CONNECTICUT SCHOOL FINANCE PROJECT

Distributing State Aid to Municipalities through a Needs-Capacity Formula

Policy Briefing - March 15, 2019

Executive Summary

The State of Connecticut contains 169 towns with a wide range of wealth and resident need. Currently, the State of Connecticut provides financial aid to towns through a variety of statutory and non-statutory grant programs. The current town aid structure does not sufficiently address the underlying municipal fiscal disparities that are caused by the unequal costs of delivering services and the low revenue raising capacity of towns in Connecticut.

Using a needs-capacity formula to distribute aid to Connecticut's towns is one method of addressing fiscal disparities and creating a more equitable distribution of state aid. A needs-capacity formula allocates funding to municipalities based on their projected costs of providing a common level of government service, and their capacity to raise revenue through local property taxes. The purpose of this policy briefing is to introduce and examine how Connecticut can address municipal fiscal disparities by using a needs-capacity formula to distribute town aid.

Introduction

Connecticut municipalities currently receive funding from the State of Connecticut through a variety of non-education municipal aid grants.[A] In fiscal year 2018, total expenditures on statutory non-education grants equaled approximately $520 million.[1] These non-education municipal aid grants do not effectively take into account the revenue raising capacity of the municipalities or the differing costs they face.[2] Under the current municipal aid system, towns with differing levels of need often receive similar amounts of funding from the State, which does not effectively address the underlying fiscal disparities faced by some municipalities.[3] The inequitable distribution of municipal aid in Connecticut could be rectified with the implementation of a needs-capacity formula that considers a municipality's capacity to raise revenue through property taxes and its costs of delivering services.

In 2015, the Federal Reserve Bank of Boston's New England Public Policy Center produced a report titled, *Measuring Municipal Fiscal Disparities in Connecticut*, at the request of the Connecticut General Assembly's Municipal Opportunities and Regional Efficiencies (MORE) Commission. The Federal Reserve Bank of Boston's report specifically analyzed non-education aid because Connecticut's Education Cost Sharing (ECS) formula for distributing education aid has been examined far more frequently than other forms of municipal aid.[4] In addition to public education, Connecticut municipalities provide a variety of services that include public safety, public works, human services, and general government. The report noted the costs of

[A] The non-education aid grants include: Grants for Municipal Projects, Local Capital Improvement, Mashantucket Pequot and Mohegan Fund Grant, Municipal Revenue Sharing, Municipal Stabilization Grant, Municipal Transition Grant, PILOT: Colleges and Hospitals, PILOT: State Owned Real Property, Adult Education, and Town Aid Road Fund Grant.

these services, and a municipality's capacity to fund them, are not frequently examined.[5]

The sample modeled needs-capacity formula in this policy briefing utilizes the research and underlying model from the Federal Reserve Bank of Boston's report to measure the needs of a municipality and the capacity of the municipality to fund those needs.

Connecticut's Current Town Aid Structure

Connecticut's current town aid structure distributes grants to municipalities through several programs. In FY 2018, the State of Connecticut spent approximately $520 million on a variety of non-education grants.[6] The payment-in-lieu-of-taxes (PILOT), Mashantucket Pequot and Mohegan Fund Grant, and Municipal Revenue Sharing Account were specifically targeted at property tax relief and represented approximately $242 million of non-education grants in FY 2018.[7] The non-education grants distributed to municipalities by the State of Connecticut acknowledge that many municipalities cannot raise as much revenue through property taxes as other municipalities. For example, the PILOT grants for state-owned property and private colleges and hospitals attempt to reimburse municipalities for the lost property tax revenue from these tax-exempt properties.[8] However, the formulas for these grants do not explicitly take a municipality's need into account when calculating the amount of funding they are eligible to receive.[9]

According to the Federal Reserve Bank of Boston, existing municipal aid programs do not substantially reduce fiscal disparities in Connecticut because they do not explicitly have an equalization goal.[10] Most of the present fiscal disparities experienced by Connecticut municipalities are due to stark differences between the revenue raising capacity of municipalities in Connecticut.[11] Table 1 below provides descriptions for the current statutory formula grants provided by the State to municipalities.

Table 1: Current Statutory Formula Grants Provided by the State to Municipalities[12]

Name of Statutory Formula Grant	Summary of Non-Education Statutory Formula Grant	FY 18 Grant Amount	Grant Source
PILOT: State Owned Real Property	The State Owned Real Property PILOT grant provides payments to municipalities for lost property tax revenue due to the presence of state-owned real property, certain real property that is involved in a state lease or long-term financing contract, municipally-owned airports, and certain lands held in trust by the federal government.	$50,296,119	General Fund

Name of Statutory Formula Grant	Summary of Non-Education Statutory Formula Grant	FY 18 Grant Amount	Grant Source
PILOT: Colleges and Hospitals	The Colleges and Hospitals PILOT grant provides payments to municipalities for lost property tax revenue due to exemptions for eligible private colleges as well as general and free-standing chronic disease hospitals.	$98,377,556	General Fund
Mashantucket Pequot and Mohegan Fund Grant	This grant program distributes funds from the Mashantucket Pequot and Mohegan Fund to municipalities through a formula that considers the amount of money municipalities received through the PILOT programs and various other property tax relief efforts.	$57,649,850	General Fund
Town Aid Road Fund Grant	The Town Aid Road Fund distributes funding to municipalities and boroughs for various projects, including the construction and maintenance of public highways, roads, and bridges.	$59,774,845	Bond Funding
Local Capital Improvement Program	Municipalities and boroughs can request reimbursement for local capital improvement projects through this grant program.	$54,946,210	Bond Funding
Grants for Municipal Projects	This program provides grants to municipalities for the construction and maintenance of public highways, roads, and bridges.	$59,151,133	Bond Funding
Adult Education	This grant program reimburses municipalities for expenditures related to adult education, and the formula provides a higher reimbursement rate to school districts with the highest percentages of poor and remedial students.	$18,495,993	General Fund
Municipal Revenue Sharing	This fund distributes grants to municipalities to supplement the grants they receive under other municipal aid programs.	$35,221,814	General Fund
Municipal Stabilization Grant	This program insulates distressed municipalities and Alliance Districts from reductions made to other municipal aid programs.	$54,173,480	General Fund

