess of the threshold is reduced to 40 percent and the credit is capped at \$1,000. In this simulation, the number of eligible households is unchanged at 195,409, since the eligibility parameters are unchanged. The number of households receiving the capped amount of the tax credit falls to 129,202, however, because of the combination of a smaller share of tax in excess of the threshold being paid (which reduces the credit amount) and the lower cap in this simulation. The total amount of property tax relief provided in this simulation falls to \$167.8 million.

Alternative variants of a single-threshold circuit breaker can be simulated by altering not only the two parameters varied in Tables 10 and 11, but also varying the income limitation and the tax threshold. Analysts can tailor the circuit breaker parameters to suit policy objectives provided by policy makers in terms of coverage and total cost to the State.

Table 11: Simulated General Circuit Breaker for Connecticut, Variant 2

	Unweighted ACS sample of households	Weighted ACS sample of households	Scaled for CT
Sample size--households	7,477	652,811	1.3 million
Households eligible for circuit breaker credit	1,063	95,208	195,176
Number of eligible households with capped credits	715	62,950	129,202
Total amount of credits	\$920,187	\$81.8million	\$167.8 million
Total property taxes	\$53.0 million	\$4.5 billion	\$9.3 billion

paid by all households			
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Source: Author's estimates using ACS sample of Connecticut families living in single-family homes. Credit design requires household income to be less than \$50,000 and for property taxes to exceed 3.5 percent of family income. Credit amount is 40 percent of the difference between property taxes paid and 3.5 percent of family income, subject to a cap of \$1,000.

There are several advantages and disadvantages related to this approach in providing property tax relief.

Advantages:

- Tax relief is targeted to those most needing assistance, and that targeting is based on means-testing rather than other criteria
- Relief is provided regardless of other taxpayer or household characteristics (elderly, disabled, veterans, etc.), making implementation much simpler
- The circuit breaker mechanism adds a degree of progressivity to the state income tax
- The cost of the program can be determined explicitly by the state

Disadvantages:

- State revenues are required to pay for the credits, which involves using general fund revenues generated from other sources such as the state income or sales taxes
- The credit mechanism lowers the tax price of local public goods (e.g. schools) for credit recipients, which may encourage them to demand more public goods

Options for Policy Reform Consideration

Based on the review of direct property tax relief programs currently in use in Connecticut, the following policy options are suggested for the Tax Panel to consider.

- Consider replacing the current complex set of property tax exemptions and circuit breaker with a single unified circuit breaker mechanism that provides property tax relief to homeowners and renters whose property taxes are high relative to their household resources
 - Implement a single threshold type circuit-breaker credit on the Connecticut income tax which is fully refundable in order to provide targeted relief (modification of the current CT property tax credit)
 - Fund that property tax relief with general revenues generated by state income and sales taxes, as well as with increased revenues from the elimination of other relief mechanisms (e.g. State-funded exemptions, and increased revenue from tightening PA490 provisions)
- Consider tightening PA490 provisions to target tax relief more specifically to properties for which the subsidy is intended and those that provide the greatest social benefit
 - Implement an objective test for agricultural use (e.g. *de minimus* level of net income from agricultural production)
 - Rationalize use-value assessment (UVA) computation methods used—a more accurate income measure and a more realistic capitalization rate

- Ideally, move away from general tax relief for agriculture and move toward strategic use of UVA to provide tax relief for those property owners for whom it is intended and to protect and preserve land that provides ecosystem services that are a form of public good or generates positive externalities
- The Tax Expenditure Report should provide an estimate of the foregone revenue due to PA490
- Consider modifications to the current property tax deferral program
 - Reduce the threshold level of tax relative to income from eight percent to, perhaps, five percent
 - Hold local governments harmless by having the State provide a low interest loan secured by a lien on the property that pays the property tax to the local government units

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Appendix

Hartford Tax Rate History

Table A1: Hartford Tax Rate History

Tax Rate History									
Year	Mill Rate	Surcharge	Passback	Effective Mill Rate			Assessment Ratio		
				Commercial (LUC 201-583)	Residential (LUC 101-108)	Apt/Mixed Use (LUC 801-820)	Commercial (LUC 201-583)	Residential (LUC 101-108)	Apt/Mixed Use (LUC 801-820)
1975	82.00			82.00	82.00	82.00	65%	65%	65%
1976	82.00			82.00	82.00	82.00	65%	65%	65%
1977	90.90			90.90	90.90	90.90	65%	65%	65%
1978*	71.90			71.90	71.90	71.90	70%	45.8%	70%
1979	71.10			71.10	71.10	71.10	70%	47.7%	70%
1980	67.60			67.60	67.60	67.60	70%	47.1%	70%
1981	69.70			69.70	69.70	69.70	70%	45.6%	70%
1982	72.90			72.90	72.90	72.90	70%	50%	70%
1983	72.90			72.90	72.90	72.90	70%	55%	70%
1984	72.90			72.90	72.90	72.90	70%	60%	70%
1985	72.90			72.90	72.90	72.90	70%	65%	70%
1986	72.90			72.90	72.90	72.90	70%	70%	70%
1987	72.90			72.90	72.90	72.90	70%	70%	70%
1988	72.90			72.90	72.90	72.90	70%	70%	70%
1989*	34.40	0.1216	0.001739	38.58	23.17	34.40	70%	70%	70%
1990	34.40	0.1153	0.001873	38.37	23.30	34.40	70%	70%	70%
1991	34.40	0.1166	0.001885	38.41	23.31	34.40	70%	70%	70%
1992	34.40	0.1167	0.001888	38.41	23.32	34.40	70%	70%	70%
1993	34.40	0.1200	0.00196	38.53	23.39	34.40	70%	70%	70%
1994	33.40	0.1340	0.001896	37.88	22.33	33.40	70%	70%	70%
1995	32.40	0.1455	0.001971	37.11	21.40	32.40	70%	70%	70%
1996	31.40	0.1261	0.001937	36.36	20.37	31.40	70%	70%	70%
1997	29.88	0.1500	0.002458	34.36	19.37	29.88	70%	70%	70%
1998	29.50	0.1500	0.002503	33.93	19.03	29.50	70%	70%	70%
1999*	47.00	0.1500	0.007041	54.05	28.47	47.00	70%	70%	70%
2000	48.00	0.1500	0.006763	55.20	29.19	48.00	70%	70%	70%
2001	48.00	0.1500	0.007126	55.20	29.55	48.00	70%	70%	70%
2002	52.92	0.1500	0.005308	60.86	32.66	52.92	70%	70%	70%
2003	56.32	0.1500	0.003856	64.77	34.60	56.32	70%	70%	70%
2004	60.82	0.1500	0.002865	69.94	38.11	60.82	70%	70%	70%
2005	64.82	0.1500	0.00305	74.54	42.30	64.82	70%	70%	70%
2006*	63.39	0.1350		71.95	63.39	63.39	70%	38.869%	58.090%
2007	68.34	0.1200		76.54	68.34	68.34	70%	34.293%	51.011%
2008	72.79	0.1050		80.43	72.79	72.79	70%	29.666%	43.629%
2009	72.79	0.0900		79.34	72.79	72.79	70%	27.618%	40.991%
2010	71.79	0.0750		77.17	71.79	71.79	70%	26.173%	37.602%
2011*	74.29			74.29	74.29	74.29	70%	29.2%	50%
2012	74.29			74.29	74.29	74.29	70%	29.2%	55%
2013	74.29			74.29	74.29	74.29	70%	29.93%	60%

*Revaluation Years

Downtown Business Improvement District, add 1.5 Mills
(Prior to 2012 GL the rate was 1 mill)

Park Street Service District, add 3.5 Mills

Source: http://www.hartford.gov/images/assessment/documents/Historical_Tax_Rates.pdf

Uniformity Requirements

Table A2: States with Constitutional Provisions Requiring Uniform Taxation

Alabama	Indiana	Nevada	South Dakota
Arizona	Kansas	New Jersey	Tennessee
Arkansas	Kentucky	New Mexico	Texas
California	Louisiana	North Carolina	Utah
Colorado	Maryland	North Dakota	Virginia
Delaware	Michigan	Ohio	Washington
Florida	Minnesota	Oklahoma	West Virginia
Georgia	Mississippi	Oregon	Wisconsin
Idaho	Missouri	Pennsylvania	Wyoming
Illinois	Nebraska	South Carolina	

Source: Coe (2009, 159-160).

Alternative Circuit Breaker Mechanisms

Multiple Threshold Circuit Breaker Design

Multiple threshold circuit breakers allow for more progressive tax relief. As income rises, the size of the property tax credit is scaled down and eventually disappears. With this type of circuit breaker, as income increases the level of property tax burden relative to income where tax relief is provided also increases. Progressivity is provided with a lower threshold level of property tax burden for low income households than for high income households. For example, a state could specify that property tax relief is available when property tax bills exceed 3% of income for households with incomes below \$20,000, 5% of income for households with incomes between \$20,000 and \$30,000, and 7% of income for households with incomes between \$30,000 and \$40,000. The threshold percentages are applied incrementally as with a graduated income tax structure.

For eligible households with varying incomes, where the income of household i is written as Y_i , a multiple threshold circuit breaker with three income brackets, Y_1, Y_2, Y_3 , and three corresponding threshold percentages ($b_1 < b_2 < b_3$) can be written as,

$$C = a[P - b_1Y], \text{ if } Y_i \leq Y_1$$

$$C = a\{P - [b_1Y_1 + b_2(Y_i - Y_1)]\} \text{ if } Y_1 < Y_i < Y_2$$

$$C = a\{P - [b_1Y_1 + b_2(Y_2 - Y_1) + b_3(Y_i - Y_2)]\} \text{ if } Y_2 < Y_i < Y_3$$

$$C = 0, \text{ otherwise.}$$

With this type of circuit breaker, as income rises, $Y_1 < Y_2 < Y_3$, the level of property taxes relative to income needed to qualify for tax relief, $b_1 < b_2 < b_3$, increases. States can also specify the share of property tax relief above the threshold that is covered by the credit (a).

Sliding Scale Circuit Breaker Design

With a sliding scale circuit breaker, income brackets are specified with all households in the group eligible for tax relief (e.g., elderly owners, owners of all ages). In each bracket tax relief is a given percentage reduction in property taxes, regardless of the size of their property tax bill. Housing expenditures generally rise with family income, but not proportionately. Consequently, we expect that low income families will pay a larger share of family income on housing and therefore on property taxes in comparison with high income families. The sliding scale form of circuit breaker provides property tax relief based on income with the explicit intention of leaving remaining differences across taxpayers in place. Those differences may be due to individual choices regarding the amount of housing to consume, or may be due to differences in voter preferences for public services.

For example, consider a sliding scale circuit breaker with three brackets. The credit C provided is a fraction a of the property tax P paid, where the fraction depends on income Y . As income rises from zero up through Y_3 , the fraction of property tax refunded declines, with $a_1 > a_2 > a_3$. Taxpayers with income in excess of Y_3 receive no credit.

$$C = a_1 P, \text{ if } 0 \leq Y \leq Y_1$$

$$C = a_2 P, \text{ if } Y_1 < Y \leq Y_2$$

$$C = a_3 P, \text{ if } Y_2 < Y \leq Y_3$$

$$C = 0, \text{ otherwise.}$$

Chapter 4

Diversifying Municipal Revenue in Connecticut

A Report Prepared for the Connecticut Tax Study Panel

Presented November 17, 2015

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EXECUTIVE SUMMARY

This report considers revenue diversity among towns in Connecticut and provides an analysis of three policy options for increasing local revenue diversity: adoption of local sales taxes, adoption of local income taxes, and increases in fees and charges. Each of these could also reduce local government reliance on property taxes. There are other policies that could be adopted that would increase revenue diversity and/or reduce reliance on the property tax, for example, a state grant program for towns or a property tax circuit breaker. Consideration of these other options are beyond the scope of this report.

Current Environment

Towns in Connecticut are not allowed to use local sales or local income taxes, and are second to the last among all states in terms of their relative reliance on user charges and fees. The result is that local governments in Connecticut have the least diverse revenue structure of any state, and consequently rely relatively more heavily on property taxes than other states. In 2012, 88.0 percent of local government own source revenues in Connecticut were derived from property tax revenue (the highest percent of any state). Local governments in Connecticut are second to last among all states in terms of their relative reliance on user charges and fees.

Other states allow local governments to adopt local option taxes. As of 2012, local governments in 34 states relied on sales taxes. The reliance on local sales taxes varies; local sales tax revenue as a share of local tax revenue ranged from 1.6 percent to 48.5 percent. In 2012, local income taxes were imposed in 12 states; local income tax revenue as a share of local tax revenue ranged from less than one percent to 33.3 percent.

Arguments for and Against Local Revenue Diversification

The principal reasons for adopting a local option tax or increasing charges and fees are that they will diversify the local revenue structure and can reduce the property tax burden. The Advisory Commission on Intergovernmental Relations (1988) outlined several arguments supporting or justifying local revenue diversification. Allowing use of alternative revenue sources would allow towns to better capture local revenue raising capacity, would reduce reliance on the property tax, and would collect revenue from tourists and commuters who impose costs on local governments but do not pay any property taxes to the local government. There are counter arguments, the principal one being that if a local government gains access to additional revenue options, it will increase revenue, and thus expenditures, beyond what citizens truly desire; however, the empirical evidence on this possibility is mixed. In addition, property tax revenues are less cyclical than sales and income tax revenues, and the property tax base is less geographically mobile than the bases for sales and income taxes.

Policy Option: Allow Local Sales Taxes

Options for Local Sales Taxes

We considered two alternative local sales taxes, a local sales tax where the revenue collected in a town goes to that town, and a regional sales tax in which total local sales tax revenue across all towns in each of the nine planning districts (i.e., Councils of Government) is allocated to the towns in the planning district using a formula in which half of the revenue is allocated to the town from which the revenue was generated and half is allocated on a per capita basis. (Of course, there are many other options for defining regions and for allocating such revenue across towns.)

Estimated Revenue

Using estimated taxable sales by town, the estimated revenue from a one percent local sales tax, ignoring revenue from out-of-state vendors, is \$473.5 million. The available data on state sales taxes due by town do not include sales taxes collected from out-of-state vendors, which are 21.3 percent of total sales taxes due. Thus, our estimated revenues by town under estimate the likely revenue in the aggregate by this percentage. One possible objective for adopting a local sales tax is to reduce property taxes. A one percent local sales tax, if adopted statewide and used just for property tax relief, could reduce total local property taxes, including school property taxes, by about 6.1 percent on average.

Local sales tax revenue per capita by town ranges from \$5 to \$717, a result due to the large disparity across towns in sales tax base per capita. The range for the regional sales tax is from \$42 to \$230, a substantially smaller range. As expected, the regional sales tax shifts the revenue from towns with high local sales tax revenue per capita to towns with low local sales tax revenue per capita. It needs to be stressed that the estimates by town are reasonable indications of local sales tax revenue for informing state tax policy, but not for local government budget making.

Economic Effects

In considering whether to recommend allowing local governments to use local sales taxes, the following factors are relevant.

- **Effect on Total Sales**

Economic theory suggests that an increase in the sales tax rate will reduce the sales tax base since the increase in the sales tax rate is the same as a price increase. Assuming a price elasticity of 1.0, and using state sales taxes due, the local sales tax revenue from a one percent local sales tax adopted by all towns would be \$603.9 million (this includes sales taxes collected by out-of-state vendors), and state sales tax revenue would fall by an estimated \$36.4 million.

- Effect on Cross-Border Shopping

One of the effects of differential sales tax rates is on cross-bordering shopping. Studies generally find that a one percentage point higher interstate sales tax rate differential is associated with per capita sales along a state's border that are between one and 7 percent lower. Connecticut's basic state sales tax rate is currently 6.35 percent. Connecticut borders three states, New York, Rhode Island, and Massachusetts. Rhode Island and Massachusetts do not have local sales taxes; their state tax rates are 7.0 percent and 6.3 percent, respectively. Along New York's border with Connecticut, the total sales tax rates in New York are generally in the range of 8.125 percent to 8.375 percent. If Connecticut towns adopted a one percent local sales tax, Connecticut border cities would lose some sales to Massachusetts, and might experience a small drop in sales that are made to buyers from New York. One should expect a similar effect from inter-town sales tax rate differentials.

- Effect on Tax Competition

Local jurisdictions currently compete for property tax base. If local governments adopt a sales tax, one should expect that towns will compete for sales tax base as well. The difference is that the competition will be for retail facilities such as shopping centers rather than business facilities more generally.

- Effect on Fiscal Disparities

A recent report from the New England Public Policy Center at the Federal Reserve Bank of Boston (Zhao and Weiner 2015) provides an index of fiscal disparities for all Connecticut cities. The index is the difference between the cost of providing non-school public services (costs) and the economic resources available to pay for those services (capacity). There is not much of a consistent pattern between the index and either local or regional sales tax revenue per capita, although the correlation coefficients suggest that larger sales tax revenue per capita is associated with greater fiscal health. We get a similar result if we use the property tax base (i.e., Grand List) per capita rather than the index of fiscal disparities. So, it appears that neither a local or regional sales tax will on average reduce fiscal disparities between towns.

- Other Issues

If structured as an add-on to the state sales tax, the cost of administration and compliance would be small. A local sales tax would generate tax revenue from commuters and visitors, thus offsetting some of the service costs associated with commuters and visitors. Sales tax revenue are expected to be more cyclical than property tax revenues. Sales taxes are also more regressive than property taxes.

Local Revenue Diversification

Policy Option: Allow Local Income Taxes

Options for Local Income Taxes

We considered five alternative definitions of an income tax base:

- Connecticut adjusted gross income, which we refer to as the AGI Tax.
- Connecticut income tax liability, which we refer to as the Income Surtax.
- A tax on earned income imposed by place of work, which we refer to as the Payroll Tax.
- A tax on earned income split equally between place of work and place of residence, which we refer to as the Split Earnings Tax.
- A tax imposed by a town on earned income of the resident, regardless of where earned, and on earnings of non-residents working in the town, but with a credit for taxes paid by place-of-work, which we refer to as the “Residence-base Tax”.

It is also possible to adopt a regional income tax, however, we did not analyze that option.

Estimated Revenue

We selected tax rates of one percent for the taxes on earned income, 0.75 percent for the tax on adjusted gross income (AGI Tax), and 18 percent for the tax on state tax liability (Income Surtax). These rates yield similar total statewide tax revenue, namely, \$1,084.0 million.

Revenue per capita differs widely across towns; per capita revenue ranges from \$40 to \$1,773 for the AGI Tax, and from \$31 to \$1,874 for the Income Surtax. These are substantial ranges. If we don’t consider the 5 percent of towns with the highest revenue per capita and the 5 percent with the lowest per capita revenue, we find that for 90 percent of the towns per capita revenue ranges from \$120 to \$639 for AGI Tax, and from \$90 to \$705 for the Income Surtax. For most towns the revenue from the tax on AGI is similar to the revenue from the tax on tax liability.

Per capita revenue for the Payroll Tax ranges from \$22 to \$872. The per capita revenue for the Payroll Tax is positively related to AGI Tax revenue per capita, but the correlation is small, 0.27. The reason is that AGI is based on the income of the residents of a town, while the payroll tax is based on the earned income of those working in the town.

Per capita revenues for the Split Earnings Tax ranges from \$97 to \$760. For towns with low values of per capita Payroll Tax revenue, the per capita revenue for the Split Earning Tax is greater than the Payroll Tax revenue per capita. Towns with small Payroll Tax bases are likely to be residential communities so that resident earned income is likely to be larger than payroll earned income. The opposite is the case for towns with large Payroll Tax revenue per capita.

One possible objective for adopting a local income tax is to reduce property taxes. In the aggregate, a local income taxes in Connecticut would generate sufficient revenue to reduce total property taxes, including school property taxes, by about 11.5 percent. But there are substantial difference between towns in the possible reduction in property taxes, and furthermore the possible reduction for a town differs by tax.

Given the data that were available errors in estimated revenue are likely. A limitation with the data is that they do not include earnings of Connecticut residents who work out-of-state; we are unable to adjust for this. Thus, it needs to be stressed that the estimates by town are reasonable indications of local income tax revenue for informing state tax policy, but not for local government budget making.

Economic Effects

In considering whether to recommend allowing local governments to use local income taxes, the following factors are relevant.

- Effect on Employment

It is expected that a local income tax will have a small, negative effect on hours worked. To the extent the local income tax rates differ across towns, for example, if not all towns adopted a local income tax, it is expected that the tax differential will cause migration of the tax base from the towns with the higher income tax rates to those towns with lower tax rates, but with the tax rates proposed, the effect will be small. Much of the research on the effect of local income taxes on tax base mobility has focused on Philadelphia, for which differential income tax rates have been shown to result in migration of workers across the Philadelphia region.

- Effect on Tax Competition

The adoption of an income tax will change the incentives for local government competition for tax base. Currently, towns compete for property tax base, with commercial and industrial property being more desirable since there are less associated public service costs than for residential property. Adopting an income tax provides an incentive for towns to compete more strongly for high wage households or high wage jobs, and somewhat less for property.

- Effect on Equity

The distribution of the tax payments across households from the AGI Tax will be proportional, assuming that income is measured by AGI. The distribution for the Income Surtax will be the same as the distribution of the state income tax liability. Local earned income taxes are slightly regressive since not all income sources are taxed and the excluded income (largely returns to capital) are

associated with higher income households. Any of the local income taxes will be less regressive than either property taxes or sales taxes.

- **Effect on Fiscal Disparities**

Income tax revenue per capita is generally larger for towns with better fiscal health, as measured by the index of fiscal disparities created by the New England Public Policy Center at the Federal Reserve Bank of Boston (Zhao and Weiner 2015). This is particularly true for the AGI Tax, the Income Surtax, and the Split Earnings Tax. Thus, the adoption of local income taxes will not offset existing fiscal disparities. The results are the same if we consider property tax base (i.e., Grand List) per capita rather than the index of fiscal disparities.

- **Other Issues**

The cost of administration and compliance, assuming state administration, would be small for a local income tax that is based on state AGI or state tax liability. The administrative cost for an earned income tax administered by each town will be large relative to the tax revenue generated, and would require significant administrative capabilities, although regional administration would likely reduce the total cost of administration. Given the size of many of the towns in Connecticut, we suspect that administering such a tax for many towns would be a challenge. If the tax is based on payroll, the tax would generate tax revenue from commuters, and thus offset some of the service costs associated with commuters and visitors.

Local Option Tax Design Issues

If Connecticut chooses to allow cities to adopt a local sales tax or a local income tax, the state will have to specify the design of the tax structure, which means selecting one of the options for each of several parameters or features. In particular, the state will have to:

- Define of the tax base;
- Specify the allowable tax rate or rates;
- Determine whether the tax is optional or mandated;
- Determine whether the town's elected officials can adopt the tax on their own or whether to require voter approval through a referendum;
- Determine whether the administration of the tax will be done by the state, some regional body, or by each town;
- Determine whether the revenue can be used only for specific purposes or for any activity allowed by law;

- Specify the extent to which the revenue collected in a town is allocated to that town or shared among towns.

Policy Option: Increase Reliance on User Charges and Fees

Possible Reasons for Small Usage of Charges and Fees

Local governments in Connecticut are second to last among all states in terms of their relative reliance on user charges and fees. There are several possible explanations for why Connecticut ranks so low in the use of charges and fees.

- There are services for which the state has set limits on the size of the fees that can be charged, for example, for the issuance of marriage licenses.
- There are services that local governments perform in other states that Connecticut towns do not provide. For example, in Connecticut, public hospitals and public transit are provided by the state, while they are typically provided by local governments in other states.
- It has been suggested that citizens would view the implementation of a charge for a service such as waste collection not as a way to reduce property taxes but as an addition payment to the government. Thus it is thought that citizens would oppose such a fee.
- Officials may avoid imposing fees and charges over the concern that charges and fees impose a substantial burden on low income households.

Argument for and Against Charges and Fees

In addition to generating revenue that can be used to reduce property taxes, charges and fees can serve as signals of the cost of a public service, similar to prices for private goods. If charges vary with the amount of service consumed, individuals are expected to adjust their consumption of these services, relating the benefits they receive to what they pay. Charges thus act as a rationing device in the same way that prices ration goods and services in the private sector. In addition, charges can be used to reduce congestion when the demand for a public service exceeds capacity.

A major issue with charges is equity. On the one hand, for public services that do not involve distributional concerns, charges ensure that those who benefit from the public service pay for it. Based on the benefit principle of equity, this would be equitable. This is also relevant for services consumed by nonresidents, who might not pay taxes commensurate with the cost of providing those services. On the other hand, there are potential vertical equity issues that may arise. For many public services the user

charges would constitute a larger percentage of income for lower income individuals and therefore may be regressive. The extent to which this is the case would vary with the nature of the public services.

There are charges or fees that do not vary with the use of the public service. For example, the fee for solid waste collection is generally a flat amount, independent of the amount of solid waste generated. Such a fee is not associated with the cost of providing the service. In this case, the fee is essentially equivalent to a flat per household tax. However, some cities have adopted a fee structure that depends on the volume of solid waste that a household generates.

Estimates of Potential Revenue

To estimate the potential for increasing revenue from charges and fees, we selected three states that do not have a large city and for which current charges as a share of OSR is close to the average for the U.S. If Connecticut increased its current charge revenue sufficiently to cover the same percentage of each expenditure category as these 3 other states, Connecticut could increase its current service revenue by between \$349 million and \$867 million, or between 38.6 percent and 96.0 percent. If used to reduce property taxes, towns in Connecticut could reduce total property taxes by between 3.8 percent and 9.3 percent.

Impact Fees

Impact fees are one-time charges on new development that are used to pay for the construction or expansion of off-site capital improvements that are necessitated by and benefit the new project. They are not considered a user charge. Towns in Connecticut are not allowed to impose impact fees. To estimate the potential revenue from impact fees, we used data on impact fee revenue per housing permit for Florida. Applying these data to Connecticut yields annual revenues estimates for impact fees in Connecticut that range between \$33.4 million and \$45.2 million. Data are not available that would allow us to estimate impact fee revenue by town.

Policy Options for Increasing Charges and Fees

- State legislation regarding limits the state imposes on fees could be reviewed to determine whether they are still appropriate.
- Actions that would encourage greater use of user charges and fees might be proposed, such as funding a comparative interstate study of the use, design, and fee levels of user charges or a campaign to promote the increase use of charges.
- For services such as waste collection, local governments could be encouraged to adopt a fee structure that is based on the volume of waste a resident puts in the system and that is not as regressive as a flat per household charge.

- Consideration could be given to authorizing the use of impact fees.

INTRODUCTION¹

The current composition of local government revenue in the United States is much different than it was 70 years ago. For example, in 1942, property taxes accounted for 92.2 percent of local government taxes and 88.3 percent of own source revenue.² By 2012, property taxes had fallen to 73.5 percent of local tax revenue and 47.1 percent of own source revenue.³

This decrease in the relative important of property taxes in the United States is the result of at least two developments. The first is the growth in the use of local sales taxes and local income taxes. In 1942, local sales and income taxes accounted for less than 3.4 percent of tax revenue, but by 2012, these revenue sources had increased to 16.3 percent of tax revenue. Second, the use of charges and miscellaneous revenue increased from 10.5 percent of own source revenue in 1942 to 35.8 percent in 2012. As a result, local government revenue sources are now more diverse and rely less heavily on property tax.

This report explores the diversity of local government revenue among towns in Connecticut and discusses three options for increasing that diversity, namely adopting local sales taxes, adopting local income taxes, or increasing reliance on charges and fees. To the extent that reducing reliance on property taxes is an objective, each of these three policy could have the effect of reducing the reliance on property taxes. The second section presents comparative measures by state of the diversity of local government revenue. The third section discusses the arguments for and against revenue diversity and the advantages and disadvantages of relying on local sales taxes, local income taxes, and user charges and fees. The fourth section explores the nature and structure of local sales taxes as used in other states, suggests alternatives for structuring a local sales tax in Connecticut, discusses incentive effects of sales taxes, provides revenue estimates, discusses equity/fairness, and relates the estimated sales tax revenue per capita by town to a measure of the fiscal gap. The fifth section covers the same issues for the local income tax. The final section focuses on user charges and fees.

We searched for prior studies of the effect of adopting local sales taxes and local income taxes in Connecticut, and did not find any. However, the 2003 Blue Ribbon Commission on Property Tax Burdens and Smart Growth Incentives did consider the option of local sales and income taxes. The Commission concluded, “The commission believes that local-option taxes on a municipality-by-municipality basis in a state like Connecticut are generally counterproductive - - they tend to foster tax competition between communities and make high-tax towns that opt for additional taxes less competitive. The commission believes that regional revenue sharing offers the best model.” (p. 31) The Commission goes on to

¹ Thus report draws heavily from Sjoquist and Stoycheva (2012).

² U.S. Bureau of the Census (1951). Own source revenues are general revenues from taxes, charges and miscellaneous general revenue, and do not include intergovernmental revenue or revenue from utilities, liquor stores and trust funds.

³ U.S. Bureau of the Census, State and Local Government Finance (2012).

recommend an increase in the real estate conveyance tax, the imposition of a 15 percent surcharge on the state room occupancy tax to be retained by the host municipality, and regional sharing of part of the state sales tax, with the host community getting the greatest share.

In 2006, the Program Review and Investigations Committee issued a report entitled *Connecticut's Tax System*. One option it considered, but did not recommend, was to expand the taxing authority of local governments to levy an income or sales tax. The Committee concluded that “this option would negatively impact the complementary nature and simplicity of the current system, and may lead to taxpayer confusion and resentment. It may generate competition among municipalities and possibly encourage sprawl. This would circumvent issues with the spending cap but still allow funding to go to towns.” (pp. 164-165)

Nonetheless, in a recent report, the Connecticut Conference of Municipalities (2011) suggested that consideration be given to allowing towns to use local option taxes. The report states, “Distressed municipalities could be allowed to levy certain types of local-option taxes as a way to take pressure off property taxes. For example, locally levied sales taxes, entertainment taxes and hotel occupancy taxes can be considered in municipalities where those industries are strong.” (p. 6)

In addition to the three policies discussed in this report, there are other policies that could be adopted that would increase local revenue diversity and/or reduce the reliance on the property tax. Such options include a state grant program for towns and a property tax circuit breaker. However, consideration of these other options are beyond the scope of this report.

LEVEL OF REVENUE DIVERSIFICATION

There is little revenue diversity among the local governments in Connecticut, i.e., the 169 towns and the few existing school districts. There are various ways of illustrating this point. Consider first property tax revenue as a share of own source revenue and as a share of total taxes (Table 1, columns 1 and 2).⁴ Connecticut relies relatively more heavily on property taxes than most other states. In 2012, 88.0 percent of local government own source revenues (OSR) in Connecticut were derived from property tax revenue (the highest percent of any state). At the other end of the range was the District of Columbia and local governments in Louisiana, which derived just 24.6 percent and 28.6 percent of their OSR from property taxes, respectively. The average for the United States was 51.1 percent.

⁴ See Appendix A for a discussion of the government revenue data used in this report.

Table 1. Measures of Revenue Diversity, 2012

	[1]	[2]	[3]	[4]
State	Property Taxes as a Share of Own Source Revenue	Property Taxes as a Share of Total Tax Revenue	State and Federal Intergovernmental Revenue as a Share of General Revenue	Herfindahl Index
Alabama	30.1%	42.8%	41.3%	0.181
Alaska	51.1%	79.7%	41.4%	0.292
Arizona	44.8%	66.1%	37.5%	0.250
Arkansas	25.3%	43.1%	56.7%	0.161
California	45.7%	75.9%	45.6%	0.235
Colorado	41.7%	63.0%	30.6%	0.226
Connecticut	88.0%	98.8%	29.2%	0.776
Delaware	56.1%	81.8%	53.0%	0.344
District of Columbia	24.6%	31.6%	28.7%	0.148
Florida	47.0%	76.4%	29.2%	0.241
Georgia	48.9%	65.9%	31.9%	0.285
Hawaii	52.1%	69.2%	16.4%	0.310
Idaho	54.5%	95.1%	46.7%	0.322
Illinois	63.7%	83.7%	33.3%	0.417
Indiana	43.0%	78.4%	40.7%	0.250
Iowa	49.4%	80.8%	36.1%	0.284
Kansas	47.3%	75.3%	31.9%	0.256
Kentucky	33.0%	55.1%	40.9%	0.162
Louisiana	28.6%	44.8%	38.8%	0.206
Maine	81.0%	99.1%	31.9%	0.661
Maryland	43.2%	55.7%	32.5%	0.264
Massachusetts	77.3%	96.0%	32.2%	0.605
Michigan	55.0%	92.1%	48.3%	0.330
Minnesota	52.9%	93.4%	45.5%	0.303
Mississippi	39.0%	93.1%	41.2%	0.292
Missouri	38.6%	57.2%	33.1%	0.195
Montana	60.9%	97.2%	43.0%	0.388
Nebraska	54.3%	77.4%	30.5%	0.319
Nevada	39.3%	68.1%	42.7%	0.190
New Hampshire	85.2%	99.0%	30.1%	0.729
New Jersey	80.5%	98.1%	28.3%	0.654
New Mexico	37.4%	55.1%	53.0%	0.222
New York	45.8%	58.8%	34.4%	0.245
North Carolina	46.6%	75.8%	41.8%	0.262
North Dakota	47.2%	76.6%	48.0%	0.256
Ohio	45.4%	65.2%	38.5%	0.247
Oklahoma	30.4%	51.1%	35.4%	0.188
Oregon	55.8%	85.6%	41.6%	0.337

Local Revenue Diversification

Pennsylvania	56.3%	70.8%	40.0%	0.347
Rhode Island	81.8%	97.8%	26.7%	0.676
South Carolina	53.0%	77.8%	35.3%	0.304
South Dakota	52.2%	73.0%	31.1%	0.309
Tennessee	37.0%	64.2%	32.1%	0.204
Texas	59.1%	83.9%	32.0%	0.365
Utah	46.3%	69.9%	37.0%	0.249
Vermont	59.1%	94.0%	68.9%	0.374
Virginia	59.2%	75.4%	36.3%	0.366
Washington	43.0%	64.1%	41.2%	0.227
West Virginia	52.2%	80.4%	44.3%	0.302
Wisconsin	68.2%	94.8%	39.9%	0.479
Wyoming	43.8%	76.9%	40.5%	0.267
United States	51.1%	73.9%	37.4%	0.281

Source: Author's calculation based on 2012 Census of Governments, U.S. Bureau of the Census.

As a share of total local taxes, local property taxes comprise 98.8 percent of total local government taxes in Connecticut (which ranks Connecticut the 3rd highest among all states). This helps to explain in part why in 2012 property tax per capita in Connecticut was the third highest among all states, and 1.9 times the U.S. average. (Note also that local OSR per capita in Connecticut ranks 9th in the country, so local government taxes in Connecticut are relatively high.) At the other end of the range is Alabama, where only 42.8 percent of local government taxes come from the property tax. There are 13 states in which property taxes as a share of local government total taxes exceeds 90 percent, 7 of which are in the Northeast. The average for the United States is 73.9 percent.

While not really under the control of local governments, intergovernmental revenues is a source of revenue diversity. Connecticut local governments get 29.2 percent of their general revenue from intergovernmental grants, which is lower than 47 states and the District of Columbia (Table 1, column 3).

For a more complete or comprehensive measure of revenue diversification one can use the Herfindahl Index. The Herfindahl Index is calculated as the sum of the squares of the share of each source of own source revenue. The greater the number of revenue sources available and the more equal the share of revenue from the available revenue sources, the greater is the diversity of revenue sources. If a local government had only one source of revenue, the Herfindahl Index would equal one, while if there were 10 revenue sources and each source yielded the same amount of revenue, the Herfindahl Index would equal 0.10.⁵ The greater the concentration of revenue, the larger the value of the Herfindahl Index, while the greater the diversity of revenue, the lower is the value of the Herfindahl Index.

⁵ The following illustrates how to calculate a Herfindahl Index. With 9 revenue sources and with each source yielding the same amount of revenue, each revenue source accounts for 1/9th of total revenue. To calculate the Index, one would square 1/9th and sum over the 9 revenue sources, i.e., $\Sigma(1/9)^2 = 0.11$. On the

Local Revenue Diversification

Using the 2012 local government OSR revenue data from the Bureau of the Census, Herfindahl indices were calculated for each state, including the District of Columbia (Table 1, column 4). By this measure, Connecticut has the least diverse local government revenue system of any state, with a Herfindahl Index of 0.776. The value of the Herfindahl Index for all local governments in the U.S. is 0.189, suggesting substantial diversity of local government revenue sources. Twenty-seven states have Herfindahl index values of less than 0.200. The five states with the highest Herfindahl Index values, and thus the smallest degree of local government revenue diversity, are Connecticut (0.776), New Hampshire (0.729), Rhode Island (0.676), Maine (0.661), and Massachusetts (0.605), all of which are states in the Northeast. Given that these states do not have very diverse local government revenue structures, it is not surprising that they also rely heavily on property taxes. The correlation between the Herfindahl Index and property taxes as a share of own source revenue is very high, namely, 0.96.

REASONS FOR AND AGAINST DIVERSIFYING LOCAL GOVERNMENT REVENUE

In this section we discuss the arguments in support of and against local government revenue diversification.

Arguments for Revenue Diversification

The Advisory Commission on Intergovernmental Relations (1988) outlined several arguments supporting or justifying local revenue diversification. These include the following arguments.

Capture Local Revenue Raising Capacity

Local governments differ in the relative size of alternative tax bases since economic and demographic conditions that determine the size of the tax bases differ across jurisdictions.⁶ For example, a sales tax will have a high revenue capacity in a locality that is a retail center, while an income tax will rank high in relative capacity in a jurisdiction with a high concentration of professional employees. Similarly, a jurisdiction dominated by manufacturing plants will rank high for property taxation. In order to take advantage of the tax base with the highest revenue raising capacity, local governments should have a diverse set of potential revenue sources available to them to finance their public services.

More generally, revenue sources differ along several dimensions. They differ in terms of their revenue raising capacity, stability over the business cycle, growth rate, equity, ease of administration, economic effects, acceptability by citizens, etc. Thus, alternative revenue portfolios could be constructed,

other hand, if one revenue source accounted for 60 percent of the revenue and another 8 accounted for 5 percent each, the Index would equal 0.38, i.e., $\Sigma(0.6^2 + 0.05^2 + 0.05^2 + 0.05^2 + 0.05^2 + 0.05^2 + 0.05^2 + 0.05^2 + 0.05^2) = 0.38$.

⁶ Yilmax and Zahradnik (2008).

each of which would yield a different mix of characteristics. Several authors have explored this idea and estimated the trade-offs among some of these characteristics.⁷

Just as investors have different preferences for risk and return, local governments may differ in their preferences over the various revenue characteristics. The citizens of one jurisdiction may have a preference for revenues that are tied to the benefits received from public services, while another jurisdiction may be more concerned with the regressivity of their revenue structure.⁸ Thus, if a local government can use alternative revenue instruments, the local government can choose the revenue portfolio that more closely achieves its desired mix of characteristics.

Reduce Reliance on the Property Tax

A second often cited reason for revenue diversification is that by allowing local governments to use non-property tax revenue, local governments can reduce their reliance on the property tax. As noted above, greater revenue diversity is associated with a smaller relative reliance on property taxes.

Equity

Another argument for revenue diversity is premised on the notion that beneficiaries of local public services should pay a fair share of the cost of public services. This is particularly relevant for tourists, shoppers, and commuters who impose costs on local governments but do not pay any property taxes to the local government. (Of course, a business' property, and thus the property tax revenue, is positively related to the number of workers the business employs. To that extent, property tax revenue is generated indirectly from commuters.) To the extent that property taxes and other revenue sources do not capture the cost of the service burden placed on a jurisdiction from nonresidents, a sales tax or an income tax might do better. Clearly, a sales tax only generates revenue from a nonresident to the extent that he or she purchases taxable products or services. Tourists and shoppers are likely to make larger purchases than workers, and thus are more likely to contribute more revenue per trip.

On the other hand, local payroll taxes can broaden the base of who pays for local public services to include nonresident workers (Wallace and Edwards 1999). Of course a local payroll tax will generate revenue only from workers and not from other visitors to the jurisdiction.

In the 1970s there were various attempts to measure whether nonresidents "exploited" central cities in the sense that the cost of providing public services to nonresidents exceeded the revenue they generated. One of the first such studies (Neenan 1970) found a significant net benefit to nonresidents, i.e., nonresidents received more in benefits than the taxes and fees they paid to the central city. However, other studies found much smaller effects. Bradford and Oates (1976) found that the net effects of

⁷ White (1983); Misiolek and Perdue (1987); Dye and McGuire (1991); Harmon and Mallick (1994).

⁸ A tax or tax system is said to be regressive (progressive) if the tax burden as a share of income decreases (increases) as income increases.

nonresidents on net costs (i.e., cost imposed by nonresidents less revenue collected from nonresidents) were of minor quantitative importance. Shields and Shideler (2003) also found that there is not a significant equity issue due to non-residents. The results do depend on the local government's revenue structure.

Revenue Stability and Other Characteristics of Taxes

A fourth argument for a diversified revenue structure concerns the stability of total revenue over the business cycle. Just as a diversified investment portfolio can reduce the overall risk of a loss, a diversified revenue structure can reduce the risk of revenue loss to the local government. To the extent that the effect of changes in economic conditions have differential effects on tax sources, a diversified tax structure will have a smaller risk of revenue decline in the face of economic recessions. Of course, if changes in economic conditions have the same effect on all revenue sources, diversification will have no effect on revenue stability.

Economic Efficiency

A final reason for revenue diversification is that financing local public services through user charges and fees promotes an efficient level of public services.⁹ Charges and fees, when appropriately designed, serve as signals of the cost of the public service, similar to prices for private goods. Since user charges vary with the amount of service consumed, individuals can adjust their consumption in response to the charge. In other words, user charges or fees are benefit charges. Taxes, on the other hand, are paid regardless of the level of consumption of public services, and therefore the effective marginal cost that the citizen pays to consume one more unit of the public service may be perceived to be zero. As a result, the quantity demanded of public services financed with taxes will be higher than what is socially optimal because each individual taxpayer ignores the extra cost that results from his or her consumption of the public service. (See the section on charges and fees for a more extensive discussion of user charges.)

Arguments against Revenue Diversification

There are two principal counter arguments against a diversified revenue structure. First, Hamilton (1975) (see also Fischel 2001) advanced a theory that the property tax is a benefit tax, and thus is an ideal tax for local governments. In essence, the premise is that local jurisdictions offer alternative tax-public service packages and that households choose among the jurisdictions based on the household's most preferred package. Thus, the property tax liability is equal to the benefits a household receives from the public services that the local government provides. In this world, the property tax is essentially the price that a resident pays for the public services that are provided. However, others, for example Zodrow (2001), argue that this theory is not supported by empirical evidence. A more ad hoc argument is that the

⁹ Bierhanzl and Downing (1998); Downing (1999); Duff (2004).

benefits of public services such as police protection, fire service, and streets networks are positively associated with the value of one's property and thus with property taxes paid.

The second argument against local revenue diversification is that if a local government gains access to additional revenue options, it will increase revenue, and thus expenditures, beyond what the citizen truly desire. There are several reasons why this might happen, but the main argument is based on the Leviathan view of government, as espoused by Buchanan (1967) and Buchanan and Wagner (1977). Under this view, government decision makers are assumed to determine expenditure levels with little regards to the preferences of voters. Furthermore, it is assumed that the government bureaucrats prefer greater public spending than the citizens. Government bureaucrats, the argument goes, are able to increase expenditures since more revenue instruments leads to a more complex tax structure, which allows greater manipulation of voters by government officials. The empirical evidence of the effect of the revenue structure on the level of expenditures is mixed; see for example Wagner (1976), who found support for this view of government, and Ladd and Weist (1987), who obtain contrary results.¹⁰

Another reason for not adopting local sales or income taxes is that property tax revenue is less cyclical than income tax and sales tax revenue. This is in large part due to the ability to adjust the property tax rate in response to changes in the property tax base. The property tax base is also less responsive to changes in the tax rate than the sales tax and income tax bases. The property tax base responds slowly to changes in the property tax rate, particularly in the short run, because property is hard to move geographically.

LOCAL SALES TAXES

Reliance on Local Sales Taxes

The Census Bureau reports that as of 2012, local governments in 34 states, plus the District of Columbia, relied on sales taxes (Table 2). The reliance on local sales taxes varies widely among these 34 states, as reflected in local sales tax revenue as a share of local tax revenue, which ranged from 1.6 percent to 48.5 percent (Table 2). The difference in reliance on the sales tax reflect differences in the percentage of local governments in the state that employ a local sales tax and the local sales tax rates.

¹⁰ For a review of the literature, see Sjoquist, Walker, and Wallace (2005), Sjoquist, Wallace, and Edwards (2004), and Ross and Nguyen-Hoang (2015).

Table 2. Local Sales Tax Revenue as a Percentage of Local Tax Revenue, 2012

State	Percent	State	Percent
Louisiana	48.5%	New York	16.5%
Arkansas	45.7%	Alaska	12.8%
Oklahoma	43.1%	Iowa	12.4%
New Mexico	38.4%	Texas	10.3%
Alabama	36.8%	Hawaii	10.1%
Colorado	28.7%	California	9.3%
Arizona	26.6%	Nebraska	8.9%
Tennessee	25.1%	Nevada	7.5%
Georgia	24.8%	Ohio	7.3%
Missouri	24.0%	Virginia	7.1%
South Dakota	22.7%	South Carolina	6.2%
North Carolina	19.2%	Florida	6.2%
Washington	18.8%	Illinois	5.3%
Utah	18.3%	Wisconsin	2.8%
Kansas	17.7%	Pennsylvania	2.7%
North Dakota	17.6%	Vermont	2.1%
Wyoming	17.4%	Minnesota	1.6%

Source: Bureau of the Census, *Government Finances: FY 2012*

Local Sales Taxes in Selected States

There is significant variation across states in how local sales taxes are imposed and the purposes for which the revenue can be used. The following illustrates this diversity.

