



# The Fiscal Impact of Potential Local-option Taxes in Massachusetts

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# Municipal Fiscal Stress

- MA municipalities have experienced difficulties raising adequate revenues to meet expenditure needs.
- Seek additional local-option taxes
  - New local-option meals tax: 0.75% tax rate
  - Raise the maximum local-option hotel tax rate: 4%→6%
  - Some discussions on local-option sales, income, and payroll taxes



# Fiscal Impact of Local-option Taxes

- To what extent would new local-option taxes boost the revenue-raising capacity of municipalities?
- What types of communities would benefit most from new local-option taxes?
- Would adding local-option taxes alleviate existing fiscal disparities?



# Research Approach

- Use “representative tax system” (RTS) approach to measure revenue-raising capacity from local-option taxes
  - “Representative” tax rates are imposed to authorized tax bases of local government.
    - Local-option income and payroll tax rate: 1%
    - Local-option sales and meals tax rate: 0.75%
  - Measured capacity is proportional only to tax base.



# Data

- Sales and meals tax base:
  - FY08 state sales and meals tax collection
  - 2002 Economic Census of Retail Trade to estimate the distribution
- Income tax base:
  - FY06 net Massachusetts AGI
- Payroll tax base:
  - 2007 wage data



# Adjustments for Behavioral Response

- Sales tax
  - Price effect: 1.3-1.9% decrease
  - Border effect: sales in border towns reduced by 2.3%
- Meals tax:
  - Price effect: 1.3% decrease in tax base
  - No border effect
- Income tax:
  - 5.5% decrease in income tax base
- Payroll tax:
  - No adjustment



# Local-option taxes have revenue potential, but high dispersion.

**Table 1. Summary Statistics of Local-Option Tax Capacities across 351 Massachusetts Cities and Towns (per capita, in 2008 dollars)**

	Average	80% / 20%
Local Sales Tax Capacity	93	2.2
Local Meals Tax Capacity	15	2.5
Local Income Tax Capacity	335	2.0
Local Payroll Tax Capacity	283	3.8
Existing Local Revenue Capacity	1,610	2.1

Note: Figures are weighted by population. 80% / 20% = the ratio of the 80th percentile to the 20th percentile.



# Local-option tax capacities tend to cluster.

**Table 2. Correlations between New Local-Option Taxes**

	Local Sales Tax Capacity		Local Meals Tax Capacity		Local Income Tax Capacity		Local Payroll Tax Capacity	
Local Sales Tax Capacity	1.00							
Local Meals Tax Capacity	0.48	***	1.00					
Local Income Tax Capacity	-0.01		0.02		1.00			
Local Payroll Tax Capacity	0.23	***	0.63	***	0.16	***	1.00	

Note: Figures are weighted by population.