Name of Statutory Formula Grant	Summary of Non-Education Statutory Formula Grant	FY 18 Grant Amount	Grant Source
Municipal Transition Grant	This program provides property tax relief by allocating grants to municipalities with motor vehicle mill rates above 39 in FY 18 and 45 in FY 19.	$32,722,988	General Fund
Total	**Total Non-Education Aid**	**$520,809,988**	**N/A**

What is a Needs-Capacity Formula and How Can One be Used in Connecticut?

The goal of a needs-capacity formula is to address fiscal disparities between municipalities. A needs-capacity formula achieves this goal by considering a municipality's costs of delivering services and its capacity to raise revenue to pay for those services. High levels of fiscal disparity between municipalities raise two primary concerns. First, it is not equitable for two otherwise-identical households to pay different amounts in taxes to receive the same level of service, simply because the households are located in different municipalities.[13] Second, fiscal disparities place some municipalities at a disadvantage in terms of economic competition because high taxes and a low quantity of public services makes the municipality less appealing to potential residents and businesses.[14]

A needs-capacity formula addresses this goal by distributing aid based on need, calculated as municipal cost in the formula. Reducing fiscal disparities between municipalities will allow fiscally distressed municipalities to provide higher-quality services to the citizens and businesses that rely on them or reduce their mill rates, in recognition of their limited capacity to raise own-source revenue.

The definitions listed in Table 2 below describe the key components of a needs-capacity formula:

Table 2: Key Components of a Needs-Capacity Formula[15]

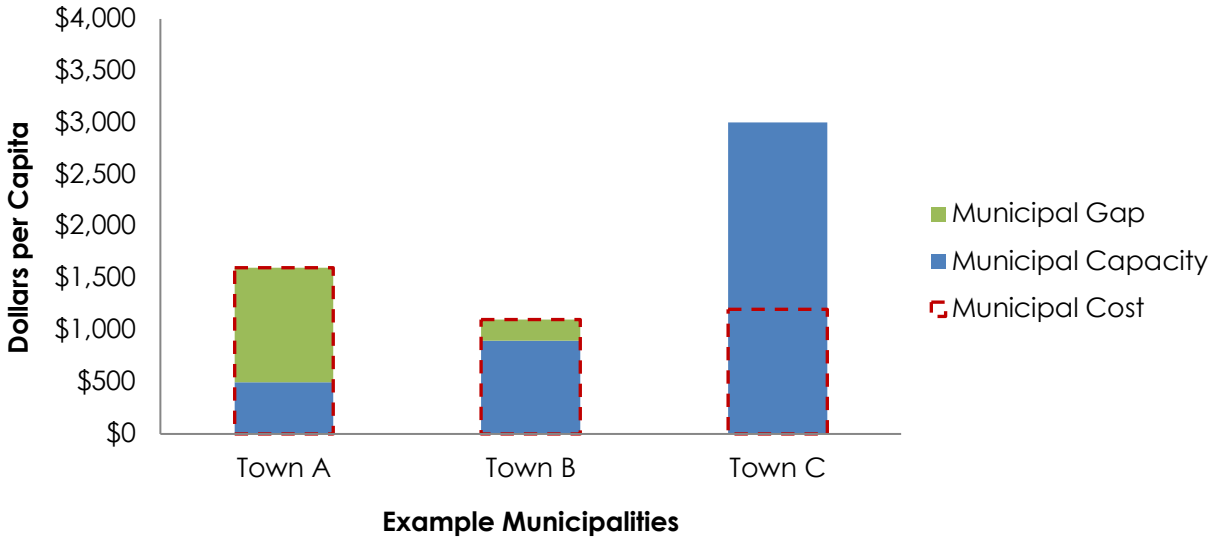
Formula Component	Definition
Municipal Cost	Municipal cost refers to the amount each municipality must spend in order to provide a common quantity and quality of government services given the underlying socioeconomic and physical characteristics of the municipality. It does not reflect actual spending, which is a combination of both the prior factors and the decisions of local governments.
Municipal Capacity	Municipal capacity refers to a municipality's revenue raising ability through its own resources. This measure reflects resources that governments are authorized to tax

Formula Component	Definition
	and not actual revenues raised as municipalities can choose to tax at different rates.
Municipal Gap	The municipal gap is the difference between the municipal capacity and municipal cost. A positive gap indicates a municipality lacks the revenue raising capacity to provide a common level of government service. A larger positive gap indicates a worse fiscal condition. A negative gap indicates a municipality has more than enough revenue raising capacity to fund a common level of government service.

Figure 1 below illustrates the interaction between municipal cost, capacity, and gap through three different hypothetical municipalities. Town A has a higher municipal cost than it has municipal capacity, which means it has a municipal gap (shaded in green). Town B has a smaller municipal gap than Town A because it has a lower municipal cost (outlined in red) coupled with a higher municipal capacity. Town C at the right side of the graph does not have a municipal gap because its municipal capacity exceeds its municipal cost.