Georgia

Georgia allows seven alternative local option sales taxes. These are:

1. MARTA tax, used to fund the bus and rail system in Fulton, DeKalb, and Clayton Counties.
2. Local Option Sales Tax (LOST), designed for property tax relief, with the revenue shared between the county and municipal governments within the county based on a negotiated sharing agreement;
3. Special Purpose Local Option Sales Tax (SPLOST), used to fund capital improvements by the county and municipal governments;
4. Education Special Purpose Local Option Sales Tax (ESPLOST), used for capital improvements for schools;
5. Homestead Option Sales Tax (HOST), used to fund county government homestead exemptions of up to 100 percent of taxable value;
6. Municipal Option Sales Tax (MOST), used to fund an upgrade of the city of Atlanta's water-sewer system;

7. Transportation Special Purpose Option Sales Tax (TSPOST), used to fund transportation projects within designated multi-county regions.

All of Georgia's local sales taxes are one percent, are county wide with the exception of the MOST and TSPOST, and must be approved through referendum. Some are permanent while others have term limits, but the temporary ones can be re-authorized through referendum.

California

As early as 1944, local governments in California were allowed to adopt their own sales tax ordinance, tax rates, and exemptions. But in 1955, California established the Bradley-Burns uniform sales tax in order to reduce the complexity of the system. The Bradley-Burns sales tax is imposed at one percent and is split 25 percent to the county government and 75 percent to the city or county depending on the location of the sale, with the revenue going to the general fund.¹¹ All counties in California have adopted a Bradley-Burns sales tax. In addition, a city or county can adopt by referendum a local option sales tax of up to 1.5 percent.

Utah

Utah has 16 different local sales taxes. There is a one percent sales tax that all jurisdictions impose. Local governments also have authority to impose, subject to referendum, sales taxes for other purposes. Six of 16 local sales taxes are for various types of transportation projects, 3 are for hospital and cultural support, while the rest are supplementary sales taxes for various classes of government. Total local sales tax rates vary from 1.25 percent to 3.65 percent, with the median rate being 1.6 percent.

Tennessee

In Tennessee, counties can impose a local sales tax up to a rate of 2.75 percent. Municipalities within that county can impose a tax at a rate equal to the difference between 2.75 percent and the county sales tax rate. Half of the revenue is allocated to education, and some revenue is earmarked for tourism promotion.

Designing a Local Sales Tax System

If Connecticut chooses to allow cities to adopt local sales taxes, the state will have to specify the design of the local sales tax structure, which means selecting one of the options for each of several parameters or features. This section lists the parameters that have to be determined and discusses the options for each parameter. In designing a local sales tax, consideration should be given to the provision of the Streamline Sales Tax Project (SSTP). While Connecticut is not a member of the SSTP, if Congress were to pass something like the Marketplace Fairness Act, its provisions would likely be similar to those

¹¹ If the sale occurred in the non-incorporated area of a county, the revenue goes to the county government.

adopted by the SSTP, such as common sales tax base and single tax administrator for all sales taxes imposed in a state.

Sales Tax Base

The state could allow each city to decide which goods and services will be taxed (which is the case, for example, in Alabama), could require that the sales tax base be the same as the base for the state sales tax (which is the case in most states), or specify specific differences between the state and local sales tax base (as in the case of Georgia and several other states). In Georgia there are some differences in the state and local sales tax bases, the largest being the exemption of food for home purchase for the state sales tax but not for most local sales taxes.

Allowing cities to define their own tax base creates issues since it could significantly increase administrative and compliance costs, and thus most tax policy experts recommend a uniform base for all sales taxes within a state. Determining whether a product or service is taxed in any given jurisdiction is not costless. Firms already struggle to determine the local sales tax rates that apply at different locations, and that problem is compounded if firms also have to determine which products the tax applies in each town.

Sales Tax Rate

The state could require that all municipalities that adopt a sales tax impose the same tax rate, for example, one percent, or the state could allow each municipality to adopt its own sales tax rate, or to choose from a set of possible rates, for example, 0.5 percent, 1 percent, or 1.5 percent. Allowing cities to choose alternative rates will increase compliance costs. However, limiting the sales tax rate to, say, one percent means that a local government that would prefer a tax rate of 0.5 percent has to choose between a zero percent (i.e., not having a sales tax), and a one percent sales tax rate. Actual practice varies across states.

Situs of Sales

The sales tax could be based on where the sale occurred (origin basis) or where the product is used (destination basis). State sales taxes are generally imposed on a destination basis. Thus, if the good or service is delivered, the transaction is assumed to have occurred where the product is delivered. Residents who purchase a product out-of-state, for example, a book from Amazon, are legally required to pay a use tax to their home state.

Using the destination basis for siting sales for local sales taxes imposes heavy demands on the vendor to determine the tax rate at the point of delivery and to maintain records of sales for each destination site. If the tax is origin based there is an incentive for the vendor to locate in the municipality with a low local sales tax rate; such an incentive does not exist when the tax is based on destination. States are split between the two options. In states that use origin as the basis for the local sales tax,

exceptions are made for sales such as automobile purchases so that the situs is the residence of the buyer, thereby eliminating the location incentive for auto dealers.

Optional versus Mandated Sales Tax

The state could require that a sales tax of a fixed tax rate be adopted by each municipality; this would be equivalent to a state grant with revenues distributed on a situs collection basis. Or, it could allow each municipality to decide whether to adopt a sales tax. Mandating that all municipalities adopt a sales tax with the same tax rate would mean that the sales tax rate would be uniform across the state, which reduces administrative and compliance costs. However, this benefit would come at the expense of fiscal freedom on the part of the cities to set their own tax structure. In most states, the local sales tax is a local government option.

Should a Referendum Be Required?

The state needs to determine whether the municipality's elected officials can adopt a sales tax on their own or whether to require voter approval through a referendum. This is a political and not an economic issue; the choice depends at least in part on whether the state believes that voters should have a direct rather than an indirect say in setting a municipality's tax structure. The general practice is to require a referendum, although there are exceptions.

Who Should Administer the Local Sales Tax?

Collecting sales tax revenue, and generally enforcing compliance with the tax, could be done by the state or by each municipality. The administrative costs would be lower if the state collected local sales taxes as part of its current sales tax collection responsibilities. This would be particularly true for municipalities with small sales tax bases. However, it is possible that local governments might be more aggressive in collecting and enforcing local sales taxes since they are more directly affected by the collection rate. Local administration would require that the town employ a staff with the requisite skills, including the ability to conduct sales tax audits. While there are some issues associated with state administration of local sales taxes, Due and Mikesell (1994) suggest these issues are not overwhelming; most tax policy experts argue for state administration of local sales taxes. Some of the issues with state administration concern the timeliness of the transfer of tax collections to the local government, whether the state audits vendors to ensure that vendors have paid the required local sales tax, and how to allocate sales tax collections that are less than the total (state plus local) sales tax liability or when the location of the sale is not provided. In most states, the state administers local sales taxes, although Louisiana is an exception.

Use of the Revenue

The state can specify that the sales tax revenue can be used only for specific purposes, or allow the revenue to be used to fund any government activity allowed by law. Typically, sales tax revenue is

Local Revenue Diversification

earmarked for specific services or categories of services. This is a political issue relating to how much authority and freedom local governments should have in deciding how to use its revenue.

Restrictions on the use of sales tax revenue may not have much effect in practice. Suppose that the use of the revenue is restricted to a specific public service, and suppose further that sales tax revenue is less than the current existing expenditures on the designated activities. Given that other revenue sources are fungible, the local government can simply replace existing revenue with sales tax revenue and use the freed up revenue for other purposes. On the other hand, if the revenue from the sales tax exceeds the desired expenditure level on the allowable services, expenditures on the allowable services will be larger than the local government desires.

One commonly designated use of sales tax revenue is to reduce property taxes. For example, in Georgia local governments are required to roll back property taxes by the amount of the prior year's LOST revenue. However, Zhao and Jung (2008) estimate that only 17 percent of LOST revenues are used for property tax reduction. The rollback in Georgia is from the property tax rate that the jurisdiction sets. Knowing that it must rollback the property tax rate, the jurisdiction can set an artificially higher property tax rate and rollback from that rate. Thus, in effect the local government can set any property tax levy it wants. Sales tax revenue could be used to reduce property taxes on certain classes of property, as with the Georgia HOST.

Geographic Coverage

It has been implicitly assumed to this point that the revenue would go to the host town, i.e., the town from which the revenue was collected. However, it would be possible to impose the local sales tax in some defined region (or perhaps in entire the state) and split the revenue by formula among the towns in the region. For example, the regions might be comprised of retail centers and the surrounding towns. How the revenue would be allocated to the various towns depends on the objective of the allocation, since that would determine the factors that would be used in the formula. There are many formulas that could be used to allocate the revenue. For example, the state could adopt a formula that allocated half of the revenue to the host town and half on a per capita basis throughout the region. Or, the formula could be based on the inverse of the property tax base per capita, so that more of the sales tax revenue goes to towns with smaller per capita property tax bases.

Economic Issues Associated with Local Sales Taxes

There are four economic issues associated with the adoption of a local sales tax that we consider: incentive effects, the amount of revenue generated, equity/fairness, and the effect on fiscal disparities.

Incentive Effects

Economic theory suggests that an increase in the sales tax rate will reduce the sales tax base since the increase in the sales tax rate is the same as a price increase. It is reasonable to assume that the price

elasticity of the sales tax base is between 0.7 and 1.0. These elasticities suggest that the adoption of a one percent local sales tax rate statewide would result in a decrease in the sales tax base of between 0.66 percent and 0.94 percent.

The current basic sales tax rate in Connecticut is 6.35 percent,¹² and state sales tax revenues due in fiscal year 2013-14 was \$3,869.3 million.¹³ A one percent local sales tax adopted statewide would increase the basic statewide sales tax rate by 15.7 percent. In the absence of any loss of sales tax base due to the tax rate increase, the sales tax revenue would increase by 15.7 percent, or by \$607.4 million. However, assuming price elasticities of 0.7 and 1.0 implies that total sales tax revenue would increase by 15.0 and 14.7 percent, respectively. This would consist of new revenue to towns but a loss of revenue to the state of between 0.66 and 0.94 percent. Assuming a price elasticity of 1.0, the local sales tax revenue from a one percent local sales tax would be \$603.9 million. State sales tax revenue would fall by \$36.4 million.

There is a substantial literature on the mobility of sales tax bases, although much of the focus is on the effect of differential sales tax rates on cross-bordering shopping.¹⁴ These studies generally find that a one percentage point higher interstate sales tax rate differential is associated with per capita sales along a state's border that are between one and 7 percent lower. For example, Walsh and Jones (1988) studied West Virginia's phased-in reduction of the sales tax rate on grocery purchases. For each percentage point reduction in the sales tax rate they find that grocery sales along the West Virginia border increased by about 5.9 percent. It is expected that differential sales tax rates across jurisdictions within a state would have similar effects on the location of purchases as interstate sales tax rate differentials.

Connecticut's basic state sales tax rate is currently 6.35 percent. Connecticut borders three states, New York, Rhode Island, and Massachusetts, with the bulk of its border adjacent to Massachusetts. Rhode Island and Massachusetts do not have local sales taxes; their state tax rates are 7.0 percent and 6.3 percent, respectively. New York has a state sales tax rate of 4 percent and local sales tax that range up to 4.88 percent. Along New York's border with Connecticut, the total sales tax rates in New York are generally in the range of 8.125 percent to 8.375 percent. If Connecticut added a one percent local sales tax, Connecticut border cities would lose some sales to Massachusetts, and might experience a small drop in sales that are made to buyers from New York.

Local jurisdictions currently compete for property tax base, perhaps by keeping property tax rates low or offering special incentives to large developments. If local governments adopt a sales tax, one should expect that towns will compete for sales tax base as well. The difference is that the competition

¹² Certain goods and services are taxed at rates different than 6.35 percent.

¹³ Actual sales tax revenue in 2013-14 was \$4,107.8 million. But this includes such items as late payments and fines and fees from audits.

¹⁴ See for example, Mikesell (1970); Mikesell and Zorn (1986); Fisher (1980); Fox (1986); Walsh and Jones (1988), and Tosun and Skidmore (2007).

will be for retail facilities, e.g., shopping centers, rather than business facilities more generally (Lewis 2001).

Revenue

Appendix Table A1 provides estimates of sales tax revenues, total and per capita, by town for a one percent sales tax imposed in all Connecticut towns, with revenue going to the town from which the revenue was generated. We refer to this as the Local Sales Tax. As an alternative we estimated revenue for a Regional Sales Tax. For the Regional Sales Tax we summed local sales tax revenue across all towns in each of the nine planning districts (i.e., Councils of Government) and allocated the revenue across towns in the planning district using a formula in which half of the revenue was allocated to the host town and half was allocated on a per capita basis.

The estimated Regional Sales Tax revenue by town, total and per capita, are also presented Appendix Table A1. Appendix A explains how these estimates were developed. The last column in Appendix Table A1 is a fiscal disparities index, which is discussed below.

It needs to be stressed that these estimates should not be used for budgeting purposes; data limitation suggest that the revenue estimates should be viewed with caution and may be imprecise (see Appendix A for a discussion). Because the data do not accurately measure the tax base for each town, we did not attempt to adjust for possible changes in the base due to the tax increase and to cross border shopping. However, these estimates do provide a reasonable indication of local sales tax revenue for informing state tax policy, but not for local government budget making.

The data on state sales taxes due by town do not include sales taxes collected from out-of-state vendors, which are 21.3 percent of total sales taxes due. Since there is no obvious way to appropriately allocate this sales tax revenue to towns, we are forced to ignore the revenue collected from out-of-state vendors. The sum of the estimated revenue by town from a one percent local sales tax is thus \$473.5 million.¹⁵ Local sales tax per capita by town ranges from \$5 to \$717, which is a large variation in per capita revenue across towns. The range for the regional sales tax is from \$42 to \$230, which is a much smaller range.

Obviously, the makeup of the regions can be altered (we used the towns in the planning districts out of convenience), and an alternative formula for the distribution sales tax revenue within the district could be selected. Having the state define the regions would seem to make more sense than allowing towns to decide which towns they want to be partnered with. The decision of whether the region will adopt a local sales tax could be made by vote of a majority or super majority of towns, with the possibility that the choice for each town be made by referendum in that town. Or, there could be a region-wide

¹⁵ This figure differs from the \$607.4 million report above because the \$607.4 million includes sales tax revenue from out-of-state vendors.

referendum. There is no need for a regional authority, particularly if the administration of the tax is done by the state.

As expected, the regional sales tax increases the revenue to towns with low local sales tax revenue per capita and decreases revenue from towns with high local sales tax revenue per capita. This can be seen in Figure 1, which plots the Local and Regional Sales Tax revenue per capita, as reported in Appendix Table A1. The line in Figure 1 represents equal values of the revenue per capita from the two sales taxes. Points above the line represent towns for which sales tax revenue per capita from the Regional Sales Tax is greater than for the Local Sales Tax. Notice that towns with lower Local Sales Tax revenue per capita are generally above the line, that is, those towns have higher Regional Sales Tax revenue per capita than Local Sales Tax revenue per capita.

Figure 1. Estimated Regional and Local Sales Tax Revenue

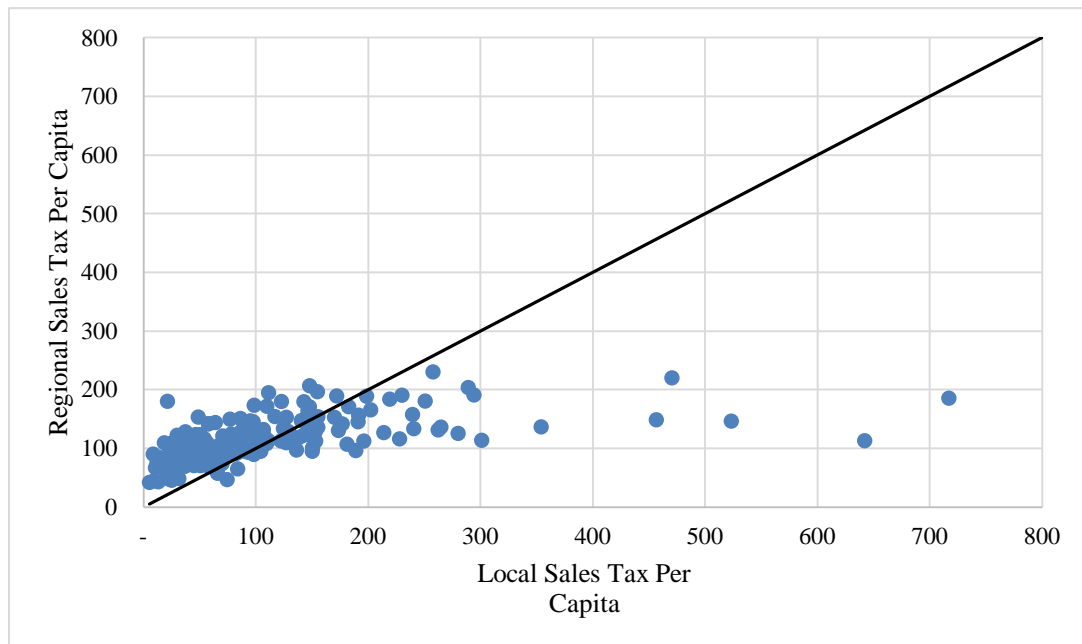


Figure 2 provides more detail on the distribution of sales tax revenue per capita. In particular, the figure shows that there are many more towns with Local Sales Tax revenue per capita below \$75 and above \$200 than for the Regional Sales Tax.

Figure 2. Distribution of Estimated Sales Tax Revenue Per Capita



Figure 3. Potential Percentage Reduction in Property Taxes Using Revenue from the Local Sales Tax and Regional Sales Tax



To the extent that the sales tax will be used to reduce property taxes, it is of interest to show the potential reduction in property taxes. Figure 3 plots the potential reduction in property taxes for the Local Sales Tax and the Regional Sales Tax. Each point in Figure 3 represents a town and shows the percentage reduction in property taxes for the Local Sales Tax and the Regional Sales Tax. Bear in mind that because

the sales tax revenue from out-of-state vendors is not included, the calculation understates the potential total reduction in property taxes by 21.3 percent. On average, property taxes could be reduced by 5.0 percent (or 6.1 percent if the revenue from out-of-state vendors is included.)

Because it is hard to make comparisons across all 169 towns, 23 towns were selected in order to provide a clearer picture of how sales tax revenue varies across towns. The 23 towns represent 5 categories of towns: large cities, small cities, rich suburbs, mixed base, and rural. Appendix Table 2A lists the towns and several demographic and economic variables for each town for two different years. Table 3 reports the latest population, Net Grand List per capita, millage rate, property tax revenue, and estimated sales tax revenue. A couple of observations. First, Bridgeport has a small sales tax base and Manchester has a large sales tax base despite the sizes of their population. Two, the magnitude of the difference in per capita revenue between the two sales taxes can be large.

Table 3. Local and Regional Sales Taxes

	Population	Net Grand List (in millions)	Mill Rate	Prop Tax Revenues (in millions)	Local Sales Tax Revenue (in 1000s)	Local Sales Tax Revenue Per Capita	Regional Sales Tax Revenue (in 1000s)	Regional Sales Tax Revenue Per Capita
Large								
Bridgeport	147,216	\$6,981	41.11	\$285.96	\$7,693.8	\$53	\$4,614.2	\$134
Hartford	125,017	\$3,398	74.29	\$255.55	\$21,528.1	\$172	\$259.8	\$72
New	130,660	\$5,995	38.88	\$230.99	\$19,258.1	\$148	\$491.8	\$52
Stamford	126,456	\$24,294	17.89	\$432.10	\$19,210.7	\$155	\$1,883.3	\$99
Small Cities								
Manchester	58,211	\$3,888	35.83	\$122.29	\$14,005.8	\$241	\$10,247.2	\$93
Meriden	60,456	\$3,246	34.70	\$113.89	\$5,302.1	\$87	\$730.1	\$74
New	27,545	\$1,565	26.60	\$41.47	\$5,903.8	\$214	\$48.3	\$46
Torrington	35,611	\$2,359	33.47	\$79.23	\$6,134.2	\$170	\$3,489.7	\$126
Rich								
	34,768	\$4,208	30.50	\$128.47	\$4,305.7	\$125	\$449.9	\$69
Guilford	22,417	\$3,490	22.36	\$77.17	\$1,749.5	\$78	\$820.7	\$87
Litchfield	8,333	\$1,109	22.20	\$24.79	\$3,838.1	\$457	\$4,850.9	\$121
New	20,194	\$8,249	14.08	\$116.62	\$1,948.0	\$98	\$1,018.8	\$107
Mixed Base								
Hamden	61,607	\$4,049	37.14	\$149.05	\$5,544.5	\$90	\$1,334.5	\$70
	47,333	\$3,581	26.90	\$95.67	\$5,077.0	\$107	\$231.8	\$45
Norwich	40,347	\$2,433	26.90	\$64.82	\$3,968.8	\$98	\$480.8	\$85
Windsor	29,142	\$2,908	27.95	\$8.22	\$3,575.7	\$123	\$4,053.0	\$163
Rural								
Bozrah	2,639	\$244	22.50	\$5.42	\$282.3	\$108	\$5,668.7	\$127
Durham	7,361	\$732	32.19	\$23.55	\$410.4	\$56	\$2,548.4	\$203
Killingly	17,233	\$1,365	19.70	\$28.73	\$1,702.2	\$98	\$2,494.8	\$78
North	3,241	\$344	21.50	\$7.49	\$70.3	\$21	\$136.9	\$90
Plainfield	15,228	\$1,035	21.52	\$22.46	\$1,285.2	\$84	\$168.7	\$113
Union	848	\$98	23.59	\$2.31	\$77.6	\$75	\$4,675.4	\$116
Washington								
Washington	3,526	\$1,255	11.50	\$14.38	\$453.2	\$127	\$2,658.2	\$136

Equity/Fairness

The sales tax in Connecticut is more regressive than the property tax (Institute on Taxation and Economic Policy 2015). However, the equity of the local sales tax will differ from the equity of the state sales tax if the local sales tax base differs from the tax base for the state.

One might also be concerned with fiscal equity, i.e., differences in the tax revenue per capita across towns. This was discussed above, where it was noted that there is a large variance across towns in local sales tax revenue per capita.

One fairness issue concerns the link between the cost of public services and sales tax revenue. The sales tax in any given city will generate revenue from tourists, shoppers and commuters from other Connecticut cities and other states. This is especially true for cities that are large retail center. Thus, a significant percentage of local sales taxes that an individual pays is likely paid to a jurisdiction other than the jurisdiction of residence, and this percentage will vary widely across jurisdictions. The likely result is that there will be differences across jurisdictions in the relationship between the benefits received from public services and the taxes paid. We are unable to estimate the percentage of sales tax revenue in any town that is paid by non-residents.

Fiscal Disparities

A recent report from the New England Public Policy Center at the Federal Reserve Bank of Boston (Zhao and Weiner 2015) provides an index of fiscal disparities for all Connecticut cities (see column 5 of Appendix Table A1). The index is the difference between the cost of providing non-school public services (costs) and the economic resources available to pay for those services (capacity), on a per capita basis. A larger positive (negative) number represents a larger (smaller) disparities, i.e., greater fiscal disparity since the cost of service exceeds (is less than) the resources. To better see the relationship between local government sales taxes and fiscal disparities we plotted estimated revenue per capita for the Local Sales Tax and Regional Sales Tax against the fiscal disparity index in Figure 4 and Figure 5, respectively. The correlation coefficient between the index and Local Sales Tax revenue per capita is -0.13, and -0.26 for the Regional Sales Tax, which suggests that larger sales tax revenues per capita are associated with towns with greater fiscal health. As can be seen, most of the towns are concentrated near the zero value of the index. However, even in the mass of towns near zero fiscal disparity, the correlations with sales tax revenues are about the same as reported above. So, it appears that neither a local or regional sales tax will reduce the fiscal disparities between towns.

Figure 4. Local Sales Tax and Fiscal Disparities

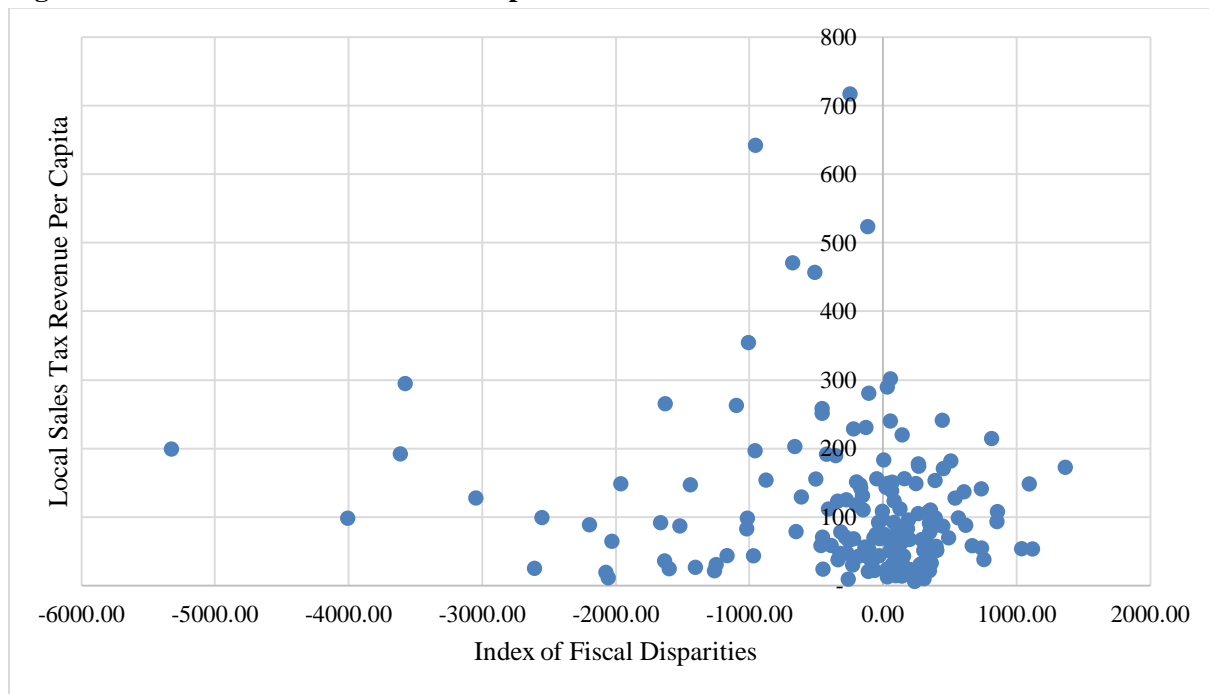
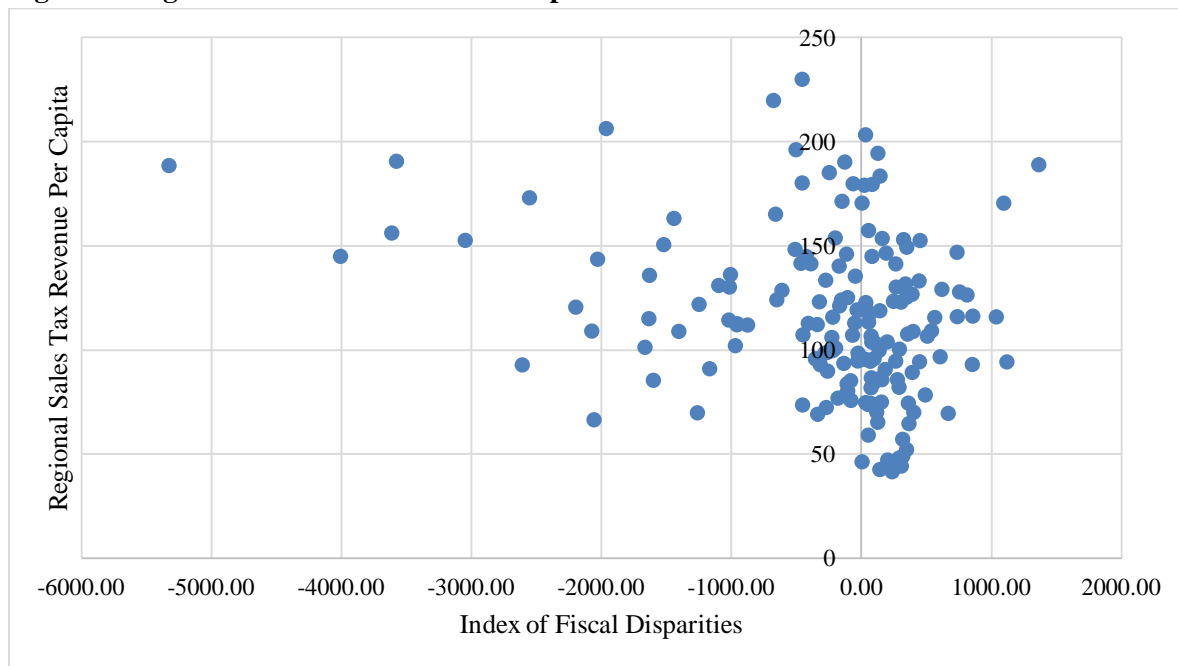


Figure 5. Regional Sales Tax and Fiscal Disparities



We also considered the relationship across towns between sales tax base per capita and the property tax base (Grand List) per capita. The relationship is similar to that shown in Figures 4 and 5, i.e., sales tax base per capita is positively related to the property tax base per capita, again implying that a

Local Revenue Diversification

local sales tax will not do much to reduce fiscal disparities. This is not surprising since the correlation between the index of fiscal disparities and the Grand List per capita -0.47.

We also calculated that the correlation between the ratio of Local Sales Tax revenue to property tax revenue and the commercial and industrial share of the 2013 Net Grand List was 0.57. In other words, the greater the ability to reduce property taxes are for town's with more commercial and industrial property. This means that more of the property tax reduction goes to reducing taxes on commercial and industrial property.

Summary Discussion Regarding Adopting a Local Sales Tax

The following are relevant points in considering the adoption of local sales taxes.

- The principal reasons for a adopting local sales tax is that it will diversify the local revenue structure and the revenue can be used to reduce property taxes.
- A one percent local sales tax, if adopted statewide and used just for property tax relief, could reduce property taxes by about 6.1 percent, on average.
- If structured as an add-on to the state sales tax, the cost of administration and compliance would be small.
- A local sales tax would generate tax revenue from commuters, shoppers, and visitors, thus offsetting some of the service costs associated with commuters, shoppers, and visitors.
- Sales tax revenues per capita vary widely across towns, from \$5 to \$717 for the Local Sales Tax and from \$42 to \$230 for the Regional Sales Tax.
- Estimated sales tax revenues per capita are negatively correlated with a measure of fiscal disparity, meaning that sales tax revenues per capita are higher the smaller the fiscal gap.
- Given the sales tax rates in border states, adding a one percent local sales tax should not have a major effect on the interstate location of businesses.
- Differences in local sales tax rates across town will result in some shifting of sales between towns similar to the shifting across state's border.
- If local governments adopt a sales tax, it is expected that towns will compete for sales tax base in a way similar to how they currently compete for property tax base.
- The sales tax is more regressive than the property tax.

Although not discussed above, it should be pointed out that adopting local sales taxes could preclude the state from increasing the state sales tax rate.

LOCAL INCOME TAXES

Reliance on Local Income Taxes

In 2012, local income taxes were imposed in 12 states (Table 4). New Jersey (Newark) and California (San Francisco and Los Angeles) have local payroll taxes imposed on employers, but the Census Bureau does not classify them as income taxes and therefore does not report the revenue as income tax revenue; thus these two states are not included in Table 4.¹⁶ In most states that allow local income taxes, very few local governments actually have local income or payroll taxes; for example, one city in Delaware, two cities in Missouri and in New York (including New York City), and two transit districts in Oregon have local income taxes. The states in which a substantial number of municipal or county governments impose an income tax are Maryland, Kentucky, Ohio, and Pennsylvania. There has been little growth in local income taxes as a percentage of taxes since 1980, in fact most large cities that currently use the income tax adopted it by 1970.¹⁷

Table 4. Local Income Tax Revenue as a Percentage of Local Tax Revenue, 2012

State	Percent	State	Percent
Maryland	33.3%	Delaware	6.6%
Kentucky	26.4%	Missouri	3.7%
Ohio	22.0%	Michigan	3.6%
Pennsylvania	17.5%	Alabama	2.0%
Indiana	17.0%	Iowa	1.7%
New York	11.0%	Kansas	0.04%

Source: Bureau of the Census, *Government Finances: FY 2012*

Local Income Taxes in Selected States

There is significant variation across states in how local income taxes are imposed. The following illustrates this diversity. It should be noted that local income taxes are not normally imposed on corporate income.

Ohio

Local governments in Ohio are significant users of local income taxes. Nearly all municipal governments impose a tax on earned income at rates that generally range from one percent to three

¹⁶ The Census Bureau considers payroll taxes imposed on businesses a business tax, not an income tax. In addition, Iowa allows an income tax in school districts.

¹⁷ Wallace and Edwards (1999) provide an overview of the structure of local income taxes and Sjoquist and Stoycheva (2012) provide a description of the local income or payroll tax in each state.

percent, with an average rate of 1.3 percent. Municipal governments can impose an income tax of up to one percent without voter approval. The base of the tax is comprised of wages, salaries, other compensation and net corporate and non-corporate profits attributable to the municipality; in most cases residents can credit taxes paid to the city of employment against income taxes due to their city of residence. The tax is locally administered, with differences across municipalities in compliance and reporting requirements. School districts can impose a local income tax, but it requires voter approval. The school district tax rates range from 0.25 percent to 2 percent, with one percent being the most common tax rate. Most school districts use state taxable income as the base, although about 10 percent of the districts with an income tax use earned income, i.e., wages, salary, other compensation, and earnings from non-corporations.

Pennsylvania

Most cities and townships in Pennsylvania have an earned income tax. Municipalities have the option of imposing the tax on nonresident employees, but nonresident taxpayers get to credit the tax on the income tax imposed by their place of residence. No referendum is required to adopt an income tax; tax rates cannot exceed one percent, except in certain cases. If a school district imposes an earned income tax, the revenue is split between the municipality and school district. The tax base is comprised of wages, salaries, other compensation and net profits from non-corporations. Recently, the state has formed countywide tax collection districts and imposed more uniformity on the administrative process.

Kentucky

Local governments in Kentucky are authorized to impose a tax on earnings by place of employment, and/or a tax on net profits of non-corporate businesses conducting a business within the city. Cities can adopt different rates for the payroll tax and the net profits tax; the median rate for the payroll tax is one percent while the median rate for the net profits tax is 1.4 percent. No referendum is required. There are limits on the tax rate that can be imposed.

Structuring a Local Income Tax System

If Connecticut chooses to allow cities to adopt local income taxes, the state will have to design a local income tax structure, which means selecting an option for each of several parameters or features. This section lists the parameters that have to be determined and the options for each parameter. Many of the parameters that have to be selected are the same as with a local sales tax.

Income Tax Base

There are several options for the income tax base:

- **Gross Earning.** The most commonly used base is gross earned income, which includes wages, salaries, other compensation, and net profits of non-corporations. This base thus excludes

Local Revenue Diversification

income from sources such as dividends, interest, royalties, rents, etc. In most states there are no personal exemptions, deductions, or credits allowed.

- **Adjusted Gross Income.** In some states the local income tax uses state adjusted gross income (AGI) as the base, which includes all state taxable sources of income. Generally, there are no personal exemptions, deductions, or credits allowed.
- **Taxable Income.** The local income tax base for school districts in Ohio is state taxable income. This base incorporates all of the exemptions and deductions of the state income tax, but not any credits allowed under the state personal income tax. Given Connecticut's income tax structure, taxable income is not actually calculated; the tax tables incorporate the exemptions, which phase out as Connecticut AGI increases. Thus, to use taxable income as the base in Connecticut it would be necessary to redo the income tax forms to accommodate a local income tax.
- **Tax Liability.** Indiana's local income tax and Iowa's school district income tax impose a surtax on the state's tax liability. Thus, even with a flat local income tax rate, the local tax incorporates the progressivity of the state's income tax rate structure, as well as any personal exemptions and tax credits.

These alternative income tax bases obviously differ in terms of what income is taxed, but they also differ in terms of the equity of the tax, i.e., the degree of regressivity or progressivity, as well as administrative and compliance costs. These two issues are discussed below.

Income Tax Rate

Local income tax rates differ across states. For taxes using AGI, state taxable income, or earned income as the tax base, the rates are generally one percent. Because state tax liability is much smaller than AGI, state taxable income, and earned income, the tax rates are generally higher than one percent when state tax liability is the base. Higher tax rates are used in large cities such as Philadelphia and Detroit. With very few exceptions, local income tax rates are flat, i.e., there is only one rate. As with the sales tax, states differ as to whether the state sets the tax rate or whether the rate can be set by the municipality. In most states, the local income tax rate is set by the local government, but frequently with some maximum allowable rate.

Optional versus Mandated Income Tax

As with the local sales tax, the state could require that an income tax of a fixed tax rate be adopted by each municipality, or it could allow each municipality to decide whether to adopt an income tax. Requiring all towns to adopt a local income tax would be equivalent to a state grant with revenues

distributed on the basis of the income tax base. Other than Maryland, local governments decide whether to have an income tax. See the discussion of this issue in the local sales tax section above.

Situs/Allocation of Revenue

The situs of the tax base can be based on place of residence, where the income is earned, or both. For local income taxes that use AGI, state taxable income, or state tax liability as the tax base, situs is place of residence. For local income taxes that use earned income as the base, some are imposed by place of work while in some states the tax is levied on earned income of residents and on the earnings of nonresidents, but generally, although not always, the nonresident gets a credit against the income tax imposed by the resident's city for the tax imposed by place-of-work. The recent U.S. Supreme Court decision regarding Maryland's income tax (*Comptroller of the Treasury of Maryland v. Wayne*) would suggest that a credit on taxes paid to the municipality of employment would be mandatory.

In most states the local income tax is imposed on the employee. However, Los Angeles and San Francisco have payroll taxes that are paid by the employer. Assuming that this tax is born by the employee, then the payroll tax is born by anyone (both nonresidents and residents) who works in the city, but not by residents who work outside of the city.

In Michigan the tax revenue is essentially shared between the place of residence and the place of employment. Residents pay a tax on their income while nonresidents pay a rate that is half of that for residents on income arising from sources within the city. Residents receive a credit for the tax paid on earnings from outside their city of residence. For example, suppose that the tax rate in the place of residence is one percent and all of the \$50,000 in taxable income is earned outside the city of residence. The taxpayer would pay \$250 to the place of work (0.5 percent tax rate times \$50,000) and \$250 to the place of residence (one percent times \$50,000 less a credit for the \$250 in taxes paid to the place of work.)

When the tax is based on where income is earned, it is necessary to allocate earnings to the various jurisdictions in which the individual has attributable earnings. States differ in terms of how one's place of employment is determined. In Indiana, place of work is where your main place of business was located or where the employee main work activity was performed as of the first of the year. In Birmingham, Alabama, a worker must calculate the proportion of work that was performed in the city over the year. So, for workers like delivery people this requires keeping records of time spent in each jurisdiction, which is significant administrative burden on the taxpayer. It is also difficult to audit the accuracy of such allocations.

Should a Referendum Be Required?

The state needs to determine whether the municipality's elected officials can adopt an income tax on their own or whether to require voter approval through a referendum. This is a political and not an economic issue; the choice depends on whether the state believes that voters should have a direct rather than an indirect say in setting a municipality's tax structure.

Who Should Administer the Local Income Tax?

Collection and enforcement of local income taxes that are based on earnings is done by the local government, while local income taxes that are based on AGI, state taxable income, or state tax liability are administered by the state. For the later, it would seem that administrative costs would be lower if the state were responsible for the collection of the local income tax since the local income tax can be piggy backed on the state income tax.

Local administration of a local earnings tax is challenging, particularly if not all towns impose an earning tax. For example, if the tax is based on place of residence, employers located outside the town imposing the tax will not necessarily withhold income taxes or report income earned by residents of the town, which means that the local government will have a difficult task ensuring compliance. However, the state could require all firms in the state to withhold any earnings tax liability. The fixed costs of administering a local earned income tax will be high, suggesting that adopting an earnings tax may not be desirable for towns for which the tax revenue is small. While there are small towns in other states that have an earnings tax, there are no known studies of the cost and effectiveness of the administration.

Use of the Revenue

The issues associated with the allowable use of local income taxes are the same as for local sales taxes. See the discussion of this topic above in the section on sales taxes.

Geographic Coverage

The issues associated with the geographic coverage are the same as for local sales taxes. See the discussion of this topic above in the section on sales taxes.

Economic Issues Associated with Local Income Taxes

There are four economic issues we consider, incentive effects, the amount of revenue generated, equity/fairness, and effect on fiscal disparities.

Incentive Effects

If all local governments in Connecticut adopt an income tax at a uniform tax rate, the effect on the number of jobs and hours worked will be the same as if the state increased its income tax rate. To the extent the local income tax rates differ across towns, it is expected that the tax differential will cause migration of the tax base from the towns with the higher income tax rates to those towns with lower tax

Local Revenue Diversification

rates. Much of the research on the effect of local income taxes on tax base mobility has focused on Philadelphia, for which differential income tax rates have been shown to result in migration of workers across the region. Grieson (1980) estimated that Philadelphia lost 14 percent of its employment between 1965 and 1975 as a result of its high income tax rate, which was three to 4 times the tax rate in surrounding jurisdictions. Inman, et al. (1987) obtain an estimated elasticity of employment with respect to the wage tax rate of between -0.11 and -0.14 for Philadelphia. That is, for every 10 percent increase in the tax rate, employment fell by 1.1 to 1.4 percent. Luce (1994) estimated an elasticity of -0.6 for wage tax rate differential using data from the Philadelphia area, that is, an increase of 10 percent in the tax rate differential results in an estimated decrease in employment of 6 percent. If local income tax revenue is used to reduce the property tax rate, the reduction in property taxes will offset as least some of the disincentive effect of a local income tax.

In terms of economic incentives, it does not matter if an income tax is imposed on the employer or the employee. If imposed on the employer and the employer cannot reduce wages to offset the tax, the employer may decide to move to a city without an income tax. If the tax is imposed on employees and the employees can get an offsetting wage increase, the employer may decide to move to a city without an income tax. If the tax results in a reduction in net wages, employees may decide to seek work in a city without an income tax. In any of these cases, the city will lose jobs.

The adoption of an income tax will change the incentives for local government competition for tax base. Currently, towns compete for property tax base, with commercial and industrial property being more desirable since there is less associated service cost with such property than for residential property. An income tax provides an incentive for towns to compete more strongly for high wage households or high wage jobs, and somewhat less for property. Towns will be less inclined to compete for large facilities that offer low wage jobs. So, more of the inducements that local governments offer will be tailored to attract high wage jobs rather than just buildings.

Revenue

The revenue from a local income tax will depend on the tax base that is chosen and the tax rate. We consider three tax bases: Connecticut AGI (which we refer to as the AGI Tax), state tax liability (which we refer to as the Income Surtax), and earned income. For the earned income tax we consider three alternative taxes: 1) a tax imposed by place of work, which we refer to as the Payroll Tax; 2) a tax imposed by a town on earned income of the residents, regardless of where earned, and on earnings of non-residents working in the town, with a credit for taxes paid by place of work, which we refer to as the Residence-base Tax; 3) a tax equally split between place of work and place of residence, which we refer

to as the Split Earnings Tax. We will also refer to a tax that applies to earned income only of the residents of the town, which we will refer to as the Resident-only Tax.

As with the sales tax, a regional income tax is an option for any of the five income taxes. Given the number of options, we did not estimate local income tax revenue by town for a regional option. The options for how to adopt a regional income tax are the same as those for the regional sales tax, as discussed in the previous section. If a regional earnings tax is locally administrated, an agency would have to be established or one of the towns appointed to administer the tax. But such a regional agency could also be established to administer non-regional earnings taxes. Ohio provides an example for such regional administration.

The Connecticut Department of Revenue Services provided Connecticut AGI and state tax liability by town of residence. These values do not include data from returns filed by non-residents, which account for 3.1 percent of AGI and 3.5 percent of tax liability. Thus, the revenue estimates presented below will slightly understate the likely tax revenue a town would receive from these taxes.

The Connecticut Department of Labor provided data on earnings by town and place of work. Among other problems (see Appendix A), these data have two major limitations for estimating earned income tax revenue. First, these data do not include profit from non-corporate businesses; we use Census data to account in an imperfect way for this limitation. With this adjustment, we can estimate the revenue for an earned income tax imposed by place of employment, i.e., the Payroll Tax. Note that the Payroll Tax revenue for any town will not depend on whether other towns adopt the tax, except through the effect on firm location due to the tax.

The second limitation with these data is that the data do not include earnings of Connecticut residents who work out-of-state; we are unable to adjust for this. Thus, the data underestimate the revenue for a residence-based earned income tax, i.e., a tax on earned income of the residents, regardless of where earned, and on earnings of non-residents working in the town, with a credit for taxes paid by place of work.

For the Residence-base Tax, a town's tax revenue will depend on which other towns adopt the tax since that determines whether a resident's out-of-town earned income is taxed by the town of residence or by the town in which the individual works. If all towns adopt the Residence-base Tax, the tax base consists of a payroll tax plus the residents' out-of-state earned income. Since we cannot measure out-of-state earned income, the Payroll Tax and the Residence-base Tax are equivalent using our data in the case that all towns adopt a residence-base tax, since the only difference between the two tax bases when all towns adopt the Residence-base Tax is earning from out-of-state. (See Appendix A for a discussion of the procedure used to estimate the earned income tax bases.)