\* Statistically significant at 10%

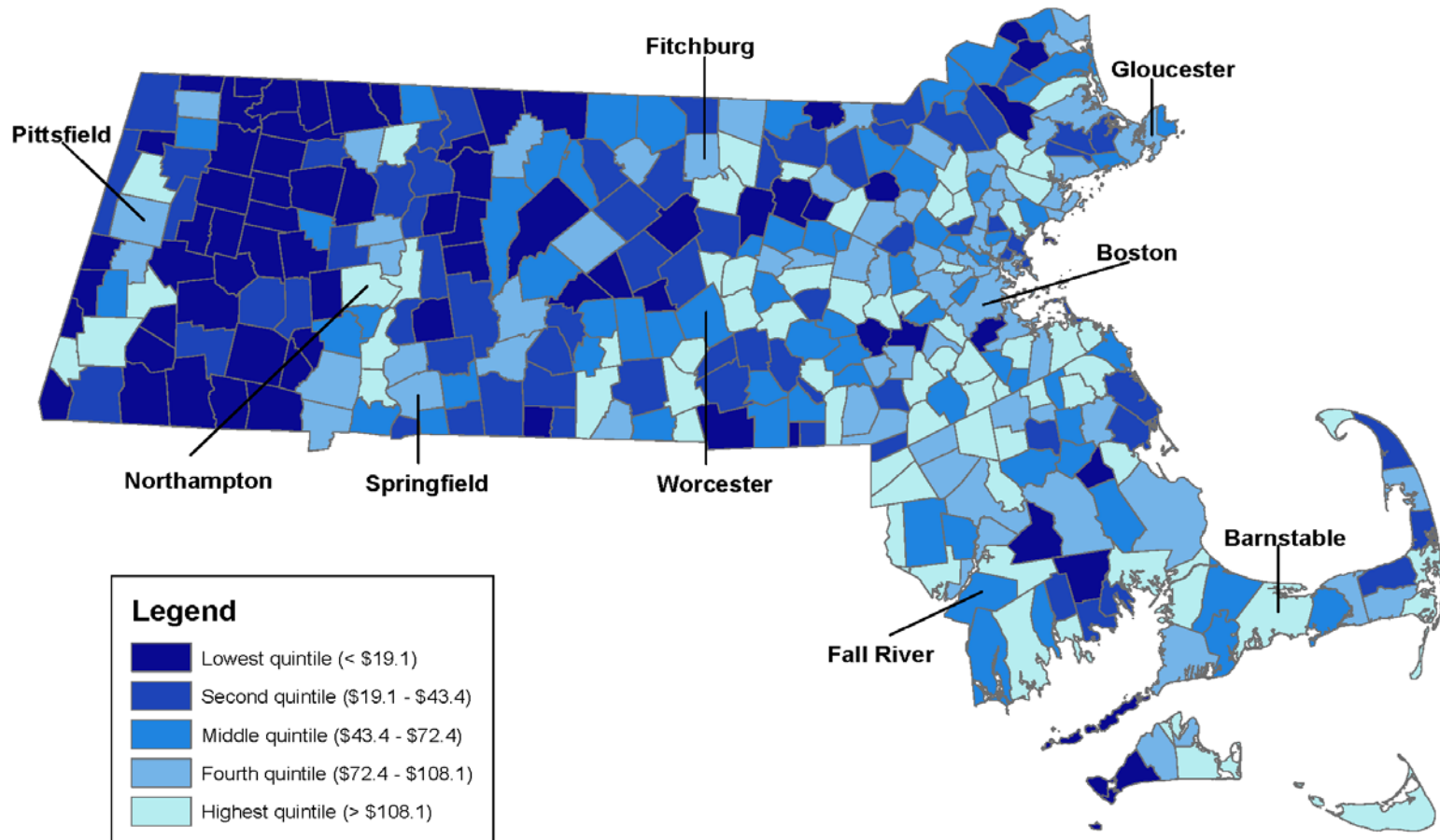
\*\* Statistically significant at 5%

\*\*\* Statistically significant at 1%



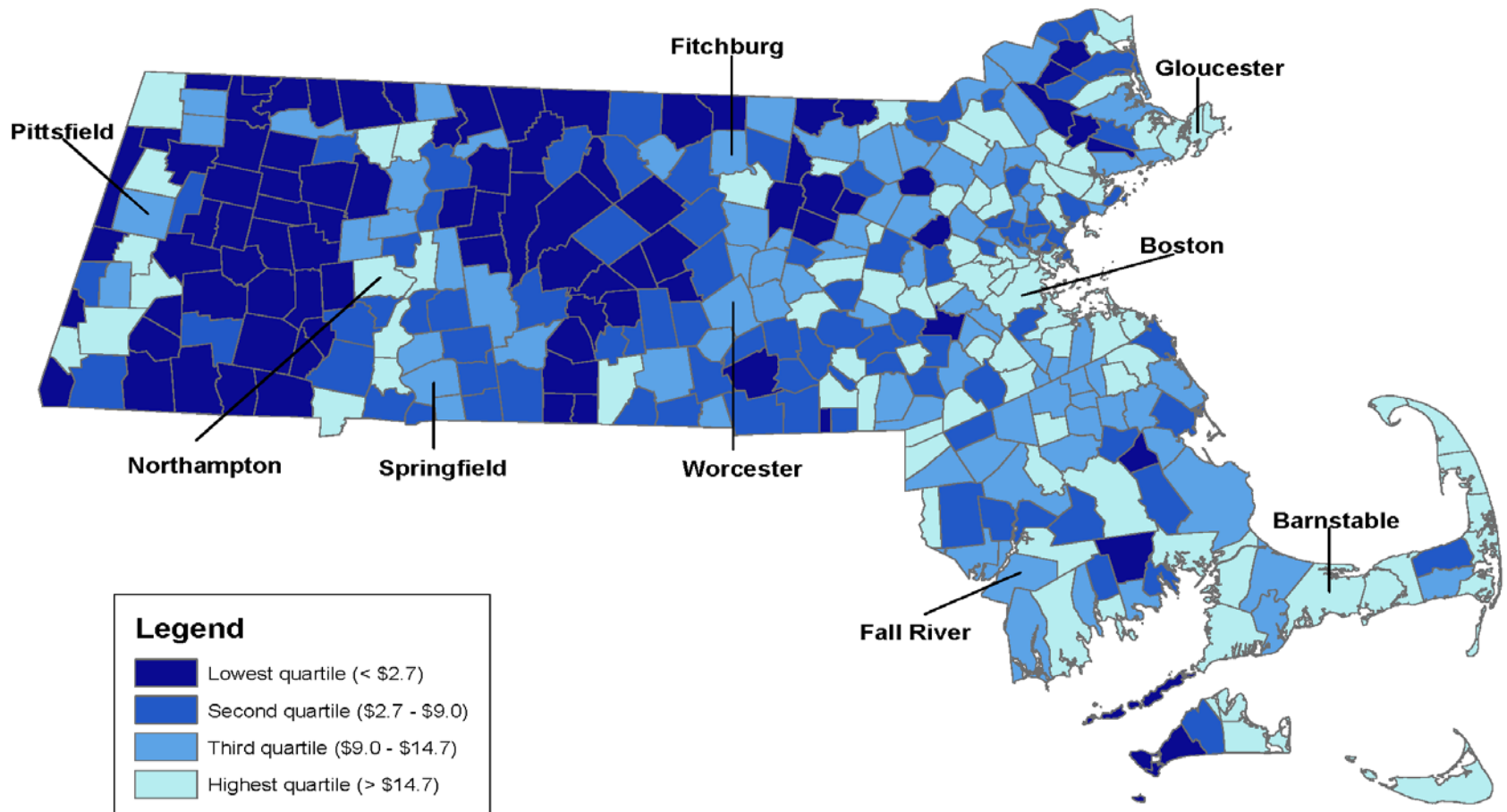
Local sales tax capacity is higher in eastern MA and lower in western MA.