Figure 1[16]

Illustration of Hypothetical Municipal Cost, Capacity, and Gap



A needs-capacity formula provides resources to municipalities based on their costs to deliver services and their capacity to raise revenue locally. This means the formula distributes more aid to municipalities that face high costs for delivering services and have low capacity to raise local revenue. The sample needs-capacity formula

modeled in this policy briefing measures the need of municipalities by calculating the municipal gaps, and allocates funding by multiplying the municipal gap per capita by the population of the municipality.[17] Only municipalities with positive gaps receive funding. As municipalities with negative municipal gaps have sufficient revenue raising capacity and low enough costs to afford the provision of a common level of government services, they would not receive any funding through the needs-capacity formula.

Factors Noted in the Literature that Impact Municipal Cost and Capacity

The Federal Reserve Bank of Boston's 2015 report examined the factors that influence municipal fiscal disparities, which need to be, and have been, accounted for in the sample needs-capacity model outlined in this policy briefing. Prior research on municipal fiscal disparities suggests there are several factors that influence municipal cost and capacity. The factors noted in the literature, examples of their impacts on municipalities, and the variables that are included in the sample needs-capacity model are detailed in Tables 3 and 4 below. For more information on the data used for these variables and the implementation of the formula, please see Appendix B.

Table 3: Municipal Cost[18,B,C]

Factor	Example	Variables in Needs-Capacity Model
Unemployment	Municipalities experiencing higher unemployment rates also tend to experience higher crime rates, which increases the cost of police protection.	Unemployment Rate
Population Density	High population density means housing is in tighter proximity, which increases the fire hazard and the costs of fire protection.	Population Density (000's per Square Mile)
Private-Sector Wages	Municipalities with high private sector wages tend to have to pay more to attract and retain municipal employees.	Private-Sector Wage Index
Miles of Public Roads	Holding all else equal, a town with more miles of roads would	Town Maintenance Road Mileage

[B] For additional detail on Connecticut towns' municipal cost, capacity, and gaps, please see the Federal Reserve Bank of Boston's 2015 report.
Zhao, B., & Weiner, J. (2015). *Measuring Municipal Fiscal Disparities in Connecticut* (Research Report 15-1). Boston, MA: Federal Reserve Bank of Boston, New England Public Policy Center. Available from https://www.bostonfed.org/publications/new-england-public-policy-center-research-report/2015/measuring-municipal-fiscal-disparities-in-connecticut.aspx.
[C] For additional detail on the methodology and research of the needs-capacity model, please see Zhao's working paper.
Zhao, B. (2015). *From urban core to wealthy towns: Nonschool fiscal disparities across Connecticut municipalities* (Working papers 15-14). Boston, MA: Federal Reserve Bank of Boston. Retrieved from https://www.econstor.eu/bitstream/10419/130692/1/843872918.pdf.

Factor	Example	Variables in Needs-Capacity Model
	have to spend more to maintain its roads than other towns.	
Employment	This factor represents cost pressures generated by commuters and employers who do not reside in the municipality in which they work, but consume public services (such as police and fire protection) while they are there.	Total Jobs per Capita

Table 4: Municipal Capacity[19]

Factor	Example	Variable in Needs-Capacity Model
Value of Taxable Property	Municipalities with a greater quantity of taxable property and higher-valued property will have higher revenue raising capacity.	Equalized Net Grand List (ENGL). The ENGL is a full-value estimate of all taxable property within all cities and towns within Connecticut, equalized across assessment cycles.[20]

Sample Implementation of a Needs-Capacity Formula

Table 5 below demonstrates the state aid some example municipalities receive currently from the State, and the aid they would be eligible to receive through one possible implementation of a needs-capacity formula as detailed by the New England Public Policy Center. In this analysis, a positive municipal gap indicates the town does not have sufficient revenue raising capacity to pay for a common level of government service.[21] A negative gap indicates a town has more than enough revenue raising capacity to fund a common level of service.[22] A full listing of these figures for all towns can be found in Appendix A of this policy briefing.

Table 5: State Aid for Example Municipalities[23]

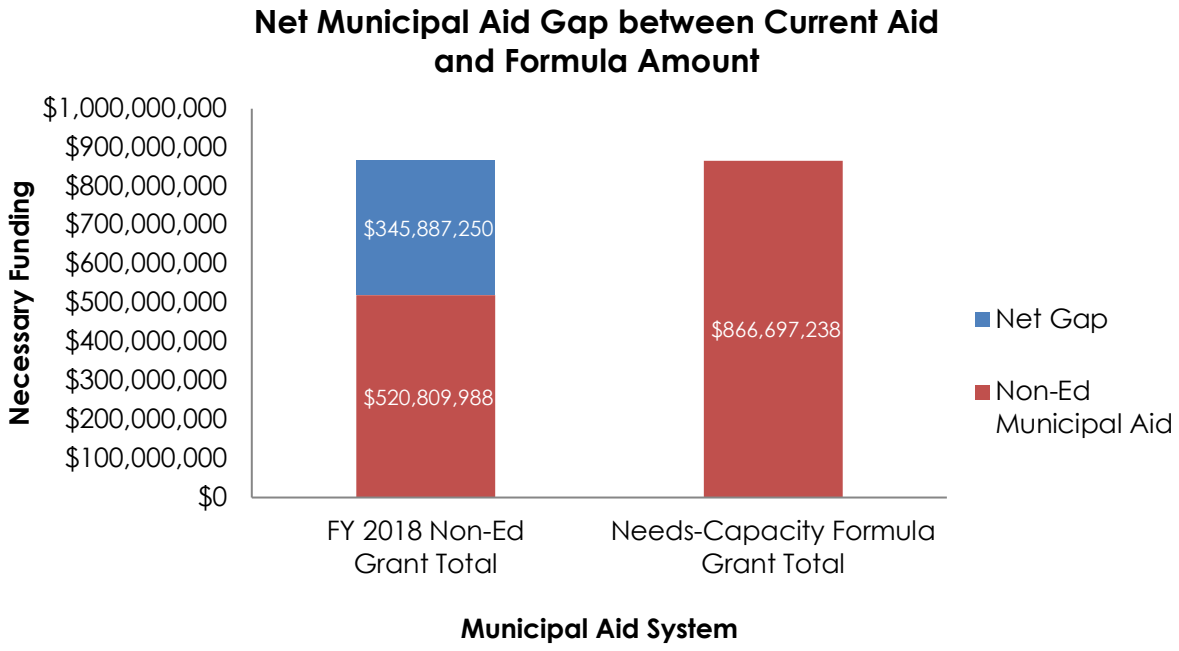
Municipal Gap = Municipal Cost – Municipal Capacity