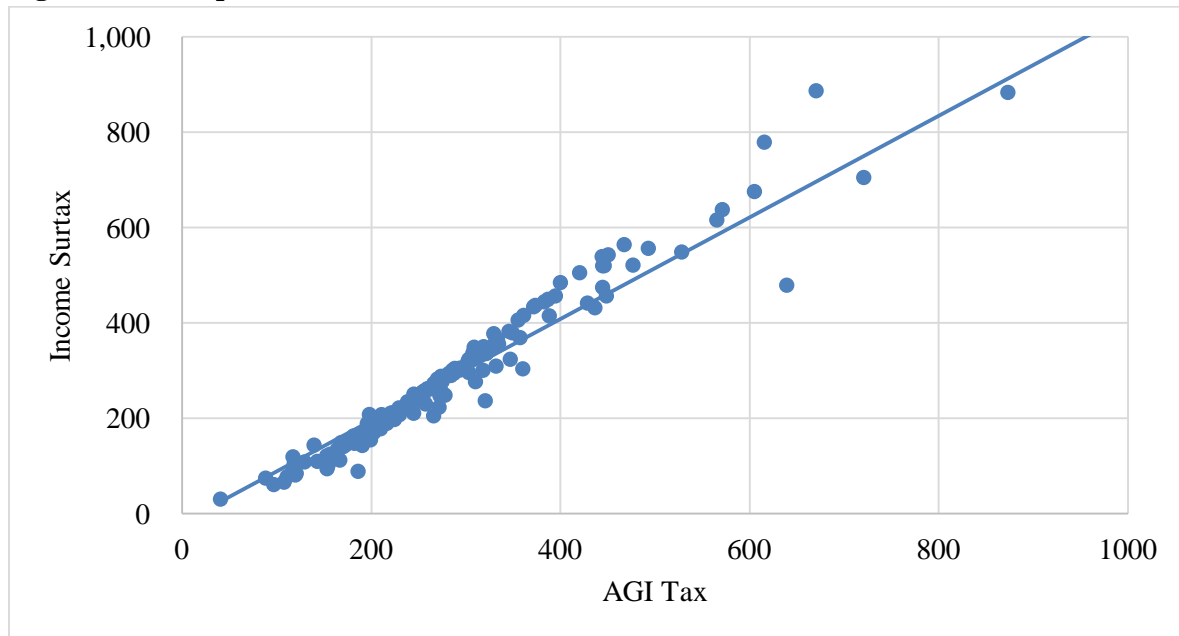
We set the tax rates at one percent for the tax on earned income, 0.75 percent for the AGI Tax, and 18 percent for the Income Surtax. These rates yield similar total statewide tax revenue, namely, \$1,084.0 million. Income tax rates that would raise essentially the same aggregate tax revenue as a one percent local sales tax are: 0.42 percent on Connecticut AGI, 9.99 percent on Connecticut income tax liability, and 0.55 percent on earnings and net non-corporate profits.

Appendix Table A3 provides estimates of total and per capita tax revenues by town for each of the tax bases. It needs to be stressed that these estimates are not appropriate for budgeting purposes; data limitation suggest that the revenue estimates should be viewed with caution and may be imprecise, particularly for the earnings tax. Because the data do not accurately measure the tax base for each town, we did not attempt to adjust for possible changes in the base due to behavioral responses to the tax. However, these estimates do provide a reasonable indication of tax revenue that municipalities might generate for informing state tax policy, but not for local government budget making.

Revenue per capita differs widely across towns; per capita revenue range from \$40 to \$1,773 for the AGI Tax, and from \$31 to \$1,874 for the Income Surtax, which are substantial ranges. If we don't consider the 5 percent of towns with the highest revenue per capita and the 5 percent with the lowest per capita revenue, we find that for 90 percent of the towns AGI Tax per capita ranges from \$120 to \$639, and from \$90 to \$705 for the Income Surtax. Figure 6 plots per capita tax revenue for the two income taxes. For most towns the revenue from the tax on AGI is similar to the revenue from the tax on tax liability, for 147 towns the amounts are within 25 percent of each other. However, the ratio of revenue from the AGI Tax to that from the Income Surtax ranges from 0.76 to 2.08.¹⁸ There are four things to note. First, higher per capita AGI Tax revenue is associated with higher per capita Income Surtax revenue. In fact the correlation between the two is 0.98. Second, the slope of a simple regression line through the dots in Figure 6 has a slope that is greater than one, so that as AGI increases the per capita tax revenue for the Income Surtax increases faster than per capita tax revenue for the AGI Tax. Third, the relationship between the two revenues is more varied at the high AGI levels. Fourth, the ratio of per capita revenue from the AGI Tax to that from the Income Surtax is inversely related to AGI.

¹⁸ State tax liability is always less than state AGI, but because the tax rates differ, the revenue from the local tax on tax liability does not have to be less than the local tax on AGI.

Figure 6. Per Capita Income Tax Revenue for AGI Tax and Income Surtax



Per capita revenue for the Payroll Tax ranges from \$22 to \$872, which is not as large as the range for the AGI Tax. The per capita revenue for the Payroll Tax is positively related to per capita revenue for the AGI Tax, but the correlation is small, 0.27. The reason is that AGI is based on the income of the residents of a town, while the Payroll Tax is based on the earned income of those working in the town.

As noted above, the revenue from a Residence-base Tax depends on which towns adopt the tax. If all towns adopt a Residence-base Tax, the results using our data would be the same as for the Payroll Tax. However, for illustrative purposes we calculated the revenue for a Residence-base Tax if only the four largest towns adopted it. Table 5 presents the results. For comparison purposes we calculated two ratios. First, we take the ratio of the revenue for a Residence-base Tax to the revenue from a Payroll Tax. For these 4 cities, the revenue from the former is larger than the latter, and the relative differences vary, from 11 percent more to 52 percent more. We also calculated revenue for a Resident-only Tax and took the ratio of the Residence-base Tax to the Resident-only Tax (column 4 of Table 5). (Recall that the Resident-only Tax applies to the earned income only of the residents of the town.) The ratios are large, suggesting that these 4 towns would generate a substantial percentage of their revenue from the earned income of non-residents.

Table 5. Tax Revenue for Residence-base Tax

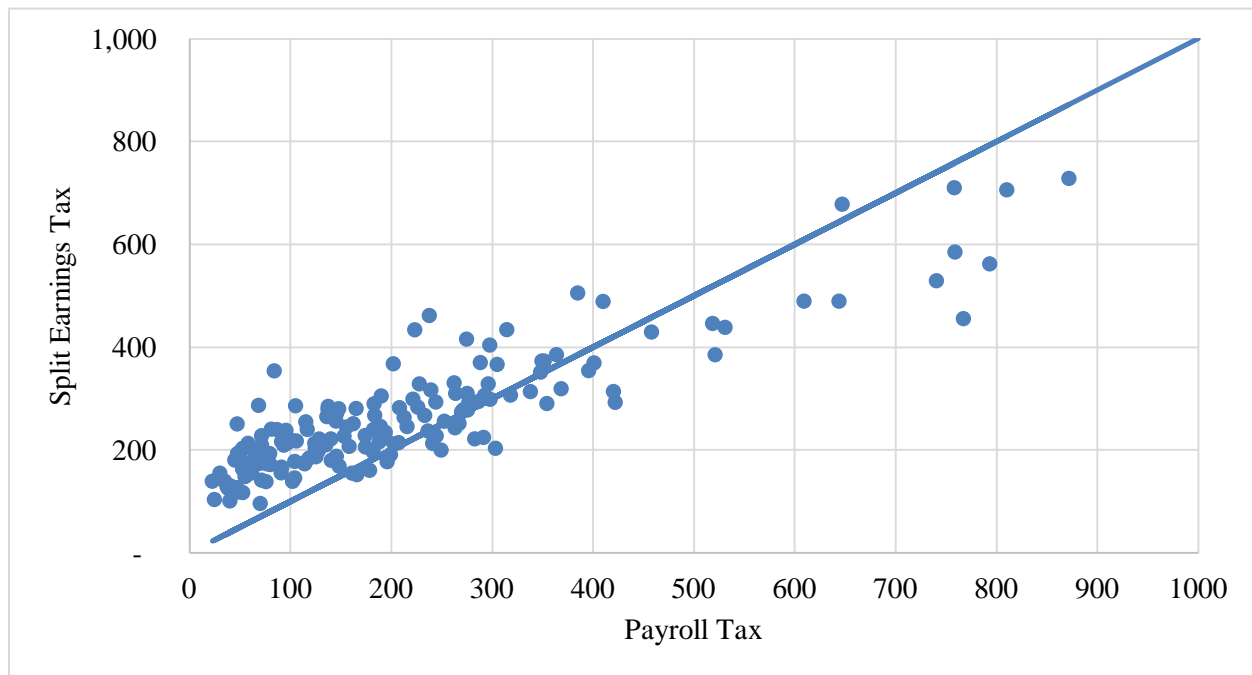
	Tax Revenue	Tax Revenue Per Capita	Ratio of Bases	
			Residence-base Tax/Payroll Tax	Residence-base Tax / Resident-only Tax
Bridgeport	\$33,441,235	230	1.52	2.02
Hartford	93,269,242	745	1.11	7.03
New Haven	59,355,611	455	1.16	3.45
Stamford	105,168,062	848	1.23	3.17

To explore the relationship between the Payroll Tax and the Resident-only Tax, we created the ratio of the revenue from the two taxes (Table 6). A ratio greater than one means that tax revenue is larger when the tax is based on place of work (Payroll Tax) than place of residence (Resident-only Tax). There are only 35 towns from which Payroll Tax revenue is greater than Resident-only Tax revenue. These 35 towns are employment centers, and thus generate more revenue when the earned income tax is a Payroll Tax.

Table 6. Distribution of the Ratio of Payroll Tax Revenue to Resident-only Tax Revenue

Range	Number of Towns
0 to 0.2	22
0.2 to 0.4	44
0.4 to 0.6	30
0.6 to 0.8	21
0.8 to 1.0	17
1.0 to 1.4	17
1.4 to 2.0	9
2.0 and above	9

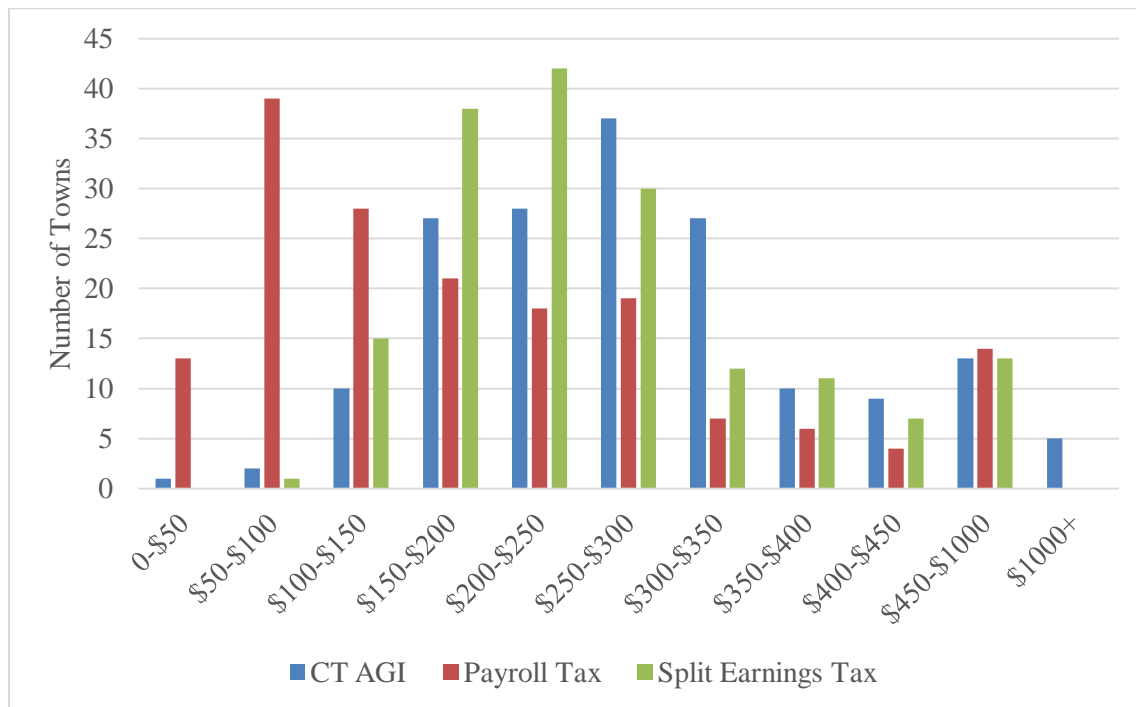
Figure 7. Earned Income Tax Revenue per Capita



We also consider a tax in which the tax on earned income is split 50/50 between place of residence and place of employment. Per capita revenues for the Split Earnings Tax ranges from \$97 to \$710. Figure 7 shows the relationship between per capita revenues for the Payroll Tax and the Split Earnings Tax. The line in Figure 7 represents points for which the revenue per capita from the two taxes are equal. For low values of per capita Payroll Tax revenue, the per capita revenue for the Split Earnings Tax is greater than the per capita revenue for the Payroll Tax, i.e., the points are above the line. Towns with small Payroll Tax bases are likely to be residential communities so that resident earned income is likely to be larger than payroll earned income, since residents in such communities work outside their town of residence. The opposite is the case for towns with large per capita Payroll Tax revenue.

Figure 8 provides more detail on the distribution of tax revenue per capita for three income taxes (we exclude the Income Surtax since it is closely related to the tax on AGI). In particular, the figure shows that there are many more towns with Payroll Tax revenue per capita below \$150 than either the AGI Tax or the Split Earnings Tax. Furthermore, the distribution for the Split Earnings Tax is more uniformly distributed than either of the other two taxes.

Figure 8. Income Tax per Capita



One possible objective of adopting a local income tax is to reduce property taxes. In the aggregate, the income taxes generate sufficient revenue to reduce total property taxes by about 11.5 percent. But there are substantial differences between towns in the possible reduction in property taxes, and furthermore the possible reduction for a town differs by the particular income tax considered. For each of three taxes (AGI Tax, Payroll Tax, and Split Earnings Tax) we calculated the income tax revenue as a percentage of property tax revenue. Table 7 summarizes the distribution of the potential percentage reduction in property tax. For the AGI Tax and the Split Earnings Tax, most of towns can reduce property taxes by 5 to 15 percent. However, for the Payroll Tax, most of the towns can reduce property taxes by less than 10 percent. The reason is that there are many towns that generate very little revenue with a Payroll Tax, and a few towns with very large payrolls which allows a substantial reduction in property taxes for these towns.

Table 7. Potential Reduction in Property Tax

Percent Reduction	Number of Towns		
	AGI Tax	Payroll Tax	Split Earnings Tax
0 to 5%	4	65	6
5% to 10%	57	61	91
10% to 15%	97	24	58
15% to 20%	8	7	10
20% of more	3	12	4

Table 8 present total and per capita income tax revenue estimates for the 23 sample cities, while Table 9 shows the possible percentage reduction in property tax revenue. The tables illustrate the points made above.

Table 8. Local Income Tax Revenue

	[1]		[2]		[3]		[4]	
	AGI Tax		Income Surtax		Payroll Tax		Split Earnings Tax	
	Total (\$1,000)	Per Capita	Total (\$1,000)	Per Capita	Total (\$1,000)	Per Capita	Total (\$1,000)	Per Capita
Large Cities								
Bridgeport	15,660.4	108	9,720.7	67	24,131.7	166	22,127.3	152
Hartford	12,094.0	97	7,727.6	62	95,987.7	767	56,998.3	456
New Haven	16,840.0	129	14,237.6	109	54,987.4	422	38,151.5	293
Stamford	54,097.8	436	53,598.5	432	94,076.1	759	72,560.1	585
Small Cities								
Manchester	12,198.8	210	11,187.5	192	12,541.5	216	14,293.4	246
Meriden	9,952.9	164	8,238.6	136	11,032.2	182	11,936.1	197
New London	3,181.3	115	2,338.9	85	7,796.2	283	6,115.5	222
Torrington	6,142.4	170	5,099.0	141	7,470.8	207	7,728.3	214
Rich Suburbs								
Glastonbury	15,559.9	450	18,768.0	543	10,278.9	297	13,965.3	404
Guilford	9,401.6	420	11,316.2	506	4,091.0	183	6,488.0	290
Litchfield	2,537.2	302	2,680.9	319	1,588.7	189	2,067.4	246
New Canaan	34,492.7	1730	36,224.2	1817	4,736.8	238	9,204.6	462
Mixed Base								
Hamden	12,949.6	211	12,809.9	208	9,719.9	158	12,729.6	207
Middletown	9,648.5	203	9,300.5	196	17,507.5	368	15,174.7	319
Norwich	5,770.4	143	4,464.8	110	8,048.7	199	7,717.5	191

Windsor	7,028.1	561	6,636.2	530	18,733.0	1495	14,245.1	1137
Rural								
Bozrah	582.6	223	556.2	212	507.5	194	584.9	223
Durham	2,741.8	372	3,205.4	434	1,075.2	146	2,004.1	272
Killingly	2,883.8	167	1,957.9	113	4,172.0	241	3,685.3	213
North Canaan	132.6	40	102.8	31	996.1	303	668.2	203
Plainfield	2,359.8	154	1,705.2	111	1,594.7	104	2,230.4	146
Union	174.9	168	156.0	150	54.7	53	122.0	117
Washington	2,013.3	565	2,195.1	616	830.0	233	951.9	267

Table 9. Income Tax Revenue as a Percent of Property Tax Revenue

	AGI Tax	Income Surtax	Payroll Tax	Split Earnings Tax
Large Cities				
Bridgeport	5.5%	3.4%	8.5%	7.8%
Hartford	4.7%	3.0%	37.5%	22.3%
New Haven	7.3%	6.2%	23.9%	16.6%
Stamford	12.8%	12.7%	22.2%	17.1%
Small Cities				
Manchester	10.0%	9.2%	10.3%	11.7%
Meriden	8.7%	7.2%	9.6%	10.4%
New London	7.7%	5.6%	18.8%	14.7%
Torrington	7.7%	6.4%	9.3%	9.6%
Rich Suburbs				
Glastonbury	12.2%	14.7%	8.1%	10.9%
Guilford	12.2%	14.7%	5.3%	8.4%
Litchfield	10.1%	10.7%	6.4%	8.3%
New Canaan	30.0%	31.5%	4.1%	8.0%
Mixed Base				
Hamden	8.7%	8.6%	6.5%	8.6%
Middletown	10.0%	9.7%	18.2%	15.8%
Norwich	8.9%	6.9%	12.4%	11.9%
Windsor	19.9%	18.8%	53.0%	40.3%
Rural				
Bozrah	10.8%	10.3%	9.4%	10.9%
Durham	11.6%	13.6%	4.6%	8.5%
Killingly	10.0%	6.8%	14.5%	12.8%
North Canaan	1.7%	1.4%	13.1%	8.8%
Plainfield	10.4%	7.5%	7.1%	9.9%
Union	6.2%	5.5%	1.9%	4.3%
Washington	13.9%	15.1%	5.7%	6.6%

Equity/Fairness

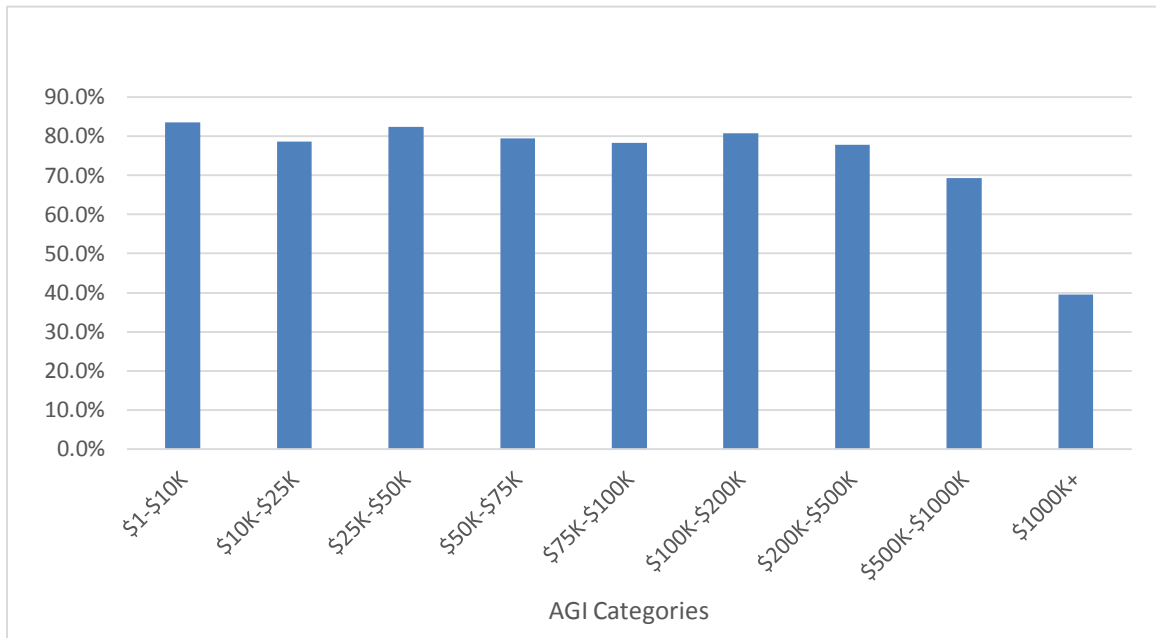
An income tax on AGI will be proportional, assuming that income is measured by AGI. The distribution of the tax for an income tax using tax liability will be the same as the distribution of the state income tax liability.

Local earned income taxes are slightly regressive since not all income sources are taxed and the excluded income (largely returns to capital) are associated with higher income households. Figure 9 shows earned income (including net non-corporate profits) as a share of Federal AGI by AGI category using IRS data for Connecticut. While the pattern is not consistent, in general the earned income share decreases as AGI increases, particularly at the upper AGI levels. Since the Payroll Tax is not imposed on earnings from out-of-state, there is a horizontal inequity between those who work in-state and those who work out-of-state.

Fiscal Disparities

A recent report from the New England Public Policy Center at the Federal Reserve Bank of Boston (Zhao and Weiner 2015) provides an index of fiscal disparities across Connecticut cities (Table A1, column 4). (See the discussion of the index in the previous section.) To illustrate the direction of the effect of local income taxes on fiscal disparities we plotted the fiscal disparity index and per capita tax revenue for three taxes, the AGI Tax, the Payroll Tax, and the Split Earnings Tax, see Figures 10, 11, and 12. Recall that a negative value of the index implies fiscal health. As can be seen, tax revenue per capita is generally larger for towns with better fiscal health. This is particularly true for the AGI tax and the Split Earnings Tax, for which where the correlation coefficients are -0.83 and -0.41. The pattern for the payroll tax is not as clear, but the correlation coefficient of -0.17 suggests that larger per capita revenue is associated with towns that have greater fiscal health. Thus, the adoption of local income taxes will not in general offset existing fiscal disparities.

Figure 9. Earnings and Net Profits as a Percentage of AGI, FY 2012



Source: *Statistics of Income*, IRS

Figure 10. AGI Tax and Fiscal Disparities

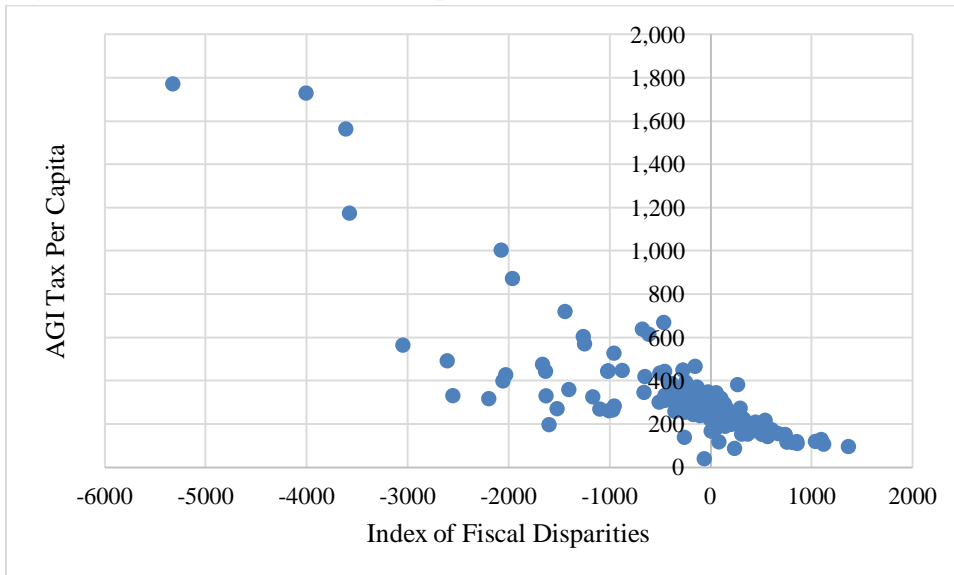


Figure 11. Payroll Tax and Fiscal Disparities

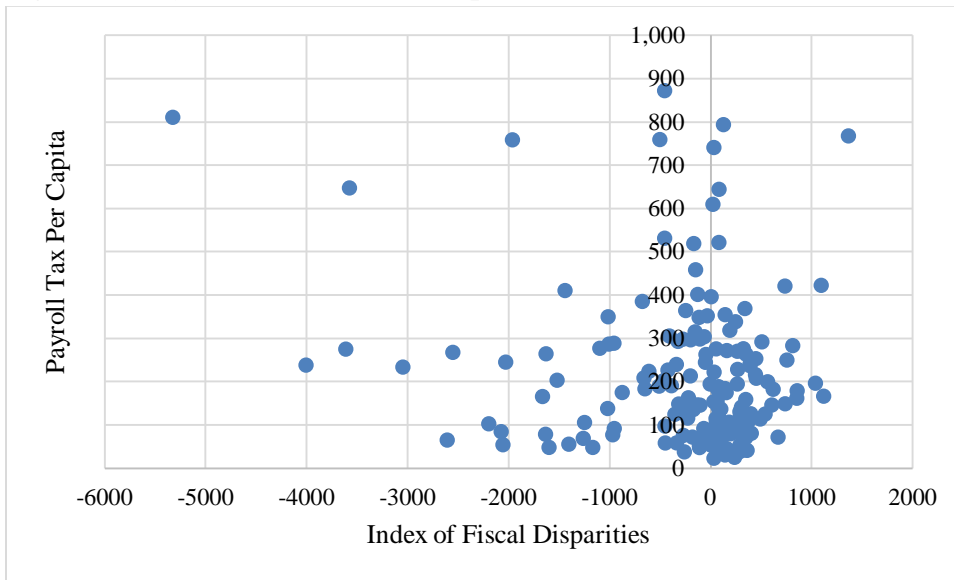
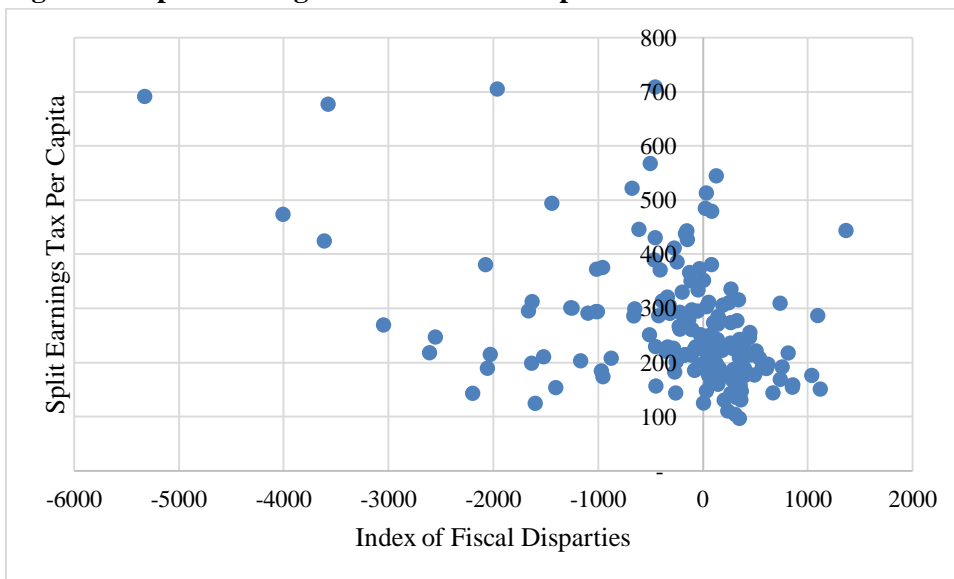


Figure 12. Split Earnings Tax and Fiscal Disparities



We also considered the relationship between the various income tax bases per capita and the property tax base per capita. The correlations between property tax base per capita and the AGI Tax and Income Surtax bases are 0.67 and 0.65, respectively, while the correlation with the Payroll Tax base per capita is 0.26. These correlations are consistent with the relationship between the taxes and the index of fiscal disparities, that is, the income taxes will not, in general, reduce the level of fiscal disparity.

We also calculated that the correlation between the ratio of Payroll Tax revenue to property tax revenue and the commercial and industrial share of the 2013 Net Grand List was 0.81. In other words, the greater the ability to reduce property taxes are for town's with more commercial and industrial property. This means that more of the property tax reduction goes to reducing taxes on commercial and industrial property.

Summary Discussion Regarding Adopting a Local Income Tax

The following are relevant points in considering the adoption of local income taxes.

- The principal reasons for adopting a local income tax is that it will diversity the local revenue structure and the revenue can be used to reduce the property tax burden.
- Given the estimated income tax revenue, a local income tax, if adopted by all towns and used just for property tax relief, could reduce property taxes by about 11.5 percent. However, there are large difference between towns in the potential for reducing property taxes, and the differences depend on which income tax is adopted.
- The cost of administration and compliance, assuming state administration, would be small for a local income tax that is based on state AGI or state tax liability. The administrative cost for an earned income tax administrated by each town will be large and would require significant administrative capabilities. Given the size of many of the towns in Connecticut, we suspect that administrating such a tax for many towns would be a challenge. Regional administration of an earnings tax would overcome some of the administrative issues associated with the administration by town.
- If the tax is based on payroll, the tax would generate tax revenue from commuters, and thus offset some of the service costs associated with commuters and visitors.
- Income tax revenue per capita varies widely across towns, with the difference depending on which tax is adopted.
- Estimated income tax revenue per capita is negatively correlated with a measure of fiscal disparity. This means that local income taxes will not reduce fiscal disparities.
- The income tax based on AGI or state tax liability is progressive, while an earned income tax is less regressive than the property tax or a sales tax.
- An earned income tax based on payroll is likely to reduce employment by a small amount in any town that adopts it, particularly if neighboring towns do not adopt an earned income tax.

USER CHARGES AND FEES

Reliance on User Charges and Fees

Table 10 shows local government revenue from current charges as a share of OSR by state.¹⁹ The District of Columbia and Connecticut have the lowest share of current charges overall at 8.5 and 8.6 percent, respectively, while in Mississippi current charges account for over 50 percent of local own source revenue. On average, local governments in the U.S. generate 22.9 percent of their OSR from current charges. It is worth noting that for more than half of the states, current charges as a share of OSR ranges from 20 percent to 30 percent.

Table 10. Current Charges as a Share of OSR, 2012

Current Charges as a Share of OSR		Current Charges as a Share of OSR	
Mississippi	51.1%	Utah	24.1%
Wyoming	38.1%	New Mexico	23.6%
Indiana	37.0%	Ohio	22.8%
Idaho	34.6%	Wisconsin	22.7%
Tennessee	33.8%	South Carolina	22.5%
North Carolina	33.3%	Arizona	22.5%
Iowa	32.7%	Hawaii	22.4%
Nevada	32.4%	Texas	22.1%
Oklahoma	32.1%	South Dakota	22.0%
Michigan	31.9%	North Dakota	20.9%
Alaska	30.0%	Delaware	20.5%
Minnesota	29.5%	Alabama	20.0%
California	29.3%	Georgia	18.4%
Florida	28.3%	Maryland	18.2%
Arkansas	27.8%	Illinois	16.2%
Kentucky	27.4%	Pennsylvania	15.9%
Louisiana	26.9%	Massachusetts	15.3%
West Virginia	26.7%	Virginia	14.8%
Oregon	26.2%	New York	14.6%
Montana	25.8%	Maine	14.2%
Colorado	25.7%	New Jersey	13.4%

¹⁹ The Bureau of the Census defines current charges as the amounts received from the public for performance of specific services benefitting the person charged, and from sales of commodities and services, except liquor store sales. Includes fees, assessments, and other reimbursements for current services, rents and sales derived from commodities or services furnished incident to the performance of particular functions, gross income of commercial activities, and the like. Excludes amounts received from other governments (Intergovernmental revenue) and interdepartmental charges and transfers. Current charges are distinguished from license taxes, which relate to privileges granted by the government or regulatory measures for the protection of the public. Current charges do not include fines for violations of law, civil penalties, and special assessments such as impact fees.

Vermont	25.7%	Rhode Island	12.1%
Missouri	25.4%	New Hampshire	11.0%
Nebraska	25.3%	Connecticut	8.6%
Washington	25.2%	District of Columbia	8.5%
Kansas	25.0%	United States	22.9%

Note: Current charges do not include utility charges.

Source: Bureau of the Census, Government Finances: FY 2012.

Table 11 presents the share of current charge revenue by service category and the share of the expenditures financed by current charges, both for the U.S. and for Connecticut. Hospital fees, sewerage charges and other charges are the major source of current charge revenue in the U.S., with hospitals accounting for the largest share of current charges revenue in the U.S. Since public hospitals in Connecticut are a state function, local governments in Connecticut collect no current charge revenue from hospitals.

Table 11. Current Charges by Function, 2012

Function	Current Charges as a Share of Total Charges		Current Charges as a Share of Expenditures	
	U.S.	Connecticut	U.S.	Connecticut
Education	13.2%	14.0%	4.1%	1.4%
Hospitals	22.3%	0.0%	75.8%	N.A.
Highways	1.9%	0.1%	6.2%	0.2%
Air transportation (airports)	6.3%	0.1%	89.6%	31.8%
Parking facilities	1.2%	7.0%	132.4%	161.5%
Sea and inland port facilities	0.9%	0.1%	100.5%	108.2%
Natural resources	0.3%	0.3%	9.8%	9.8%
Parks and recreation	3.5%	10.1%	23.0%	39.5%
Housing and community development	1.4%	0.4%	11.7%	2.9%
Sewerage	20.9%	34.4%	96.9%	83.2%
Solid waste management	8.0%	6.0%	73.6%	28.3%
Other charges	20.0%	27.6%	36.9%	38.7%
Total	100.0%	100.0%		

Source: Author's calculation based on 2012 Census of Governments, U.S. Bureau of the Census.

The extent to which current charges are used to cover the expenditures for government services varies significantly across services. For the U.S., revenue from parking and water transportation facilities exceed expenditures on these services. Other services with a large ratio of current charge revenue to expenditures are air transportation, sewerage, hospitals, and waste management. On the other hand, education, highways, parks and recreation, and housing and community development have low current charge revenue to expenditure ratios.

For most services, Connecticut collects a smaller percentage of expenditures in current charges than the average for the U.S. Of particular note are air transportation and solid waste management. However, there are some functions for which current charges as share of expenditures in Connecticut exceed the U.S. average.

We attempted to determine current charges for a sample of Connecticut cities in order to show comparisons across cities. However, we were unsuccessful because cities differ greatly in how they categorize current charges.

Issues Associated with Current Charges

Charges and fees can serve as signals of the cost of a public service, similar to prices for private goods.²⁰ If charges vary with the amount of service consumed, it is expected that individuals will adjust their consumption of these services, relating the benefits they receive to the cost. Charges thus act as a rationing device in the same way that prices ration goods and services in the private sector.

In addition, charges can be used to reduce congestion when the demand for a public service exceeds capacity. For example, congestion tolls on some urban interstate lanes are being used to manage traffic congestion on those lanes. But in addition, charges can be used to limit the excess demand of facilities such as swimming pools and golf courses on weekends, of electricity during heat waves, and of water during droughts.

A major issue with charges is equity. On the one hand, for services that do not involve distributional concerns, charges ensure that those who benefit from the service pay for it. Based on the benefit principle of equity, this would be equitable. This is also relevant for services consumed by nonresidents, who might not pay taxes commensurate with the cost of providing those services.

On the other hand, there are potential vertical equity issues that may arise. For many public services user charges would constitute a larger percentage of income for lower income individuals, and therefore may be regressive. The extent to which this is the case would vary across public services. On the other hand, there may be public services that are used more by higher income households. For example,

²⁰ Bierhanzl and Downing (1998); Downing (1999); Duff (2004).

higher income individuals may consume more recreational services such as golf, so public provision of golf courses financed through general taxes subsidizes the consumption of higher income individuals.

There are charges or fees that do not vary with the use of the public service. For example, the fee for solid waste collection is generally a flat amount, independent of the amount of solid waste generated. Such a fee is often not directly associated with the cost of providing the service to a particular household, which depends on front footage and the amount of solid waste that the family generates. In this case, the fee is essentially equivalent to a flat per household tax. Some cities have adopted a fee structure that depends on the volume of solid waste that a household generates.

The Potential for Expanding the Use of Current Charges in Connecticut

As noted above, local government current charges as a share of OSR in Connecticut are relatively low. In this subsection we explore the possibility of expanding current charges for Connecticut towns. In order to determine the potential for expanding the use of current charges in Connecticut we need to understand why Connecticut ranks so low (Table 10). There are several explanations.

- There are services for which the state has set limits on the size of the fees that can be charged, for example, for the issuance of marriage licenses.
- There are services that local governments perform in other states that Connecticut towns do not provide. In Connecticut, hospitals service and public transit are provided by the state, where they are typically provided by local governments in other states. If we exclude hospital current charges in calculating current charges as a share of OSR, the U.S. average goes from 22.9 percent to 17.8 percent.
- There appears to be a reticence among towns in Connecticut to use charges. For example, in our interviews with local government officials it was noted that most waste and recycling is financed through the property tax rather than through charges. There appears to be two reasons for that. First, it was suggested that citizens would view the implementation of a charge for waste collection not as a way to reduce property taxes but as an addition payment to the government. And thus it was thought that citizens would oppose such a fee. Second, officials avoid imposing fees and charges over the concern that charges and fees impose a substantial burden on low income households. These reasons are consistent with Duff's (2004) discussion of the political feasibility of user charges
- It is possible that since Connecticut has no large city, local governments have less opportunity to collect charges. However, there are other states that do not have a large city and yet collect relatively more in current charges than Connecticut.

To estimate the potential for increasing current charge revenue, we selected three states that do not have a large city and for which current charges as a share of OSR is close to the average for the U.S. These states are Delaware, South Dakota, and North Dakota. If Connecticut increased its revenue from current charges sufficiently to cover the same percentage of expenditures in each expenditure category as these 3 other states, Connecticut could increase its revenue from current charges by between \$349 million and \$867 million, or between 48.1 percent and 96.0 percent. If used to reduce property taxes, towns in Connecticut could reduce property taxes by between 3.8 percent and 9.3 percent.

Impact Fees

Local governments in the U.S. have increased their use of economic development impact fees, which are one-time charges on new development used to pay for the construction or expansion of off-site capital improvements that are necessitated by and benefit the new project.²¹ (As noted in footnote 19, impact fee revenue is not included in current charge revenue as reported by the Census Bureau.) Connecticut towns are not authorized to impose impact fees.

Financing the public infrastructure required as a result of new development by impact fees, if they are appropriately structured, is expected to be economically efficient, particularly in comparison to using the property tax. The ideal is for the value of the impact fee to be equal to the cost of the required public infrastructure and thus provide the appropriate incentives to developers. However, in practice impact fees are rarely structured so that economic efficiency is achieved (Snyder and Stegman 1986). It is commonly argued that impact fees, like user charges, are fair since the person responsible for generating the expenditure pays the cost. However, if existing public infrastructure built for previous development is being financed from property taxes, it may seem as unfair to require new development to pay impact fees as well as the property tax required to pay off the cost of existing infrastructure.

There are a substantial number of studies of the effect of impact fees on housing prices. In general these studies find that impact fees are paid by buyers in the form of higher housing prices.²² A concern with impact fees is whether they will reduce economic development. There is not a lot of research on this topic, and the research that has been conducted is not of one mind on this subject. Earlier research associates impact fees with improvement in economic development, i.e., the studies find a positive correlation between impact fees and job growth. The explanation offered for such results is that impact fees reduce other barriers to development that communities establish to prevent unwanted development

²¹ For a description of impact fees and their use, see Burge (2010). Duncan Associates hosts a website, ImpactFees.com, which provides a comprehensive and current collection of online information relating to impact fees and infrastructure financing.

²² See Burge (2010) and Been (2005) for a review of the literature on the effect of impact fees on housing prices.

(Nelson and Moody 2003). More recent research however, for example, Burge and Ihlanfeldt (2009), find that an increase in impact fees results in a decrease in employment.

Designing an impact fee system is difficult and potentially costly, but administering the system is not particularly costly. The collection rate is high since the city can deny the issuance of a building permit until the impact fees are paid.

The Bureau of the Census does not separately report impact fee revenue, but includes it as part of Special Assessments. We were unable to find impact fee revenue by state other than for Florida.

Assuming that impact fee revenue is associated with increases in housing, we took annual impact fee revenue for Florida local governments for the period 2010 – 2013 and divided it by the number of housing permits issued. The resulting annual values ranged from \$7,159 to \$11,503, with an average of \$8,209. Applying these values to Connecticut's housing permits yields annual revenues estimates that range between \$33.4 million and \$45.2 million. We obtain similar values when we used the dollar value of housing permits rather than the number of housing permits.

The revenue that might be expected from impact fees will depend on the size of the fees charged. Duncan Associates' most recent survey of impact fees (available at ImpactFees.com) reports that for a standard \$200,000 home, Florida's average impact fee is \$9,014, while the national average, excluding California, is \$8,510. So, Florida's current impact fees are similar to other states, and thus the estimated impact fee revenue for Connecticut is based on essentially the average impact fee.

Summary Discussion of Charges and Fees

Towns in Connecticut do not appear to rely on charges and fees to the extent that local government in other states do. While there are various reasons why charge and fee revenue is relatively low in Connecticut, there does appear to be room to increase fee and charge revenue. State legislation regarding limits the state imposes on fees should be reviewed to determine whether they are still appropriate. For services such as waste collection, local governments could be encouraged to adopt a fee structure that is based on the volume of waste a resident puts in the system and that is not as regressive as a flat per household charge. Consideration might be given to authorizing the use of impact fees. In 2013, the Connecticut House of Representatives considered HB 5135, a bill to authorize the use of impact fees; the Connecticut Conference of Municipalities testified in favor of the legislation.

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APPENDIX A. NOTES ON REVENUE DATA AND REVENUE ESTIMATION.

Census Bureau Revenue Data

The data for Tables 1, 2, 4, 10, and 11 come from the 2012 Census of Government conducted by the U.S. Bureau of the Census. For each state, the Census provides revenue data by four types of local governments: counties, municipalities, townships, special districts, and school districts. The focus of this report is on towns in Connecticut. Connecticut towns provides services that in other states are provided by counties, municipalities, townships, and school districts. Thus, for comparison purposes, the data for these four types of local government were combined to produce the data used in the Tables. The data thus exclude special districts.

Herfindahl Index

The Census identified the following 27 sources of own source revenue: property tax, general sales tax, motor fuel tax, alcoholic beverage tax, tobacco product tax, public utility tax, individual income tax, corporate income tax, motor vehicle tax, other selective sales tax, all other taxes, education charges, hospital charges, highway charges, air transportation charges, parking facilities charges, sea and inland water charges, natural resource charges, park and recreation charges, housing and community development charges, sewerage charges, solid waste management charges, other charges, other general revenue, sale of property, special assessments, and interest earnings. These were the categories used to construct the Herfindahl Index. While the value of the Herfindahl Index will differ depending on how many categories are used, the rankings of states does not change much if some of the categories are combined.

Estimating Sales Tax Revenue

The Connecticut Department of Revenue Services provided sales and use tax due by town. For most retail establishments DRS was able to allocate sales to the town in which the sale was made. However, some firms that collect sales taxes in multiple towns report all of their sales tax collections on one form. DRS data suggests that multi-outlet vendors account for 13.1 percent of total tax due. Attributing all of these sales to the vendor's headquarter town would overstate the sales in that town, although an unknown number of these multi-outlet vendors have outlets in only one town. We allocated the sales taxes due from multi-outlet vendors to towns based on the town's share of total state employment. Sales taxes are also collected from out-of-state vendors selling in Connecticut; revenue from these vendors account for 23.1 percent of sales taxes due. We do not know in what town the sales were made. We could have arbitrarily allocated these revenues, but choose not to. Thus, the estimated revenue by town will understate the actual revenue that a town would likely receive if a sales tax is adopted.

Estimating Income Tax Revenue

The Connecticut Department of Revenue Services provided data on Connecticut adjusted gross income and tax liability by town of residence for tax year 2013. Returns from out-of-state and out-of-country could not be assigned to a town; including them would increase AGI by 3.1 percent and tax liability by 3.5 percent.

The Connecticut Department of Labor provided total wage and salary income for residents of each town by place of employment. These data come from quarterly reports filed by establishments with employees who are required to report wages for each employee by place of work for the employment security tax; these are commonly called ES202 reports. Not all firms are required to file, so the data will underestimate tax revenue from an earned income tax by place of employment. But adjustments were made to account for the missing establishments.

Estimating the earned income tax revenue when the tax is imposed by location of the residence and place of work, with a credit for taxes paid by place of work, is more difficult. The DOL matched the social security numbers from the ES202 reports with social security numbers from the Department of Motor Vehicle records in order to determine town of residence of each employee. DOL had an 87 percent match rate. Nonmatching was due to errors in reported social security numbers and to employees without Connecticut driver's licenses, including out-of-state workers. In addition, these data do not include wage and salary income of Connecticut residents who work out-of-state; to the extent that these workers work in New York City, they will get a credit for the taxes they pay to NYC. We allocated to towns the wage and salary income that was not assigned to a town by DOL. We did this assuming the distribution of the unassigned income was the same as the assigned income. Thus, the estimated statewide tax bases are the same, but the distribution across towns differ.

Because of these difficulties, the estimated revenues from this version of the earned income tax are less reliable than the estimated revenue for the tax based on place of work.

ES202 data only include wage and salary data, and thus we had to adjust these data to account for other sources of earned income. To do that we used Census data to determine non-wage and salary earnings as a percentage of total earned income for each town. We inflated the DOL wage and salary income earned in each town by this percentage. We assume that the distribution of this other earned income for each town by place of residence is the same as the distribution of wages and salary income.