**Local Sales Tax Capacity of Massachusetts Cities and Towns**  
(per capita, in 2008 dollars)



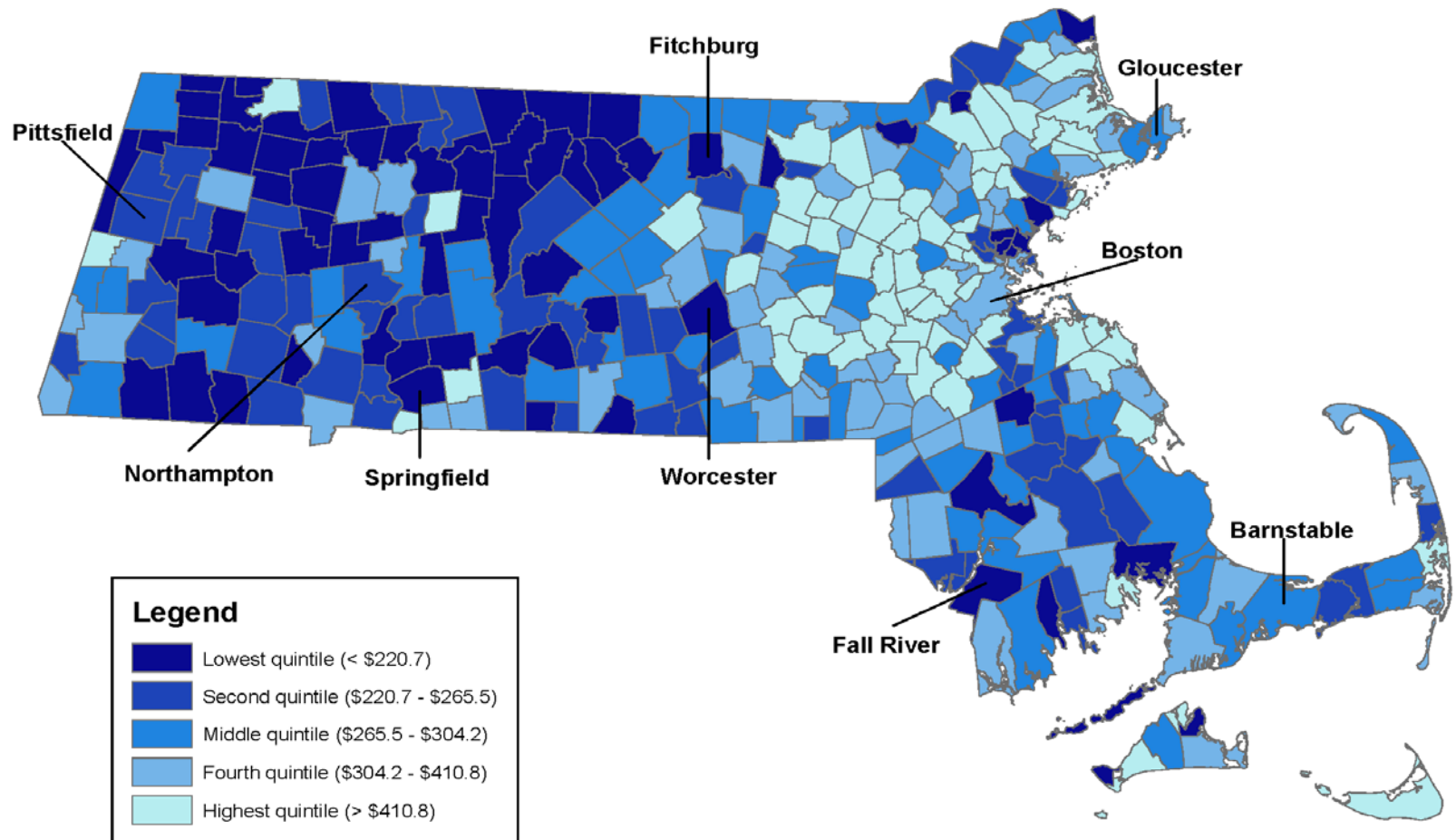
Local meals tax capacity is also higher in eastern MA and lower in western MA.