Grant from Needs Capacity Model = Municipal Gap * Population

Town Name	Municipal Cost per Capita	Municipal Capacity per Capita	Municipal Gap per Capita	Current Non-Ed Aid Total	Needs-Capacity Model Aid Total	Projected Change in Grant Amount
Hartford	$1,511	$516	$995	$72,979,317	$122,807,437	$49,828,120
Glastonbury	$1,112	$1,554	-$442	$1,404,473	-	-$1,404,473
New Britain	$1,304	$454	$850	$15,148,476	$61,796,127	$46,847,651
Westport	$1,215	$4,998	-$3,783	$1,083,216	-	-$1,083,216

If a needs-capacity formula were enacted in Connecticut, one possible method for funding this formula could be to aggregate existing non-education aid funding into the formula. Fully funding the needs-capacity formula under this sample implementation would require approximately $867 million, which is a net increase of approximately $346 million over the State's current non-education municipal aid expenditure. If the needs-capacity formula was funded at the same level as previous non-education aid, then the amount of money each town would receive under the needs-capacity formula would decrease by about 40 percent, assuming each municipality's aid was reduced by an equal percentage. Figure 2 below shows the difference by illustrating the net gap between the current grant levels and the need-based funding levels through the needs-capacity formula.

Figure 2[24]

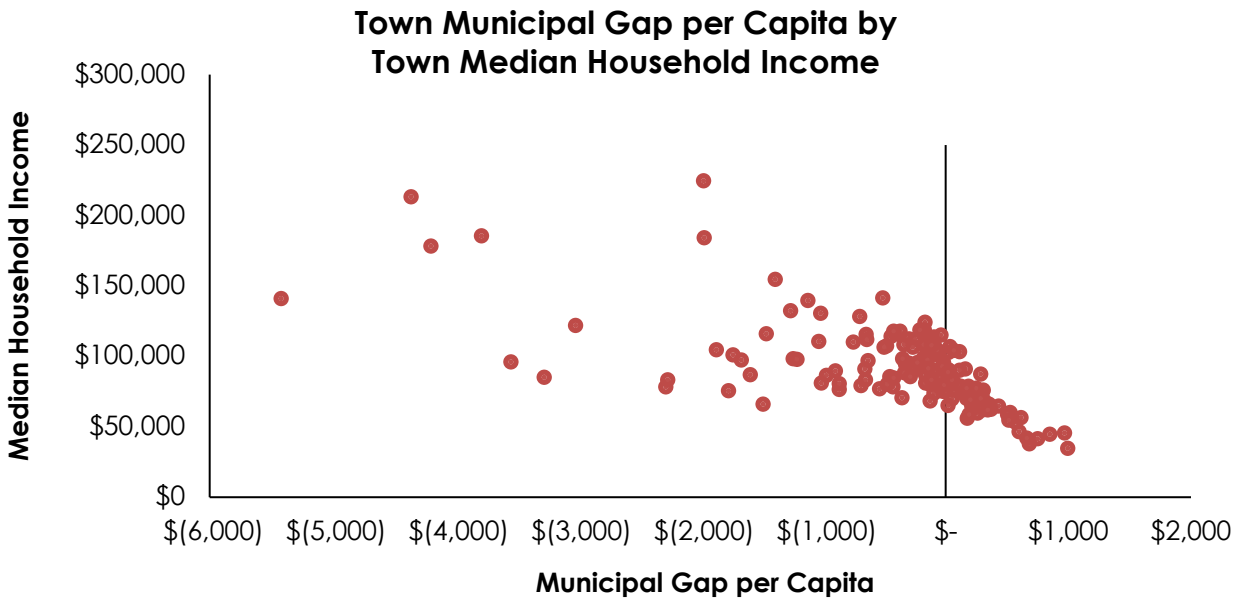


Under the full sample implementation of the needs-capacity formula, 61 municipalities would receive municipal aid grants. Of the municipalities receiving grants, 45 would receive an increased grant amount over prior aid levels and 16 would receive less funding than current grant levels. In total, 108 towns would not receive any aid.

This shift in aid reflects the equity considerations in the needs-capacity formula as the towns with the greatest levels of fiscal disparity receive a greater increase in funding, while towns with the capacity to pay receive less funding. For town-by-town estimated grant amounts, please see Appendix A.

Figure 3 below demonstrates the equity considerations of the needs-capacity formula. Each red point on this graph represents a town. Generally, towns with the lowest median household incomes have the largest municipal gaps per capita.

Figure 3[25]



Additional Considerations

There are several additional items to comprehend when considering the implementation of a needs-capacity municipal aid formula. First, fully implementing this sample formula is projected to require approximately $867 million, approximately a 60 percent increase over what the State of Connecticut is currently spending on non-education municipal aid.[26] Additionally, the needs-capacity formula would aggregate all town aid, which eliminates the specificity of the other grant programs that provide aid for their specific criteria. For example, targeted property tax relief from the PILOT programs offered by the current set of PILOT grants. However, the needs-capacity

formula heavily considers the value of taxable property, so the municipalities experiencing the worst fiscal disparities include those with a meaningful amount of non-taxable property, who will benefit from the needs-capacity formula.[27]

Connecticut's current system of town aid does not fully consider equity because many of the municipalities that currently receive aid have the revenue capacity to provide a common level of government service, and the aid formulas currently used do not explicitly account for municipal wealth or resident need. A needs-capacity formula would go beyond the current municipal aid system in terms of distributing funding equitably.