We compared our estimate of earned income by residence to earned income as reported by the Census Bureau's American Community Survey (ACS), which is reported by residence. The state totals were within 1 percent of each other. There are differences in the two values for some towns, but generally less than 10 percent. The ACS data is based on a survey with an average error of 10 percent.

Local Revenue Diversification

APPENDIX B. APPENDIX TABLES

Table A1. Local and Regional Sales Tax Revenue and Fiscal Disparity Index

Town	Local Sales Tax		Regional Sales Tax		Fiscal Disparity Index
	Total (\$1,000)	Per Capita	Total (\$1,000)	Per Capita	
Andover	84.2	27	268.3	87	75.81
Ansonia	1,104.0	58	1334.5	70	667.30
Ashford	135.7	32	207.3	48	289.15
Avon	2,343.5	129	2342.8	129	-611.39
Barkhamsted	162.0	43	357.6	95	-28.33
Beacon Falls	191.2	32	394.8	65	125.71
Berlin	10,560.7	523	2948.1	146	-114.51
Bethany	163.2	29	589.3	106	-227.40
Bethel	2,210.7	117	2905.7	154	-201.22
Bethlehem	167.4	47	259.8	72	-270.19
Bloomfield	2,290.9	111	3999.1	194	126.66
Bolton	355.2	71	516.5	104	79.29
Bozrah	282.3	108	312.5	119	-5.05
Branford	5,356.1	191	4062.2	145	-422.74
Bridgeport	7,693.8	53	13734.8	94	1118.75
Bridgewater	61.1	35	199.0	115	-1634.77
Bristol	5,213.3	86	5715.4	94	447.11
Brookfield	3,361.4	202	2745.4	165	-660.33
Brooklyn	542.3	66	470.2	57	317.28
Burlington	187.9	20	786.3	84	-110.32
Canaan	540.1	471	252.4	220	-676.35
Canterbury	128.7	25	231.8	45	265.62
Canton	2,349.8	228	1193.5	116	-220.65
Chaplin	68.4	28	118.0	49	317.28
Cheshire	2,681.5	92	3491.1	119	-33.44
Chester	192.8	46	511.7	123	-323.03
Clinton	2,502.9	189	1269.1	96	-354.22
Colchester	1,329.6	82	1462.3	91	182.89
Colebrook	13.3	9	136.9	90	-260.41
Columbia	530.2	97	522.9	95	-3.39
Cornwall	133.9	88	183.2	121	-2197.01
Coventry	335.3	27	1067.1	86	157.39
Cromwell	2,090.6	149	1728.9	123	33.95
Danbury	17,976.0	219	15044.0	184	143.26
Darien	4,009.1	192	3269.0	156	-3612.55
Deep River	312.2	68	460.5	100	-220.27
Derby	1,749.9	136	1243.1	97	605.66
Durham	410.4	56	691.0	94	-135.58
East Granby	553.3	110	863.3	171	-149.07

Local Revenue Diversification

East Haddam	359.2	39	693.3	76	-80.49
East Hampton	640.1	49	956.6	74	52.46
East Hartford	7,203.3	141	7529.9	147	735.44
East Haven	3,198.1	110	3140.7	108	355.09
East Lyme	1,338.1	70	1883.3	99	-281.25
East Windsor	1,752.6	155	1733.0	154	160.16
Eastford	92.2	56	122.6	74	77.51
Easton	158.3	21	527.9	70	-1261.38
Ellington	967.0	62	1565.4	100	136.49
Enfield	6,827.3	153	5668.7	127	389.47
Essex	651.4	98	868.7	130	-1015.20
Fairfield	11,797.8	196	6743.5	112	-957.52
Farmington	6,555.4	258	5848.5	230	-455.85
Franklin	546.3	280	244.1	125	-106.64
Glastonbury	4,305.7	125	4614.2	134	-274.55
Goshen	127.1	43	268.9	91	-1167.21
Granby	765.3	68	1112.0	99	-26.11
Greenwich	12,264.5	199	11641.9	189	-5325.65
Griswold	386.3	32	891.8	75	360.87
Groton	3,674.5	92	5817.7	145	81.35
Guilford	1,749.5	78	2778.6	124	-650.87
Haddam	353.7	42	641.9	77	-180.10
Hamden	5,544.5	90	7708.0	125	347.29
Hampton	24.0	13	77.5	43	141.53
Hartford	21,528.1	172	23650.1	189	1364.01
Hartland	27.3	12	168.8	75	32.28
Harwinton	188.2	33	480.8	85	-82.76
Hebron	272.0	28	924.3	96	97.52
Kent	256.0	86	446.5	151	-1520.59
Killingly	1,702.2	98	1546.1	89	390.74
Killingworth	241.0	37	449.9	69	-336.82
Lebanon	101.1	14	617.2	84	94.77
Ledyard	734.7	49	2303.4	153	323.93
Lisbon	1,305.2	301	491.6	113	55.40
Litchfield	3,838.1	457	1247.0	148	-510.28
Lyme	25.9	11	160.9	67	-2056.59
Madison	1,503.1	82	2093.0	114	-1020.06
Manchester	14,005.8	241	7752.5	133	443.63
Mansfield	986.6	37	3374.6	128	755.01
Marlborough	149.9	23	611.7	96	30.40
Meriden	5,302.1	87	7839.7	129	618.85
Middlebury	838.7	111	852.2	113	-408.58
Middlefield	328.7	74	499.5	113	-51.73
Middletown	5,077.0	107	6263.6	132	338.99

Local Revenue Diversification

Milford	12,672.3	240	8325.1	157	54.66
Monroe	1,523.3	78	1825.6	93	-316.46
Montville	1,512.8	77	2931.2	149	348.70
Morris	102.0	43	243.1	102	-969.47
Naugatuck	2,196.3	69	2494.8	78	490.93
New Britain	3,887.2	53	8478.3	116	1037.39
New Canaan	1,948.0	98	2891.3	145	-4006.31
New Fairfield	327.1	23	1503.7	107	-449.38
New Hartford	480.1	69	742.8	107	-68.37
New Haven	19,258.1	148	22228.1	171	1094.44
New London	5,903.8	214	3489.7	126	812.48
New Milford	4,091.7	146	3926.4	140	-171.18
Newington	2,911.4	95	4485.7	147	189.93
Newtown	1,609.2	58	3928.5	141	-388.45
Norfolk	961.2	642	168.7	113	-954.47
North Branford	1,016.5	71	1737.5	121	30.89
North Canaan	70.3	21	591.0	180	-63.68
North Haven	5,526.2	230	4568.7	190	-128.09
North Stonington	344.8	65	524.3	99	-256.18
Norwalk	21,696.1	251	15591.5	180	-455.69
Norwich	3,968.8	98	4675.4	116	563.88
Old Lyme	692.6	91	770.1	101	-1664.74
Old Saybrook	2,716.6	265	1394.1	136	-1630.06
Orange	9,991.2	717	2580.6	185	-247.25
Oxford	657.2	52	1023.6	80	-105.29
Plainfield	1,285.2	84	991.4	65	365.61
Plainville	3,144.8	177	2511.9	141	264.31
Plymouth	617.1	51	852.1	70	402.44
Pomfret	179.6	43	316.7	75	153.75
Portland	676.1	71	820.7	87	145.21
Preston	145.6	31	389.2	82	73.67
Prospect	577.6	61	709.3	75	57.85
Putnam	1,730.8	181	1018.8	107	507.16
Redding	276.3	30	1123.0	122	-1248.83
Ridgefield	3,637.2	146	4053.0	163	-1441.92
Rocky Hill	2,820.9	143	3537.0	179	22.32
Roxbury	56.5	25	213.8	93	-2608.41
Salem	172.0	41	331.4	79	-112.06
Salisbury	367.1	99	644.3	173	-2552.76
Scotland	9.4	5	72.4	42	236.53
Seymour	1,098.6	66	1358.3	82	289.36
Sharon	177.2	64	397.7	144	-2029.29
Shelton	5,671.6	142	4850.9	121	-167.45

Local Revenue Diversification

Sherman	94.4	26	395.4	109	-1404.39
Simsbury	3,081.4	131	2926.6	124	-153.94
Somers	346.3	30	1150.1	100	291.91
South Windsor	3,998.5	155	3489.8	135	-46.93
Southbury	2,992.1	151	2006.0	101	-198.31
Southington	5,968.7	138	5091.0	118	64.04
Sprague	89.6	30	256.3	86	276.92
Stafford	682.3	57	1311.3	109	397.03
Stamford	19,210.7	155	24329.1	196	-503.12
Sterling	36.0	9	168.7	44	307.13
Stonington	2,840.8	153	2076.1	112	-875.62
Stratford	7,665.3	148	6379.2	123	246.09
Suffield	477.3	30	1679.8	107	74.67
Thomaston	818.1	104	741.7	95	263.54
Thompson	199.1	21	491.8	52	347.20
Tolland	801.1	53	1552.9	104	100.66
Torrington	6,134.2	170	5503.1	153	451.32
Trumbull	4,442.4	123	4069.9	112	-339.49
Union	77.6	75	48.3	46	4.96
Vernon	3,707.4	127	3189.0	109	539.07
Voluntown	59.5	23	123.2	47	202.03
Wallingford	8,245.2	183	7695.4	171	5.02
Warren	35.4	24	126.1	86	-1600.35
Washington	453.2	127	543.9	153	-3047.35
Waterbury	10,211.7	93	10247.2	93	852.74
Waterford	6,907.3	354	2658.2	136	-1007.36
Watertown	3,364.9	150	2119.1	95	68.29
West Hartford	10,996.4	174	8250.6	130	267.00
West Haven	2,997.7	54	6424.0	116	737.33
Westbrook	1,816.2	262	907.1	131	-1097.57
Weston	191.4	19	1119.9	109	-2074.14
Westport	7,877.4	294	5103.7	191	-3576.23
Wethersfield	2,174.1	82	3161.8	119	141.67
Willington	401.6	67	625.5	104	198.23
Wilton	2,715.7	148	3787.4	206	-1962.56
Winchester	563.9	51	1371.9	123	304.77
Windham	2,717.0	107	2944.7	116	856.37
Windsor	3,575.7	123	5225.0	180	82.87
Windsor Locks	3,623.9	289	2548.4	203	31.93
Wolcott	750.5	45	1172.2	70	117.46
Woodbridge	519.8	58	1272.4	142	-464.91
Woodbury	694.4	70	730.1	74	-452.62
Woodstock	203.6	26	469.6	59	52.78

Local Revenue Diversification

TOTAL	473,537.5	473,537.5
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Table A2. Demographic and Economic Variables for Case Study Cities

Cities	Population		Unemployment		TANF Recipients		Net Grand List (in millions)		Mill Rate		Prop Tax Revenues		Total Revenues (in millions)	
	2013	2009	2013	2009	2013	2009	2013	2009	2013	2009	2013	2009	2013	2009
Large Cities														
Bridgeport	147,21	137,29	11.8%	12.3%	2.3	2.6%	\$6,981	\$5,540	41.1	44.5	\$285.9	\$248.7	\$539.0	\$484.3
Hartford	125,01	124,06	14.7%	14.3%	4.3	5.5%	\$3,398	\$3,451	74.2	68.3	\$255.5	\$250.6	\$549.6	\$540.9
New Haven	130,66	123,33	11.2%	11.4%	3.3	3.6%	\$5,995	\$4,945	38.8	42.2	\$230.9	\$203.4	\$507.0	\$469.0
Stamford	126,45	121,02	6.4%	7.4%	0.6	0.5	\$24,29	\$23,92	17.8	16.1	\$432.1	\$386.6	\$512.3	\$458.8
Small Cities														
Manchester	58,211	56,388	7.4%	8.2%	1.1	1.4%	\$3,888	\$3,837	35.8	32.9	\$122.2	\$112.7	\$172.9	\$161.4
Meriden	60,456	59,186	9.5%	10.3%	2.2	2.4%	\$3,246	\$3,659	34.7	27.9	\$113.8	\$104.1	\$196.8	\$187.8
New	27,545	26,184	10.5%	9.6%	2.5	2.8%	\$1,565	\$1,272	26.6	30.8	\$41.47	\$39.60	\$84.16	\$83.26
Torrington	35,611	35,408	8.5%	10.3%	0.8	1.1%	\$2,359	\$1,928	33.4	35.3	\$79.23	\$68.67	\$120.6	\$110.5
Rich														
	34,768	33,353	5.3%	5.8%	0.1	0.2%	\$4,208	\$4,074	30.5	28.3	\$128.4	\$115.6	\$156.3	\$136.5
Guilford	22,417	22,469	5.6%	5.6%	0.1	0.2%	\$3,490	\$3,455	22.3	19.1	\$77.17	\$65.71	\$89.45	\$77.34
Litchfield	8,333	8,686	6.5%	7.1%	0.2	0.1%	\$1,109	\$901	22.2	25.5	\$24.79	\$23.03	\$28.88	\$26.63
New	20,194	20,000	5.4%	5.9%	0.0	0.0%	\$8,249	\$7,049	14.0	15.1	\$116.6	\$106.9	\$133.6	\$119.2
Mixed Base														
Hamden	61,607	58,119	7.7%	7.6%	0.8	0.7%	\$4,049	\$4,310	37.1	29.4	\$149.0	\$126.2	\$200.8	\$181.4
	47,333	48,383	7.7%	7.6%	1.0	1.0%	\$3,581	\$3,475	26.9	25.5	\$95.67	\$88.79	\$140.1	\$131.2
Norwich	40,347	36,639	9.0%	9.1%	2.1	2.3%	\$2,433	\$1,852	26.9	29.6	\$64.82	\$53.98	\$112.1	\$100.9
Windsor	29,142	29,014	7.6%	8.0%	0.6	0.7%	\$2,908	\$2,591	27.9	29.3	\$82.16	\$76.56	\$108.2	\$100.5
Rural														
Bozrah	2,639	2,466	7.7%	7.2%	0.4	0.5%	\$244	\$239	22.5	19.5	\$5.42	\$4.66	\$7.67	\$7.14
Durham	7,361	7,469	5.8%	5.9%	0.0	0.0%	\$732	\$769	32.1	26.2	\$23.55	\$20.24	\$28.56	\$25.18
Killingly	17,233	17,828	9.5%	10.4%	1.1	1.1%	\$1,365	\$1,257	19.7	17.8	\$28.73	\$25.86	\$54.33	\$50.02
North	3,241	3,366	7.0%	8.0%	0.1	0.5%	\$344	\$346	21.5	21.0	\$7.49	\$7.22	\$10.83	\$10.62
Plainfield	15,228	15,442	10.1%	10.4%	1.1	1.1%	\$1,035	\$1,007	21.5	19.9	\$22.46	\$20.25	\$47.19	\$44.66
Union	848	761	5.5%	6.7%	0.0	0.0%	\$98	\$73	23.5	28.9	\$2.31	\$2.23	\$2.88	\$2.79
	3,526	3,689	5.8%	6.2%	0.1	0.1%	\$1,255	\$981	11.5	13.0	\$14.38	\$12.28	\$15.65	\$13.91

Source: Municipal Fiscal Indicators, 2009-2013, Office of Policy and Management.

Table A3. Local Income Tax Revenue

Town	CT AGI		CT Income Tax Liability		Earnings by Place of Work		Earnings by Place of Residence		Earnings Split 50/50	
	Total (\$1,000)	Per Capita	Total (\$1,000)	Per Capita	Total (\$1,000)	Per Capita	Total (\$1,000)	Per Capita	Total (\$1,000)	Per Capita
Andover	889.2	287	913.3	295	155.8	50	1,131.5	366	610.2	197
Ansonia	2,996.2	156	2,404.1	125	1,364.4	71	4,160.7	217	2,709.0	141
Ashford	987.1	230	894.9	208	225.7	52	1,276.8	297	700.5	163
Avon	11,204.5	615	14,186.4	779	4,062.3	223	12,191.3	670	7,899.0	434
Barkhamsted	959.4	254	920.3	244	261.3	69	1,216.4	322	724.1	192
Beacon Falls	1,383.2	229	1,321.6	219	478.9	79	1,920.3	318	1,166.1	193
Berlin	5,922.4	293	6,170.8	306	7,020.3	348	7,152.4	354	7,092.5	351
Bethany	2,073.4	373	2,428.8	437	639.5	115	2,326.0	419	1,415.4	255
Bethel	4,857.8	257	4,356.1	231	4,015.1	213	6,020.7	319	4,974.5	263
Bethlehem	963.4	269	991.3	277	269.6	75	1,040.1	290	626.4	175
Bloomfield	5,582.3	271	5,679.9	276	16,308.8	793	6,116.0	297	11,557.5	562
Bolton	1,572.5	316	1,686.9	339	579.3	117	1,908.3	384	1,193.1	240
Bozrah	582.6	223	556.2	212	507.5	194	667.3	255	584.9	223
Branford	8,785.0	313	9,440.0	337	6,338.3	226	9,733.1	347	7,941.3	283
Bridgeport	15,660.4	108	9,720.7	67	24,131.7	166	19,880.3	137	22,127.3	152
Bridgewater	768.4	444	821.3	475	134.5	78	553.5	320	330.6	191
Bristol	11,831.2	195	10,609.4	175	15,282.2	252	15,691.1	259	15,495.2	256
Brookfield	5,761.7	347	5,388.7	324	3,455.5	208	6,059.4	365	4,691.8	282
Brooklyn	1,582.3	192	1,291.6	157	622.3	76	1,712.1	208	1,138.1	138
Burlington	3,332.3	355	3,814.7	407	441.6	47	4,466.2	476	2,352.6	251
Canaan	733.7	639	550.5	480	441.6	385	757.7	660	580.3	505
Canterbury	1,034.7	202	872.6	170	177.2	35	1,289.7	252	713.9	139
Canton	3,719.2	361	4,289.8	416	1,413.1	137	4,626.8	449	2,876.6	279
Chaplin	416.8	173	350.7	146	112.4	47	541.4	225	305.0	127
Cheshire	9,637.2	329	11,060.5	378	10,285.1	351	11,586.1	396	10,917.6	373
Chester	1,281.9	309	1,452.3	350	1,214.4	292	1,328.6	320	1,271.7	306

Local Revenue Diversification

Clinton	3,430.9	259	3,477.1	263	1,641.5	124	4,214.5	318	2,823.0	213
Colchester	4,178.8	259	4,219.5	262	1,704.6	106	5,479.2	340	3,507.3	218
Colebrook	212.1	139	220.0	144	56.5	37	382.1	251	195.8	129
Columbia	1,475.9	270	1,495.9	273	399.9	73	1,758.0	321	1,062.3	194
Cornwall	483.0	318	457.6	301	154.9	102	280.5	185	211.3	139
Coventry	3,192.6	257	3,218.1	259	556.2	45	4,144.5	333	2,244.0	180
Cromwell	4,265.1	303	4,565.4	324	3,115.7	221	5,427.3	386	4,207.7	299
Danbury	15,597.3	190	11,778.8	144	29,026.3	354	17,774.2	217	23,805.5	290
Darien	32,728.6	1564	29,429.7	1406	5,743.9	274	12,039.6	575	8,698.1	416
Deep River	1,317.6	286	1,389.1	301	748.3	162	1,669.0	362	1,159.0	251
Derby	2,232.9	174	1,919.3	149	1,867.2	145	2,992.3	233	2,411.4	188
Durham	2,741.8	372	3,205.4	434	1,075.2	146	3,050.9	413	2,004.1	272
East Granby	1,619.1	322	1,694.0	336	2,305.8	458	2,000.1	397	2,163.1	430
East Haddam	2,237.1	245	2,296.4	251	581.2	64	2,813.4	308	1,657.1	181
East Hampton	3,644.2	281	3,806.3	294	801.2	62	4,628.5	357	2,622.2	203
East Hartford	7,694.4	150	5,743.7	112	21,529.1	420	10,224.5	200	16,079.9	314
East Haven	5,603.8	192	4,925.0	169	2,644.6	91	6,587.0	226	4,535.8	156
East Lyme	5,231.2	274	5,518.4	289	2,454.6	128	6,212.5	325	4,233.8	221
East Windsor	2,530.4	224	2,235.3	198	3,059.0	271	3,216.0	285	3,136.5	278
Eastford	356.9	216	313.7	190	309.8	188	408.3	247	356.1	216
Easton	4,567.7	605	5,102.3	676	515.6	68	4,035.2	534	2,165.6	287
Ellington	4,602.8	294	4,731.0	302	1,496.1	95	6,114.8	390	3,734.9	238
Enfield	8,375.1	187	6,722.6	150	10,558.4	236	10,615.0	237	10,593.4	237
Essex	2,974.9	446	3,470.2	520	2,328.7	349	2,641.8	396	2,488.4	373
Fairfield	31,751.6	528	33,015.5	549	17,324.2	288	27,878.1	464	22,253.9	370
Farmington	11,289.3	444	13,720.4	540	22,165.3	872	13,920.0	547	18,521.6	728
Franklin	466.7	239	455.8	234	580.8	298	579.9	297	582.5	299
Glastonbury	15,559.9	450	18,768.0	543	10,278.9	297	18,180.0	526	13,965.3	404
Goshen	963.5	326	1,019.7	345	139.9	47	1,061.3	359	569.6	193
Granby	3,938.3	349	4,284.8	380	913.1	81	4,768.5	423	2,713.9	241
Greenwich	109,425.7	1773	115,699.3	1874	50,009.1	810	35,434.5	574	43,592.9	706
Griswold	2,177.3	182	1,772.5	148	485.7	41	2,651.9	222	1,554.2	130

Local Revenue Diversification

Groton	4,744.7	118	4,222.2	105	20,903.0	521	9,689.1	241	15,461.5	385
Guilford	9,401.6	420	11,316.2	506	4,091.0	183	9,309.3	416	6,488.0	290
Haddam	2,536.8	304	2,703.1	324	594.6	71	2,968.3	356	1,749.3	210
Hamden	12,949.6	211	12,809.9	208	9,719.9	158	15,955.7	260	12,729.6	207
Hampton	504.2	278	452.1	249	54.3	30	526.7	290	281.2	155
Hartford	12,094.0	97	7,727.6	62	95,987.7	767	15,196.1	121	56,998.3	456
Hartland	441.4	196	428.1	190	50.6	22	615.8	273	314.3	139
Harwinton	1,522.4	270	1,578.8	280	359.0	64	2,167.2	385	1,138.4	202
Hebron	2,961.5	307	3,254.1	338	687.1	71	3,894.8	404	2,196.0	228
Kent	804.8	272	663.7	224	600.7	203	649.4	219	627.9	212
Killingly	2,883.8	167	1,957.9	113	4,172.0	241	3,116.8	180	3,685.3	213
Killingworth	2,161.6	332	2,386.1	367	376.4	58	2,601.0	400	1,384.4	213
Lebanon	1,613.2	220	1,547.7	211	505.1	69	2,173.1	297	1,273.2	174
Ledyard	3,393.3	225	3,195.8	212	4,145.0	275	4,210.9	280	4,180.1	278
Lisbon	784.4	181	709.2	164	451.4	104	1,109.2	256	770.5	178
Litchfield	2,537.2	302	2,680.9	319	1,588.7	189	2,640.4	314	2,067.4	246
Lyme	966.4	400	1,172.4	485	129.5	54	787.0	326	423.0	175
Madison	8,129.4	444	9,514.2	520	2,511.5	137	8,257.4	451	5,208.8	285
Manchester	12,198.8	210	11,187.5	192	12,541.5	216	16,174.2	278	14,293.4	246
Mansfield	3,086.4	117	3,162.7	120	6,574.9	249	3,559.2	135	5,272.0	200
Marlborough	2,038.9	319	2,244.1	351	553.5	87	2,630.8	411	1,534.1	240
Meriden	9,952.9	164	8,238.6	136	11,032.2	182	12,898.1	213	11,936.1	197
Middlebury	2,919.4	387	3,397.3	450	2,301.4	305	3,306.4	438	2,767.6	367
Middlefield	1,209.3	274	1,270.9	287	1,078.7	244	1,532.3	347	1,296.9	293
Middletown	9,648.5	203	9,300.5	196	17,507.5	368	12,559.5	264	15,174.7	319
Milford	18,269.6	345	20,248.2	383	14,551.4	275	18,408.1	348	16,399.8	310
Monroe	7,011.5	357	7,257.5	370	2,900.0	148	8,528.3	434	5,503.5	280
Montville	3,519.5	179	3,064.2	156	5,161.8	263	4,371.4	223	4,771.7	243
Morris	632.4	266	646.7	272	182.2	77	697.0	293	412.0	173
Naugatuck	5,770.1	182	4,962.1	156	3,593.2	113	7,668.1	241	5,559.2	175
New Britain	8,807.8	120	6,226.5	85	14,311.7	196	11,485.1	157	12,957.9	177
New Canaan	34,492.7	1730	36,224.2	1817	4,736.8	238	14,169.5	711	9,204.6	462

Local Revenue Diversification

New Fairfield	4,488.1	320	3,325.6	237	808.0	58	3,585.3	256	2,136.5	153
New Hartford	2,003.0	289	2,110.5	304	631.7	91	2,546.3	367	1,500.1	216
New Haven	16,840.0	129	14,237.6	109	54,987.4	422	19,832.9	152	38,151.5	293
New London	3,181.3	115	2,338.9	85	7,796.2	283	4,225.3	153	6,115.5	222
New Milford	6,843.7	245	5,910.1	211	3,778.3	135	8,248.5	295	5,878.2	210
Newington	7,302.3	239	6,950.6	227	9,734.5	318	9,017.1	295	9,390.0	307
Newtown	10,777.5	388	11,534.5	415	5,275.0	190	12,160.0	438	8,474.6	305
Norfolk	425.2	284	434.7	290	136.4	91	384.6	257	249.5	167
North Branford	3,829.5	266	3,913.2	272	2,201.3	153	4,485.5	312	3,263.6	227
North Canaan	132.6	40	102.8	31	996.1	303	240.4	73	668.2	203
North Haven	6,875.2	286	7,181.0	299	9,625.0	401	7,983.5	332	8,870.7	369
North Stonington	1,348.5	255	1,243.3	235	674.5	127	1,459.0	276	1,048.5	198
Norwalk	26,815.2	310	23,992.2	277	45,913.3	531	28,640.7	331	37,941.3	439
Norwich	5,770.4	143	4,464.8	110	8,048.7	199	7,355.3	182	7,717.5	191
Old Lyme	3,621.1	477	3,963.5	522	1,253.7	165	3,239.4	426	2,133.6	281
Old Saybrook	3,394.4	331	3,690.9	360	2,705.0	264	3,713.3	362	3,181.8	310
Orange	5,497.2	395	6,368.5	457	5,066.4	364	5,693.9	409	5,372.0	386
Oxford	3,669.7	288	3,887.2	305	1,847.8	145	4,805.9	377	3,263.6	256
Plainfield	2,359.8	154	1,705.2	111	1,594.7	104	2,916.2	190	2,230.4	146
Plainville	3,667.6	206	3,302.0	186	4,789.1	270	4,946.3	278	4,869.9	274
Plymouth	2,439.1	201	2,175.7	179	971.8	80	3,323.0	274	2,085.9	172
Pomfret	1,149.3	272	1,046.5	248	734.0	174	1,236.5	293	963.1	228
Portland	2,688.8	283	2,770.9	292	962.3	101	3,287.3	347	2,072.6	218
Preston	1,011.2	213	944.4	199	291.2	61	1,242.1	261	740.8	156
Prospect	2,433.1	256	2,453.3	258	888.3	93	3,216.8	338	1,993.2	209
Putnam	1,461.2	153	906.9	95	2,781.3	291	1,451.9	152	2,143.5	224
Redding	5,257.6	571	5,873.3	638	966.7	105	4,572.8	497	2,633.4	286
Ridgefield	17,893.2	721	17,512.5	705	10,176.7	410	14,385.6	579	12,141.9	489
Rocky Hill	5,682.6	288	5,991.6	303	12,024.7	609	7,134.4	361	9,667.0	490
Roxbury	1,133.9	493	1,281.3	557	148.2	64	856.5	372	453.8	197
Salem	1,274.1	305	1,357.3	325	219.7	53	1,565.9	375	848.4	203

Local Revenue Diversification

Salisbury	1,234.8	332	1,153.9	310	993.8	267	847.6	228	936.6	252
Scotland	153.1	88	130.9	75	42.6	24	342.4	197	180.3	104
Seymour	3,780.3	229	3,593.0	217	2,147.9	130	5,319.0	322	3,609.6	218
Sharon	1,186.4	428	1,224.1	442	676.9	244	515.0	186	630.1	228
Shelton	10,997.5	275	11,132.0	278	20,739.6	518	14,345.0	359	17,849.9	446
Sherman	1,305.9	360	1,103.7	304	199.0	55	917.2	253	537.5	148
Simsbury	11,022.6	467	13,319.5	565	7,416.7	314	13,515.6	573	10,241.2	434
Somers	3,134.7	274	2,944.6	257	1,356.4	118	2,931.2	256	2,111.1	184
South Windsor	8,116.2	315	8,732.5	339	6,752.9	262	10,475.1	407	8,516.4	331
Southbury	6,193.9	312	6,659.0	335	5,879.5	296	7,243.7	365	6,528.4	329
Southington	11,521.0	266	11,846.6	274	6,734.1	156	14,926.1	345	10,596.3	245
Sprague	603.4	202	509.6	171	271.9	91	734.6	246	494.1	165
Stafford	2,352.6	195	1,979.3	164	1,506.3	125	3,035.9	252	2,248.9	187
Stamford	54,097.8	436	53,598.5	432	94,076.1	759	46,814.3	378	72,560.1	585
Sterling	585.7	154	387.7	102	151.3	40	641.8	169	383.7	101
Stonington	8,308.2	448	8,467.9	457	3,228.7	174	4,486.3	242	3,813.4	206
Stratford	11,375.3	220	10,285.8	199	17,461.4	338	14,660.3	284	16,212.9	314
Suffield	4,765.1	303	4,665.9	297	2,201.3	140	4,895.1	311	3,486.3	222
Thomaston	1,673.4	214	1,544.0	197	1,518.4	194	2,180.6	278	1,836.9	235
Thompson	1,749.0	186	842.5	90	658.0	70	1,167.4	124	903.2	96
Tolland	4,784.8	319	5,191.6	347	2,036.4	136	6,166.7	412	3,968.2	265
Torrington	6,142.4	170	5,099.0	141	7,470.8	207	7,980.4	221	7,728.3	214
Trumbull	12,123.3	334	12,919.8	356	8,668.8	239	14,617.3	403	11,485.1	317
Union	174.9	168	156.0	150	54.7	53	206.4	198	122.0	117
Vernon	6,363.8	218	5,859.0	201	3,633.0	125	8,517.5	292	5,953.1	204
Voluntown	518.9	199	405.6	156	100.3	38	581.5	223	325.4	125
Wallingford	11,440.6	254	11,498.8	255	17,844.9	396	13,939.0	309	15,989.4	354
Warren	291.8	198	307.7	209	70.0	47	298.2	202	174.2	118
Washington	2,013.3	565	2,195.1	616	830.0	233	1,091.1	306	951.9	267
Waterbury	13,154.9	120	9,010.3	82	17,716.7	161	16,317.4	148	17,063.2	155
Waterford	5,117.1	262	5,115.2	262	5,582.2	286	5,901.5	303	5,740.0	294
Watertown	5,330.3	238	5,268.3	235	4,080.7	182	6,812.3	304	5,369.1	240

Local Revenue Diversification

West Hartford	24,246.0	383	28,169.1	445	14,422.5	228	28,146.8	444	20,813.1	329
West Haven	8,450.0	153	6,749.2	122	8,202.8	148	10,515.9	190	9,322.5	168
Westbrook	1,867.2	270	1,958.1	283	1,913.8	276	2,121.3	306	2,016.3	291
Weston	10,305.8	1004	10,897.9	1062	860.2	84	6,961.2	678	3,632.2	354
Westport	31,456.7	1175	32,390.2	1210	17,316.4	647	18,968.4	709	18,154.6	678
Wethersfield	7,292.3	274	7,413.5	279	4,877.2	183	9,545.9	359	7,110.5	267
Willington	1,371.4	228	1,301.8	216	475.0	79	1,641.3	273	1,043.3	173
Wilton	16,022.8	873	16,215.8	884	13,912.4	758	11,992.7	653	13,035.1	710
Winchester	2,023.1	181	1,676.8	150	1,565.3	140	2,507.9	225	2,005.7	180
Windham	2,804.3	111	1,979.9	78	4,515.0	178	3,527.2	139	4,064.2	161
Windsor	7,028.1	242	6,636.2	228	18,733.0	644	9,191.9	316	14,245.1	490
Windsor Locks	2,626.8	210	2,238.8	179	9,277.2	740	3,596.4	287	6,633.0	529
Wolcott	3,824.0	229	3,712.5	222	1,209.4	72	5,037.5	302	3,029.4	182
Woodbridge	6,019.4	670	7,966.0	887	1,812.9	202	5,190.8	578	3,302.4	368
Woodbury	3,302.8	333	3,622.9	366	959.0	97	3,594.2	363	2,116.5	214
Woodstock	2,107.7	266	1,632.4	206	904.9	114	1,900.4	240	1,373.5	173
TOTAL	1,095,001.5		1,083,274.3		1,081,550.9		1,087,009.1		1,084,551.1	

Chapter 5

The Business Personal Property Tax in Connecticut

A Report Prepared for the Connecticut Tax Panel

Presented November 17, 2015

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Executive summary

The personal property category in the Connecticut property tax system includes tangible personal property owned or leased by businesses. It does not include registered motor vehicles which are assessed separately. It also excludes business inventories and intangible personal property.

The personal property category accounts for just over 5% of total taxable property in the state and generates over \$560 million in tax revenue each year.

Comparing the relative importance of personal property and business real property, the value of taxable personal property in Connecticut is currently over 40% of the value of all commercial, industrial and public utility real property in the state.

There is a national downward drift in taxing personal property. States have expanded exemptions and several have or are attempting to replace the tax on personal property with other tax revenues.

Personal property exemptions in Connecticut currently represent 20.4% of total personal property taxable value.

The personal property tax is challenging to administer because of the difficulty in identifying personal property, valuing it for tax purposes and auditing to insure compliance.

Personal property is valued using the historical purchase price less depreciation for age. The use of standardized depreciation schedules provides only a very rough estimate of current market value and does not reflect the practices employed by private fee appraisers.

In particular, the historical cost less depreciation approach does not consider the possibility of economic obsolescence. The chemical products manufacturing sector is one industry in Connecticut that may have experienced economic obsolescence since 2008.

Administration of the personal property tax in Connecticut

Identifying personal property relies on self-reporting by businesses who are required to file an annual declaration detailing their owned or leased personal property grouped into 17 different categories. Reporting involves stating the aggregate original cost and acquisition date for all property in each category.

Valuation follows standardized depreciation schedules for each category. Most categories have a 30% residual value regardless of age.

Of the 17 reporting categories, the largest in terms of the percent of the aggregate of total personal property value are:

- | | |
|--|-------|
| • Cable, conduits, pipes, poles, towers, etc.: | 26.5% |
| • Commercial furniture & fixtures: | 21.2% |
| • Manufacturing & biotechnology machinery & equipment: | 17.6% |

Compliance appears to be variable across the state. The tax is reported to be difficult to collect in some jurisdictions because of the rate of business turnover. Auditing practices appear to be highly variable. There is evidence suggesting enforcement efforts are more lax in jurisdictions with high levels of personal property per capita.

Trends and patterns

Personal property as a percent of total taxable property varies across cities and towns in the state from 0.88% to 24.3%.

Mill rates also vary markedly, from 10.7 to 74.29, with an average of 29.47. Consequently, the tax burden placed on personal property varies markedly as well.

The analysis of over 30,000 individual personal property accounts in 13 different jurisdictions shows that

- Nearly 89% of the taxable personal property value is found in only 7.2% of personal property accounts
- Over 52% of the value is found in only 0.22% of the accounts
- At the other extreme, 93% of all tax accounts total only 11.5% of taxable value
- The median tax obligation for all accounts valued at less than \$1 million is \$251

For the majority of businesses, the personal property tax is more nuisance than financial burden. It is likely that it costs firms more to comply and cities more to administer the tax than can be justified by the amount of revenue collected from the large majority of taxpayers.

Comparisons of business tax burdens

The Connecticut property tax on combined real estate and business personal property is above the national average for urban areas and below the national average for rural areas.

Even for urban areas, there are a number of states that appear to have higher combined property tax burdens for commercial and industrial property.

The treatment of business personal property in Connecticut does not appear to set Connecticut apart from other states.

Effective overall (real and personal) property tax rates do not differ nationally between states which tax personal property and those which do not. There is no evidence that tax burdens are higher for firms in states that tax any of the types of tangible personal property.

While there is substantial variation in tax burdens within the state, Connecticut tax rates are similar to other jurisdictions around the country. The overall median in Connecticut is slightly higher than the national average for urban areas.

These findings relate to relatively large businesses. For the large majority of Connecticut businesses, the property tax on business personal property appears to be an administrative nuisance but not a significant cost in terms of the amount of tax paid.

Options

The options for modifying the personal property tax all present the same challenges. Granting “relief” to large taxpayers will inevitably impact local government revenues. The lost revenue will either need to be replaced from some other tax or expenditures will need to be reduced. Replacing the revenue will require some combination of transfers from the state, increases in local tax property rates or the development of new sources of local revenue.

Option 1: The state could adopt an alternative tax to replace any relief granted for the personal property tax. Similar efforts in other states demonstrate that this is difficult to implement and sustain especially in recessionary times. The experience of other states suggests that local governments often must cope with reduced revenues or must increase other taxes, or both.

Option 2: Over time, the state could phase out the tax on personal property and do nothing to compensate local governments. The impact on local governments will vary dramatically depending on the relative importance of personal property in the overall tax base. The experience in other states indicates that this option would have consequences for decades into the future.

Option 3: Pool the base from the relatively small number of very large personal property taxpayers. This type of proposal has been studied for at least 40 years. There seems to be little evidence to suggest that such a radical change would improve overall equity or reduce the burden on large taxpayers.

There are also several options for compliance relief and administrative improvements that should be considered for improving the existing tax on personal property.

Compliance relief: Recognizing that very little revenue is generated from thousands of businesses required to complete the annual declaration, exempt all taxpayers with personal property below a designated threshold.

- Exempting accounts with a taxable value below \$5,000 would reduce property tax revenue by 0.024%, but would affect 42% of all personal property accounts.
- Exempting accounts with a depreciated value below \$7,500 would reduce property tax revenue by 0.040%, but would exempt about 50% of all personal property accounts.
- Exempting accounts with a depreciated value below \$10,000 would reduce property tax revenue by 0.057%, but would exempt about 56% of all personal property accounts.

An alternative approach would provide compliance relief while avoiding any abrupt transition from tax exempt to fully taxable personal property. This approach would involve a standard dollar value deduction for all personal property accounts. For example, if the deduction were \$10,000, the taxable value of all accounts would be reduced by \$10,000. With such a deduction for all accounts, the revenue loss would be about 0.195% of total property tax revenue.

Administrative improvements:

- The approach to depreciation should be revisited including the specific categories employed, and the appropriate residual value for each category.
- The assessment process needs to allow for the possibility of economic obsolescence in an industry. OPM might be given the assignment to evaluate the possibility of obsolescence and then provide guidance to local assessing offices.
- Audit procedures and frequency need to be improved. Contingency audits should be carefully evaluated for their effectiveness and fairness, and audit standards for such audits should be very clear.
- The role of OPM in overseeing uniformity in assessment administration should be strengthened. There needs to be an active state agency that provides training, oversight and standards enforcement to assure that the state property tax system is operating efficiently and fairly.

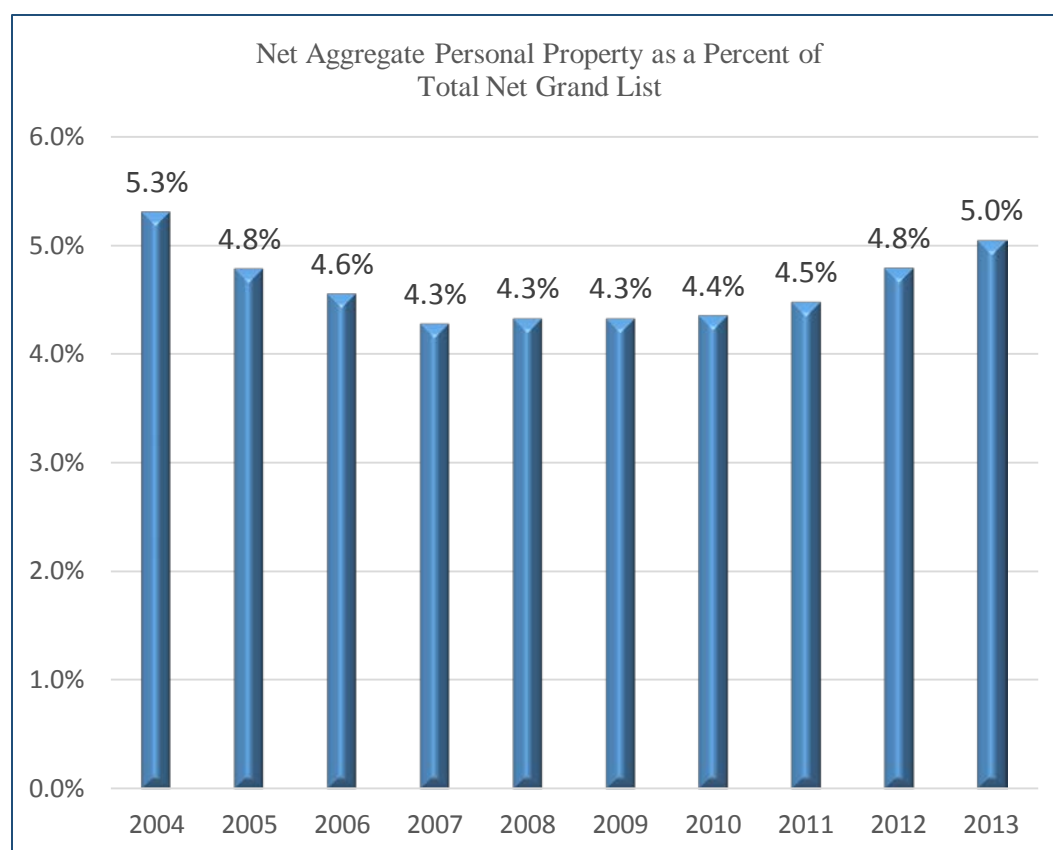
The Business Personal Property Tax in Connecticut

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 business personal property tax. The taxation of motor vehicles raises somewhat different issues and is treated in a separate discussion.

As of the 2013 assessment year, taxable business personal property made up just over five percent of total taxable property within the state. The tax revenue generated by this base totaled \$560 million in 2014. Even though the aggregate value of taxable personal property has increased every year (except for the 2010 assessment year), the relative importance of personal property as a component in the property tax base has varied somewhat depending on relative variations in real estate values from one year to the next. Personal property as a percentage of the total net grand list over the past decade is shown in Figure 1.

Figure 1



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

Before proceeding to a more detailed discussion of the personal property tax in Connecticut, it will be useful to describe the taxation of personal property more broadly. The next section of the paper discusses

Business Personal Property Tax

basic principles of property taxation as applied to personal property and introduces some of the general terminology used in such discussions. Section 3 then discusses the policies and administrative practices in place in Connecticut. Section 4 presents the analysis of trends in the personal property tax base among Connecticut's 169 local assessing jurisdictions, and a more detailed picture based on the analysis of over 30,000 individual personal property accounts in 13 jurisdictions. Section 5 compares the taxation of personal property in Connecticut with the practices in other states with a particular focus on relative competitiveness. Section 6 discusses options which the state may wish to consider for improving both the administration of the tax and easing the compliance burden for taxpayers.

The taxation of personal property

The personal property tax can be imposed on tangible and intangible personal property. Examples of tangible personal property include machinery, computers, inventory, and office furniture. Intangible personal property would include such items as banking accounts, stocks, bonds, trademarks, and patents.

Definition

The Census Bureau defines Personal Property as:

... every kind of property other than real property. It is either tangible, such as inventories that can be seen, touched, or moved about, or intangible. Intangible personal property has no physical existence other than certificates or accounts that represent its value. Fixtures may be either personal or real property, depending on whether or not they can be removed without damaging the real property to which they are attached. (US Census Bureau 1992: viii)

The personal property tax can be imposed on the personal property of individuals such as home furnishings or artwork. However, in virtually every state that imposes a personal property tax it is only assessed on the personal property of business firms and not on individual property owners with the exception of motor vehicles and personal water craft in a number of states. Likewise intangible personal property is exempt from the tax in the majority of states except for some Southeastern states.

Personal property in Connecticut follows a similar logic. Connecticut General Statutes (CGS) define taxable personal property in several sections. Two key definitions are:

All goods, chattels and effects or any interest therein, including any interest in a leasehold improvement classified as other than real property (§12-71(a))

The annual declaration of the tangible personal property owned by such person on the assessment date, shall include, but is not limited to, the following property: Machinery used in mills and factories, cables, wires, poles, underground mains, conduits, pipes and other fixtures of water, gas, electric and heating companies, leasehold improvements classified as other than real property and furniture and fixtures of stores, offices, hotels, restaurants, taverns, halls, factories and manufacturers. (§12-41(c))

Connecticut courts have embraced a somewhat more straightforward and succinct definition of personal property:

The term 'personal property' embraces everything, not coming under the denomination of real estate, which is the subject of ownership and has an exchangeable value. (Judicial Branch 2014)

While this definition could include intangible personal property, the numerous references to tangible personal property in state statute would seem to make it clear that the state's intent is to tax only tangible personal property.

Fiscal importance of personal property

The fiscal or revenue importance of the personal property tax has been declining over the past decades. (Errecart et al. 2012) In the 70s the personal property tax averaged more than ten percent of the total assessed value for property taxes in the United States. The relative value of personal property has now been reduced to generally less than ten percent of the total. The importance of personal property to the tax base does have a regional pattern. The Southeastern states tend to rely most heavily on the personal property tax. The relative share of personal property in the property tax base is reported for selected states for the period from 1986 to 2013 in Table 1¹. Of particular interest is the observation that personal property had a much larger share of the base in Connecticut in the past than it does today.