**Local Meals Tax Capacity of Massachusetts Cities and Towns**  
(per capita, in 2008 dollars)



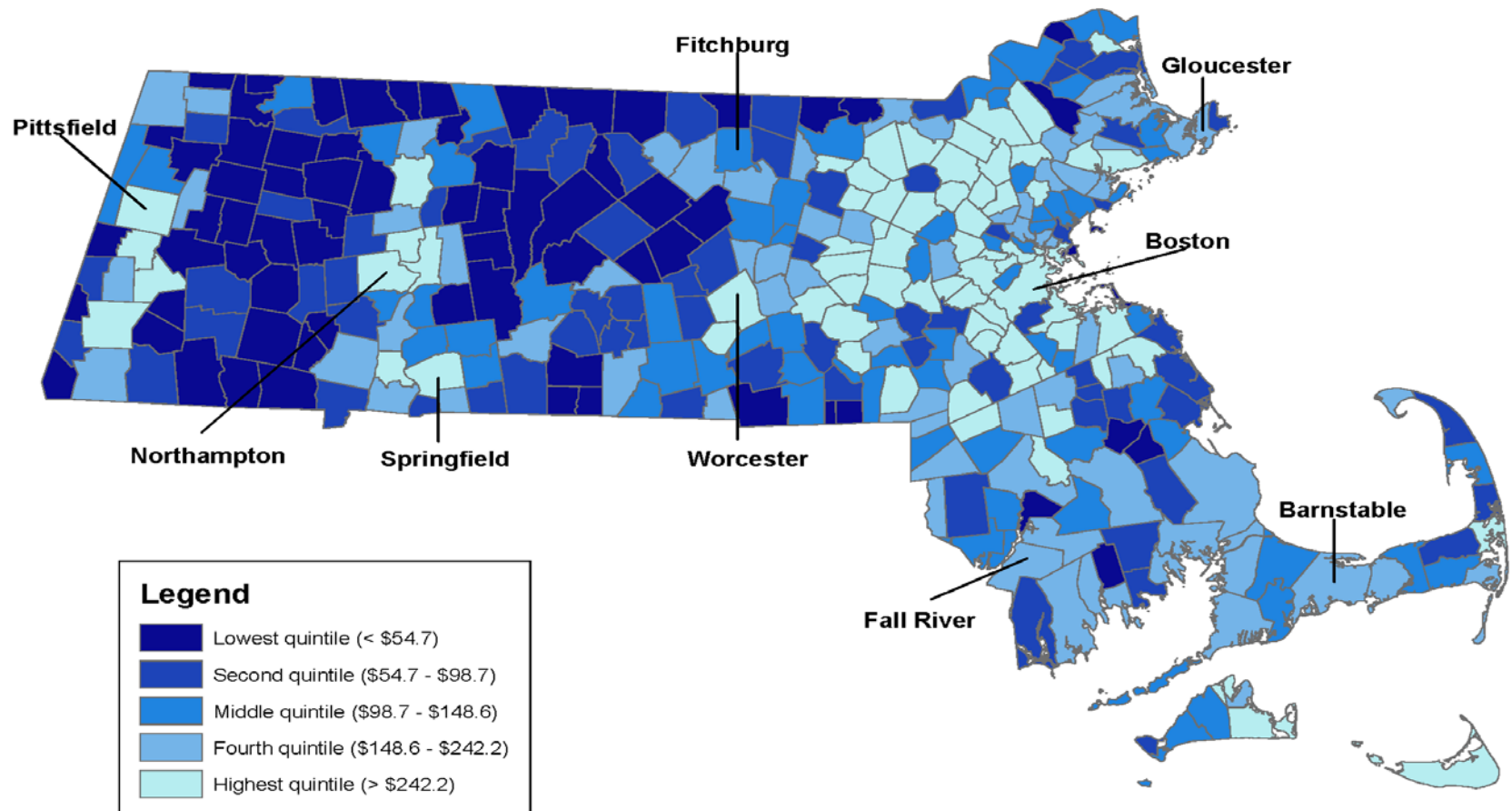
# Boston suburbs have the highest income tax capacity.