Finally, a further consideration of the formula is its use of unemployment rate and a private-sector wage index for calculating municipal cost.[28] If Connecticut experienced a recession, municipal costs would likely increase across many municipalities, resulting in a higher calculated grant amount due to the increase in need. This higher projected grant amount would be the responsibility of the State, even as an economic downturn would simultaneously affect the finances of the State.

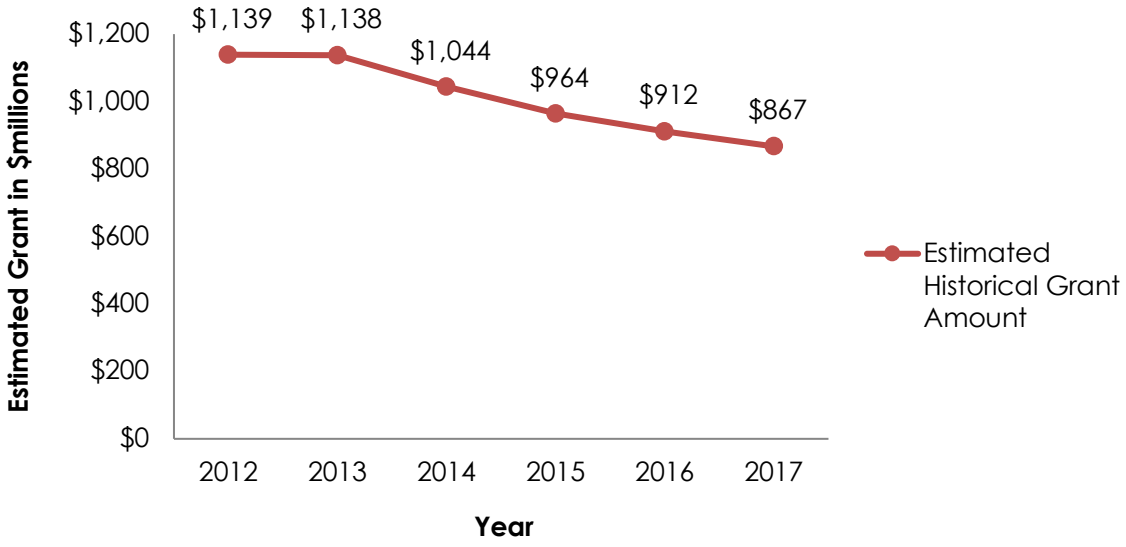
A historical sensitivity test of the needs-capacity model was also conducted to examine the impacts of the model's factors over time. In this analysis, the needs-capacity formula was run with each year's data. The analysis showed the fully-funded grant totals for the needs-capacity formula decreased over time. These findings support the consideration of the needs-capacity model's link to the economy because the variables in the model are responsive to the economy's recovery from the recession and growth over time.[29]

According to Connecticut's Office of Policy and Management (OPM), despite Connecticut's slow recovery from the Great Recession, the state's economy generally experienced growth and improvement in Gross State Product and Employment figures from 2012-2017.[30,D] Higher employment reduces the costs of unemployment in the needs-capacity model, and increases in Gross State Product can be linked to increased state revenue through increases in the purchase of taxable property.[31] Figure 4 below shows the grant totals for the fully funded needs-capacity formula over time using historical data.

[D] The analysis of Connecticut's economic health conducted by OPM examined a multitude of measures. For additional details please see the report.
State of Connecticut, Office of Policy and Management. (2018). *FY 2019 Midterm Economic Report of the Governor*. Hartford, CT: Author. Retrieved from http://www.ct.gov/opm/lib/opm/budget/2019midterm/EconomicReportoftheGovernorFY2019Midterm.pdf .

Figure 4[32]

6-Year Historical Estimates of Needs-Capacity Formula



Appendix A: Town Runs

Table 6 below contains the town-by-town grant amounts under different funding mechanisms. Included in this table is the non-education aid each municipality received in FY 2018, the estimated grant amount for each municipality through the needs-capacity formula, and the estimated grant for each municipality under the needs-capacity formula if the formula were funded at the current spending level. The municipal gap as calculated in the needs-capacity model is included in this table as it's an indicator for fiscal disparities and provides context for the grant amounts shown.[33] A positive municipal gap indicates a town does not have sufficient revenue raising capacity to fund a common level of government service. A negative municipal gap indicates a town has more than enough revenue raising capacity to fund a common level of government service.

Table 6: Town-by-Town Grant Amounts Under Different Funding Mechanisms[34]