Table 1: Personal Property as a Percent of Total Property Tax Base for Selected States, 1986 – 2013

State	1986	1991	2013
California	6.5	5.9	4.0
Colorado	9.2	10.5	14.1
Connecticut	12.7	14.3	5.5
Florida	12.7	10.4	7.8
Indiana	26.3	21.6	14.7
Kansas	29.6	16.9	11.4
Kentucky	25.2	21.9	8.6
Louisiana	36.0	25.9	29.9
Maine	12.7	10.2	4.7
Maryland	0.8	0.8	3.2
Massachusetts	3.0	2.3	3.0
Michigan	12.7	12.3	9.2
Mississippi	26.9	30.6	28.4
Missouri	19.3	21.1	18.6
Nebraska	14.1	13.4	5.2
Oklahoma	17.4	16.7	19.5
Oregon	5.9	4.6	4.5
Rhode Island	16.8	15.4	3.4
Tennessee	9.8	9.1	6.7
Texas	17.1	19.3	12.7
Utah	14.8	14.4	5.6
Washington	6.3	5.8	5.6
Wisconsin	4.7	5.2	2.4
Average	14.8	13.4	9.9

Source: US Census (1992 and 1987); Lincoln Institute (2015)

Of the 23 states where data are reported, four have seen the personal property relative share of the total property tax base increase since 1986. Another 19 have experienced a decline in the importance of the

¹ It is worth noting that the US Census Bureau no longer reports data on the make-up of the property tax base in each state. As a result, the best available information is found in the Lincoln Institute of Land Policy/George Washington University database *Significant Features of the Property Tax*. Because the Lincoln Institute/George Washington data are self-reported, definitions may not be completely consistent across states.

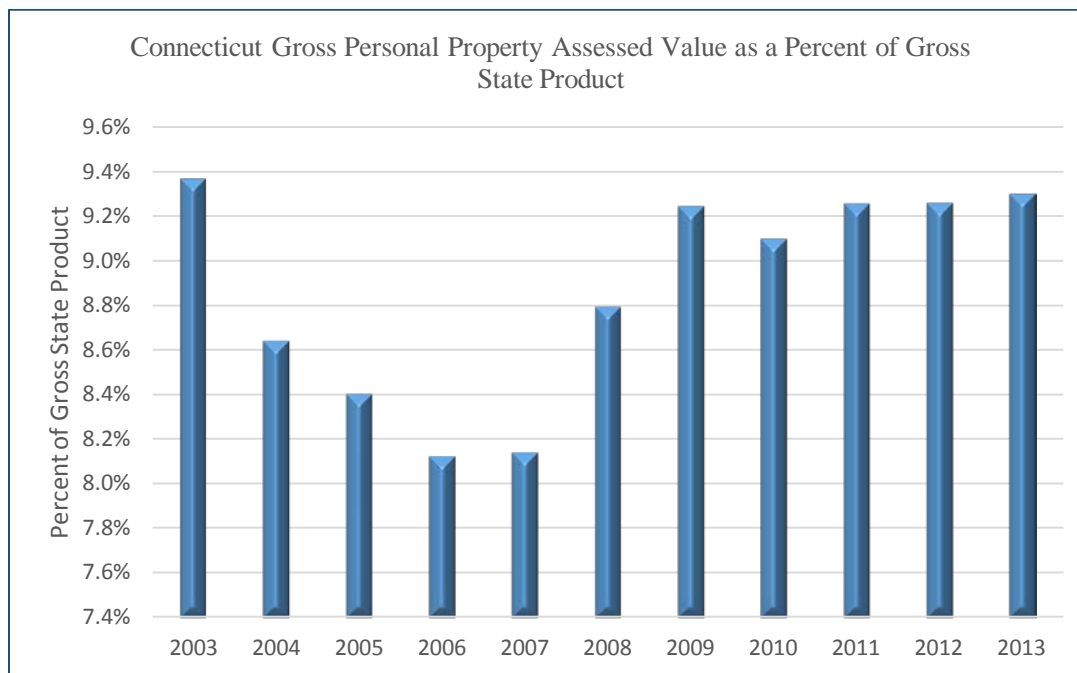
personal property tax. It is important to note that the percentages reported in Table 1 are statewide averages and hide the fact that many taxing jurisdictions within a state may have a substantial portion of their property tax base in personal property. Examples would include taxing jurisdictions with large manufacturing firms or public utilities. This is certainly the case in Connecticut as described below.

The downward drift in the taxation of personal property has been propelled by several important trends. Most states have now adopted a policy to exempt business inventory from the personal property tax. (Errecart et al. 2012) This legislative action has resulted in a significant reduction in the personal property tax. The motivation for removing inventory from the tax base was the concern that manufacturing firms would relocate to states that did not tax inventory. There was also a desire by states to be viewed favorably in terms of offering tax-free status warehousing for goods in various stages of the production or distribution processes. The practice started with the adoption of “Freeport centers” that exempted stored goods in the intermediate stages of production or finished goods in transit. When this policy was first adopted it may have offered a tax advantage for the first few states that followed this policy but the exemption of goods in transit spread rapidly to other states likely resulting in no distinct advantage for the early adopters. (Cornia and Wheeler 1999) (There have been other legislative changes to the taxation of personal property but the exemption of inventory is the most significant.)

The second trend that has contributed to the decline in the taxation in personal property has been the changing nature of business processes and the makeup of business firms in the United States. As the US economy has shifted from a manufacturing-based economy to a service-based economy the importance of value added from capital facilities relative to value added via intellectual contributions has been declining for decades. Service-based businesses use less personal property per employee when compared to manufacturing firms. The result is that in most states there is less tangible personal property to be taxed relative to the Gross State Product.

While this trend may explain national declines over a long time period, it does not seem to hold in Connecticut over the past decade. Figure 2 reports the gross personal property base (before exemptions) as a percentage of the state’s Gross State Product (Connecticut’s contribution to national GDP). The sharp decline from 2003 to 2007 was the result of the rapid growth in the overall Connecticut economy during that period. Nominal annual growth rates ranged from 4.6% to 9.4%. In 2008, Connecticut fell victim to the national recession and the economy shrank by 1.4% in 2008 and another 2.0% in 2009. Growth since 2009 has been at a much more modest rate (0.6% to 2.9%).

Figure 2

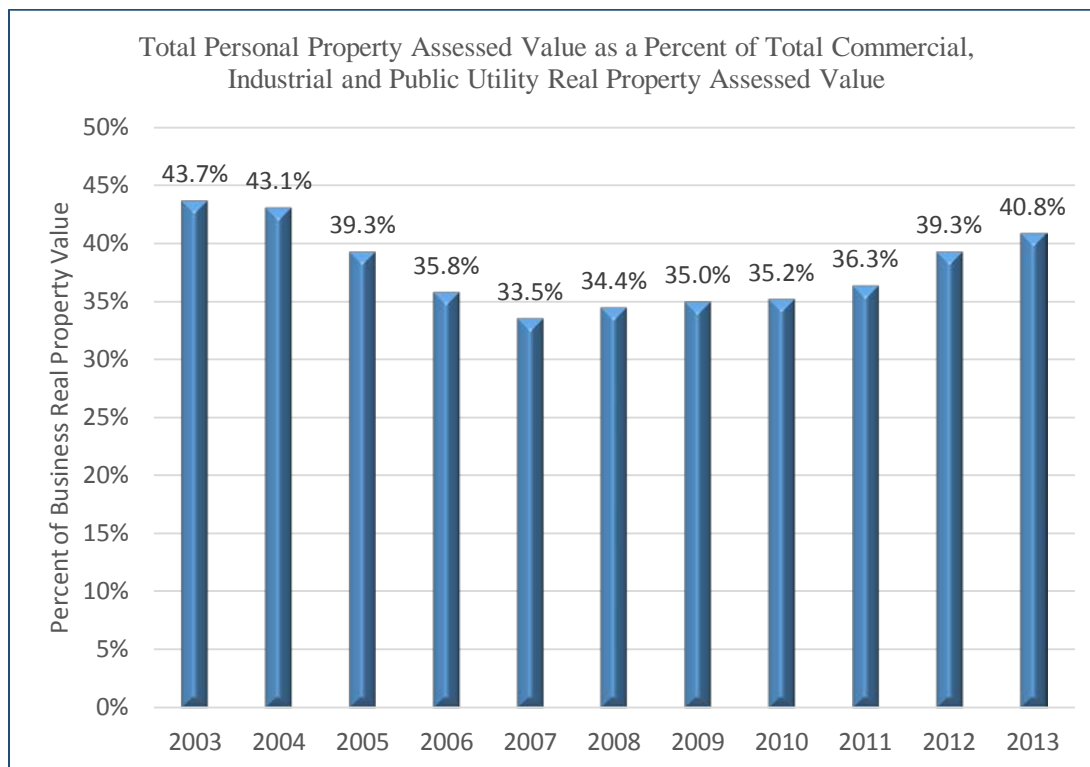


Source: US Bureau of Economic Analysis and calculations by the author

The methods used to assess and value personal property may also contribute to the decline in the importance of personal property. Personal property value is often based on the historical purchase price while other components of the property tax base, e.g. residential homes, have their value established by current market sales. Such a divergence in the valuation methods may well result in personal property valuations lagging the other segments of the property tax base if revaluations are carried out regularly.

One way to consider this structural relationship between real and personal property is to examine the relationship between the value of personal property and the value of all commercial, industrial and public utility property. Since taxable personal property in Connecticut is nearly all owned by businesses, the ratio of personal to business real property should be declining if the national pattern holds. Figure 3 reports the ratio of gross taxable personal property (before exemptions) to gross commercial, industrial and public utility property. The highest ratio was observed in 2003 when the value of personal property represented 43.7% of the value of commercial, industrial and public utility property. In subsequent years, this ratio fell (reflecting the relative increase in real estate values), before starting to climb again in 2011. For the most recent year available (2013), aggregate personal property was valued at 40.8% of business real estate.

Figure 3



Source: Calculations by the author

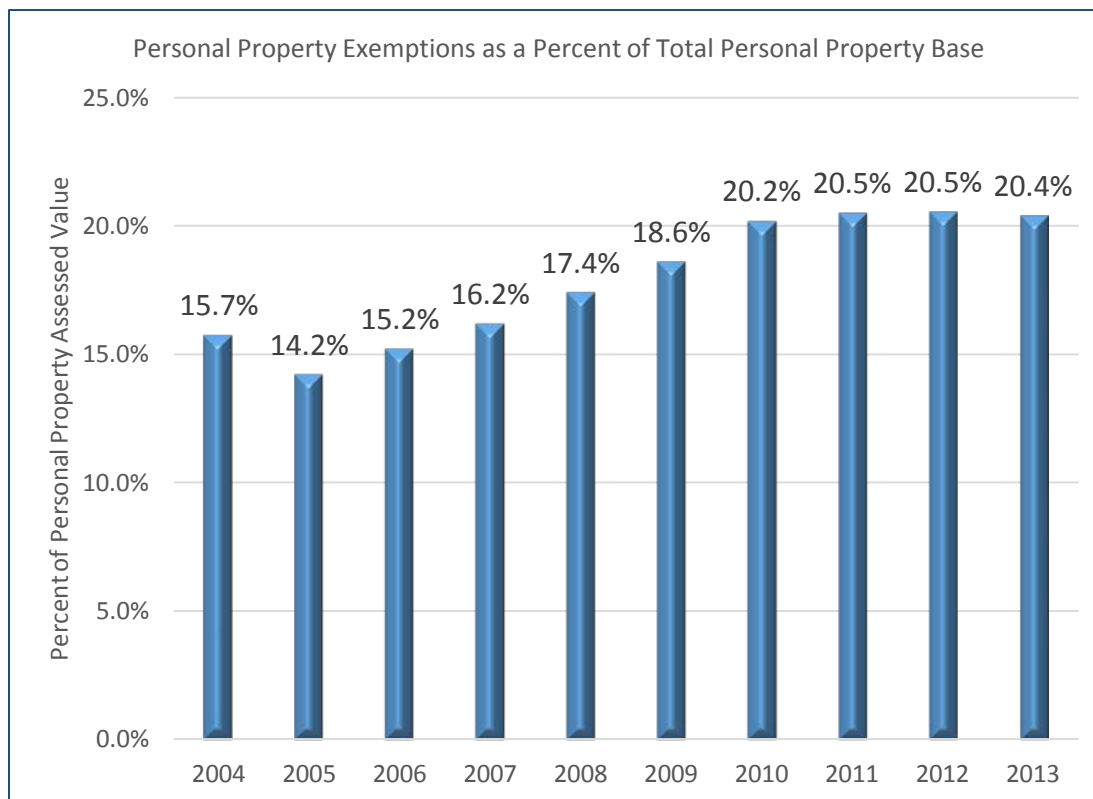
Given the current climate around taxes and tax policy it would be reasonable to assume that seeking exemptions for personal property will be common. A quick review of the tax literature confirms this trend. For example, Collins and Langley (2014) report that during 2013 three states adopted or expanded exemptions for personal property. Colorado now allows local governments to offer personal property exemptions to firms if the local government is able to determine that a firm is considering relocating to another state. Utah expanded personal property taxes by indexing existing exemption brackets to account for changes in the price index. Idaho allows the exemption of property costing less than \$3,000. Collins and Langley suggest the Idaho legislation will remove the personal property tax from most business firms in Idaho. The new law is expected to reduce total revenues by \$20 million and the state pledged to replace the revenue lost by local governments by adjusting the sales tax distribution formula.

The program adopted in Idaho illustrates the problem of reducing or eliminating personal property from the tax base. Virtually every dollar of revenue from the personal property tax goes to local governments and if a state decides to eliminate or reduce the personal property tax it is local governments that feel the effects of the decision. The response to a loss in revenue can take the approach adopted in Idaho and simply transfer state funds to local governments. The term “simply transfer” ignores the complexity of intergovernmental fiscal transfers because such actions are rarely simple. Another approach is to cut services that were previously funded by the revenue from the personal property tax. This is also one of those policy responses that is never simple. The third approach is for the government that is losing revenue to adjust tax rates upward on the remaining tax bases. As with the previous two solutions to foregone revenue, adjusting tax rates is fraught with significant challenges. For the loss of revenue alone any decision around the personal property tax requires a careful and thoughtful policy review.

Exemptions to Connecticut's personal property tax have leveled off in the past several years after climbing significantly for several years running. Figure 4 reports on the total personal property exemptions granted across the state as a percentage of the personal property base. Noteworthy was Connecticut's decision to exempt certain manufacturing machinery and equipment beginning in 2007. But that only continued a trend that had started some years before. Other exemptions to business personal property include:

- Inventory [CGS § 12-81(50), (54)]
- Manufacturing machinery and equipment, including machinery and equipment used in biotechnology [CGS § 12-81 (72), (76)]
- New machinery and equipment used in upgrading a manufacturing facility in a qualified distressed municipality, targeted investment community, or enterprise zone [CGS § 12-81(70)]
- Municipalities may abate taxes for information technology personal property and real and personal property of a communications establishment [CGS § 12-81t to 12-81u]

Figure 4



Source: Office of Policy and Management, Grand Lists by Town for the years shown and calculations by the author

Administration

Revenue significance notwithstanding, the personal property tax is accompanied by some inherent challenges. The first challenge when taxing personal property is developing and implementing an administrative process that treats taxpayers in a fair and transparent manner. This requires an administrative process that results in an acceptable degree of certainty, allows a taxpayer to identify what is being taxed and also understand the valuation used to determine the taxes due on the subject property. For real property the administrative challenges are relatively easy to resolve. Business owners or

Business Personal Property Tax

homeowners can easily relate to the property that is being taxed and with modest effort understand how the value of the taxable property is established. Likewise, it is relatively easy for tax administrators to discover and value the real property of business and residential homes.

The converse is true for personal property. Personal property is difficult to administer because of challenges in identifying personal property, valuing the property for tax purposes, and auditing establishments for personal property to insure compliance.

Issues with the cost approach

When valued separately from real property, personal property is generally valued using the property's acquisition cost less depreciation. This historical cost less depreciation approach is used in Connecticut as well. But it is not the only version of a cost approach that can be used. For example, assets could be valued based on what it would cost to reproduce the asset. This is essentially what Connecticut tries to do with the current car tax based on current average market values.

But neither of these variations on the cost approach reflect how market actors would evaluate an asset. Most firms would evaluate what it would cost to replace the functionality provided by the asset. The classic example often used is the value of a 2-year old computer. In valuing such a machine, firms would consider the cost of replacing the functionality provided by the computer. New technology may mean that the same function can be obtained at a lower cost. The historical cost of the computer or the cost of reproducing the same machine would be of little interest.

Unfortunately, given the limited information available to assessors and the volume of accounts that must be valued each year, it is extremely difficult to truly emulate the market when valuing personal property. But it is worth noting that a professional fee appraiser would likely use either the reproduction or replacement cost approach rather than the historical cost.

A second set of issues related to the cost approach relates to the concept of depreciation. Depreciation schedules are standardized assumptions about how an asset's value will decline over time. The decline in value, however, may be due to one of three reasons, not all of which are captured in a depreciation schedule. First, there is physical deterioration. This is the concept that fits most clearly with a standard depreciation schedule. An asset is deemed to have a certain useful life, and consequently the value of the asset will decline over the course of that time period to reflect the fact that the remaining useful life is constantly declining. The rate of decline is often assumed to be linear, but this need not be the case. And it is generally assumed that even at the end of its useful life, the asset will have a residual salvage value.

A second type of depreciation is functional obsolescence. The asset may still have significant remaining useful life, but the function that it fills has changed. Firms are seeking for a new configuration or a new technology to meet the new functional needs. Consequently, the current asset has lower value than would be suggested by the depreciation schedule. An example would be the value of a reasonably new electric typewriter in an emerging age of word processors.

A third type of depreciation is perhaps the most difficult to identify and measure because it is external. This is economic obsolescence. It arises when market conditions change and the productive capacity of the asset is no longer needed. Because economic obsolescence is a result of external market forces, it is never reflected in depreciation schedules. Appraisers and assessors must look to the market for indications that economic obsolescence may exist in a given industry.

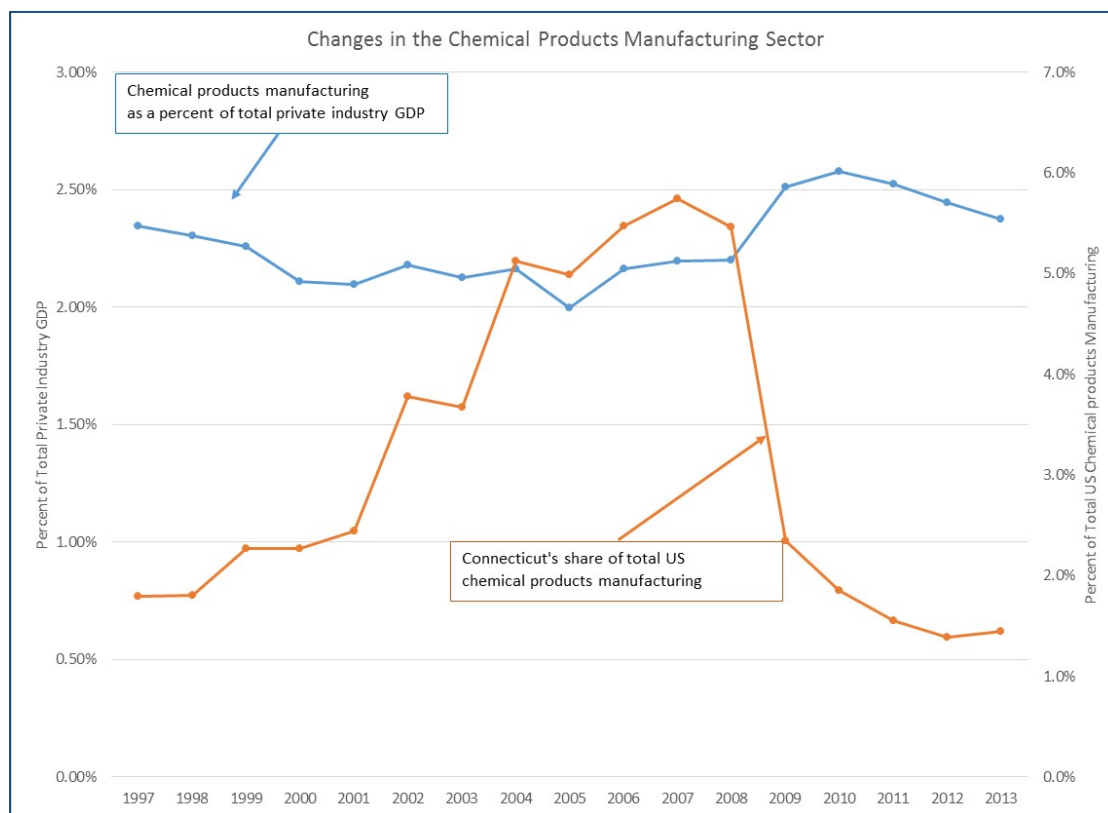
For example, there is an industry in Connecticut that is likely suffering from economic obsolescence, and one other that may be. The industry that is quite likely experiencing obsolescence is the chemical

products manufacturing industry (NAICS code 32) or at least some of its subdivisions. Figure 5 illustrates the point. The figure shows two lines representing the national trend in the industry and the Connecticut trend. Nationally, chemical products manufacturing has represented between 2.0% and 2.5% of GDP since at least 1997. During the recent recession, the percentage actually increased. Since the recession, the percentage has fallen slightly, but remains solidly above 2.0%.

During much of the late 1990s and up to 2008, Connecticut was clearly growing as an important contributor to the national industry trend. In 2009, the pattern changed dramatically. Connecticut's share of the national industry fell from nearly 6% to just over 2%, and has continued to decline in the years since. Something has clearly changed in the national market and Connecticut firms have yet to adapt.

This trend suggests that to the extent that Connecticut firms in the chemical product manufacturing sector have specialized equipment that cannot be readily converted to another use, the value of that machinery and equipment may have fallen much more than would be reflected in a standard depreciation schedule based solely on physical deterioration.

Figure 5



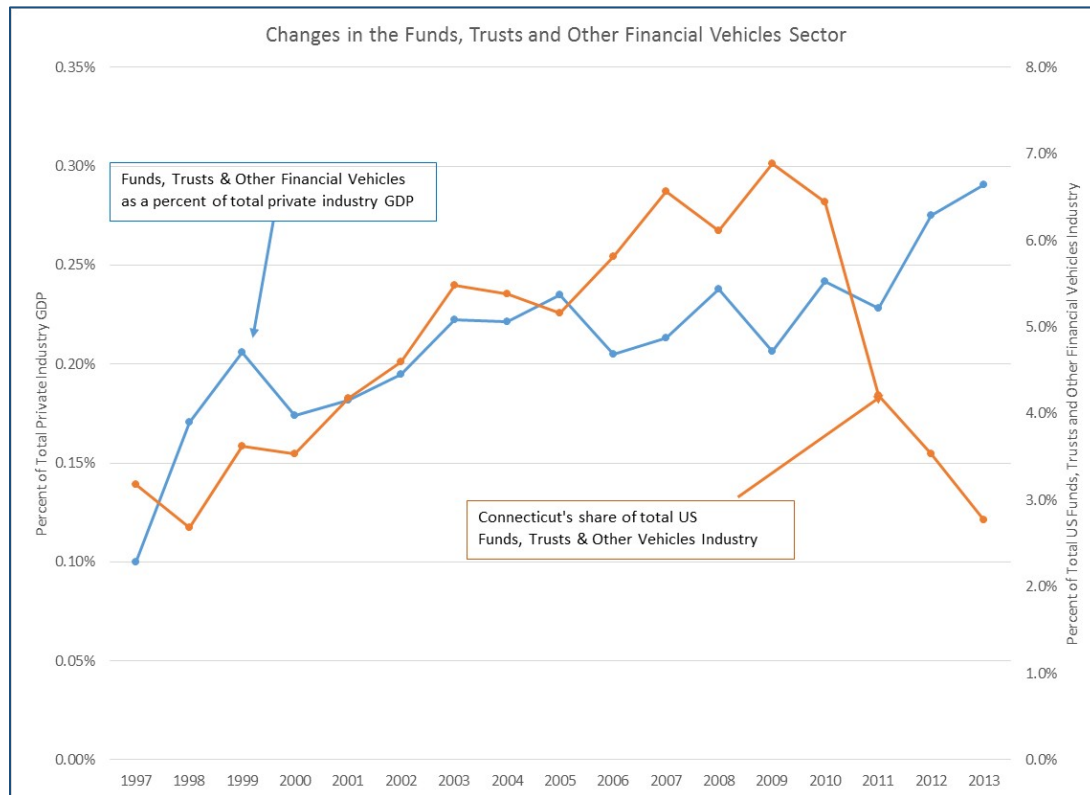
Source: US Bureau of Economic Analysis

A second industry that has also seen dramatic changes relative to the national market is the Funds, Trusts, and Other Financial Vehicles (NAICS code 55) industry. Figure 6 reports again both the national industry trend and Connecticut's contribution to the national market output for that industry. Here the data indicate that the industry in Connecticut began to decline in 2010, but fell dramatically in 2011 and has continued to decline since. But in this instance it is less clear that there is economic obsolescence. The firms may be

less valuable, but if the equipment and other fixtures they employ can be used productively in another industry (say, insurance or education), there may be no obsolescence.

The point is that assessors charged with valuing property at market value have a responsibility to monitor larger market trends and at least consider the possibility that obsolescence may be present. The next section describes the administrative processes in use in Connecticut.

Figure 6



Source: US Bureau of Economic Analysis

Administration of the Personal Property Tax in Connecticut

The tasks inherent in the administration of any property tax involve several recurring steps regardless of the type of property. 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 administration of the personal property tax in Connecticut.

Discovery of personal property

Local assessors in Connecticut rely on self-reporting by business operators to identify taxable personal property and potential exemptions. State law requires each business to file a personal property declaration form with the local assessor each year. Businesses with multiple locations must file separate declarations in each jurisdiction in which they operate. The forms must be filed by November 1 of each year for assessments as of October 1. Those who must file include:

- Owners of unregistered motor vehicles; horse, ponies and thoroughbreds; mobile manufactured homes not assessed as real estate
- Businesses
- Lessors and Lessees of personal property

Failure to file the declaration by November 1 (or by the extension deadline if granted) results in a 25% penalty being added to the assessment.

Property reported is grouped by type of property. For each type of property, the aggregate acquisition value of property acquired in a given year is recorded. The property categories and reporting information are shown in Table 2.

Table 2: Personal Property Annual Declaration Information

Property category	Required information	Depreciation period	Residual value
(9) Unregistered motor vehicles and vehicles garaged in Connecticut but registered elsewhere	Year, make, model, VIN, length, weight, purchase price, date	None	Current value
(10) Manufacturing machinery and equipment not eligible under CGS 12-81 (76) for exemption	Original cost, transportation and installation	7 years	30%
(11) Horses and ponies ²	Age, breed, sex, quality and value	None	None
(12) Commercial fishing apparatus ³	Original cost, transportation and installation	7 years	30%
(13) Manufacturing machinery and equipment eligible under CGS 12-81 (76) for exemption (requires a separate exemption claim form as well)			
(14) Mobile manufactured homes not currently assessed as real estate	Year, make, model, length, width, bedrooms, baths	None	Current value
(16) Furniture, fixtures and equipment	Original cost, transportation and installation	7 years	30%
(17) Farm machinery			
(18) Farm tools ³			
(19) Mechanics tools ³			
(20) Electronic data processing equipment ⁴		4 years	20%
(21a) Telecommunications company equipment not technologically advanced	Original cost, transportation and installation	7 years	30%
(21b) Telecommunications company equipment technologically advanced		4 years	20%
(22) Cables, conduits, pipes, etc.		Not specified	Depreciated value

² Horses and ponies are subject to a \$1000 exemption per animal

³ \$500 exemption applied

⁴ Including bundled software

Property category	Required information	Depreciation period	Residual value
(23) Expensed supplies	Total expended, average monthly	None	None
(24a) Other goods including leasehold improvements	Original cost, transportation and installation	8 years	30%
(24b) Rental entertainment medium	Original cost, transportation and installation	4 years	20%

Source: Connecticut Association of Assessing Officers (CAAO) 2015 Declaration of Personal Property

In addition, taxpayers desiring exemptions for water or air pollution control equipment, farm machinery in excess of \$100,000, or a distressed municipality/enterprise zone location must file an additional form.

The example shown in Table 3 may help clarify how the declaration form is to be completed. The example is taken from the CAAO declaration form for 2014 and is described as follows:

June 2012, you bought a desk for \$300 and a chair for \$80. In October of 2012 you buy a display rack for \$400. You have a filing cabinet you bought 10 years ago for \$100 that is being used in your business. A friend gave you a used bookcase, in February 2014, which you believe is worth \$50.

Given this description, the declaration form should be completed as shown in the table. The shaded columns are completed by the taxpayer. The other information is printed on the form.

Table 3: Example personal property declaration

#16 – Furniture, fixtures and equipment			
Year ending	Original cost, transportation & installation	% Good	Depreciated value
10-1-14	50	95%	48
10-1-13	400	90%	360
10-1-12	380	80%	304
10-1-11		70%	
10-1-10		60%	
10-1-09		50%	
10-1-08		40%	
Prior years	100	30%	30
Total	930	Total	742

Source: CAAO 2014 Declaration of Personal Property

Declaration forms are mailed out to each business that filed in the previous year and each new business registered with city. Whether or not a business receives the declaration form does not affect their obligation to complete and file the declaration.

Clearly discovering new businesses poses a burden for local assessors (Catherine Collins 2015) and based on interviews with 11 different cities, efforts to identify such potential taxpayers vary across assessing jurisdictions. When forms are completed, there is no easy way to verify the accuracy of the data provided short of an audit. And for large firms with millions of dollars in personal property, the filing can be quite lengthy.

Valuation

Using the information provided by the taxpayer on the declaration form, valuation by the assessor is generally straightforward. State law requires that all property be assessed at 70% of market value. The assessor simply takes the depreciated value totals for each property category, deducts any exemptions, and multiplies the remainder by 0.7 before adding them together to arrive at the total taxable value for the firm's personal property. In the case of motor vehicles reported on the declaration, value is verified where possible by using the National Automobile Dealers Association data available from the state. No other attempts are made to test whether or not the final value bears any connection with actual market value since for the most part the assessor has very little information on quality, condition or marketability of the assets.

The result for the 2013 Grand List was total personal property valued for tax purposes at \$22,948 million before exemptions. Table 4 reports the breakdown of this total by type of property. The largest single category is the infrastructure owned by public utility companies in cable, conduits, pipes, etc. Several of the property types are very small in the aggregate. In addition the total taxable value was reduced by exemptions totaling 20.4% putting the final taxable value at \$18,270 million.

Table 4: Distribution of Personal Property Value by Type: 2013

Personal Property Type	Percent of State Total Personal Property
Non-registered MV and Snowmobiles	0.93%
Industrial/Mfg. Machinery & Equipment	10.30%
Horses and Ponies	0.03%
Commercial Fishing Apparatus	0.002%
Manufacturing & Biotechnology Machinery & Equipment	17.64%
Mobile Manufactured Homes	0.01%
Commercial Furniture & Fixtures	21.23%
Farm Machinery	0.41%
Farming Tools	0.01%
Mechanics Tools	0.20%
Electronic Data Processing Equipment	8.77%
Telecommunications Equipment	2.02%
Cable, Conduits, Pipes, Poles, Towers, Telephone, Water, etc.	26.53%
Monthly average quantity of supplies	0.33%
All other taxable property, chattels & effects	10.51%
25% Penalty	1.08%
Total	100.0%

Source: Office of Policy and Management, Grand List by Town: 2013 and calculations by the author

Interviews with both assessors and taxpayer representatives indicated that there is substantial dissatisfaction with a 30% residual value for most property categories. The view expressed was that this value is too high in many cases.

There is also concern that the property categories on the CAAO's standard form are too broad for some types of specialized properties. This has led some jurisdictions to develop their own declaration forms.

An issue that affects personal property valuations in Connecticut relative to real property has to do with the valuation cycle for each. Personal property is valued every year using the standard forms, but real property is revalued every 5 years. This mismatch in the valuation cycle means that the effective

assessment ratio of real and personal property may differ over the course of the real property valuation cycle.

Billing and Collection

Assessments are done as of October 1. Tax bills are mailed out by all jurisdictions generally the following June. By law, however, there is no legal obligation for a municipality to notify a taxpayer of their specific obligation. The law only requires that municipalities publish, at specified intervals, a general notification to the public that taxes are due and payable at a certain date. (CGS §12-145)

The personal property tax is due July 1, after the local government has adopted their mill rate and new budget. The tax payment is delinquent after August 1. (Some elements of the property tax can be paid in quarterly or biannual installments in some jurisdictions.)

While collection rates for the property tax are generally high in Connecticut, collection of the personal property tax may pose a problem for local tax collectors. In February, 2015, one local newspaper reported that a Councilman who happened to be running for the state Senate owed over \$140,000 in personal property taxes that had not been paid since 2002. The city finance director reported that the personal property tax is the hardest property tax to collect because of the rate of business turnover. (Lockhart 2015)

Cities do have legal options for pursuing delinquent accounts, but they often lack the resources for effective enforcement.

Auditing

Limited resources also limit the ability of many cities to audit personal property accounts. It is clear from the CAAO declaration form used by most jurisdictions that the information provided by a taxpayer is very general and could easily be misrepresented. Comparisons of declarations across years may reveal significant changes or taxpayer inconsistencies. But even such variations may not trigger an audit.

Audits do take place, but generally at very low rates. Some jurisdictions have sought outside help for audits, including using contingency contracts with private auditors. For the most part, taxpayers and many assessors are uncomfortable with contingency audits. Nonetheless, there are cities using this approach. The effectiveness of in-house, contracted or contingency audits is not known. But given the size of most personal property accounts, it seems likely that audits will focus on larger businesses and will ignore the majority of personal property taxpayers.

There is also evidence suggesting that assessors across the state may not be consistent in how aggressively they administer the personal property tax. Table 4 reported the total personal property penalties assessed across the state at just over 1% of total personal property assessed value. But this percentage varies substantially across jurisdictions and in some instances is over 15% of total personal property. Table 5 reports a simple comparison between the level of penalties as a percentage of total personal property value and the total personal property value per capita. It is clear from the table that jurisdictions with personal property value per capita above the state median are much less likely to assess penalties. Those communities with value per capita below the median are much more likely to assess penalties. While it is possible that in jurisdictions with relatively high personal property per capita there is also a higher level of compliance overall, it seems more likely that the pattern shown in Table 5 indicates variations in administrative practices regarding auditing and enforcement.

Table 5: Personal Property per Capita and Personal Property Penalties Assessed

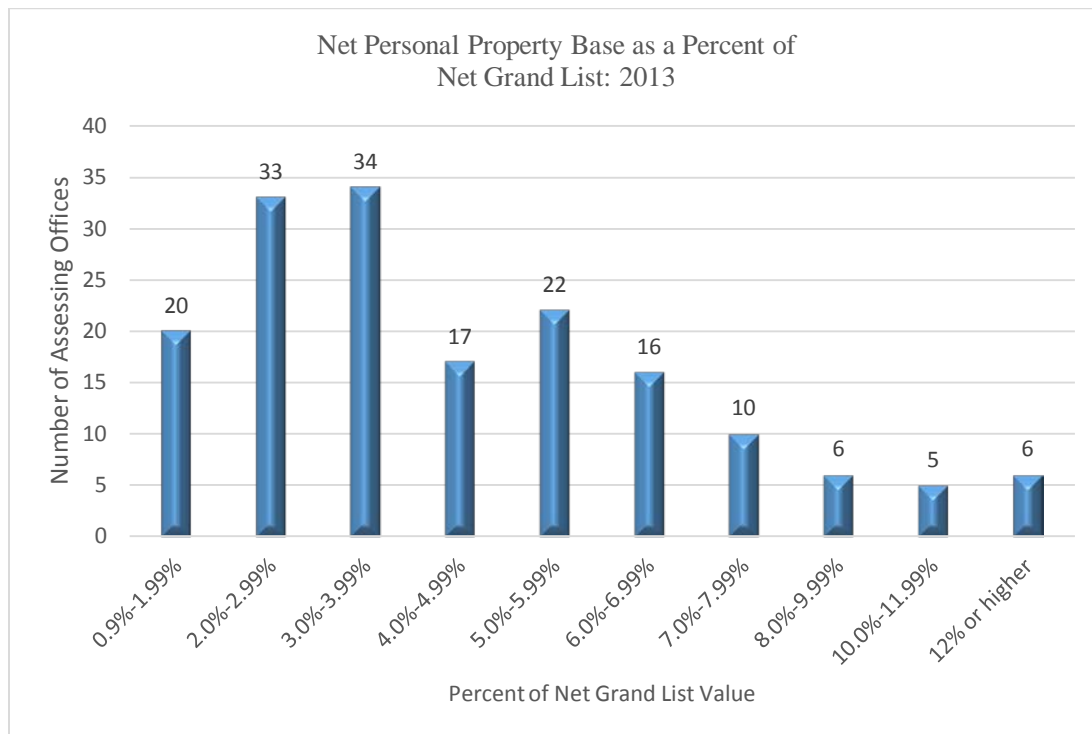
Number of assessing jurisdictions		Personal property penalties assessed as a percent of total personal property		
		Below the median	Above the median	Total
Personal property value per capita	Above the median	61	24	85
	Below the median	23	61	84
	Total	84	85	169

Source: Office of Policy and Management, Grand List by Town: 2013, and calculations by the author

Trends and patterns in the Connecticut personal property tax

As noted in the introduction, taxable personal property represents just over five percent of Connecticut's total property tax base after all exemptions are included. But this summary statistic masks the significant variation that exists between Connecticut's towns and cities. The range is from 0.88% in New Canaan to 24.3% in Waterford. The full distribution is reported in Figure 7. Clearly variations in the value of the tax base do not tell the whole story since tax rates vary substantially by community as well. For 2016, mill rates⁵ vary between 10.70 in Salisbury and 74.29 in Hartford, with an average across the state of 29.47.

Figure 7

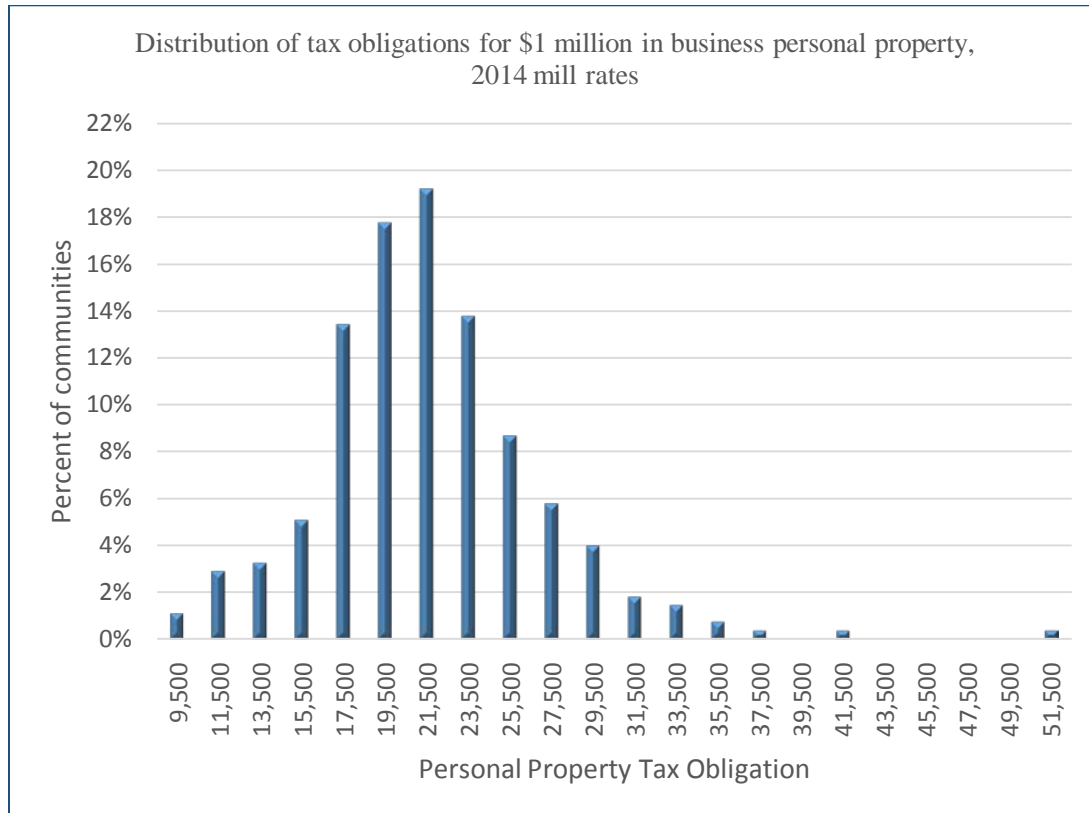


Source: Calculations by the author

⁵ A mill rate expresses the tax as a rate per \$1,000 of value. Thus a mill rate of 25.0 applied to a base of \$10,000 would result in a tax obligation of 25.0 X 10, or \$250.

One way to compare cities is to apply the local mill rate to a standardized value. Figure 8 shows the personal property tax obligation due for a company owning personal property with a depreciated value of \$1 million. Using the state assessment ratio of 70% of market value, and community-specific mill rates, the tax obligation in each community is calculated. The median obligation is \$20,409, and 36% of communities are within 10% of the median. The range is from \$7,490 in Salisbury to \$40,754 in Waterbury and \$52,003 in Hartford. Thus, there are outliers on both the high and low end with the result that the tax burden for a given amount of personal property varies substantially across the state. But most jurisdictions cluster around the median value.

Figure 8



A more careful examination of the burden of the personal property tax yields a richer picture. The personal property grand list was obtained from 13 towns⁶, totaling 30,195 personal property accounts. The cities were selected because they represent both extremes in the distribution of personal property as a percent of total grand list. A comparison between the 13 indicates that the distribution of accounts by total taxable value is virtually identical. This appears to be a reasonable sample for accounts statewide.

Table 6 reports the number and percent of personal property accounts by value range. The table also shows the proportion of total personal property taxable value represented by each value range. The table shows that nearly 89% of the taxable personal property value is found in only 7.2% of personal property accounts. In fact, over 52% of the value is found in only 0.22% of the accounts. It is striking that nearly 93% of all tax accounts total only 11.5% of taxable value.

⁶ The jurisdictions included were Bloomfield, Fairfield, Greenwich, Groton, Hartford, Killingly, Middletown, Montville, Norwich, Stamford, Waterford, West Hartford, and Windsor.

Excluding all accounts with a taxable value in excess of \$1 million, the median tax obligation for remaining firms, using 2014 mill rates, is \$251. This analysis of actual personal property accounts indicates that the personal property tax in Connecticut is a tax on large businesses. For the majority of businesses, it is more nuisance than financial burden. It is likely that it costs firms more to comply and cities more to administer the tax than can be justified by the amount of revenue collected from the large majority of taxpayers.

Table 6: Distribution of Personal Property Taxable Values: 2014

Net assessment range	Personal Property Accounts (2014)	Percent of accounts	Total Net Personal Property taxable value (\$ millions)	Percent of Personal Property tax base
\$200,000-\$299,999	665	2.20%	161.1	2.95%
\$300,000-\$599,999	657	2.18%	270.3	4.95%
\$600,000-\$999,999	304	1.01%	235.7	4.32%
\$1,000,000-\$1,499,999	166	0.55%	200.6	3.67%
\$1,500,000-\$1,999,999	80	0.26%	137.2	2.51%
\$2,000,000-\$2,999,999	97	0.32%	238.2	4.36%
\$3,000,000-\$9,999,999	143	0.47%	730.6	13.38%
\$10,000,000-\$49,999,999	54	0.18%	1,253.8	22.96%
Over \$50 million	13	0.04%	1,606.5	29.42%
Sub-total	2,179	7.22%	4,834.1	88.52%
Remaining accounts	28,016	92.78%	626.8	11.48%
Total	30,195	100.00%	5,460.8	100.00%

Source: 2014 Grand List from 13 assessment offices and calculations by the author

Comparisons with other states and within Connecticut

An important question is whether businesses with large investments in Personal Property are taxed more heavily in Connecticut than elsewhere? Comparing the personal property tax burden across states is very difficult, given variations in definitions, exemptions, valuation practices and even within state differences. (Catherine Collins 2015)

One way that comparisons can be made is to use a standard business configuration that includes both real and personal property and then calculate the total tax obligation in several specific jurisdictions. This is the approach taken by the Minnesota Center for Fiscal Excellence and the Lincoln Institute of Land Policy. The two organizations partner to produce an annual study making comparisons between large cities in each state. The following tables are extracted from their most recent study. (LILP/MCFE 2015)

Table 7 compares a **hypothetical** commercial property with \$1 million in current real estate market value and \$200,000 in fixtures. The total property tax obligation is compared because the differences in valuation practices and base definitions, as well as different rates, can be quite confusing. As a result, the Lincoln Institute/Minnesota study compares the total statutory tax obligation.

Table 7: Comparative property tax obligations for \$1 million in commercial real property and \$200,000 in fixtures, payable in 2014

State	City	Net Tax	Effective Tax Rate ⁷	National rank
Urban property				
New York	New York City	47,597	3.966%	2
Rhode Island	Providence	43,757	3.646%	4
Connecticut	Bridgeport	40,978	3.415%	7
Massachusetts	Boston	34,610	2.884%	13
New York	Buffalo	32,608	2.717%	16
New Jersey	Newark	28,945	2.412%	20
Vermont	Burlington	27,767	2.314%	23
National average		25,883	2.157%	
New Hampshire	Manchester	24,370	2.031%	28
Maine	Portland	24,000	2.000%	29
Rural property				
New York	Warsaw	35,847	2.987%	4
Massachusetts	Adams	24,954	2.330%	10
Maine	Rockland	24,192	1.016%	17
New Hampshire	Lancaster	24,125	2.010%	18
New Jersey	Maurice River Township	23,668	1.972%	19
Vermont	Hartford	23,112	1.926%	21
Rhode Island	Hopkinton	22,787	1.899%	22
National average		20,945	1.745%	
Connecticut	Litchfield	20,833	1.736%	25

Source: Lincoln Institute of Land Policy and Minnesota Center for Fiscal Excellence (2015)

Table 8 is a similar comparison for an industrial (manufacturing) company with a current market value of \$25 million in real property, \$12.5 million in machinery and equipment, \$10 million in inventories and \$2.5 million in fixtures. Again, there are variations in how states either tax or exempt such property, and the Lincoln Institute/Minnesota study compares the total property tax obligation for such a firm in different states.