Column Number	*1*	*2*	*3*	*4*	*5*	*6*
Municipality	FY 2018 Non-Education Aid	Municipal Gap per Capita	Needs-Capacity Model Funded at Current Level	Needs-Capacity Modeled Total Grant	Col. 3 – Col. 1	Col. 4 – Col. 1
Andover	$286,520	$27	$52,724	$87,740	-$233,796	-$198,780
Ansonia	$1,178,979	$600	$6,782,080	$11,286,285	$5,603,101	$10,107,306
Ashford	$449,432	$173	$440,030	$732,269	-$9,402	$282,837
Avon	$911,402	($703)	-	-	-$911,402	-$911,402
Barkhamsted	$321,951	($139)	-	-	-$321,951	-$321,951
Beacon Falls	$394,804	$23	$85,354	$142,041	-$309,450	-$252,763
Berlin	$1,880,025	($298)	-	-	-$1,880,025	-$1,880,025
Bethany	$400,879	($298)	-	-	-$400,879	-$400,879
Bethel	$994,360	($177)	-	-	-$994,360	-$994,360
Bethlehem	$294,650	($198)	-	-	-$294,650	-$294,650
Bloomfield	$2,851,828	($21)	-	-	-$2,851,828	-$2,851,828
Bolton	$346,348	($66)	-	-	-$346,348	-$346,348
Bozrah	$392,914	($36)	-	-	-$392,914	-$392,914
Branford	$1,331,642	($540)	-	-	-$1,331,642	-$1,331,642
Bridgeport	$34,708,653	$967	$85,154,819	$141,708,969	$50,446,166	$107,000,316
Bridgewater	$230,755	($1,867)	-	-	-$230,755	-$230,755
Bristol	$5,683,216	$351	$12,700,365	$21,135,100	$7,017,149	$15,451,884
Brookfield	$744,842	($651)	-	-	-$744,842	-$744,842
Brooklyn	$814,005	$184	$906,586	$1,508,680	$92,581	$694,675

Column Number	1	2	3	4	5	6
Municipality	FY 2018 Non-Education Aid	Municipal Gap per Capita	Needs-Capacity Model Funded at Current Level	Needs-Capacity Modeled Total Grant	Col. 3 – Col. 1	Col. 4 – Col. 1
Burlington	$469,043	($167)	-	-	-$469,043	-$469,043
Canaan	$289,639	($690)	-	-	-$289,639	-$289,639
Canterbury	$405,744	$162	$494,070	$822,199	$88,326	$416,455
Canton	$472,958	($319)	-	-	-$472,958	-$472,958
Chaplin	$393,917	$189	$254,172	$422,977	-$139,745	$29,060
Cheshire	$5,317,267	($123)	-	-	-$5,317,267	-$5,317,267
Chester	$347,884	($283)	-	-	-$347,884	-$347,884
Clinton	$739,174	($431)	-	-	-$739,174	-$739,174
Colchester	$903,128	$114	$1,101,734	$1,833,432	$198,606	$930,304
*Colebrook	$258,680	($292)	-	-	-$258,680	-$258,680
Columbia	$345,672	($105)	-	-	-$345,672	-$345,672
Cornwall	$294,871	($2,281)	-	-	-$294,871	-$294,871
Coventry	$626,633	$22	$163,936	$272,812	-$462,697	-$353,821
Cromwell	$609,702	($105)	-	-	-$609,702	-$609,702
Danbury	$9,570,073	$50	$2,561,030	$4,261,895	-$7,009,043	-$5,308,178
Darien	$555,564	($4,359)	-	-	-$555,564	-$555,564
Deep River	$392,986	($355)	-	-	-$392,986	-$392,986
Derby	$1,890,787	$524	$3,961,015	$6,591,657	$2,070,228	$4,700,870
Durham	$518,037	($174)	-	-	-$518,037	-$518,037
East Granby	$827,946	($332)	-	-	-$827,946	-$827,946
East Haddam	$534,410	($121)	-	-	-$534,410	-$534,410
East Hampton	$664,662	($70)	-	-	-$664,662	-$664,662
East Hartford	$10,068,044	$565	$17,098,097	$28,453,513	$7,030,053	$18,385,469
East Haven	$1,906,639	$217	$3,754,391	$6,247,808	$1,847,752	$4,341,169
East Lyme	$1,658,087	($457)	-	-	-$1,658,087	-$1,658,087
East Windsor	$913,981	$82	$564,174	$938,860	-$349,807	$24,879
Eastford	$284,369	($15)	-	-	-$284,369	-$284,369
Easton	$376,161	($1,123)	-	-	-$376,161	-$376,161
Ellington	$887,594	$14	$132,490	$220,481	-$755,104	-$667,113
Enfield	$4,312,490	$299	$8,022,720	$13,350,875	$3,710,230	$9,038,385
Essex	$375,158	($898)	-	-	-$375,158	-$375,158

Column Number	1	2	3	4	5	6
Municipality	FY 2018 Non-Education Aid	Municipal Gap per Capita	Needs-Capacity Model Funded at Current Level	Needs-Capacity Modeled Total Grant	Col. 3 – Col. 1	Col. 4 – Col. 1
Fairfield	$2,925,608	($1,019)	-	-	-$2,925,608	-$2,925,608
Farmington	$3,970,826	($632)	-	-	-$3,970,826	-$3,970,826
Franklin	$208,283	($323)	-	-	-$208,283	-$208,283
Glastonbury	$1,404,473	($442)	-	-	-$1,404,473	-$1,404,473
Goshen	$368,409	($1,241)	-	-	-$368,409	-$368,409
Granby	$532,334	($95)	-	-	-$532,334	-$532,334
Greenwich	$1,516,790	($5,417)	-	-	-$1,516,790	-$1,516,790
Griswold	$826,835	$300	$2,107,638	$3,507,390	$1,280,803	$2,680,555
Groton	$4,365,344	$20	$459,261	$764,271	-$3,906,083	-$3,601,073
Guilford	$858,506	($750)	-	-	-$858,506	-$858,506
Haddam	$438,921	($342)	-	-	-$438,921	-$438,921
Hamden	$8,961,719	$305	$11,219,223	$18,670,283	$2,257,504	$9,708,564
Hampton	$271,127	$65	$71,695	$119,309	-$199,432	-$151,818
Hartford	$72,979,317	$995	$73,796,635	$122,807,437	$817,318	$49,828,120
Hartland	$266,527	($156)	-	-	-$266,527	-$266,527
Harwinton	$362,087	($160)	-	-	-$362,087	-$362,087
Hebron	$452,001	$35	$201,053	$334,579	-$250,948	-$117,422
Kent	$396,796	($1,491)	-	-	-$396,796	-$396,796
Killingly	$1,892,983	$175	$1,800,981	$2,997,072	-$92,002	$1,104,089
Killingworth	$417,983	($409)	-	-	-$417,983	-$417,983
Lebanon	$572,284	($15)	-	-	-$572,284	-$572,284
Ledyard	$2,498,377	$111	$987,237	$1,642,893	-$1,511,140	-$855,484
Lisbon	$295,000	($36)	-	-	-$295,000	-$295,000
Litchfield	$581,196	($475)	-	-	-$581,196	-$581,196
Lyme	$235,543	($1,591)	-	-	-$235,543	-$235,543
Madison	$993,510	($1,033)	-	-	-$993,510	-$993,510
Manchester	$5,990,854	$312	$10,855,128	$18,064,381	$4,864,274	$12,073,527
Mansfield	$10,225,833	$523	$8,147,232	$13,558,080	-$2,078,601	$3,332,247
Marlborough	$349,274	($93)	-	-	-$349,274	-$349,274
Meriden	$6,305,902	$504	$18,141,944	$30,190,612	$11,836,042	$23,884,710
Middlebury	$451,139	($482)	-	-	-$451,139	-$451,139
Middlefield	$526,615	($132)	-	-	-$526,615	-$526,615