Table 8: Comparative property tax obligations for an industrial (manufacturing) property comparison

State	City	Net Tax	Effective Tax Rate	National rank
Urban				
New York	New York City	1,189,931	2.380%	7
Rhode Island	Providence	954,431	1.909%	16
Connecticut	Bridgeport	950,615	1.901%	17
New York	Buffalo	815,189	1.630%	22
National average		798,309	1.597%	

⁷ The effective tax rate is calculated by dividing the tax due by the total market value of the property being taxed. Thus it adjusts for differences in assessment ratios and nominal rates to produce a rate that is more comparable across states.

Massachusetts	Boston	795,090	1.590%	24
Vermont	Burlington	775,514	1.551%	26
New Jersey	Newark	723,618	1.447%	29
New Hampshire	Manchester	609,238	1.218%	38
Maine	Portland	550,000	1.100%	41
Rural				
New York	Warsaw	896,175	1.792%	9
National average		647,029	1.294%	
Massachusetts	Adams	639,630	1.279%	22
New Hampshire	Lancaster	603,135	1.206%	23
New Jersey	Maurice River Township	591,697	1.183%	24
Vermont	Hartford	573,407	1.147%	26
Maine	Rockland	554,400	1.109%	27
Rhode Island	Hopkinton	518,064	1.036%	30
Connecticut	Litchfield	476,721	0.953%	35

Source: Lincoln Institute of Land Policy and Minnesota Center for Fiscal Excellence (2015)

The Lincoln Institute/Minnesota study selects Bridgeport, CT for the urban comparisons and Litchfield, CT for the rural comparisons. The mill rate in Bridgeport is in the 95th percentile of all Connecticut cities and towns, while Litchfield is in the 36th percentile. This means that the calculations for Bridgeport are 48.2% higher than the tax obligation calculated at the state median, while the estimates for Litchfield are 10.1% lower than they would be at the state median.

The two tables suggest that the Connecticut property tax (real estate and business personal property combined) is above the national average for urban areas and below the national average for rural areas. But even for the urban areas, there are a number of states that appear to have higher combined property tax burdens for commercial and industrial property.

The treatment of business personal property in Connecticut does not appear to set Connecticut apart from other states. There are several reasons for this. First, many states use a different approach to valuing large complex properties such as those owned by electric utilities, natural gas transmission and distribution companies, railroads and similar large complex firms. In 40 of the 50 states, such companies are valued by state tax assessment entities using an approach that values the assets of these firms as a unified whole without distinguishing between real and personal property. Consequently, reports on the structure of the tax base from such states may appear to understate the amount of personal property in the tax base.

A second likely reason is that states which appear to exempt personal property compensate by raising the rate on real property to offset the lost revenue. This appears to be the case in New York. It is also likely that in some states with apparently low tax rates, aggressive valuation practices and high assessment ratios result in net tax obligations that do not differ much from or may even be higher than the national average. For example, if the assessment ratio in Connecticut were 100% rather than 70%, all mill rates could be reduced by 30%, but the final tax bills would not change.

A similar point can be made with a more direct comparison of states that tax personal property and those that do not. Combining the analysis presented in the Lincoln Institute/Minnesota study with information taken from the Lincoln Institute/George Washington University database on state property tax systems, it is possible to compare the effective tax rates for states that do and do not tax personal property and even two segments of personal property.

If the tax on personal property creates an increased tax burden for businesses, that burden should show up as a higher effective tax rate in states that tax personal property. Table 9 compares the average effective tax rates for commercial firms in states that do and do not tax personal property in general, inventories and specifically machinery and equipment. The table clearly shows that there is very little difference in the average rate regardless of firm size. If anything, the average rate is lower in states that tax personal property. The averages mask a certain amount of within group variation, so the differences shown in the table should not be overstressed. They are consistent with expectations about broad versus narrow tax bases (i.e., the broader the tax base, the lower the tax rates overall). But the key point is that there is no evidence that tax burdens are higher for commercial firms in states that tax any of the types of personal property.

Table 9: Effective property tax rates for urban commercial property by tax status of personal property and size of firm

State tax policy	Number of states	Average effective rate for		
		Small firm ^a	Medium firm ^b	Large firm ^c
	Is personal property taxed?			
Yes	37	1.98	2.01	2.03
No	14	2.36	2.50	2.56
	Are inventories taxed?			
Yes	12	1.81	1.83	1.83
No	39	2.18	2.25	2.29
	Are machinery and equipment taxed?			
Yes	36	1.96	1.98	2.00
No	15	2.40	2.52	2.58

a. Small firm: \$100,000 in real property value; \$20,000 in fixtures

b. Medium firm: \$1 million in real property value; \$200,000 in fixtures

c. Large firm: \$25 million in real property value; \$5 million in fixtures

Source: Lincoln Institute/Minnesota Center for Fiscal Excellence (2015), Lincoln Institute/George Washington University (2015) and calculations by the author

Table 10 presents a similar analysis for industrial (manufacturing) firms using the same two data sources. Here the differences are even smaller. Thus, for manufacturing firms, there appears to be no evidence that the overall effective tax rates differ between states that tax personal property and those that do not.

Table 10: Effective property tax rates for urban industrial (manufacturing) property by tax status of personal property and size of firm

State tax policy	Number of states	Average effective rate for		
		Small firm ^a	Medium firm ^b	Large firm ^c
	Is personal property taxed?			
Yes	37	1.53	1.57	1.58
No	14	1.42	1.59	1.63
	Are inventories taxed?			
Yes	12	1.57	1.58	1.60
No	39	1.47	1.57	1.58
	Are machinery and equipment taxed?			
Yes	36	1.53	1.57	1.58
No	15	1.43	1.59	1.63

a. Small firm: \$100,000 in real property value; \$50,000 in machinery and equipment; \$40,000 in inventories; \$10,000 in fixtures

- b. Medium firm: \$1 million in real property value; \$500,000 in machinery and equipment; \$400,000 in inventory; \$100,000 in fixtures
- c. Large firm: \$25 million in real property value; \$12.5 million in machinery and equipment; \$10 million in inventory; \$2.5 million in fixtures

Source: Lincoln Institute/Minnesota Center for Fiscal Excellence (2015), Lincoln Institute/George Washington University (2015) and calculations by the author

Comparisons within the state

The Lincoln Institute/Minnesota comparisons vary the size of the firm because some states apply different tax rates depending on the size of the firm. Such is not the case in Connecticut, and it is therefore possible to compare jurisdictions within the state based on a single firm configuration. Table 11 summarizes such a comparison for a manufacturing firm configured as follows:

- Real property with a current market value of \$25 million
- Machinery and equipment with a depreciated value of \$12.5 million, two-thirds of which is exempt
- Other fixtures with a depreciated value of \$2.5 million.
- Total estimated market value: \$40 million
- Total taxable value based on these assumptions: \$22.17 million

Table 11: Distribution of estimated tax obligations for a manufacturing plant in Connecticut

	Lowest 20%	2nd quintile	3rd quintile	4th quintile	Top quintile
Minimum	\$299,600	\$691,880	\$770,000	\$854,000	\$968,520
Maximum	\$678,720	\$769,160	\$851,200	\$961,800	\$2,080,120
Average	\$530,181	\$731,530	\$811,936	\$897,291	\$1,117,436

Source: Calculations by the author using 2014 mill rates
(See text for assumed plant configuration and values)

The table compares the 169 local governments using only their 2014 base mill rate. No attempt is made to incorporate variations for special districts, etc. If such adjustments were made, the resulting estimated tax would fall within the ranges shown in the table.⁸ The cities are divided into five equally sized groups (quintiles) based on the resulting estimated tax. The minimum, maximum and average tax within each quintile are reported in the table.

What the table suggests is that Connecticut cities would tax such a plant at rates similar to other jurisdictions around the country. The overall median in Connecticut (\$811,536) would be slightly higher than the national average shown for urban areas in the Table 8, and most Connecticut cities would be within about 12% of that tax level. Hartford had by far the highest estimated tax in this exercise. Five other cities had estimated tax levels at about the same level as New York City shown in Table 8.

Summary observations on the relative burden of the personal property tax on Connecticut businesses

In considering the relative burden of the personal property tax on Connecticut businesses, the following points should be kept in mind.

1. The median tax obligation on business personal property at least among the cities sampled was \$252 at 2014 tax rates for firms with less than \$1 million in taxable personal property.

⁸ Quintile means would likely vary somewhat but the overall width of the distribution would not change.

2. The total value of taxable personal property from the bottom 93% of personal property taxpayers was 11.5% of total taxable personal property.
3. The average personal property tax bill for those firms below the median tax was about \$50.
4. The 7.3% of business accounts with personal property valued at \$200,000 or more represented 88.5% of all personal property tax obligations. And many of these separate accounts appear to be essentially the same taxpayer (e.g., Connecticut Light and Power has multiple accounts even within the same jurisdiction)
5. For the large majority of Connecticut businesses, the property tax on business personal property appears to be an administrative nuisance but not a significant cost in terms of the amount of tax paid.

Options and observations

If the state is determined to make changes in the personal property tax, there are relatively few options available. First, the state could adopt an alternative tax to replace any “relief” granted for the personal property tax. This was done in Illinois in 1970 (Cornia and Wheeler 1999) and between 2008 and 2014 at least eight states have taken this course (Catherine Collins 2015). Two examples illustrate the challenges. In the case of Ohio, revenues from the new tax fell short and the result was that local funds from the personal property tax were reduced by almost half (Catherine Collins 2015).

Michigan, with voter approval, is diverting a portion of the sales tax to reimburse local governments as they phase out the personal property tax between 2012 and 2023. But local governments will also be expected to raise local taxes on other property. State transfers will assume local taxes are increased, thus local governments will have to choose between “tax relief” and maintaining spending levels. There will also be a significant impact on the state government’s general fund. (Catherine Collins 2015)

A second option is to eliminate the tax and do nothing to compensate local governments. Locals will be forced to adapt as the tax is phased out over time. Wisconsin did this in 1973. Twenty years later the consequences were still being felt. (Cornia and Wheeler 1999) The effects were quite uneven depending on the percentage of personal property in a jurisdiction.

If the personal property tax is to be eliminated, there are really only three options available to local governments: cut spending, replace the revenue with another tax or increase the tax rate on the remaining property.

Another option that might be considered in Connecticut is similar to a proposal regarding the property tax overall. (1000 Friends of Connecticut 2015) This option acknowledges that there are relatively few very large personal property taxpayers, and that there are significant disparities between communities in the total personal property tax base. The proposal would pool the base from these large accounts and share it among all cities. Proposals such as this have been studied for a number of years. (See for example, Ladd (1976), Reschovsky (1980), Fox (1981), Stark (1992).) There seems little evidence to suggest that such a radical change would produce the desired effect. At the same time, the purpose of the tax should be kept in mind. If the property tax is intended to serve as a charge for services and benefits received from local government, that objective would argue strongly for keeping the tax in the community where the business is located.

It is not clear that any of these very difficult options are in the best interest of Connecticut. There are however several options that should be considered for improving the existing tax on personal property. They can be classed as compliance relief and administrative improvements.

Compliance relief options

The first set of options derive from the observation that the personal property in Connecticut results in very little revenue considering the thousands of businesses required to complete the obligatory declaration. Five options should be considered.

- 1) Exempt taxpayers with \$5,000 or less in taxable personal property. Simulations based on the sample taken from sample cities indicates that the revenue impact would be about 0.024% of total property tax revenue. At the same time about 42% of all personal property accounts would become exempt.
- 2) Exempt taxpayers with \$7,500 or less in taxable personal property. An exemption at this level would reduce total property tax revenue by 0.040%. About 50% of all personal property tax accounts would become exempt.
- 3) Exempt taxpayers with \$10,000 or less in taxable personal property. An exemption at this level would reduce revenue overall property tax revenue by 0.057%. About 56% of all personal property accounts would become exempt.

Each of these three approaches provides significant compliance relief for taxpayers. Each also creates what some would see as an equity problem. Taxpayers with taxable values slightly below the threshold will pay no personal property tax, while those with slightly more taxable property will be taxed on the total value. To be sure, the resulting tax may still be fairly modest. For example, if the exemption level is set at \$10,000 of taxable value, and the mill levy is 30, the tax on \$10,100 in value will be \$303. To avoid this abrupt change in taxes due, the fourth option would adopt a standard dollar value deduction for all personal property taxpayers.

- 4) Provide a standard dollar deduction for all personal property taxpayers. If the standard deduction is \$10,000, accounts valued at less than that amount would owe no tax. Accounts valued at more than the deduction level would pay tax on the full value of their personal property, less \$10,000.

Table 12 summarizes the four options and provides estimates of the number of personal property accounts affected and the likely revenue implications of each option.

Table 12: Summary of compliance relief options

Option description	Percent of accounts affected	Aggregate revenue loss (millions)	Percent Property Tax Revenue Loss (Statewide)
Designated threshold approach			
Exempt accounts below \$5,000	42%	\$2.4	0.024%
Exempt accounts below \$7,500	50%	\$3.9	0.040%
Exempt accounts below \$10,000	56%	\$5.6	0.057%
Standard \$ deduction applied to all Business Personal Property accounts			
Exempt 1 st \$10,000 for all accounts	100%	\$19.0	0.195%

Source: Calculations by the author

Of course, the fifth option is to do nothing to address taxpayer compliance costs.

- 5) Leave the system as is.

The exemption or standard deduction could be designed in a variety of ways. Firms should still be required to register with the local assessor, but the declaration form could simply collect relevant statistical information and ask the taxpayer to certify that the depreciated value of their current personal property falls below the designated level. Of course, auditing would need to increase to assure compliance, but it seems likely the administrative savings resulting from the large reduction in paper work could be redeployed for auditing.

Administrative improvement options

The improvement options suggested here are derived from a review of practices in other states, from interviews with local assessors in Connecticut and from interviews with taxpayer representatives. The first suggestion is that the approach to depreciation should be revisited. The forms employed are often too narrow as evidenced by the number of cities that feel compelled to design their own. The 30% residual value in many categories is perceived to be too high at least by taxpayers. A richer, more flexible approach could be developed that more closely approximates market value without overburdening assessors or taxpayers.

The assessment process also needs to allow for the possibility of economic obsolescence in an industry, such as the current chemical products manufacturing industry. It may prove to be desirable to give the assignment to evaluate the possibility of obsolescence to OPM who can then provide guidance to the entire state.

Audit procedures and frequency need to be improved. Contingency audits should be carefully evaluated for their effectiveness and fairness, and audit standards for such audits should be very clear.

The role of OPM in overseeing uniformity in assessment administration should be strengthened. There needs to be an active state agency that provides training, oversight and standards enforcement to assure that the state property tax system is operating efficiently and fairly.

The Connecticut Business and Industry Association (CBIA) has also put forward several potential administrative improvements that the state should consider. At present the annual filing must be completed in hard copy, signed by either the owner or the owner's agent, and the signature must be notarized or witnessed by one of several possible local officials. Failure to sign the form or have it properly witnessed results in a 25% penalty for filing an incomplete form. CBIA proposes that firms be allowed to file their personal property declaration electronically and that the requirement for a notarized signature be eliminated. Such a change would reduce compliance costs for many businesses and after a transition period would also likely reduce administrative costs for assessors. According to CBIA, state statutes allow for the possibility of electronic filing, though it is not clear what the cost of implementing such a system would be, especially for smaller jurisdictions.

Personal property taxation in Connecticut is not much different than in other states, when all appropriate adjustments are made. To be sure, there are policy and administrative improvements that should be carefully considered. But the basic structure seems sound and the resulting tax burdens are consistent with the performance of the business property tax in other states.

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Chapter 6

The Taxation of Registered Motor Vehicles in Connecticut

A Report Prepared for the Connecticut Tax Panel

Presented November 17, 2015

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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 Price 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.

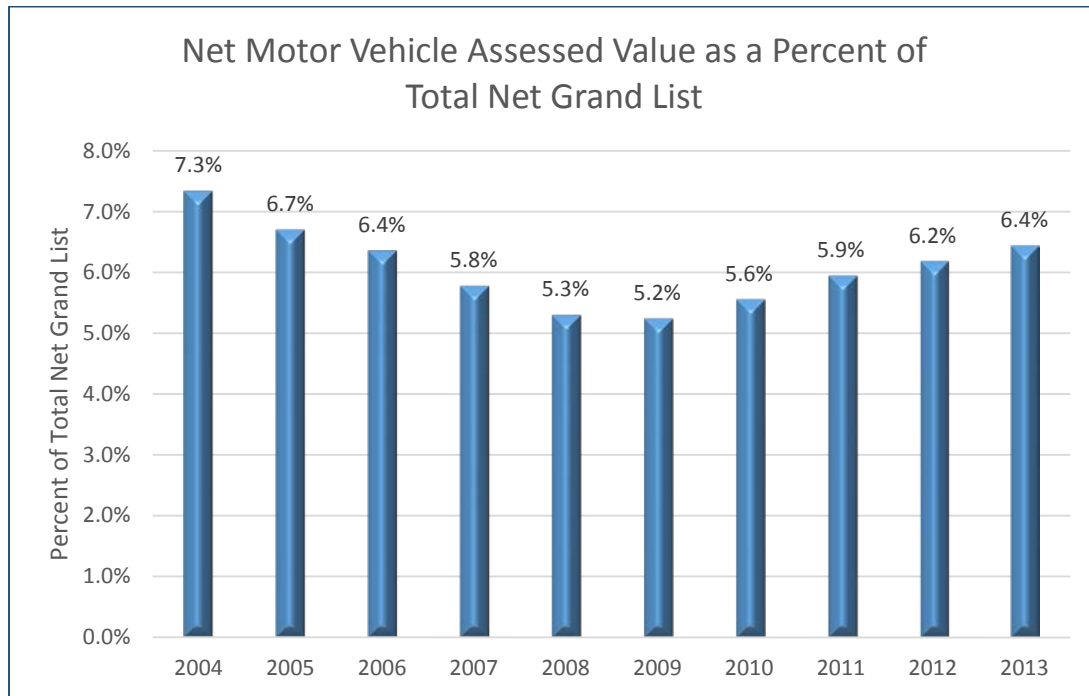
Under Connecticut law, all motor vehicles are subject to the property tax. Vehicles registered with the State Commissioner of Motor Vehicles are valued and taxed directly as a separate class of property. All other motor vehicles garaged in Connecticut are taxed as personal property and are reported on 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

Motor Vehicle Tax

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.

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

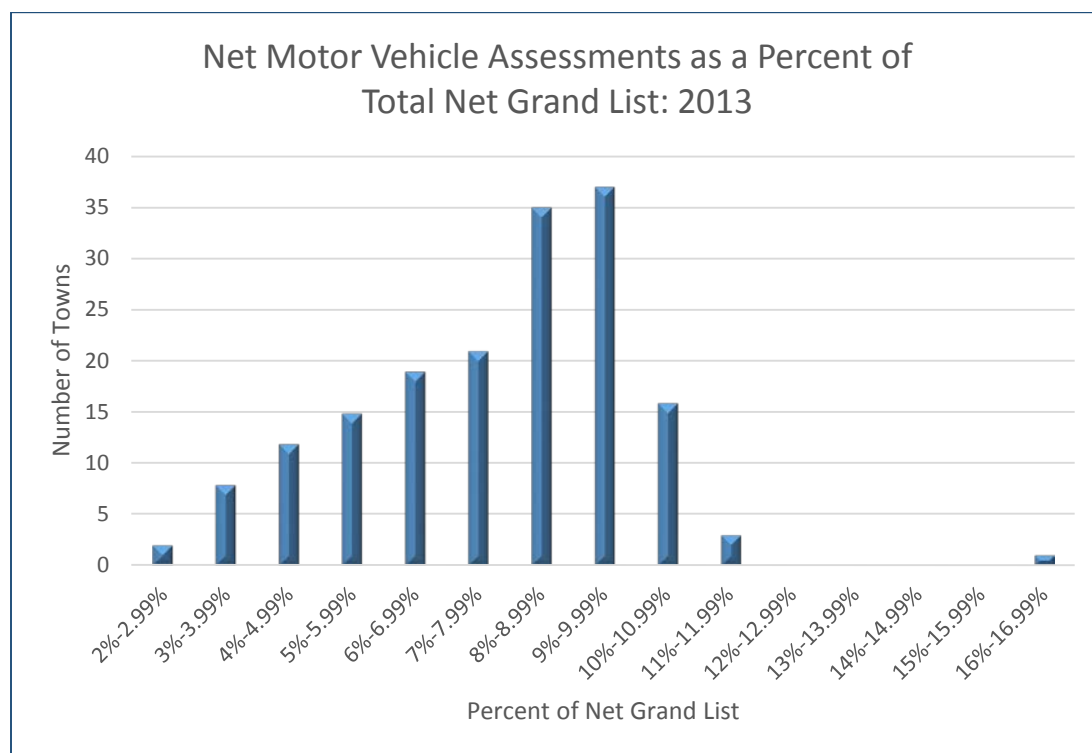
Month of acquisition	Percent of assessed value used to calculate tax
October	100.00%
November	91.7%
December	83.3%
January	75.0%
February	66.7%
March	58.3%
April	50.0%
May	41.7%
June	33.3%
July	25.0%

Source: (DMV 2015)

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 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.

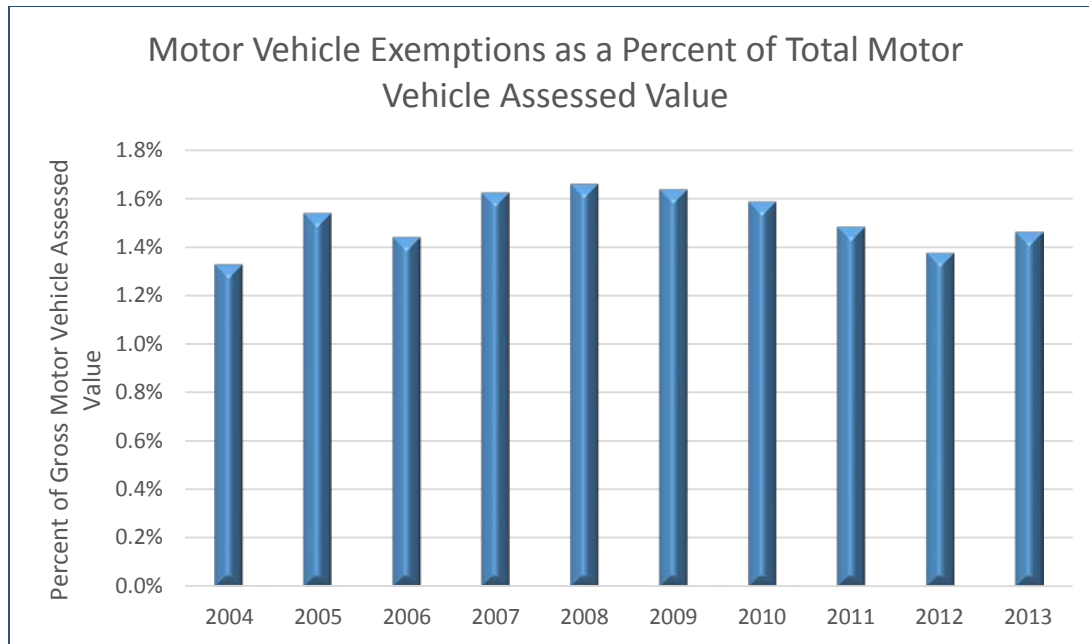
Figure 2



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

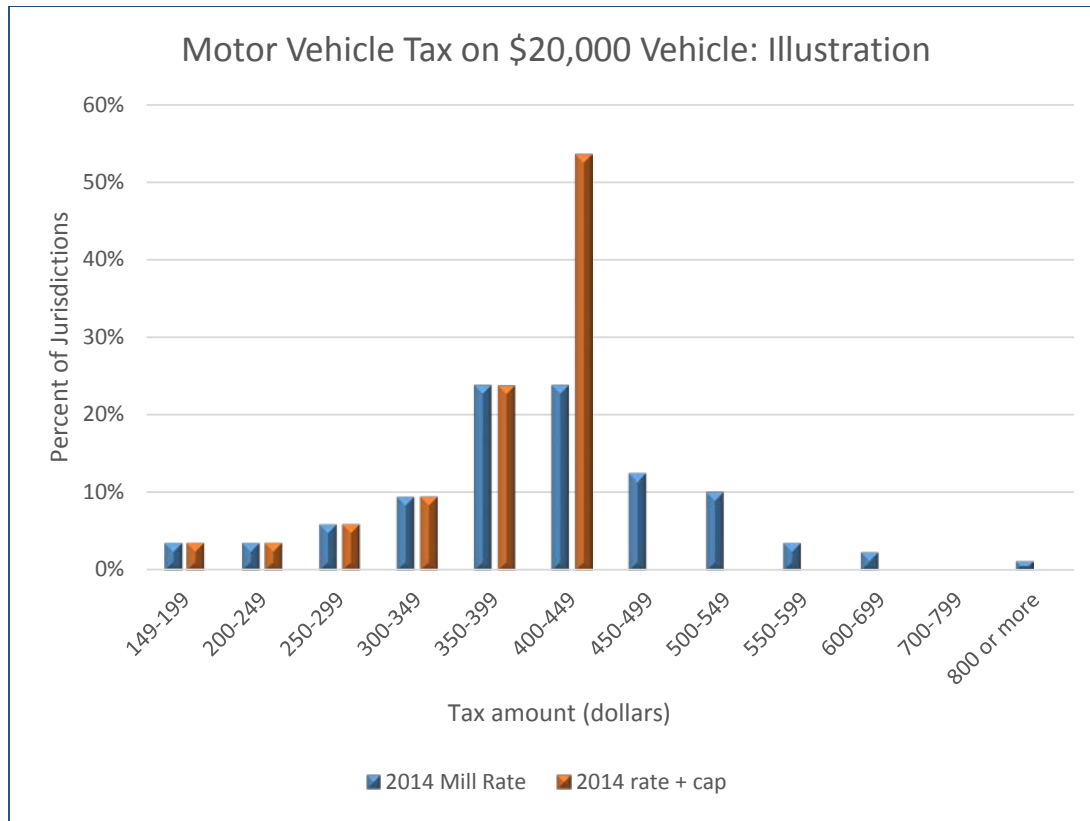
Tax rates

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.

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.

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

Source: Calculations by the author

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

State	Motor vehicle registration fee	Property tax
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
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

State	Motor vehicle registration fee	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.

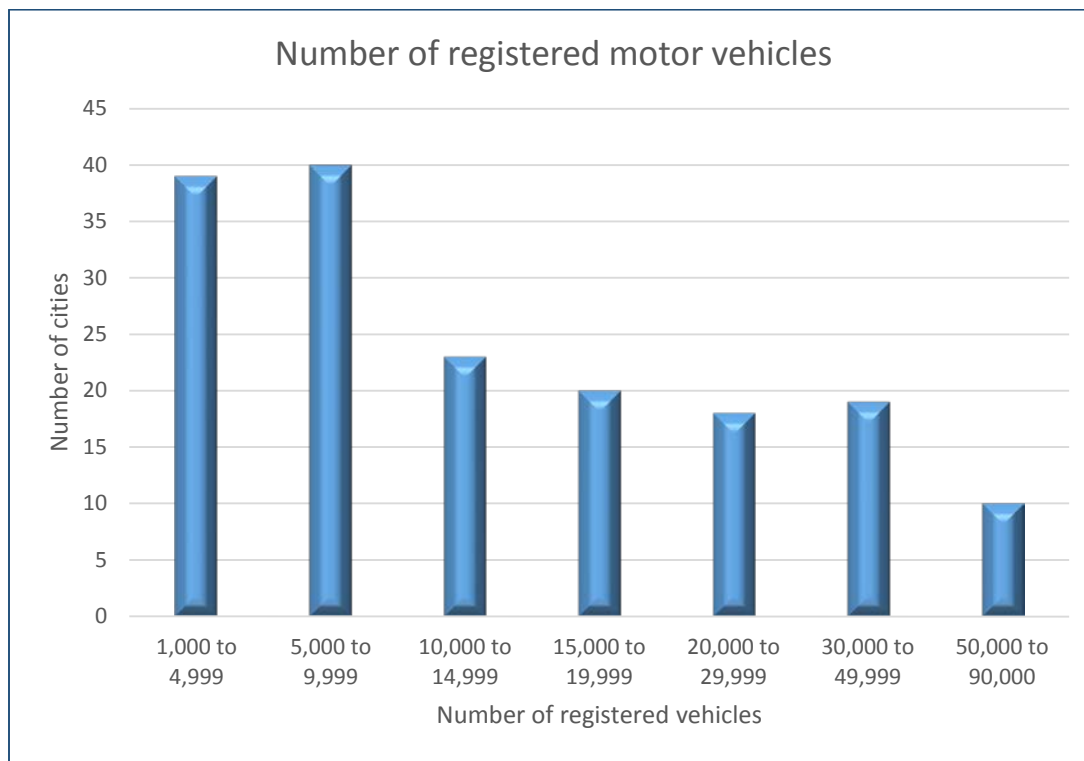
In evaluating the range of approaches taken by states, it seems clear that the variations are based at least in part on differences in state objectives. Those states that view motor vehicles as valuable assets that can be taxed as a source of general government revenue will employ either an ad valorem 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, assessors 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 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.

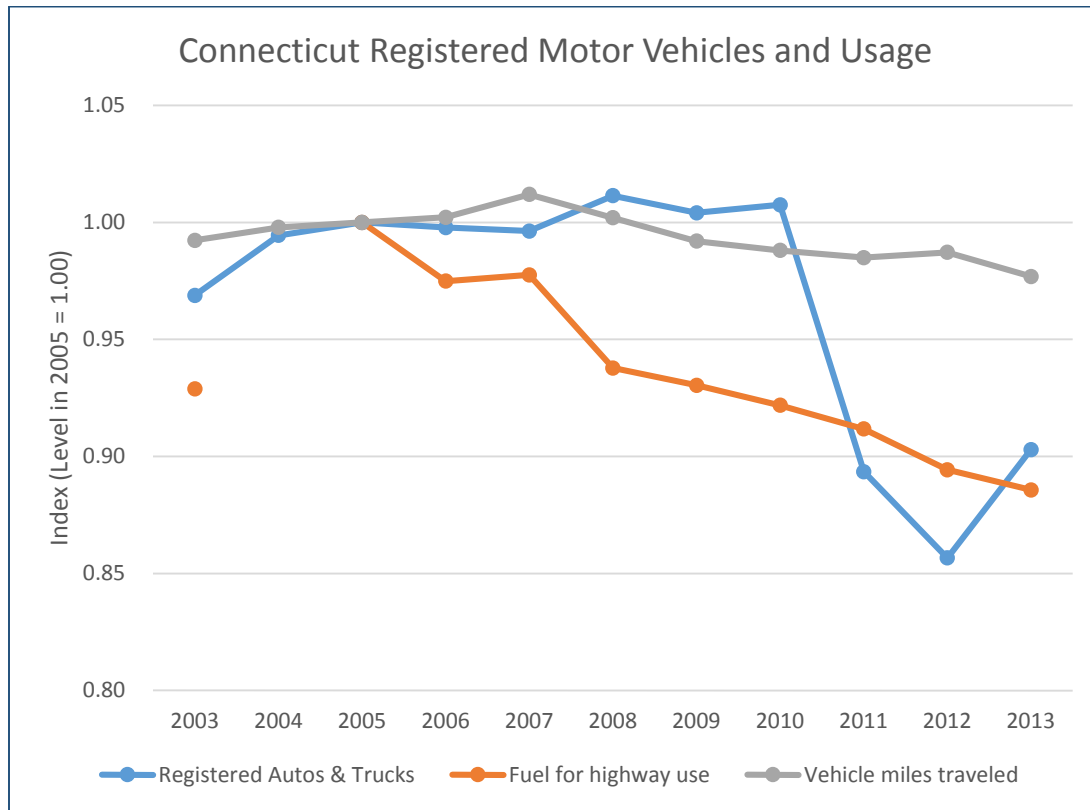
Aggregate fuel sales (gasoline and diesel) for highway use has declined steadily since 2005, but significantly, there was no radical change in the rate of decline beginning in 2011². The same is true for vehicle miles traveled. Miles traveled peaked in 2007, and has since declined at a fairly steady 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.

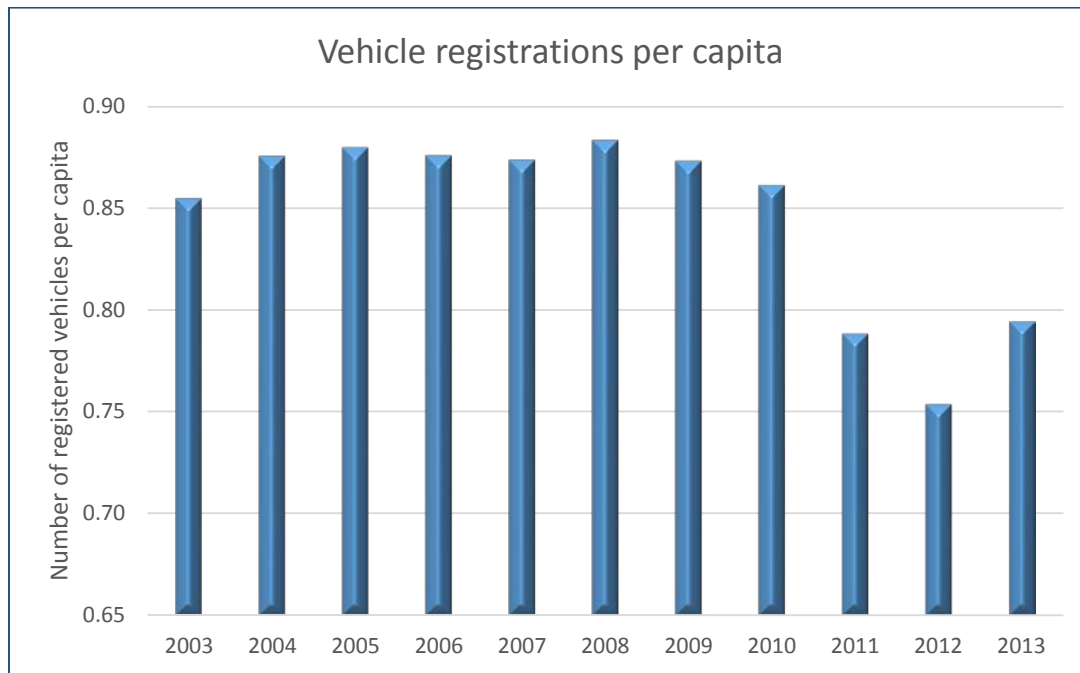
² Fuel sales for 2004 is omitted because the data for that year appears to have an error. Reported Connecticut gasoline sales in 2004 were 16% higher than in any other year on record.

Figure 6



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

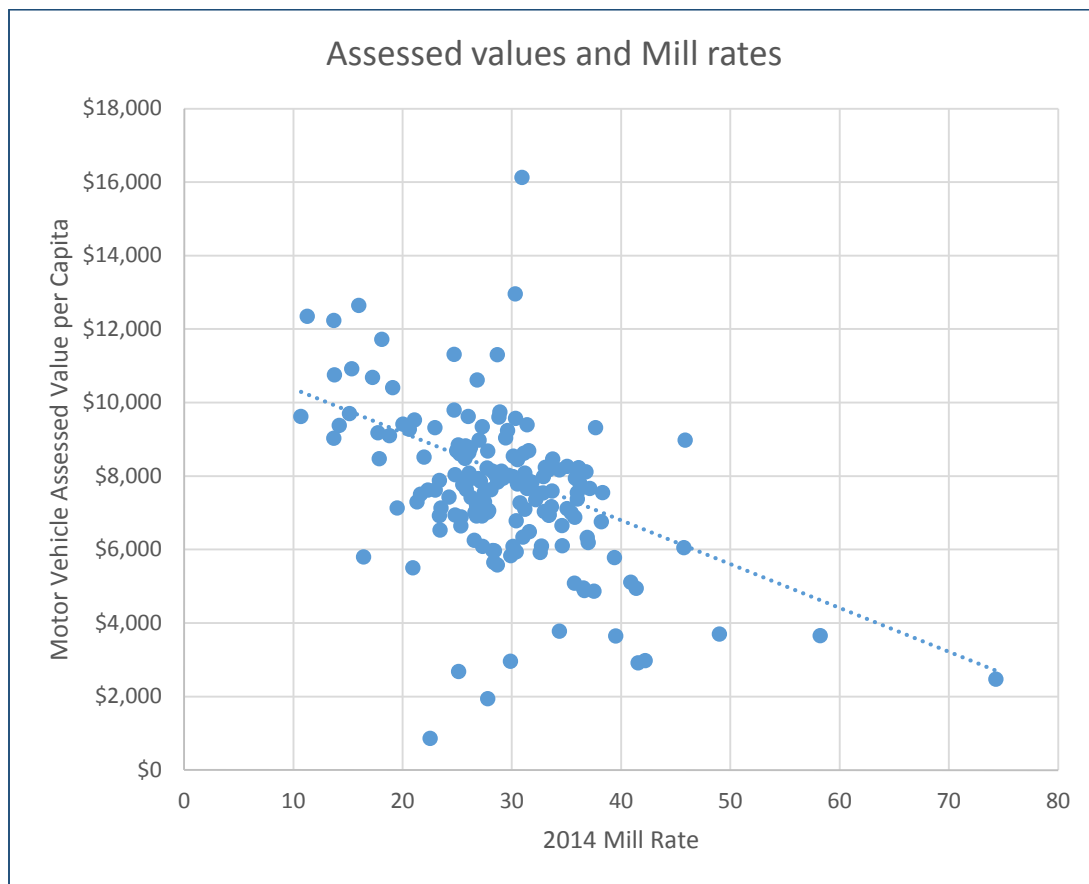
Figure 7



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 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

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

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.

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.

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 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

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.

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.

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Chapter 7

REAL ESTATE CONVEYANCE TAX

and

CONTROLLING INTEREST TRANSFER TAX

A Report Prepared for the Connecticut Tax Panel

Presented November 17, 2015

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Executive Summary

Key Facts and Findings

Real estate transfer taxes are imposed on the value of property when ownership is transferred. The tax is widely used throughout the United States with many states, like Connecticut, adopting the tax when the federal government repealed its Documentary Stamp Tax in 1965. Of the 35 states, 15 have state and local rates less than 0.5%. Rates in excess of 1.0% are imposed by 14 states and local governments, often only in selected jurisdictions and not on a statewide basis. The tax is imposed both at the state and local level in half the states while in 16 states it is primarily only a state tax, although the state may share the revenue with local governments. California is the only state where the tax is imposed only at the local level. When the tax was adopted, many jurisdictions earmarked the revenues to balance development using the funds to acquire and protect open space and address other environmental pressures. In other places, the revenues are part of general revenues, with some states sharing the revenues with local governments.

In Connecticut, Real Estate Conveyance (REC) tax is the only tax imposed by both the state government and municipalities. The tax is, by statute, paid by the seller when the deed is registered. The town clerk collects both the state and local REC tax and then transmits the state tax revenues to the state Department of Revenue Services. Both the state and municipalities consider these revenues as part of their general revenues. Because of the limited revenue raised from these taxes, their reporting is often less transparent, with details of the taxes often consigned to “other sources” by the state or combined with municipal property tax at the local level.

Real Estate Conveyance (REC) tax, unlike property taxes, is imposed only when real estate is sold or transferred and is based on the value of the consideration paid for the property at time of sale. As such, the tax revenues are sensitive to real estate market conditions, affected by both the number of transactions and the value of the property transferred.

Real Estate Conveyance (REC) tax is the only tax other than the property tax available to municipalities. Although a local revenue source, the structure of the tax, including the rate and definition of taxable transactions, is set by state statute. Some local rate flexibility is available to those municipalities identified as targeted investment communities. These 18 communities may impose an additional local rate, up to a maximum rate. All designated communities impose their permitted optional rate.

The Controlling Interest Transfer (CIT) tax is imposed by the state when Connecticut real estate interests are transferred through the sale or trade of controlling interests of a corporation, partnership or similar type entity. Since the transfer is affectuated through transfer of interests in the property rather than the transfer of a deed, the REC does not apply. By design, the tax applies to those transfers that are not covered by the REC. As such, it incorporates much the same structure as the REC and is imposed at a rate that at the time of adoption was the maximum state and local rates, exclusive of the optional local rate. By imposing both the REC and CIT, Connecticut real estate transfers are taxed by the state, regardless of how the transaction is structured. The CIT, however, is only a state tax and all revenues are state revenues.

The REC is of additional importance beyond its capacity to generate revenue. Information garnered at the time the tax is paid plays a critical role in property tax administration. REC tax is based on the consideration paid for real estate. At the time a deed is registered and the tax paid, this information is available and provides the local assessor’s office with up to date information as to the fair market value of the property for property tax purposes. Similarly, the state uses such information in an effort to equalize property values statewide. In addition to collecting the REC, the town clerk also collects recording fees

that are applied to deeds and other legal documents. These fees, unlike the REC are flat fees or flat per page charges set by the state. The sum of the fees for recording deeds is generally \$55 for the first page, with the state getting about half and the local share retained primarily by the town clerk's office.

During the recent recession, both real estate prices and taxable transactions declined in Connecticut, resulting in significant decline in revenues. The exemption for distressed transfers such as foreclosures and short sales as well as other exemptions may have led to an increase in the percentage of non-taxable transactions.

For the state, transfer tax revenues have been slower to recover from the Great Recession than all other state revenues and slower than from the 2002 recession. The municipal REC flat rate was last raised in 2003 to 0.25 percent from the original rate of 0.11 percent when the tax was enacted in 1967. The increase was enacted on a temporary basis in 2003 and made permanent in 2011. At that time the state rates were also increased.

The state rate is not a flat rate and the rate depends on the use of property with a graduated rate for single family properties. The maximum state rate, applied to the value of residential property in excess of \$800,000 and all non-residential property other than unimproved land, is 1.25 percent. All other transfers are taxed at 0.75 percent. When the rates were increased in 2011, the state earmarked a portion of the revenues from rate increase to the Municipal Relief Fund. The fund was established to distribute relief to local governments to reduce the impact of state-mandated property tax exemptions. This earmarking of the REC was in effect for two years. All state revenues are now part of the state's general revenues.

The revenues for the state REC can be estimated between \$126 million to \$172 million. The lower estimate is based on the five-year average between 2001 and 2014. A middle estimate is \$147 million is based on the 2011 average single family home price, suggested by the Warren Group estimate that the 2010 and 2011 prices are in line with income, the average 2014 number of transactions, and the 2014 average state rate. The top estimate is the 2014 revenue from the \$172 million

The combined maximum state and municipal rate is 1.75 percent for transactions in targeted communities and 1.5 percent in all other municipalities. This rate is significantly higher than state rates in Massachusetts and Rhode Island. However, in both states, a limited number of local governments also impose transfer taxes, with rates in some jurisdictions higher than those in Connecticut. The rates in New York, especially for residential property in New York City, are substantially higher than the combined rates in Connecticut. This is particularly true when one takes into consideration that Connecticut's rate for the high-end residential properties is a marginal rate that is applied only to the portion of value in excess of \$800,000 while the higher rate in New York applies to the total value of the residential property over \$1 million.

For municipalities, the REC, as part of the general revenues of the government, can be viewed as a substitute for property taxes, thus reducing property tax levies. However, the impact of the revenues on property tax mill rates is relatively small. Based on the average of the recent five years, annual local REC revenues average \$39 million. The revenue forecast is somewhat more, \$41 million based on the 2011 sales price, current level of transactions and the basic 0.25 percent rate.

Residential properties account for a significant portion of taxable conveyances, even during the recent recession. In municipalities where residential properties are a smaller portion of the property tax base, the REC reduces the property taxes imposed on other sectors.

Preliminary investigation suggests that higher local REC rates in targeted investment communities do not significantly impact on the price of real estate or the number of transactions. This finding is not consistent with other research that found that such taxes did have a negative impact on both sales and price. The differences in findings may be due, in part, to larger tax differentials in the studied localities than those in Connecticut.

Options

1. Retain the three components of the Real Estate Conveyance (REC) tax – state, municipal, and targeted investment communities—and the state Controlling Interest Transfer (CIT) tax at current rates. There is no revenue impact, other than the impact of economic conditions that may change over time.
2. Retain the local tax including the optional rate for the targeted investment communities and repeal the state component of the REC. With repeal of the state rates, provide optional rates for municipalities.
 1. Pro argument
 - i. Retaining the Controlling Interest Transfer Tax, maintains the horizontal equity, taxing transactions both by transferring controlling interest and transferring deeds although the companion state tax, Real Estate Conveyance, is repealed.
 - ii. Retaining the local tax provides some local alternative revenue diversity. The revenue impact of the current rate of 0.25 percent is \$41 million.
 - iii. Retaining the optional rate for the targeted investment communities allows some local flexibility.
 - iv. Extending optional rates provides all municipalities with a small degree of flexibility in determining their local revenue mix.
 - v. Deed registration is a local responsibility with the municipalities providing the service. They should retain all the revenues from both the REC and all land recording fees.
 2. Con argument
 - i. Repealing the state REC will not remove the local responsibility to provide the state with information about consideration paid for real estate.
 - ii. The repeal of the state portion of the REC could reduce state revenues by between \$126 million to \$172 million.
3. Retain the state taxes (REC and CIT) but repeal the REC local components, including authority for the optional tax in the targeted investment communities.
 1. Pro arguments
 - i. Retaining the two state taxes assures that all property transfers are subject to a transfer tax.
 - ii. Information critical for property tax administration is still available as the state REC would continue to be collected locally when the deed is registered.
 - iii. Horizontal equity between properties transferred in targeted investment communities and in all other municipalities is restored.
 - iv. At the local level, the loss of the REC does not have a substantial impact on local revenues as property taxes can be raised to replace the local REC revenues no longer available.