Column Number	1	2	3	4	5	6
Municipality	FY 2018 Non-Education Aid	Municipal Gap per Capita	Needs-Capacity Model Funded at Current Level	Needs-Capacity Modeled Total Grant	Col. 3 – Col. 1	Col. 4 – Col. 1
Middletown	$12,822,051	$211	$5,899,385	$9,817,364	-$6,922,666	-$3,004,687
Milford	$4,381,433	($335)	-	-	-$4,381,433	-$4,381,433
Monroe	$923,936	($254)	-	-	-$923,936	-$923,936
Montville	$4,071,409	$233	$2,685,620	$4,469,230	-$1,385,789	$397,821
Morris	$232,677	($658)	-	-	-$232,677	-$232,677
Naugatuck	$3,089,525	$431	$8,156,553	$13,573,591	$5,067,028	$10,484,066
New Britain	$15,148,476	$850	$37,134,121	$61,796,127	$21,985,645	$46,647,651
New Canaan	$560,167	($4,198)	-	-	-$560,167	-$560,167
New Fairfield	$560,456	($501)	-	-	-$560,456	-$560,456
New Hartford	$546,080	($152)	-	-	-$546,080	-$546,080
New Haven	$73,646,007	$684	$53,848,678	$89,611,378	-$19,797,329	$15,965,371
New London	$10,197,825	$682	$11,087,450	$18,450,995	$889,625	$8,253,170
New Milford	$1,850,089	($286)	-	-	-$1,850,089	-$1,850,089
Newington	$3,608,707	$69	$1,261,317	$2,098,999	-$2,347,390	-$1,509,708
Newtown	$2,716,621	($373)	-	-	-$2,716,621	-$2,716,621
Norfolk	$371,788	($867)	-	-	-$371,788	-$371,788
North Branford	$907,279	($47)	-	-	-$907,279	-$907,279
North Canaan	$628,793	($94)	-	-	-$628,793	-$628,793
North Haven	$2,635,505	($352)	-	-	-$2,635,505	-$2,635,505
North Stonington	$1,179,501	($165)	-	-	-$1,179,501	-$1,179,501
Norwalk	$7,095,048	($654)	-	-	-$7,095,048	-$7,095,048
Norwich	$5,479,340	$514	$12,189,937	$20,285,680	$6,710,597	$14,806,340
Old Lyme	$337,825	($1,666)	-	-	-$337,825	-$337,825
Old Saybrook	$435,244	($1,769)	-	-	-$435,244	-$435,244
Orange	$749,270	($642)	-	-	-$749,270	-$749,270
Oxford	$674,132	($269)	-	-	-$674,132	-$674,132
Plainfield	$1,249,041	$258	$2,341,195	$3,896,061	$1,092,154	$2,647,020
Plainville	$1,332,665	$230	$2,446,383	$4,071,108	$1,113,718	$2,738,443
Plymouth	$1,238,146	$298	$2,096,528	$3,488,901	$858,382	$2,250,755
Pomfret	$405,673	$19	$48,725	$81,084	-$356,948	-$324,589
Portland	$529,761	($89)	-	-	-$529,761	-$529,761

Column Number	1	2	3	4	5	6
Municipality	FY 2018 Non-Education Aid	Municipal Gap per Capita	Needs-Capacity Model Funded at Current Level	Needs-Capacity Modeled Total Grant	Col. 3 – Col. 1	Col. 4 – Col. 1
Preston	$1,427,457	($3)	-	-	-$1,427,457	-$1,427,457
Prospect	$504,880	($72)	-	-	-$504,880	-$504,880
Putnam	$867,549	$257	$1,444,600	$2,404,006	$577,051	$1,536,457
Redding	$527,646	($1,265)	-	-	-$527,646	-$527,646
Ridgefield	$1,384,867	($1,391)	-	-	-$1,384,867	-$1,384,867
Rocky Hill	$1,851,881	($165)	-	-	-$1,851,881	-$1,851,881
Roxbury	$405,591	($3,015)	-	-	-$405,591	-$405,591
Salem	$350,311	($98)	-	-	-$350,311	-$350,311
Salisbury	$373,799	($3,272)	-	-	-$373,799	-$373,799
Scotland	$239,924	$287	$289,335	$481,492	$49,411	$241,568
Seymour	$1,003,776	$248	$2,467,021	$4,105,452	$1,463,245	$3,101,676
Sharon	$455,882	($2,265)	-	-	-$455,882	-$455,882
Shelton	$1,800,770	($232)	-	-	-$1,800,770	-$1,800,770
Sherman	$262,938	($1,464)	-	-	-$262,938	-$262,938
Simsbury	$975,202	($213)	-	-	-$975,202	-$975,202
Somers	$3,338,918	$64	$428,440	$712,981	-$2,910,478	-$2,625,937
South Windsor	$2,215,173	($179)	-	-	-$2,215,173	-$2,215,173
Southbury	$939,602	($258)	-	-	-$939,602	-$939,602
Southington	$2,235,556	($26)	-	-	-$2,235,556	-$2,235,556
Sprague	$706,907	$302	$528,165	$878,937	-$178,742	$172,030
Stafford	$1,399,521	$285	$2,045,940	$3,404,717	$646,419	$2,005,196
Stamford	$8,658,010	($972)	-	-	-$8,658,010	-$8,658,010
Sterling	$384,438	$248	$556,965	$926,864	$172,527	$542,426
Stonington	$638,643	($869)	-	-	-$638,643	-$638,643
Stratford	$5,330,222	$151	$4,751,137	$7,906,525	-$579,085	$2,576,303
Suffield	$5,679,998	($118)	-	-	-$5,679,998	-$5,679,998
Thomaston	$874,327	$200	$915,593	$1,523,668	$41,266	$649,341
Thompson	$601,050	$122	$681,199	$1,133,606	$80,149	$532,556
Tolland	$728,677	($40)	-	-	-$728,677	-$728,677
Torrington	$3,201,998	$368	$7,644,208	$12,720,981	$4,442,210	$9,518,983
Trumbull	$1,372,847	($425)	-	-	-$1,372,847	-$1,372,847

Column Number	1	2	3	4	5	6
Municipality	FY 2018 Non-Education Aid	Municipal Gap per Capita	Needs-Capacity Model Funded at Current Level	Needs-Capacity Modeled Total Grant	Col. 3 – Col. 1	Col. 4 – Col. 1
Union	$189,047	($229)	-	-	-$189,047	-$189,047
Vernon	$2,010,594	$345	$6,079,001	$10,116,269	$4,068,407	$8,105,675
Voluntown	$439,494	$46	$71,045	$118,228	-$368,449	-$321,266
Wallingford	$3,747,956	($54)	-	-	-$3,747,956	-$3,747,956
*Warren	$231,765	($1,734)	-	-	-$231,765	-$231,765
Washington	$439,431	($3,544)	-	-	-$439,431	-$439,431
Waterbury	$33,347,335	$747	$48,781,035	$81,178,143	$15,433,700	$47,830,808
Waterford	$774,266	($1,016)	-	-	-$774,266	-$774,266
Watertown	$1,455,862	($13)	-	-	-$1,455,862	-$1,455,862
West Hartford	$3,723,154	($148)	-	-	-$3,723,154	-$3,723,154
West Haven	$8,672,701	$616	$20,287,116	$33,760,465	$11,614,415	$25,087,764
Westbrook	$579,213	($1,213)	-	-	-$579,213	-$579,213
Weston	$443,718	($1,973)	-	-	-$443,718	-$443,718
Westport	$1,083,216	($3,783)	-	-	-$1,083,216	-$1,083,216
Wethersfield	$1,577,242	$50	$793,295	$1,320,149	-$783,947	-$257,093
Willington	$461,560	$171	$608,406	$1,012,468	$146,846	$550,908
Wilton	$954,432	($1,968)	-	-	-$954,432	-$954,432
Winchester	$992,088	$190	$1,225,892	$2,040,048	$233,804	$1,047,960
Windham	$7,431,838	$659	$9,777,475	$16,271,022	$2,345,637	$8,839,184
Windsor	$2,454,795	($143)	-	-	-$2,454,795	-$2,454,795
Windsor Locks	$2,926,942	($125)	-	-	-$2,926,942	-$2,926,942
Wolcott	$1,032,824	$22	$220,412	$366,795	-$812,412	-$666,029
Woodbridge	$444,914	($513)	-	-	-$444,914	-$444,914
Woodbury	$541,504	($426)	-	-	-$541,504	-$541,504
Woodstock	$640,366	($117)	-	-	-$640,366	-$640,366
Total	**$520,809,988**	**N/A**	**$520,809,988**	**$866,697,238**	**$(0)**	**$345,887,250**

**Note: The private-sector wage index and total jobs data for these towns was suppressed. Please see Appendix B for more information.*

Appendix B: Description of Needs-Capacity Model and Changes Made by the Connecticut School Finance Project[E]

The needs-capacity town aid model used in this policy briefing is based on the 2015 report produced by the Federal Reserve Bank of Boston's New England Public Policy Center. The model uses the independent variables found in the report and their coefficients, and updates the data to find a more current municipal gap figure.

To find municipal capacity, the same mill rate was used as in the Federal Reserve Bank of Boston's report but with updated Equalized Net Grand List per Capita figures for FY 2017. Population figures, along with unemployment rate and population density, were updated using 2017 data from the Municipal Fiscal Indicators published by the OPM. Originally, the unemployment and population density were from the American Community Survey (ACS) five-year estimates produced by the U.S. Census Bureau. The town road mileage was updated using the same source as in the report (Connecticut Department of Transportation Public Road Mileage) but with 2017 data. The private sector wage index was updated using 2017 Connecticut Department of Labor data, and with the most recent Labor Market Area definitions.

In the event of data suppression for municipal wages for the private-sector wage index, the value for the private sector for the corresponding labor market area was used. Total jobs per capita for each municipality were updated with 2017 data. In the event of data suppression for total jobs per capita, the value from the original Federal Reserve Bank of Boston report was used.

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