- v. There may be a shift of the overall local tax burden to the extent that the residential share of the REC was greater than its share of the property tax.
 - vi. Any impact on the real estate markets resulting from the targeted investment communities' additional rate is mitigated.
- 2. Con arguments
 - i. Local property taxes would have to be raised to replace the REC revenue or other budget adjustments made. The midrange estimate of the general tax is \$41 million.
 - ii. Municipal revenue diversification, as limited as it is with the REC, would no longer exist.
 - iii. Eliminating the optional rate for targeted investment communities reduces the modest amount of taxing flexibility these communities have.
- 4. Upon removing the local portion of the tax in Option 3, increase the state REC rates by the 0.25 percent local rate and permanently earmark the increased revenues attributed to the rate increase for regional activities or for additional funding of the Community Investment Fund (the state fund financed with revenues from document registration fees).
 - 1. Pro arguments
 - i. The 0.25 percent rate increase is revenue neutral to the seller of property, except in the targeted investment communities in which case, the new rate is lower.
 - ii. Several options for earmarking would complement existing state efforts such as to encourage local involvement in regional approaches, to reinstate REC funding to the Municipal Relief fund, or to combine with registration fees currently earmarked to the Community Investment Fund.
 - 2. Con arguments
 - i. Local property taxes would have to be raised to replace the REC revenue or other budget adjustments made. The range of revenues lost to local governments is estimated to be between \$39 and \$46 million.
 - ii. Targeted investment communities would sustain a revenue loss.
 - iii. Municipal governments may perceive the shift as a state takeover without the state providing adequate replacement.
 - iv. Revenues for earmarked spending may not reflect local preferences.
 - v. Earmarking revenues may not prevent future diversion of funds for other state purposes.

I. Introduction

In this report Connecticut's two ad valorem real estate transfer taxes, Real Estate Conveyance and Controlling Interest Transfer taxes, are considered. The Real Estate Conveyance (REC) tax includes a state tax and two local components, one applied uniformly statewide at the municipal level and an optional add-on rate available to 18 designated municipalities identified as targeted investment communities. Both the state and the applicable local taxes are imposed upon the sale or transfer of property when the deed of the transferred property is registered with the local town clerk. The tax is imposed on the consideration paid or the value of the property. When deeds are registered, an additional fee, a flat recording fee is paid, based on the number of pages. This fee is also collected by the town clerk with some portions shared between the municipality and the state. These fees however are not included in the discussion of the ad valorem transfer taxes. The Controlling Interest Transfer tax is paid directly to the state when controlling interest in an entity that includes Connecticut real estate is transferred.

Section 2 details the two Connecticut taxes. Revenue collections from these taxes provide a context as to the importance and volatility of these taxes as a revenue source, especially for the state's general fund. The history and structure presented here includes statutory basis and rate history of both, focusing primarily, but not exclusively on the changes since 2005. The description covers when a transaction is taxable, including a discussion of the types of exemptions.

Section 3 presents the trends of the taxes, particularly the REC tax. Revenue trends are examined in light of the real estate market, taxable transactions and exemptions.

Section 4 looks at how extensively the real estate transfer taxes have been adopted throughout the United States. Certain aspects of the Connecticut taxes, including rates and exclusions are compared with the taxes in New York, Massachusetts, New Jersey, and Rhode Island. A general review of these taxes in all states is also presented.

Section 5 reviews the impact of these taxes on the issues of reliability or volatility and the incidence of the tax, especially at the municipal level.

The final section, Section 6, provides some concluding comments.

II. Main Features of the Connecticut Transfer Taxes

II.1 Transfer Taxes

Real estate transfer taxes are ad valorem taxes imposed when real estate has been sold or transferred. The importance of these taxes, especially when a transaction is effectuated with the transfer of a deed, was highlighted at the time the federal government was repealing its transfer tax, the Documentary Stamp tax. As cited by the Advisory Commission on Intergovernmental Relations,

[T]he usefulness to the States of the by-product information [is that] the sales price of property can be derived from the Federal stamps attached to deed documents. The relationship between the assessed value and the sales price,...by means of assessment-sales ratio studies, is a valuable tool for improving the administration of property tax assessment.”(ACIR 1964)

While the federal tax provided state and local governments with essential information concerning current real estate prices, reporting the true value was problematic. Further because of the limited revenue generated, federal enforcement of the tax had been minimal. The federal government, specifically the Internal Revenue Service, the agency responsible for administering the tax, believed enforcement was better addressed at the state level. Because of the importance of the information for effective property tax administration, when the federal government repealed the Documentary Stamp tax in 1965, they encouraged states to adopt their own transfer taxes. Connecticut was such a state, adopting the Real Estate Conveyance tax in 1967 as a local tax.

II.2 Structure of Real Estate Conveyance Tax and Controlling Interest Transfer Tax

The Connecticut Real Estate Conveyance (REC) tax was initially enacted as a municipal tax in 1967, effective January 1, 1968 (Laws 1967 P.A. 693). The tax was designed to be a replacement for the then-repealed federal Documentary Stamp Tax. Like many other states that adopted a transfer tax at that time, Connecticut adopted a tax that was structurally patterned after the federal tax (Connecticut Attorney General 1989 89-020). The initial tax was initially solely a local tax, collected by the town clerk at the time the deed was registered with the tax based on the consideration paid.

In 1983 the tax was expanded to include a state component also payable when a deed is registered and in 1989, the state adopted the state Controlling Interest Transfer (CIT) Tax (Laws 1989 P.A. 251). The CIT tax applies when Connecticut real estate is transferred through the sale or transfer of controlling interest of the entity that owns the property. By transferring the property by changing the ownership of the entity, there is no change in the deed nor is the deed registered. Thus no REC tax is imposed (Ruling 99-7). The CIT tax is designed to impose a transfer tax when more than 50 percent of an entity, such as a corporation or partnership, that holds Connecticut real estate, is transferred or sold to another entity. The CIT tax, therefore, is designed to mitigate the structuring of a transfer of real estate to avoid the REC. By imposing both the REC and CIT taxes, Connecticut real estate transfers are taxed, regardless of how the transaction of transferring property is structured.

In addition to the REC ad valorem tax imposed when property is transferred, local governments collect a flat rate registration or recording fee at the time a deed is registered. A portion of the revenues from these fees is retained and used to support local town clerk offices and other local services with a portion shared with the state. The fees, sharing arrangements and the use of the funds are detailed in text box 1.

Text Box 1: Recording Fees Applied to Deeds and Other Legal Land Documents

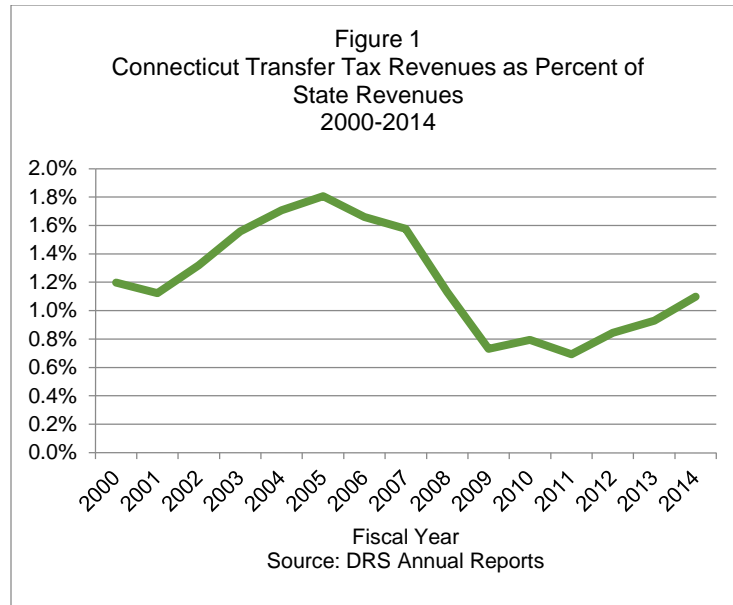
In addition to the Real Estate Conveyance Tax, recording fees are imposed for recording land-related legal documents, such as deeds, mortgages, and land surveys (CGS Sec 7-34a). The fees for registering documents are paid to the town clerk who is responsible for maintaining the public records. While the collection of the fee and the maintenance of public records are functions of the town clerk's office, a portion of these fees is shared with the state.

The fee for registering any document is \$10 for the first page and \$5 for each additional page and for registering deeds, including warranty, quick claim, and mortgage deeds, an additional \$10 for the first page is imposed. A \$2 fee is collected on those documents that contain information the state uses in preparation of the equalized net grand list. Two additional fees are imposed that are shared with the state. A \$3 fee is imposed on all documents that are recorded in the land records. The town clerk retains \$1 to use for the preservation and management of historic documents; the remaining \$2 is forwarded to the state librarian. The second land records fee that is shared is a surcharge of \$30 for the first page.

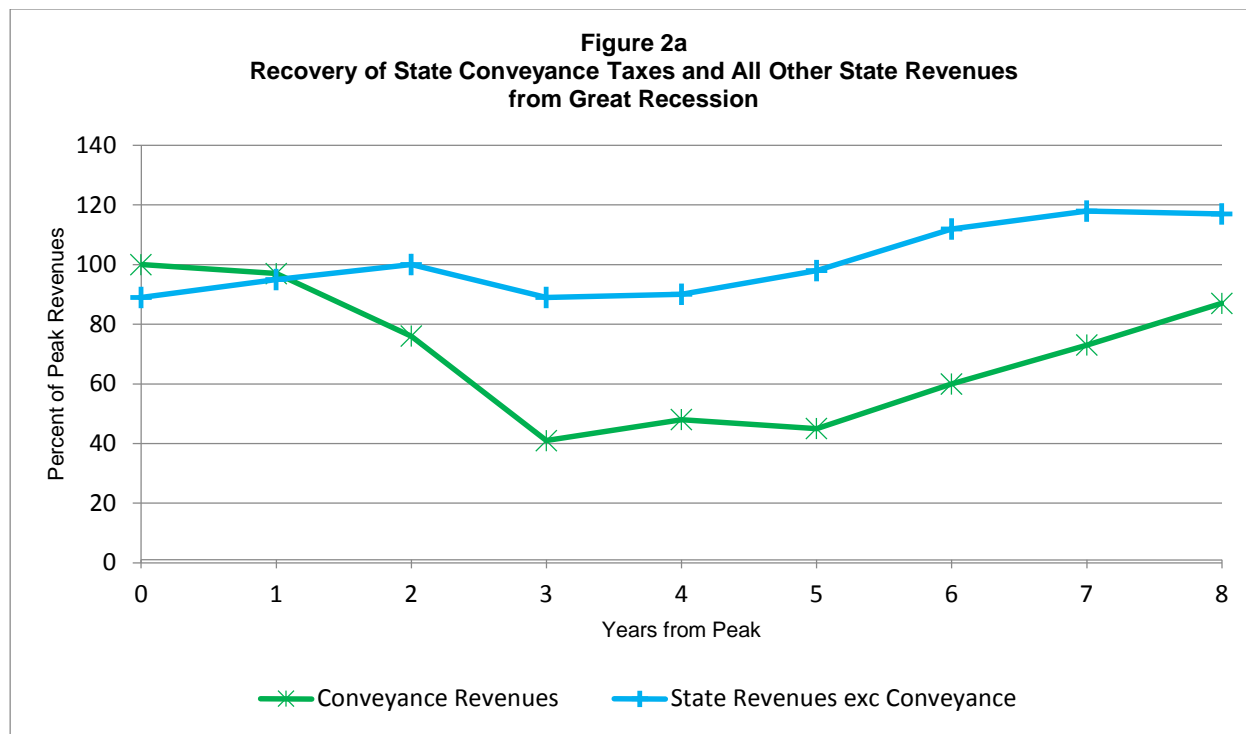
Of the \$30, \$4 is retained at the local level; \$1 is earmarked for the town clerk's office and \$3 is for the municipal general fund for capital improvement projects. The remaining \$26 of the surcharge, is deposited in the state's Community Investment Fund which is distributed to local governments for historic preservation, open space, preserving farmland and affordable housing (CGS §4-66aa(a)). For both fiscal years 2016 and 2017, however, funds from this account have been diverted. All together the recording fees for a deed is either \$55, if the conveyance tax is imposed or \$53 if the consideration is less than \$2,000, not subject to the conveyance tax and therefore not used in preparing the equalized net grand list. In 2013, an additional fee on certain mortgages was imposed at a substantially higher rate, which is now is \$159, either as a flat rate or for the first page, depending on the assignment or assumption of the mortgage. This fee applies to those mortgages that the nominee for the lender is electronically registered, MERS.

II.3 Transfer Tax Revenues in Context of Connecticut's Overall Revenue Picture

The state transfer tax revenues do not represent a substantial share of the state's overall revenues. Over the past 15 years, these two taxes account for less than 2 percent of the state's total revenues, with the REC revenues accounting for more than 90 percent of transfer revenues (Figure 1). Because of their limited contribution to the state's total revenues, these taxes are often consigned, along with similar smaller revenue streams to "other sources" in many discussions. However, these taxes, especially the REC, play a critical role in the administration of the property tax and introduce some important policy issues.

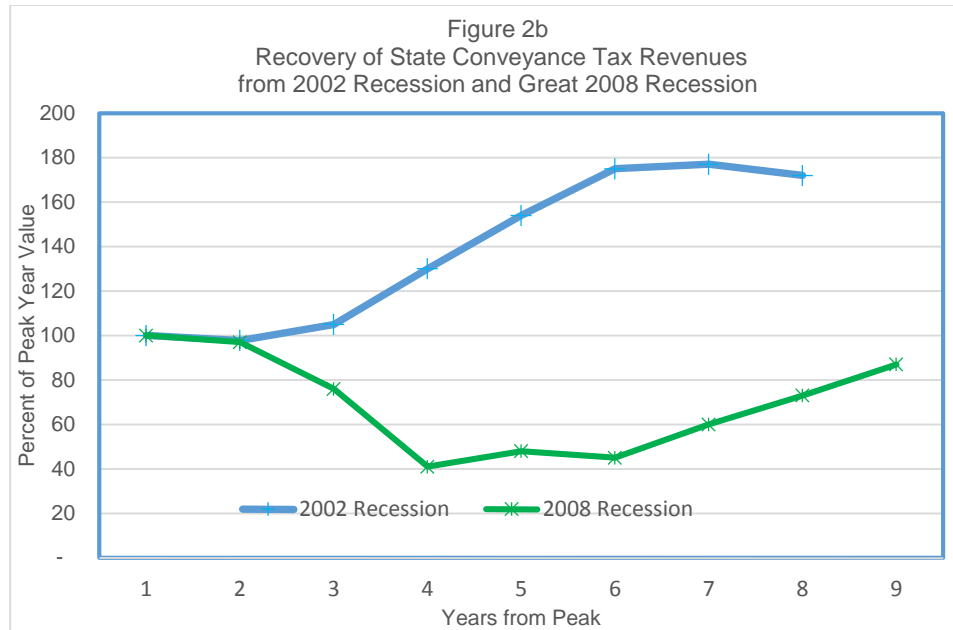


Factors widely identified as contributing to the collapse of the housing bubble and the ensuing recession—relaxed mortgage standards, rapidly rising housing prices, low short-term mortgage rates, and increased rate of homeownership—played a major role in running up the market with their decline resulting in a steep reduction in transfer tax revenues in Connecticut. During the run up of real estate prices, growth in transfer tax revenues outpaced other state revenues with transfer taxes’ share of state revenues peaking in 2005. However, the decline of transfer tax revenues began sooner. As shown in Figure 2a, the decline in these revenues began sooner, was deeper than the other state revenues and their recovery has been slower. Even after eight years, transfer revenues remain nearly 15 percent below their pre-recession level while all other state revenues have recovered.



This slow recovery can be attributed to several factors. As has been well documented, the Great Recession (December 2007 to June 2009) was a “housing market collapse” so it is not surprising that transfer tax revenues were so adversely affected. Real estate prices, especially for single family homes, declined and increasingly homeowners found themselves in a negative equity position or worse, being foreclosed (Federal Reserve Bank of New York, 2012). In addition to the collapse of the housing market, the state expanded some of its long standing exemptions specifically for distressed transfers, which further reduced revenues. Not only did the number of transaction decline, but the percent of exempt transactions rose dramatically. Details of the exemptions are discussed below and a fuller revenue history of both the REC and CIT including the number of taxable transactions is set out in Appendix 1.

The importance of the housing market to these revenues becomes evident in comparing the recovery of the revenues after the earlier recession in 2002 and Great Recession. The rapid recovery of revenues after the 2002 recession is reflective of the housing boom, which continued until the bubble burst and the onset of the Great Recession. As shown in Figure 2b, the 2002 recession had little negative impact on transfer taxes. Instead, residential real estate prices continued to increase from 2000 to 2007, even by double digits between 2002 and 2005, pushing up the revenues. With the collapse of the housing market, however, the revenues began to decline in 2008 and have yet to fully recover.



II.4 Tax Base of Real Estate Conveyance and Controlling Interest Transfer Taxes

Both the REC and CIT taxes are imposed on the grantor also identified as the seller at the time of sale or transfer. The CIT applies when more than 50 percent of interest in an entity that holds Connecticut real estate is transferred, along with a change in beneficial ownership. Transferring property when there is a change in identity or form of ownership does not trigger either tax.

Prior to the state's adoption of the CIT tax, the state relied on how the federal government had applied its stamp tax to properties transferred through change in corporate ownership. As corporate transfers became more common the state moved to structure a tax that addressed such transfers. The adoption of the CIT was designed to assure that all transfers, regardless of the form the transactions took, would be subject to a transfer tax (Law 1989 Act 251). The two taxes are complementary so that any transaction is subject to only one tax. For both taxes, the tax applies only if the value of the Connecticut real estate is \$2,000 or more and the rates, at the time of adoption were the same. The CIT tax rate of 1.11 percent was set based on the combined rates the combined maximum state rate, 1 percent and the 0.11 percent local rate at the time of adoption. The rate has remained at the level as it was not raised when the REC rates for both the state and local components were increased.

State statute has clarified that the tax is imposed on the value or market value of the conveyance and not a tax on the act of registering the deed. The tax is imposed on the value or consideration of the property. If there are a series of transactions over a period of six months, all the transfers are considered as a single sale or transfer. This is designed so that the transfer of successive transactions of interest, each of which is less than 50 percent but taken together would be more than 50 percent, would not be exempt from the tax. Similarly, property that is divided and sold as separate parcels would be considered as a single sale or transfer.

The tax is imposed on the value of property when the transfer of more than 50 percent of the interest in an entity is measured by combined voting power of all stock, or capital, profits or beneficial interest. The tax also applies to property indirectly held by the traded entity such as through a subsidiary or lower tier entity. When direct interests are transferred, the basis of the tax is the total value of the real estate that is transferred. For example, if a partnership holds Connecticut real estate valued at \$1 million and that partnership transfers 75 percent of its interest in that entity, the CIT tax would be assessed on the full \$1 million value of the property. If, however, the transferred property is held by a subsidiary, a lower-tier entity, that is also transferred, the tax is applied only to the proportion of ownership transferred.

Each tax is applied to the consideration paid, including any liens and mortgages that the grantee (buyer) may assume. While the notion of self-declaration had been identified as an issue with the federal tax, it is somewhat mitigated for the REC as the value appears on the deed and closing documents often have the consideration listed. Such information is often available when the buyer is financing the purchase and the forms that recently replaced HUD form 1 is required showing the consideration going to the seller.¹ The value of real estate is not as evident when the transfer involves the sale or trade of controlling interests, particularly with more than real estate or more than one piece of property is involved. As the returns for the CIT are filed with the state, audit responsibility rests with the Department of Revenue Services. A summary of the key factors of both the REC and CIT are presented in Appendix 2.

II.5 Exemptions

The state initiated the REC tax to replace the repealed federal tax and adopted some of the federal structures and exemptions. However, although the federal tax made a distinction between exempting certain parties and exempting certain types of transaction,² Connecticut makes no distinction. As a result, transactions may be exempt based on characteristic of the seller, such as when the state or political subdivision is a party of the transaction, or the seller is eligible for certain property tax programs. Other exemptions apply to the circumstances surrounding the transaction, such as when the transfer is at the direction of a court decree. Another group of exemptions applies to the location of the property, such as transactions that involve property in redevelopment areas. Currently property located in enterprise zone or entertainment districts or similar economic development designated areas are exempt for state but not local tax purposes.

The exemptions set out in statute CSG section 12-498 can be divided into four types: generally accepted exempt parties or transactions; transactions that reflect some financial hardship endured by the property owner; transactions between members of the family; and certain corporate activities (Table 1). This last group of exemptions prevents those transactions from being taxed under both the REC and CIT. Also included in this last group are those transactions that reflect no change in beneficial ownership.

Several of the exemptions, although in place for many years, deal specifically with the economic hardship problems that arose during the housing crisis. Exemptions apply to transactions such as tax deeds or sales, foreclosures, and transferring principal residence in lieu of foreclosure and the transferring of principal residence where the gross price is insufficient to cover outstanding mortgage and taxes. One exemption, the one for transferring principal residence properties in lieu of foreclosure, was repealed for one year and then reinstated at the time the exemptions for short sales was added, effective as of October 1, 2010.

Table 1
Exemption for Connecticut Real Estate Conveyance Tax

General

De minimis value less than \$2,000
 Prohibited under Constitution or federal law (i.e. Freddie, Fannie)
 Secure a debt or release of property
 State or municipality is party
 For the Adriaen's Landing or stadium facility
 To a water company -Class I or II (watershed areas and reservoirs) (state only)
 Property located in enterprise zone or entertainment district or similar economic development designation (state only)
 Bona fide gift
 Conveying a cemetery lot or plot
 Made to any nonprofit organization for holding undeveloped open space land

HARDSHIP

Tax Deeds or sales
 Pursuant to decree of Superior Court or judgment of foreclosure by market sale
 In lieu of foreclosure transferring principal residence
 Any instrument transferring principal resident where gross prices insufficient to cover mortgage and taxes (short sale)
 Principal residence of low income disabled or elderly who receive property tax assistance (state only)
 Conveying property to trustee for the benefit of debtors creditors
 Sale without use or occupancy

FAMILY TRANSACTIONS

Between Spouses
 Pursuant to court order dissolving marriage
 Inherited real estate
 Gifts between spouses or from parent to children
 Personal residence less than \$200,000 consisting of contract to purchase

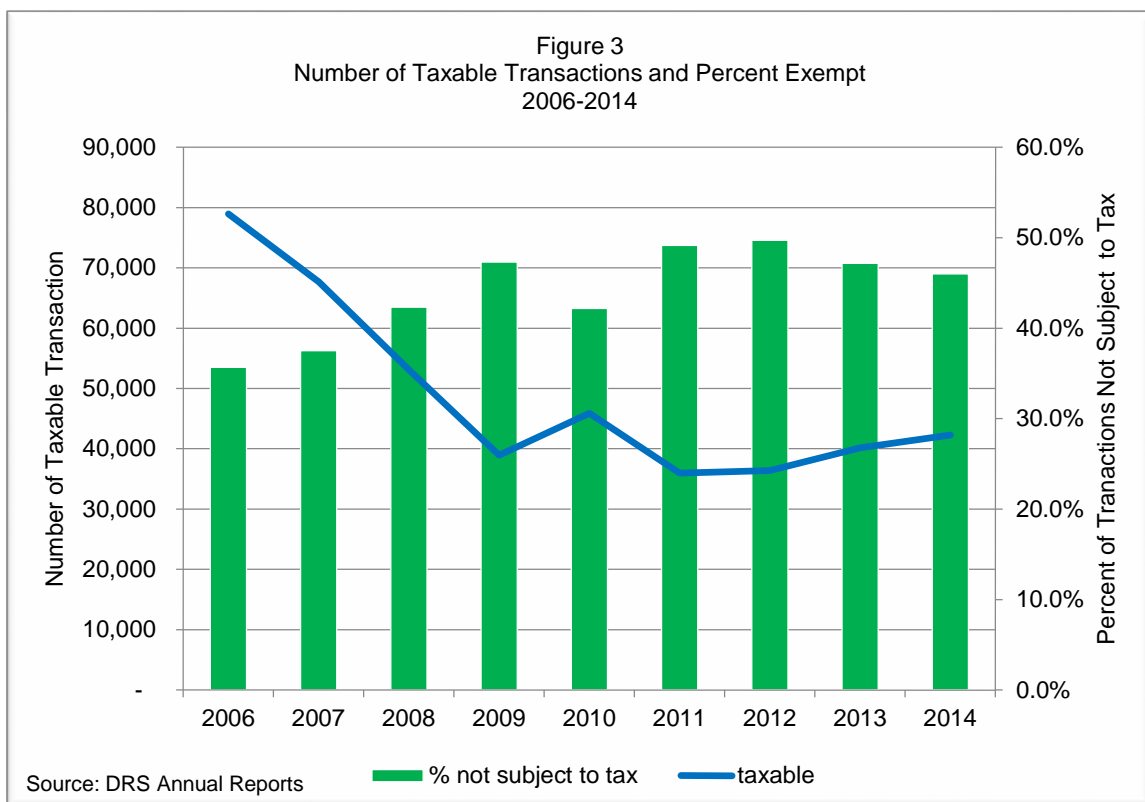
CORPORATION TRANSACTIONS

Deeds of partitions
 Court order partitions of joint and common estates
 Mergers of corporations
 Deed made by subsidiary corporation to parent for no consideration
 Between affiliated corporations of 501 (c)
 Mere change of identity no change in beneficial ownership
 Release of property which is security for a deed
 Within 6 months acquired under relocation plan
 Pursuant to federal bankruptcy court
 Controlling Interests more than 50%*
 Dissolution of corporation and property conveyed to shareholders

Long-term leases

*These transactions are taxable under Controlling Interest Transfer Tax.
Source: Connecticut General Statute §12-498

Although the exact nature of the exemptions is not always captured when the REC is reported, the fact that the transfer is exempt is captured. In recent years, the percentage of exempt transactions has increased. As shown in Figure 3, the number of taxable transactions has declined shown as the line graph corresponding to the left axis. During the same period the percentage of transactions not subject to the tax, shown as the bar graph, increased. If one assumes that 2006 reflects more normal market conditions about 35 percent of transactions were non-taxable, such as transfers between husbands and wives or value of consideration under \$2,000. The housing crisis resulted in homeowners facing loss of equity in their homes and having to sell their homes or losing them altogether through foreclosure. The result was an increase in the number of exempt transactions. In addition to the exemption of foreclosed property, properties that were acquired and then sold by Freddie Mac and Fannie Mae were also not taxable.³ Unlike New York and other states, the buyer is not responsible if the seller is exempt. Therefore these types of transactions are exempt and contribute to the increase in the percentage of sales not subject to the REC tax.



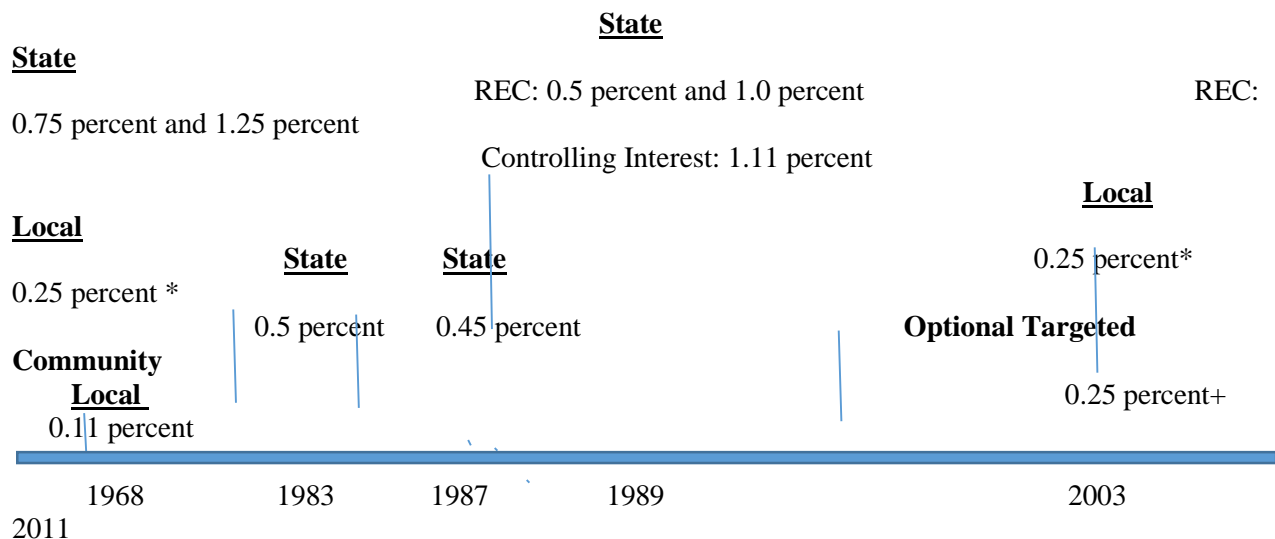
II.6 Tax Rates

Over time, the rates and rate structure have changed. The changes are outline in Table 2. As mentioned previously, the local rate has remains a flat rate along with the optional local rate. The state rate structure however, has changed from a flat rate to one that differentiates between type and value the property transferred

The initial REC enacted in 1968 was set at 55 cent for properties valued between \$100 and \$500 and 55 cents for each addition \$500 or fraction of \$500. In 1983, when the tax was extended to the state, the legislature changed how the local rate was presented, with the tax imposed at the equivalent rate, \$1.10 for each \$1,000 or fraction of \$1,000 (0.11 percent). Beginning in 2003, the state raised the local rate to 0.25 percent on a temporary basis for fifteen months and continued to extend the higher rate until it made the rate permanent in 2011.

At the same time that the state initially raised the local rate temporarily in 2003, it also provided additional optional rate, also on a temporary basis, for targeted investment communities. The tax was extended to eighteen targeted investment communities, including Bloomfield, Bridgeport, Bristol, East Hartford, Groton, Hamden, Hartford, Meriden, Middletown, New Britain, New Haven, New London, Norwalk, Norwich, Southington, Stamford, Waterbury, and Windham. These communities were allowed, with local approval, to impose the tax at an additional 0.25 percent rate, for a total local rate of 0.50 percent. This optional rate was made permanent in 2004 and in 2005 was modified so the targeted communities could impose the optional rate up to 0.25 percent. All the targeted communities impose the optional rate. All except Stamford have imposed it at the maximum rate. Recently, as of January 2015, Stamford increased its rate from 0.15 percent to 0.25 percent for properties in excess of \$1 million (Resolution No. 3687).

Table 2
Rate History of Real Estate Conveyance and Controlling Interest Transfer Taxes
Time line not to scale



*Temporary rate increase enacted 2003 and renewed until made permanent in 2011.

+Targeted community rate initially temporary, made permanent in 2004 and amended to permit rate to be up to 0.25 percent
Based on CGS 12-494

The initial state rate of 0.5 percent was nearly double the local rate of 0.11 at that time, a rate of 0.5 percent. It was lowered to 0.45 percent in 1987. In 1989 the rate was increased and differential rates were imposed, creating a graduated rate for residential homes. The differential rates were imposed based on the nature of the property, predicated on the predominate use of the seller (Ruling 89-41). For unimproved land which includes farm and forest land and open space, non-dwelling residential properties, identified as apartment buildings, and the first \$800,000 of residential dwellings, the rate was 0.5 percent. The value of residential property in excess of \$800,000 and non-residential property were taxed at 1.0 percent. In 1989 when the Controlling Interest Transfer tax was adopted the rate was set at 1.11 percent, reflecting the combined local rate (0.11 percent) and the maximum state rate, the rate imposed on non-residential property rate (1.0 percent).

Farm, forest, open space and maritime heritage land are considered unimproved if the owner meets the criteria established for being classified as such for property tax purposes and therefore taxed at the lower rate. If however within ten years of the transfer, the land is converted to some alternative use and no longer can be so classified, an additional tax is imposed. The penalty is 10 percent of the value of the property if the change occurs in the first year of transfer with percentage reduced for each year the land use has not changed. When the change of use occurs, the local assessor notifies the state that the change has occurred so as to assess the penalty.

In 2011, the state raised rates, with the rate structure presented in Table 3. The lower tier was increased to 0.75 percent from 0.50 percent which applied to unimproved land, that portion of residential dwellings \$800,000 or less, non-dwelling residential, and delinquent mortgages held by financial institution. The higher tier rate was increased to 1.25 percent from 1.0 percent. The CIT tax rate, however, remained unchanged from its initial rate of 1.11 percent. This rate is now considerable below the combined maximum state rate and local rate.

Table 3 Current Rates for Real Estate Conveyance Tax and Controlling Interest Transfer Tax	
Real Estate Conveyance Tax Rates:	
State Rates Unimproved land, Residential dwellings, \$800,000 or less Residential, non-dwelling Delinquent Mortgages	0.75%
Residential dwelling portion above \$800,000	1.25%

Real Estate Transfer Taxes

Non-residential land other than unimproved	
Municipal Rates Basic	0.25%
Optional for Targeted Investment Communities	Up to 0.25%
Controlling Interest Transfer Tax Rate State Rate	1.11%
Source: DRS Annual Report	

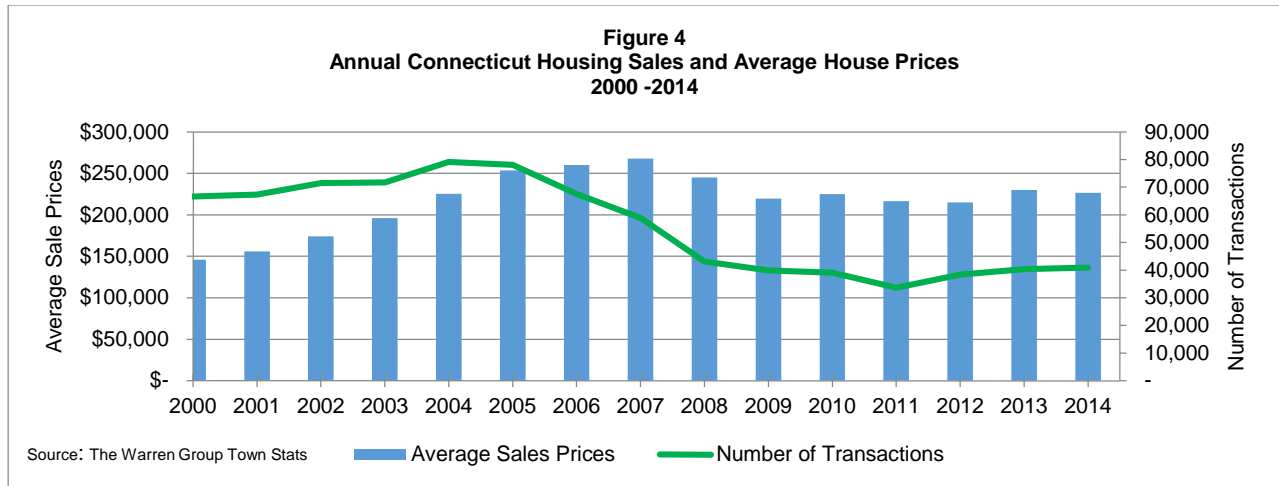
As part of the legislative package that increased the state rates, the state created the Municipal Revenue Sharing Account (MRSA) that was funded in part by the revenues attributed to the increased REC rates. MRSA funds were distributed first for manufacturing transition grants to replace the local revenue lost because of the property tax exemption of commercial vehicles and manufacturing machinery and equipment. The remaining funds were distributed on a per capita basis and according to an existing tax relief formula (P.A. 11-§§93, 95-96 & 103). While the increased rates remain in effect, the revenues attributed to the rate increase were included in the MRSA for only two years, fiscal years 2012 and 2013, with the state REC revenues now included state's general fund. Although the MRSA was reinstated in 2015, the REC funds are no longer included in the MRSA.

While the increased rates help to offset the impact of the Great Recession on the real estate market and hence the REC revenues, the increases were not sufficient to stabilize the state's revenues. Both real estate prices and the number of transactions, adversely effected at the outset of the recession, were slow to recover. In the next section we examine the revenue trends in terms change in the value and number of transactions as well as the size and nature of the residential portion of the tax base.

III Trends of Factors Critical to the Connecticut Real Estate Conveyance Tax

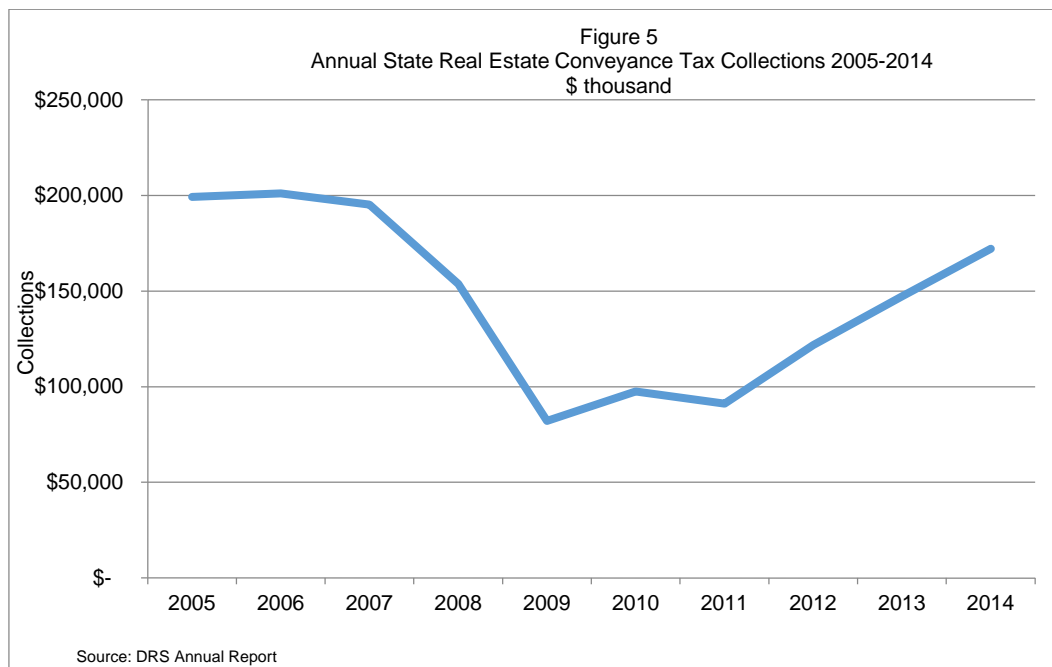
III.1 Real Estate Sales and Housing Price

Because the tax is imposed on the value of real property at the time of sale, the revenue is sensitive to market conditions-- both market activity and real estate prices. The 2008 Recession and its resultant lower real estate prices, reduced mortgage activity, decline in home sales, and credit crunch all combined to adversely affect transfer tax revenues. The effect of the recession on the Connecticut housing is shown in the housing sales statistics from the Warren Group⁴. As shown in Figure 4 both the average sale price of single family and condominium residential properties rose between 2000 and 2007, to a high of \$267,950. As prices grew during this period, sales began to slow.



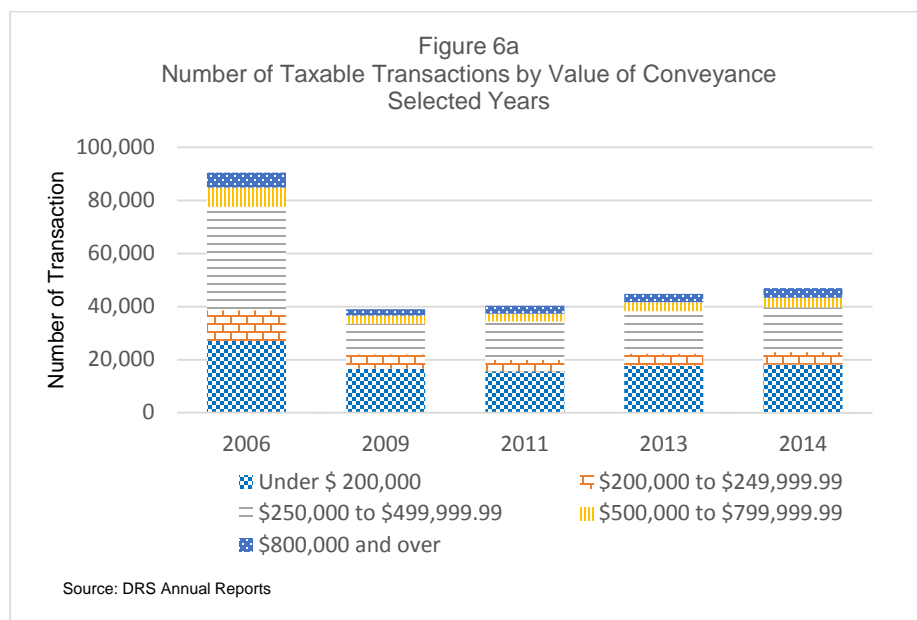
Annual sales of residential property continued to increase until 2004. They then began to drop precipitously after 2005, declining by about 10,000 sales a year for the next few years. By 2008, annual sales had declined from 79,132 in 2004 to 43,163. Annual sales continued to decline, such that by 2011 annual sales were only 33,671, less than half of the peak level.

With the drop in both prices and the number of sales, the revenues from the REC dropped substantially, declining by 35 percent between 2007 and 2012. State revenues, as shown in Figure 5, show a sharp decline between 2006 and 2009, with only modest recovery since then. The revenues remain far below the 2006 peak and as of 2014 were only at the 2004 level.

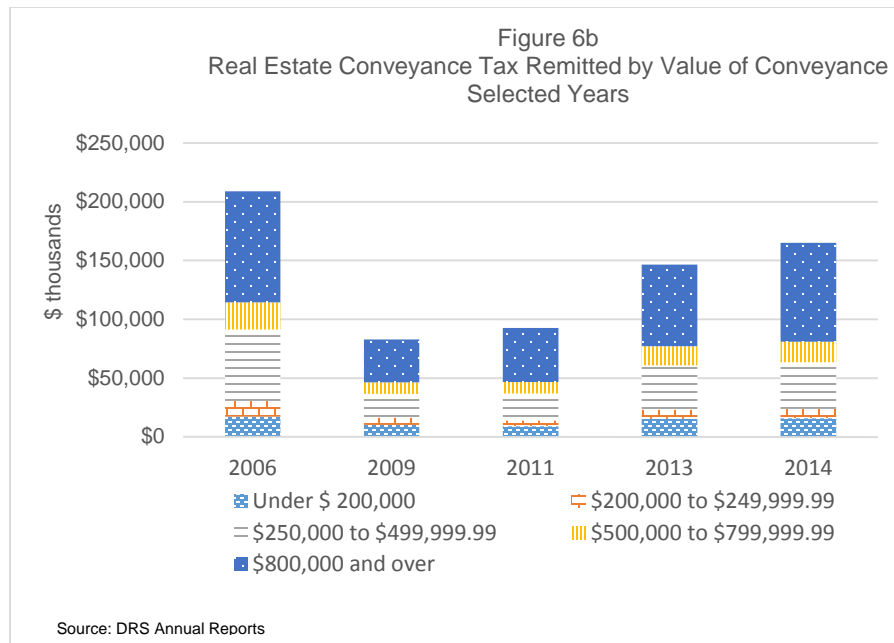


III.2. Trends by Size of Conveyance

The falling real estate market and its slow recovery was not uniform across the whole real estate market in Connecticut. Transactions declined in all segments, but as shown in Figures 6a, the middle market segment—conveyances in the \$250,000 to \$500,000 range were the hardest hit. This is a segment of the market that is critical across all income groups. Prior to the onset of the recession, conveyances within the middle market accounted for 43 percent of the transactions and dropped to less than 30 percent in 2009. By 2014, there was modest recovery with its share increasing to 35 percent. In addition to the reduced share of the number of transaction in this segment, the number of exempt transactions is concentrated in this middle market.



A similar pattern emerges when revenues are considered. The steep declines seen in Figure 6b are attributed to this same market segment, \$250,000 to \$500,000 and to those in the \$800,000 and over segment which are taxed at the higher rate. Not surprising the share of revenue from the more expensive properties, those \$800,000 or more has shown greater recovery. Although a part of the growth in 2013 and 2014 is attributed to the 2011 rate increase, it was not sufficient to offset the effects of the slow real estate market.



Residential transfers are a critical component of the REC. As the study, Connecticut Tax Incidence issued by the Department of Revenue Services pointed out, 79 percent of the REC tax is paid by Connecticut residents (Department of Revenue Services, p.56). A major factor in the revenue picture is the reliance on residential transactions. Notwithstanding the recession, residential property conveyances and the consideration of those transactions represented a substantial portion of the REC.

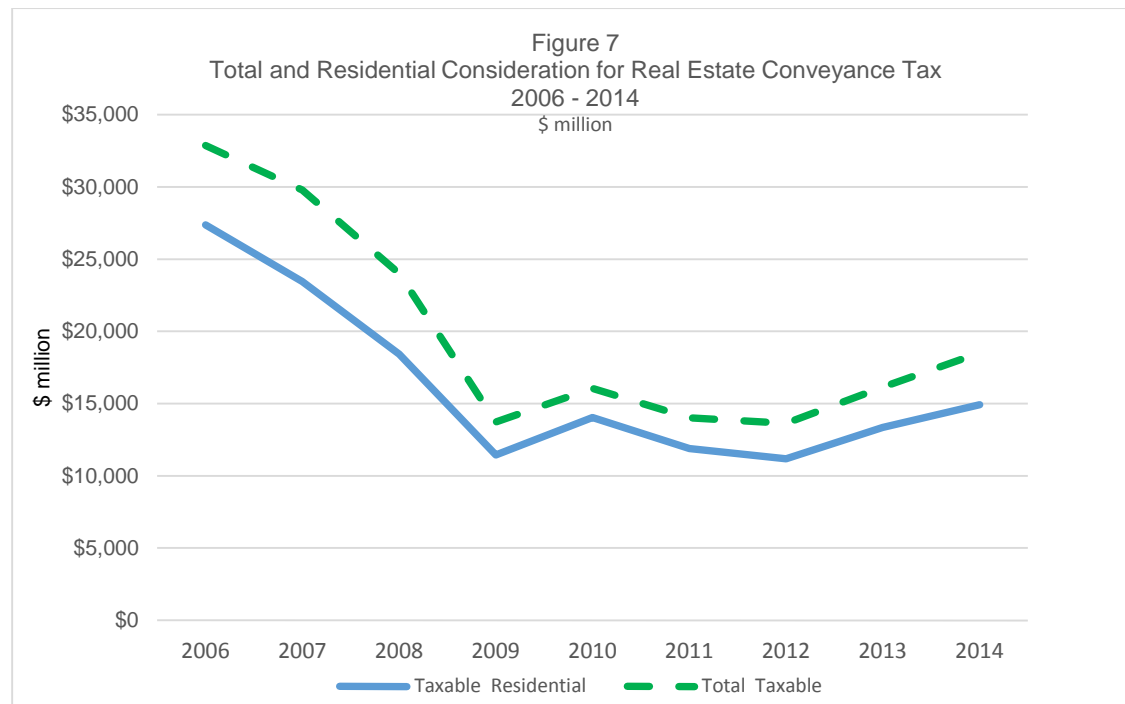
Text Box 2: Why Consideration rather than Taxes

Because of the differential tax rates for residential properties, it is not possible to estimate the amount of state tax revenues attributed to residential properties. The higher rate on conveyances of single family homes, classified as residential dwellings, is applied to that portion of value above \$800,000. The initial \$800,000 is taxed at the lower marginal rate, which is also applied to other residential transfers, such as multi-family homes. Similarly because of the two rates, the tax revenue is not based solely on value or consideration, but also the type of property. Since the pattern of tax revenues (Figure 5) is similar to that of the consideration (Figure 7), the assumption that residential conveyances account for a substantial portion of the taxable value of state REC tax seems reasonable.

Residential properties, specifically single family homes are the driver of the taxable consideration. Although the number of taxable transactions and their value declined dramatically as a result of the recession, the residential shares remained consistent. They account for 90 percent of the transactions and 80 percent of the consideration. In 2006, single family homes transactions accounted for 90 percent of the transactions and over 80 percent of the value of the conveyances. From the peak, through the trough and into the recovery, residential properties maintained about the same proportion of total consideration as the trend of taxable consideration parallels the residential tax. This relationship is shown in Figure 7. The difference between residential consideration, shown as taxable residential, and total consideration are all the other property types and like residential properties are also subject to different rates depending on the use and type of property. Therefore, while the consideration or base of the tax is known, the taxes from

Real Estate Transfer Taxes

each type of property is not known because the breakdown of consideration by the different tax rate categories is not known.



IV. National Picture of Real Estate Transfer Taxes

IV.1 State and Local Transfer Taxes

Real estate transfer taxes are widely used in the United States although not as broadly as income or sales taxes. Across the country, real estate transfer taxes are imposed in 35 states. This number is not likely to increase as several states that currently do not impose the tax have constitutional bans on transfer taxes (Atkins 2015).

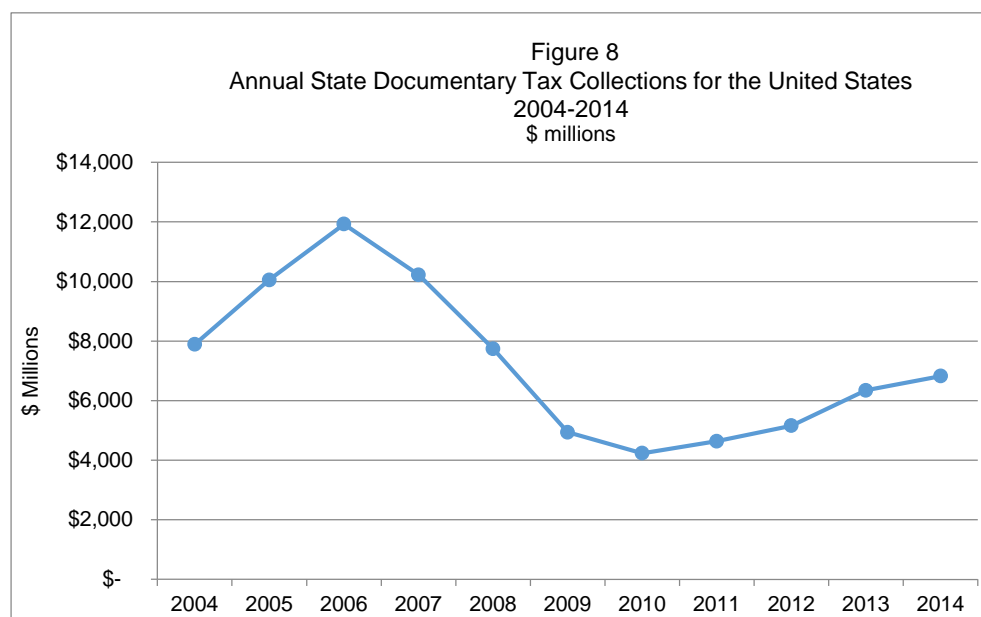
In those states that have a real estate transfer tax, many adopted at the time of the repeal of the federal documentary stamp tax. However, the taxing arrangements vary greatly. In some cases it is solely a state tax, such as in Georgia and Iowa. In other states, it is solely a local tax, as in Ohio and California. Few states have arrangements like Connecticut. Only five other states have both a state and local component. Of those five, only Nevada and West Virginia have the three components—state, mandatory local, and optional local taxes. Even so, not all optional authority is utilized. Connecticut then stands alone as the only state where in addition to the state and local taxes, the optional tax has been widely adopted. The state, local and optional rates for all states are shown in Appendix 3.

The experience during the recession among the other states is similar to that in Connecticut. Real estate prices dropped dramatically, particularly for residential properties. Nationally, housing prices fell 27 percent from their peak in July 2006 to the trough in February 2012, according to the S&P/Case-Shiller Index. Although prices are improving, they remain just under 10 percent below the peak, at a level

equivalent to prices in April 2005. Lower housing prices, however, did not translate into housing market resurgence. Home purchases and lending dropped dramatically, with new mortgages dropping by two-thirds, from 7.4 million at their peak in 2005 to 2.4 million in 2011. Although loans are increasing, in 2013 they were only at the 2008 level (Bhutta 2014).

Overall, transfer tax revenues took a hit and now are only slowly recovering. As reported by the U.S. Bureau of Census, state revenues from real estate transfer tax peaked in 2006 but the effect of the recession lasted longer and had greater impact for the country as a whole.⁵ Nationally, as seen in Figure 8 the revenues declined through 2010, with revenues declining by more than 65 percent. Recovery has been slower. By 2014 the revenues grew by less than two-thirds while in Connecticut the revenues doubled. However, both for the nation and Connecticut, the revenues are still below their peak.

Those states that saw a dramatic decline in housing prices had a substantial decline in transfer tax revenues. This is most evident in Florida and Nevada. Prices from peak to trough fell more than 40 percent in Florida and 55 percent in Nevada and revenue decline was greater with both states experiencing a 70 percent drop, reflecting in part the large number of foreclosures. In other states, the decline in revenues was not quite as substantial, more in the range of Connecticut's losses. This suggests the fall off of transactions, similar to the conditions Connecticut experienced.



Source: U. S. Bureau of Census, Annual Survey of State Government Tax Collections

IV.2 Range of Rates among the States

Few states have rates as high as Connecticut's combined rates. Of the 35 states where the tax is imposed, 14 have rates less than 0.5 percent. In Ohio, there is no state tax but counties are required to impose the tax at 0.1 percent and they have the option to impose up to an additional 0.3 percent. In some states, rates are above 1 percent, but in those states the rate is imposed in only a few specific local jurisdictions. For example, in Florida, the rate for non-residential property in Miami-Dade County is 1.05 percent, which is a combined state and county rate. Outside of Miami-Dade, the rate is 0.7 percent. In California, San Francisco has a top rate of 2.5 percent for properties over \$10 million, but the rate in most counties is a

more modest, 0.11 percent. A full listing of the rates, including state, mandated local, and optional local rates is set out in Appendix 3.

Within the region, there are some striking differences in the rates and structure of the real estate transfer taxes. Massachusetts, New York, New Jersey, and Rhode Island each has a state transfer tax. Like Connecticut municipalities, all New Jersey counties impose the transfer tax in addition to the state tax. However, no local options, either for other local governments to impose the tax or for counties to impose the tax at a higher rate, are available.

In New York only those local governments that have specific state legislative authority can impose the tax. Although such authority is not widely available, New York City does have authority and as discussed later, the rates are significant. In Massachusetts, the state imposed a transfer tax with a surcharge, but only three counties, Barnstable, Dukes and Nantucket, have local authority. This is similar to Rhode Island where the state has the tax and two localities, Towns of New Shoreham and Little Compton also impose the tax. Notwithstanding the two communities, Rhode Island local governments are not authorized to impose the transfer tax. However, they benefit directly from the tax as the state shares the revenues with the jurisdictions. While a little more than half the proceeds is distributed to the state for dedicated and general purposes, the remainder, approximately 48 percent of the collections, is retained by the local jurisdiction where the deed is registered and the taxes paid.

In Massachusetts and Rhode Island, except for the few counties and localities that have their own authority, the rates are substantially lower than Connecticut's state rate. The rates are 0.456 percent in Massachusetts and 0.46 percent in Rhode Island. The local taxes are higher for all but Barnstable County. The local rates are between 2 and 4 percent, with the local revenues used to protect sensitive open space areas. However, these higher rates are imposed in a limited number of jurisdictions.

New York and New Jersey have a rate structure that is more complex than Connecticut's. New York's is complicated because of the overlapping authority with local governments. While the state rate applicable to most properties is low, 0.4 percent, the tax imposed on expensive residential properties, those valued at \$1 million or more are taxed at 1 percent. Although this is lower than the 1.25 percent in Connecticut, the higher rate in Connecticut applies only to the value in excess of \$800,000. For property in New York City the rates are higher than the local rates and like Connecticut's state rate, different rates apply to different types and value of properties. The rates imposed on the sale of a \$1 million residence in New York City would be the state rates of 1.4 percent including the general and "mansion" taxes and the New York City rate of 1.425 percent for a total 2.825 percent. Although New York splits the taxes between the grantor (seller) and grantee (buyer), both are responsible.

The transfer tax in New Jersey has multiple components. One is a basic fee with flat state and county rates. There is a state graduated fee for properties in excess \$150,000 and different schedule for properties above \$350,000. A fourth fee is a fee shared with counties to replace certain state funding with the state portion earmarked for special education aid and municipal property tax relief aid. The final component is for properties in excess of \$1 million which is solely a state tax. This last component was initially imposed just on residential properties but has been extended to commercial properties as well (Laws of 2006, Chapter 13).

IV.3 Exemptions

One factor affecting the yield of the tax as well as addressing certain equity issues is the granting of exemptions. The tax is generally imposed on the seller as it is in Connecticut. However, in some states, as it was Federal Documentary Stamp, when the grantor (seller) is exempt the grantee (buyer) is responsible for payment. Such arrangements may have the effect of mitigating exemptions that, for policy reasons, are intended to eliminate the tax on certain sales. As is discussed in the next section, the statutory imposition of the tax on the seller may not always reflect the economic impact. Connecticut makes no distinction between an exempt seller and exempt transaction. If the transaction is exempt no tax is imposed. This is not the case in New York and New Jersey. In New York both the seller and buyer are responsible for the tax. If the seller is exempt then the buyer is responsible for paying the tax.

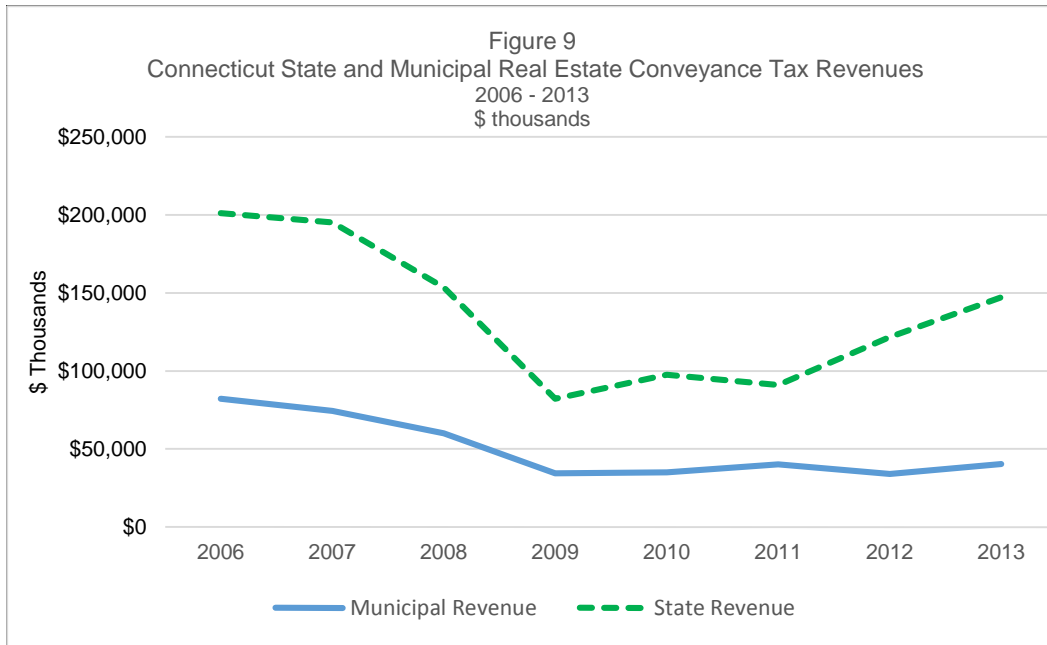
As discussed previously, Connecticut has an extensive list of exempt transactions, some of which are widely adopted in other states. These exemptions include transfers by governments and in some cases not for profit organizations, especially when the intent is to preserve open space. Many of Connecticut's exemptions for the REC are intended to clarify which transactions are covered under the REC and which ones are taxed under the CIT. Some states, like New Jersey have a similar dual-tax arrangement for the transfer of controlling interests while New York taxes these transfers under its general real estate transfer tax. This year, Rhode Island passed an amendment to its transfer tax to extend the tax to more than the transfers by deed so as to include transfers of controlling interests (Public Law 141 Budget Article 1 section 6). In Massachusetts, although the legislature had considered such inclusion, to date their tax appears not clearly tax such transactions.

Connecticut also exempts various transactions that relate to distressed sales or foreclosures, which are not widely available. Another exemption applies to elderly homeowners who qualify for certain property tax relief. While New Jersey does not provide an exemption for elderly homeowners who sell their homes, such a transaction is subject to a partial exemption, implemented relief through the rate structure. Such an arrangement provides relief for both buyer and seller. When comparing the exemptions with those in neighboring states, taking into consideration the taxation of controlling interests, it appears that Connecticut provides more exemptions, especially for distressed sales. A comparison of the exemptions is in Appendix 4.

V. Issues Surrounding Real Estate Conveyance Tax

V.1 Volatility of Real Estate Conveyance Tax and Property Tax Replacement

Because of the very nature of the REC, it is sensitive to the swings of the real estate market. This was particularly evident during the housing boom when revenues increased dramatically and the Great Recession when revenues dropped precipitously followed by only a slow recovery. As shown previously in Figure 2, the recovery of the REC revenues at the state level has been slow. For municipalities, the revenues have not been as volatile, but their recovery has been even slower. As shown in Figure 9, the municipal revenues are not as volatile although the tax base is almost identical. The major differences between the revenue patterns are explained by the state's rate structure as well as its 2011 rate increase.



The REC is the only other taxing authority available to municipalities. It accounts, however, for only a small fraction of revenue compared to the property tax, the other revenue source. This is true even for the targeted communities that have twice the available tax rate. As shown in Table 4, even at its peak in 2006, REC revenues were equivalent in the neighborhood of one percent of property tax for representative municipalities and a bit more in the targeted communities.

	2006	2007	2008	2009	2010	2011	2012	2013
Representative Municipalities								
Bozrah	0.77%	0.69%	0.55%	0.21%	0.29%	0.26%	0.30%	0.21%
Durham	0.64%	0.58%	0.42%	0.32%	0.37%	0.26%	0.21%	0.28%
Glastonbury	1.06%	0.84%	0.61%	0.45%	0.40%	0.46%	0.42%	0.43%
Guilford	1.29%	1.12%	0.87%	0.50%	0.51%	0.43%	0.39%	0.48%
Killingly	1.37%	0.92%	0.73%	0.41%	0.47%	0.30%	0.23%	0.34%
Litchfield	1.05%	0.86%	0.58%	0.30%	0.45%	0.35%	0.31%	0.40%
Manchester	1.02%	0.64%	0.50%	0.32%	0.40%	0.20%	0.24%	0.26%
New Canaan	2.08%	1.77%	1.48%	0.80%	0.94%	1.22%	0.89%	1.32%
North Canaan	0.75%	0.50%	0.40%	0.31%	0.28%	0.18%	0.34%	0.28%
Plainfield	1.12%	0.99%	0.86%	0.37%	0.44%	0.29%	0.40%	0.26%
Torrington	0.91%	0.69%	0.47%	0.30%	0.27%	0.17%	0.17%	0.17%

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Washington	2.80%	2.01%	2.45%	0.87%	1.36%	1.37%	0.69%	1.09%
Windsor	0.78%	1.01%	0.60%	0.29%	0.28%	0.21%	0.18%	0.37%
Average	1.20%	0.97%	0.81%	0.42%	0.50%	0.44%	0.37%	0.45%
Targeted Investment Communities								
Bloomfield	1.46%	2.46%	1.41%	0.58%	0.54%	0.49%	0.59%	0.44%
Bridgeport	1.96%	1.37%	0.85%	0.41%	0.37%	0.28%	0.30%	0.27%
Bristol	1.58%	1.41%	1.20%	0.61%	0.81%	0.44%	0.41%	0.43%
East Hartford	1.17%	1.05%	1.05%	0.52%	0.53%	0.31%	0.38%	0.30%
Groton	2.05%	1.69%	1.78%	0.77%	0.78%	0.73%	0.55%	0.66%
Hamden	1.45%	1.68%	1.01%	1.20%	0.70%	0.45%	0.44%	0.60%
Hartford	1.20%	1.10%	0.74%	0.32%	0.28%	0.36%	0.40%	0.32%
Meriden	1.58%	1.52%	1.03%	0.59%	0.63%	0.39%	0.46%	0.40%
Middletown	1.83%	1.32%	0.92%	1.09%	0.71%	0.51%	0.53%	0.73%
New Britain	1.55%	1.45%	0.85%	0.64%	0.53%	0.37%	0.35%	0.37%
New Haven	1.49%	1.54%	0.76%	0.52%	0.52%	0.32%	0.37%	0.57%
New London	1.58%	1.61%	0.80%	1.27%	0.64%	0.55%	0.42%	0.32%
Norwalk	3.08%	2.56%	1.75%	0.83%	0.93%	0.92%	0.74%	0.93%
Norwich	2.30%	1.75%	1.26%	0.76%	0.67%	0.47%	0.59%	0.41%
Southington	1.81%	1.48%	1.21%	0.76%	0.99%	0.66%	0.70%	0.77%
Stamford	1.50%	1.77%	2.09%	0.72%	0.74%	0.61%	0.60%	0.61%
Waterbury	1.42%	1.23%	0.68%	0.46%	0.38%	0.32%	0.24%	0.31%
Windham	1.62%	1.19%	0.85%	0.59%	0.80%	0.72%	0.59%	0.28%
Average	1.70%	1.57%	1.13%	0.70%	0.64%	0.50%	0.48%	0.48%
Source: Calculated by author from Department of Revenue Service Annual Real Estate Conveyance Tax data								

Because the REC does provide revenue, it reduces the revenue a community needs to raise from the property tax. There are two considerations, the replacement value of the REC in terms of the mill rate needed to raise an equal amount of property taxes and the differences as to the composition of the taxpayers of the two taxes.

One measure is to calculate what the equivalent mill rate is needed to generate the REC revenue. Because the REC generates only a limited amount of revenue, the mill rate equivalent is relatively small. These rates are presented in Table 5. Overall, the mill rate equivalents of the REC revenue in both the targeted investment communities and 13 other representative communities⁶ are quite small. In most cases, even in 2006 when the REC revenues were at their peak, REC revenues were equivalent to less than 0.2 mills in the representative municipalities and no more than 0.4 mills in the targeted communities.

<p style="text-align: center;">Table 5 Mill Rate Equivalent of Real Estate Conveyance Tax Revenues Representative Municipalities and Targeted Investment Communities 2006 - 2013</p>								
	2006	2007	2008	2009	2010	2011	2012	2013
Representative Municipalities								
Bozrah	0.09	0.08	0.06	0.03	0.04	0.04	0.05	0.04
Durham	0.11	0.11	0.07	0.06	0.07	0.05	0.05	0.06
Glastonbury	0.17	0.15	0.11	0.09	0.08	0.10	0.09	0.10
Guilford	0.14	0.12	0.10	0.06	0.07	0.06	0.06	0.08
Killingly	0.16	0.10	0.09	0.06	0.07	0.05	0.04	0.07
Litchfield	0.13	0.10	0.07	0.04	0.07	0.05	0.05	0.07
Manchester	0.18	0.11	0.12	0.07	0.08	0.04	0.05	0.06
New Canaan	0.16	0.14	0.12	0.07	0.09	0.13	0.09	0.14
North Canaan	0.09	0.06	0.05	0.04	0.04	0.03	0.06	0.05
Plainfield	0.14	0.11	0.10	0.05	0.06	0.04	0.06	0.05
Torrington	0.17	0.12	0.08	0.06	0.06	0.04	0.04	0.04
Washington	0.18	0.13	0.17	0.06	0.10	0.11	0.06	0.10
Windsor	0.14	0.17	0.09	0.05	0.05	0.04	0.04	0.07
Average	0.14	0.12	0.10	0.06	0.07	0.06	0.06	0.07
Targeted Investment Communities								
Bloomfield	0.30	0.44	0.26	0.11	0.11	0.10	0.14	0.12
Bridgeport	0.39	0.26	0.16	0.09	0.10	0.08	0.09	0.10
Bristol	0.27	0.22	0.19	0.11	0.15	0.08	0.09	0.10
East Hartford	0.26	0.22	0.26	0.11	0.12	0.08	0.10	0.09
Groton	0.20	0.17	0.25	0.09	0.10	0.09	0.08	0.09
Hamden	0.25	0.33	0.18	0.23	0.14	0.10	0.11	0.16
Hartford	0.30	0.27	0.29	0.10	0.10	0.12	0.16	0.12
Meriden	0.31	0.28	0.20	0.11	0.13	0.08	0.11	0.10
Middletown	0.30	0.21	0.14	0.20	0.12	0.10	0.11	0.16
New Britain	0.36	0.30	0.18	0.16	0.13	0.10	0.10	0.11
New Haven	0.28	0.28	0.22	0.14	0.13	0.09	0.12	0.15
New London	0.25	0.22	0.13	0.23	0.11	0.10	0.08	0.07
Norwalk	0.41	0.29	0.19	0.09	0.13	0.14	0.11	0.15
Norwich	0.33	0.24	0.18	0.11	0.11	0.08	0.12	0.09
Southington	0.25	0.22	0.17	0.12	0.16	0.11	0.12	0.15
Stamford	0.15	0.17	0.55	0.08	0.09	0.08	0.08	0.09
Waterbury	0.40	0.30	0.17	0.13	0.11	0.10	0.09	0.13
Windham	0.28	0.23	0.15	0.10	0.16	0.15	0.13	0.07
Average	0.29	0.26	0.22	0.13	0.12	0.10	0.11	0.11
Source: calculated by author from Department of Revenue Service Annual Real Estate Conveyance Tax data								

Over time, and with the lack of recovery of the real estate market, the replacement equivalent of REC revenues has declined. The average property tax mill rate needed to replace the REC revenues for the

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representative municipalities was 0.14 mills in 2006. This would have required a 1.2 percent increase in the property tax. However, by 2013, replacement would require 0.07 mills, raising property taxes by 0.45 percent. For the targeted communities, the average property tax mills needed to replace REC revenue would be 0.29 mills which would be a 1.7 percent increase in 2006. By 2013, only 0.11 mills would be needed, raising property taxes by 0.48 percent.

V.2 Residential Components of Conveyance and Property Taxes

Residential properties represent a substantial portion of the REC taxable consideration as shown previously in Figure 7. Except for Hartford and Stamford, where the residential portion of the REC was less than 50 percent in 2006, the residential share of the REC tax for the targeted communities averaged about 70 percent and in the representative municipalities, about 80 percent. With the slight recovery in 2010, the average shares rose to 84 percent and 85 percent in the targeted and representative communities respectively. By 2013 the shares had declined to 75 percent and 79 percent, respectively. Even still a significant portion of the REC is imposed on residential properties.

With residential component such a substantial factor for the REC, several considerations arise when comparing the tax with the property tax. The first is to what extent is the REC's reliance on residential properties mirrored in the property tax base. If residential properties are a smaller share of the property tax base, then the presence of the REC in effect reduces the property taxes of other segments of the property tax base. Generally, for the 31 specific municipalities considered here, the residential share of the REC tax base is greater than its share of the property tax base. In effect, when considering both the property tax and the REC, the share of taxes paid by residential properties is greater than if municipalities imposed only the property tax. The comparison of the residential share of both taxes is shown in Table 6.

Table 6 Residential Percent of Real Estate Conveyance Tax Consideration and Property Tax Value for Representative Municipalities and Targeted Investment Communities 2008 - 2013												
	2008		2009		2010		2011		2012		2013	
	REC	Prop	REC	Prop	REC	Prop	REC	Prop	REC	Prop	REC	Prop
Representative Municipalities												
Bozrah	85%	58%	94%	65%	69%	65%	85%	65%	83%	64%	77%	64%
Durham	88%	71%	92%	71%	92%	71%	92%	80%	89%	67%	91%	67%
Glastonbury	85%	74%	81%	76%	90%	76%	69%	76%	76%	77%	74%	76%
Guilford	85%	83%	96%	85%	94%	86%	93%	86%	95%	85%	92%	85%
Killingly	83%	39%	78%	47%	78%	46%	88%	46%	81%	46%	74%	45%
Litchfield	89%	79%	82%	79%	86%	78%	82%	78%	79%	78%	88%	78%
Manchester	68%	56%	74%	56%	74%	56%	80%	56%	64%	56%	69%	53%
New Canaan	96%	89%	88%	89%	96%	90%	93%	90%	97%	90%	92%	90%
North Canaan	88%	43%	80%	48%	72%	48%	64%	48%	90%	48%	71%	48%
Plainfield	55%	56%	81%	60%	69%	60%	80%	60%	45%	60%	84%	60%
Torrington	83%	65%	80%	65%	91%	64%	78%	65%	76%	65%	81%	65%
Washington	58%	76%	85%	76%	93%	75%	97%	75%	82%	75%	87%	75%
Windsor	64%	53%	84%	50%	94%	51%	81%	51%	82%	51%	44%	51%
Average	79%	65%	84%	67%	85%	67%	83%	67%	80%	66%	79%	66%

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Targeted Communities	Investment											
Bloomfield	51%	54%	88%	54%	81%	54%	70%	53%	51%	54%	81%	53%
Bridgeport*	83%	59%		58%	87%	60%	81%	56%	67%	57%	72%	57%
Bristol	66%	59%	86%	64%	81%	64%	85%	64%	85%	64%	92%	63%
East Hartford*	55%	56%	70%	56%	92%	56%	76%	56%	69%	56%	74%	50%
Groton	66%	54%	84%	54%	91%	54%	75%	55%	86%	55%	86%	53%
Hamden	83%	73%	52%	73%	90%	73%	85%	73%	86%	70%	66%	69%
Hartford*	41%	19%	55%	25%	63%	23%	39%	22%	28%	21%	44%	21%
Meriden*	77%	62%	81%	62%	93%	62%	76%	62%	66%	62%	82%	58%
Middletown	84%	52%	49%	57%	89%	56%	67%	55%	72%	55%	58%	55%
New Britain*	81%	57%	65%	62%	87%	62%	71%	62%	69%	62%	74%	61%
New Haven*	87%	53%	83%	53%	85%	54%	80%	52%	63%	52%	55%	45%
New London*	82%	51%	43%	51%	84%	48%	60%	48%	88%	48%	91%	48%
Norwalk	69%	68%	89%	68%	88%	68%	85%	68%	82%	67%	81%	67%
Norwich*	71%	59%	62%	59%	78%	63%	74%	63%	45%	63%	66%	62%
Southington	81%	72%	87%	71%	82%	71%	87%	71%	83%	71%	88%	70%
Stamford	42%	65%	70%	59%	82%	59%	80%	59%	75%	59%	87%	59%
Waterbury*	71%	53%	69%	56%	82%	56%	55%	56%	73%	56%	59%	56%
Windham*	89%	56%	82%	55%	81%	56%	53%	57%	41%	57%	87%	56%
Average	71%	57%	71%	57%	84%	58%	72%	57%	68%	57%	75%	56%
Source: calculated by author from Department of Revenue Service Annual Real Estate Conveyance Tax data and Fiscal Indicators												

Since homeowners dominate the REC and the tax is imposed when the property is sold, concerns have been raised as to what extent does the tax reduce housing values or dampen demand. Several studies that have looked at these effects found that the introduction of a transfer tax or a large rate increase does dampen the market, at least in the short run (Besley et al. 2014; Best et al. 2013, Benjamin et al. 1993, Dachis et al 2008, 2011 Kopczuk and Munroe 2014, O’Sullivan et al. 1995, and Slemrod et al. 2012). To determine the potential impact in Connecticut, a preliminary investigation, comparing transactions and values in the targeted investment communities before and after they implemented the optional tax was undertaken. The new component was in addition to the basic municipal tax and the state tax. The initial inquiry found that the introduction of the additional tax had a small effect, both on the sale price for single family homes and the number of transactions for those properties. However, the findings were not statistically significant. One factor that may explain the modest results is that compared with the other, more robust studies, the rate differential in Connecticut may not represent a substantial change in prices since the impact may have been muted by the presence of the state tax. Although the local rates in the targeted communities are twice those in the other communities, the rates are relatively low both in the context of the combined state and local rates and when compared to the rate differentials in the other studies.

V.3 Fairness in the Distribution of the Tax

The presence of the optional additional rate in the 18 targeted communities does presents some horizontal inequities. A sale of property in one of the 18 communities would have a higher tax than for the same priced property in another town. However, to the extent that there is the price differential of an identical

house, the lower price might be sufficient to offset the tax differential. Such differentials may be sufficient to address, and even offset, any horizontal inequities. However, this was not examined specifically here.

The issue of progressivity of the REC was presented in the Department of Revenue Services report “Connecticut Tax Incidence” (2014). Their findings were that this tax is “slightly regressive”, with a Suits Index of -0.14.⁷ Contributing to being slightly regressive is the notion that higher income households own higher value properties and may be subject to the higher tax rate for home above \$800,000. Another factor may be the exemption of foreclosed properties if lower income households are more likely to face such hardship.

Many of the long term factors that may impact the overall equity of the REC have been discussed in other studies but are not covered here (Sexton 2008). Since the tax is imposed only when the property is sold, to the extent that higher income households move more frequently they are likely to pay the tax more often, adding then to the progressivity of the tax. On the other hand, to the extent that for lower income households the home is their largest if not only asset may increase the regressivity of the tax.

VI. Concluding Comments

The Real Estate Conveyance tax and the complementary Controlling Interest Transfer tax in Connecticut provide only a nominal amount of revenue for the state and similarly at the local level the conveyance tax provides only a small fraction of revenue compared to the property tax. Because of the severity of the Great Recession and its impact on real estate, the revenues have been slow to recover. This is because tax revenues are a function of both the number of real estate transactions and the price of property, especially for residential homes. Because the REC is an ad valorem tax paid at the time the deed is registered with the town clerk, the tax provides critical information for the administration of the property tax which may not be available with just the registration of the deed.

Compared to transfer taxes in neighboring states, Connecticut state and rates are more modest, although the higher rates are only in selected jurisdictions. This is particularly true for the higher value properties compared particularly with New York and New Jersey. However, compared with the rates imposed in other states, the combined rates are generally much higher in Connecticut.

The local tax is the only local tax other than the property tax available to the municipalities. However, there is no flexibility except for targeted investment communities imposing an optional rate. However, even with the higher rate, the revenues from the REC reduce the mill rate in the range of no more than 1 percent.

Although the tax has limited revenue potential and can be extremely volatile because of its total reliance on the real estate market, information gathered from the payment of the tax provides critical information for effective property tax management.

Appendix 1 Revenue Trends of the Real Estate Conveyance Tax and Controlling Interest Transfer Tax 2000 - 2014 (\$ in thousands)				
Fiscal Year	Real Estate Conveyance		Controlling Interest Transfer	
	Revenue	Number of Exempt Conveyances	Revenue	Number of Transfers
2000	\$113,642	na	\$924	na
2001	111,113	na	1,165	na
2002	119,351	na	1,367	20
2003	147,410	na	1,907	21
2004	174,775	na	1,966	22
2005	199,193	na	8,438	36
2006	201,123	8,808	6,334	61
2007	195,216	9,043	15,834	65
2008	153,668	10,128	5,044	45
2009	82,148	8,227	8,654	34
2010	97,576	7,532	2,691	40
2011	91,112	8,990	3,709	43
2012	121,762	10,501	10,978	57
2013	147,184	10,289	6,322	64
2014	172,196	11,095	8,311	58
Source: Department of Revenue Services, Annual Report				

Appendix 2 Summary of the Connecticut Real Estate Conveyance Tax and Controlling Interest Transfer Tax		
	Real Estate Conveyance Tax Chapter 223	Controlling Interest Transfer Tax Chapter 228b
Taxable event	Upon the conveyance or transfer of real property	Sale or transfer of more than 50 percent of controlling interest in an entity where entity owns interest in Connecticut real estate
Threshold	Consideration exceeds \$2,000	Real Property present value exceeds \$2,000
Rate structure	<p>State rate:</p> <ul style="list-style-type: none"> • 0.75% Unimproved land and delinquent mortgage • 0.75% Residential properties (apartment houses) other than residential • 0.75% on the value of single family home up to and including \$800,000 and • 1.25% on the consideration in excess of \$800,000; • 1.25% Improved, non-residential <p>Local Rate:</p> <ul style="list-style-type: none"> • 0.25% <p>Selected Localities:</p> <ul style="list-style-type: none"> • Up to 0.25% 	1.11% of actual value of the interest in real property
Exemption	<ul style="list-style-type: none"> • Deeds which the state is prohibited from taxing under US constitution • Deeds made pursuant to mergers • Deeds made by subsidiary corporation to its parent corporation for no consideration except cancellation of stock and transfers where there is no change in beneficial ownership • Any deeds of property located in an entertainment district (approved districts: Bridgeport, New Britain, Stamford, Windham) • Deeds releasing property which was held as security for debt 	<ul style="list-style-type: none"> • Deeds to or by U.S government, Connecticut state or local government • No change in beneficial ownership • Entity possessing interest in property in enterprise zone • Transfer resulting from eminent domain • Releasing property which was held as security for debt • Mortgage deeds • Tax deeds • Deeds to any entity of land held in perpetuity for education, etc or other equivalent passive use

	<ul style="list-style-type: none"> • Conveyance pursuant to decree of the superior court as a result of a foreclosure by sale or of sale in lieu of foreclosure or market sale • Deeds to secure a debt • All transfers between spouses; • Land development rights to agricultural land under farmland preservation program • Employee relocation company or employer re-sales within six months of conveyance 	
Time of payment	Upon registering deed	Within 30 days of transfer
Collection agent	Municipal town clerk	Department of Revenue Services
Number of taxable transactions or transfers	42,291 taxable conveyances	58 transfers
Revenue Collections	\$157,237,245 (2013-14)	\$8,310,899 (2013-14)

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Appendix 3

State and Local Real Estate Transfer Tax Rates as of January 1, 2016

Note: States with constitutional bans are in bold.

Except where noted, state rate and mandated and optional local rates are combined for maximum applicable rates.

State	State Tax Rate	Mandated Local Tax Rate	Optional Local Tax Rate
Alabama	0.10%	—	—
Alaska	—	—	—
Arizona	—	—	—
Arkansas	0.33%	—	—
California	—	—	Counties: 0.11% Charter cities: no limit Other cities: 0.055% ¹
Colorado	0.01%	—	Selected cities and towns: 1%-4% ²
Connecticut	0.75% / 1.25% ³	Municipalities: 0.25%	Targeted investment communities and municipalities with enterprise zone manufacturing plants: ≤ 0.25%
Delaware	2% ⁴	—	Counties or municipalities: ≤ 1.50%
D.C.	1.10% / 1.45% ⁵	—	—
Florida	0.70% ⁶	—	Selected counties: ≤ 0.45% ⁷
Georgia	0.10%	—	—
Hawaii	0.10%-1% / 0.15%-1.25% ⁸	—	—
Idaho	—	—	—
Illinois	0.10%	—	Home rule counties or municipalities: no limit Other counties: 0.05% Chicago: 1.05% ⁹
Indiana	—	—	—
Iowa	0.16%	—	—
Kansas	—	—	—
Kentucky	—	Counties: 0.10%	—
Louisiana	—	—	—
Maine	0.44%	—	—
Maryland	0.50%	—	Code home rule counties: ≤ 0.50% Selected charter and commission counties: 0.50%-1.50% ¹⁰
Massachusetts	0.456% ^{11,12}	—	Nantucket and Dukes Counties: 2% Barnstable County: 0.27%

Michigan	0.75%	Counties: 0.11%	Counties, pop. 2 million and over: $\leq 0.04\%$
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State	State Tax Rate	Mandated Local Tax Rate	Optional Local Tax Rate
Minnesota	0.33%	—	Hennepin and Ramsey counties: 0.01%
Mississippi	—	—	—
Missouri	—	—	—
Montana	—	—	—
Nebraska	0.225%	—	—
Nevada	0.26%	Counties pop. under 700,000: 0.13% pop. 700,000 and over: 0.25%	Selected counties: $\leq 0.02\%$ (LGTA) Counties, pop. under 700,000: $\leq 0.01\%$ (Plant Industry Program)
New Hampshire	1.50% ¹³	—	—
New Jersey	State rate: 0.25% Additional fee: 0.15%, deeds > \$150,000 General purpose fee: 0.18%-0.43%, deeds > \$350,000 Supplemental fee: 0.05%-0.28% Mansion tax: 1%, all deeds > \$1 million	Counties: 0.10%	—
New Mexico	—	—	—
New York	State rate: 0.40% Mansion tax: 1%, residential property \geq \$1 million	—	Selected counties, cities and towns: 0.10%-3% ¹⁴
North Carolina	0.20%	—	Selected counties: 1%
North Dakota	—	—	—
Ohio	—	Counties: 0.10%	Counties: $\leq 0.30\%$
Oklahoma	0.15%	—	—
Oregon	—	—	Washington County: 0.10% ²
Pennsylvania	1%	—	Municipalities and school districts: $\leq 1\%$ (combined) Home rule jurisdictions: no limit
Rhode Island	0.46%	—	Town of New Shoreham: 3% Town of Little Compton: 2% / 4% ¹⁵
South Carolina	0.26%	Counties: 0.11%	Town of Hilton Head Island: 0.25% ²

South Dakota	—	Counties: 0.10%	—
Tennessee	0.37%	—	—
Texas ¹⁶	—	—	—
Utah	—	—	—
Vermont	0.50% / 1.45% ¹⁷	—	—

State	State Tax Rate	Mandated Local Tax Rate	Optional Local Tax Rate
Virginia	Transfer: 0.25% Grantor: 0.10% Congestion Relief fee: 0.15% ¹⁸	—	Cities or counties: 0.0833%
Washington	1.28%	—	Counties and/or cities: 0.25%-1.50%
West Virginia	0.22%	Counties: 0.11%	Counties: ≤ 0.11%
Wisconsin	0.30%	—	—
Wyoming	—	—	—
Source: Adapted from Atkins, et al. 2015			

¹ When imposed, city rate is a credit against county rate for a maximum combined rate of 0.11%.

² Tax established under home rule authority, rather than by state authorization. Taxes existing prior to constitutional ban were grandfathered.

³ Dual rate structure: 0.75% rate is imposed on unimproved land and the first \$800,000 of residential property; 1.25% rate is imposed on non-residential property and residential property in excess of \$800,000.

⁴ State rate is reduced to 1.50% if locally adopted rate exceeds 1% for a maximum state and local combined rate of 3%.

⁵ The 1.10% rate applies only to residential property valued under \$400,000.

⁶ State rate is 0.60% in Miami-Dade County.

⁷ Miami-Dade County adopted the local option at the full rate with an exemption for single-family residential property. The combined county and state rate is 1.05% for non-residential property.

⁸ Rates are graduated according to property value with the higher rate structure applied to non-owner occupied residential properties.

⁹ Chicago rate includes Chicago Transit Authority rate.

¹⁰ Not all counties have adopted the tax. Charter and commission counties require specific state authorization to impose the tax.

¹¹ State rate includes 14% surcharge.

¹² State rate is reduced to 0.342% in Barnstable County for a combined rate of 0.612%.

¹³ A rate of 0.75% is imposed on both buyer and seller.

¹⁴ For each jurisdiction, authority and maximum rate are established by state authorization.

¹⁵ Dual rate structure: 2% rate is imposed on properties between \$150,000 and \$225,000; 4% rate is imposed on properties in excess of \$225,000.

¹⁶ Voters approved a constitutional ban in November 2015, effective January 1, 2016.

¹⁷ Dual rate structure: 0.50% rate is imposed on the first \$100,000 of principal residence; 1.45% rate is imposed on principal residence in excess of \$100,000 and all other property and includes 0.2% Clean Water Fund surcharge.

¹⁸ Congestion Relief rate applies only to the Northern Virginia region.

Appendix 4
Comparison of Connecticut, New York, Massachusetts, and New Jersey Exemptions
For Real Estate Conveyance Tax and Real Estate Transfer Taxes

Y indicates that exemption is provided	Connecticut	New York	Massachusetts	New Jersey
	CSG §12-498	§1405 Tax Law	Gen. Law Ch 64D	NJSA 46:15-10
General				
De minimis	less than \$2,000	less than or equal \$500	does not exceed \$500	less than \$100
Prohibited under Constitution or federal law (i.e. Freddie Mac, Fannie)	Y	Y	Y	Y
Secure a debt or release of property	Y	Y	Y	Y
State or municipality is party	Y	Y	Y	Y
For the Adriaen's Landing or stadium facility	Y			
To a water company -Class I or II (watershed areas and reservoirs)	state only			
Property located in enterprise zone or entertainment district or similar economic development designation	state only	Y		
Bona fide gift	Y	Y	Y	
Conveying a cemetery lot or plot	Y			Y
Made to any nonprofit organization for holding undeveloped open space land	Y			
HARDSHIP				
Tax Deeds or sales	Y	Y		Y
Pursuant to decree of Superior Court or judgment of foreclosure by market sale	Y			
In lieu of foreclosure transferring principal residence	Y*			
Any instrument transferring principal resident where gross prices insufficient to cover mortgage and taxes (short sale)	effective 10/1/2010			
Principal residence of low income disabled or elderly who receive property tax assistance	state only			Y*
Conveying property to trustee for the benefit of debtors creditors	Y			Y
Sale without use or occupancy		Y		
FAMILY TRANSACTIONS				
Between Spouses	Y			Y
Pursuant to court order dissolving marriage	Y			Y
Inherited real estate	Y			Y
Gifts between spouses or from parent to children	Y			Y
personal residence less than \$200,000 consisting of contract to purchase		Y		
CORPORATION TRANSACTIONS				
Deeds of partitions	Y	Y	Y	Y
Court order partitions of joint and common estates	Y			
Deeds mergers of corporations	Y		Y	
Deed made by subsidiary corporation to parent for no consideration	Y			
Between affiliated corporations of 501 (c)	Y			

Mere change of identity no change in beneficial ownership	Y	Y		
Release of property which is security for a deed	Y			
Within 6 months acquired under relocation plan	Y			
Pursuant to federal bankruptcy court		Y		
Controlling Interests	More than 50%	50% or more		
Dissolution of corporation and property conveyed to shareholders			Y	
Long-term leases	Y (except very long leases)		Y (except very long leases)	
*Notes:				
Massachusetts a \$2.28 fee imposed on transferees over \$100 to \$500				
Massachusetts may include additional exemptions				
New Jersey provides partial exemption of total consideration for senior citizen, blind/disabled person				

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Endnotes

¹ Two new forms, called a "Loan Estimate" and a "Closing Disclosure," replaced the HUD-1 Settlement Statement, the Good Faith Estimate, and the Truth-in-Lending disclosure form that were formerly required in mortgage loan closings. These forms list all charges and credits to the borrower and seller in a transaction, including the consideration paid for the property. This information can be used in determining the value of the transferred property.

² The payment of federal Documentary Tax was to be worked out by the grantor (seller) or grantee (buyer). If either party was exempt from paying the tax, the other party would be responsible for it. Some states, including New York, require that if the seller is exempt from the tax, the buyer is responsible for the tax.

³ Although local governments throughout the US pursued taxing the transactions of Freddie Mac and Fannie Mae, multiple federal district courts up held the agencies' position that they were not subject to transfer taxes.

⁴ The Warren Group collects and compiles data on real estate sales and ownership throughout New England, including Connecticut towns. Their data are available on the web at <http://www.thewarrengroup.com>.

⁵ The revenue figures reported by the U.S. Census Bureau while consistent, may both over- and under- report real estate transfer taxes. The revenues reported by the states to the Census Bureau include mortgage recording taxes as well as real estate recording taxes. However, the figure includes only state revenues and does not include local revenues. However, since only ten states impose a mortgage recording tax, it is not likely that the revenue picture is overstate. While not including the local revenues has understated the national revenue attributed to these taxes, it is reasonable to assume that the revenue trend is not distorted.

⁶ These communities include those that were identified for the property tax study. They include Bozrah, Durham, Glastonbury, Guilford, Killingly, Litchfield, Manchester, New Canaan, North Canaan, Plainfield, Torrington, Washington, and Windsor.

⁷ The Suits Index is a measure of tax progressivity by comparing the cumulative share of income to their share of taxes paid. The index ranges from -1 to +1, from most regressive (-1) to most progressive (+1), with zero indicating a proportional tax.