**Local Income Tax Capacity of Massachusetts Cities and Towns**  
(per capita, in 2008 dollars)



Local payroll tax capacity is heavily concentrated in and around the three largest cities.

**Local Payroll Tax Capacity of Massachusetts Cities and Towns**  
(per capita, in 2008 dollars)





# Largest cities benefit more from local sales, meals, and payroll taxes.

**Table 3. Distribution of Local-Option Tax Capacity by Population Quintile(per capita, in 2008 dollars)**

	Lowest Population Quintile	Second- Lowest Population Quintile	Middle Population Quintile	Fourth-Highest Population Quintile	Highest Population Quintile	Correlation with Population Size
Local Sales Tax Capacity	25	85	84	94	97	-0.07
Local Meals Tax Capacity	3	13	12	13	16	0.51 ***
Local Income Tax Capacity	244	426	397	392	299	-0.05
Local Payroll Tax Capacity	57	167	159	234	336	0.64 ***

Note: Figures are weighted by population.

\* Statistically significant at 10%

\*\* Statistically significant at 5%

\*\*\* Statistically significant at 1%



# Lowest-income municipalities benefit the least from local-option taxes.

**Table 4. Distribution of Local-Option Tax Capacity by Income Quintile (per capita, in 2008 dollars)**

	Lowest Income Quintile	Second-Lowest Income Quintile	Middle Income Quintile	Fourth-Highest Income Quintile	Highest Income Quintile	Correlation with Income
Local Sales Tax Capacity	75	80	116	124	84	0.05
Local Meals Tax Capacity	10	19	17	17	12	0.01
Local Income Tax Capacity	177	287	280	354	687	0.91 ***
Local Payroll Tax Capacity	173	379	246	338	302	0.16 ***

Note: Figures are weighted by population. Income quintiles are based on the 2000 Census.

\* Statistically significant at 10%

\*\* Statistically significant at 5%

\*\*\* Statistically significant at 1%



# Property-poor municipalities gain less from local-option taxes.

**Table 5. Distribution of Local-Option Tax Capacity by EQV Quintile (per capita, in 2008 dollars)**

	Lowest EQV Quintile	Second- Lowest EQV Quintile	Middle EQV Quintile	Fourth- Highest EQV Quintile	Highest EQV Quintile	Correlation with EQV	
Local Sales Tax Capacity	71	79	98	121	92	0.13	**
Local Meals Tax Capacity	10	11	14	20	19	0.37	***
Local Income Tax Capacity	184	260	314	380	673	0.39	***
Local Payroll Tax Capacity	163	152	269	478	309	0.11	**

Note: Figures are weighted by population.

EQV = equalized valuation.

\* Statistically significant at 10%

\*\* Statistically significant at 5%

\*\*\* Statistically significant at 1%



# Local option taxes are unlikely to alleviate existing fiscal disparity.

**Table 6. Distribution of Local-Option Tax Capacity by Quintile for Existing Revenue Capacity(per capita, in 2008 dollars)**

	Lowest Existing- Capacity Quintile	Second-Lowest Existing- Capacity Quintile	Middle Existing- Capacity Quintile	Fourth-Highest Existing- Capacity Quintile	Highest Existing- Capacity Quintile	Correlation with Existing Capacity	
Local Sales Tax Capacity	66	82	109	116	95	0.17	***
Local Meals Tax Capacity	9	11	15	20	18	0.39	***
Local Income Tax Capacity	180	253	309	370	692	0.70	***
Local Payroll Tax Capacity	162	157	229	461	378	0.26	***

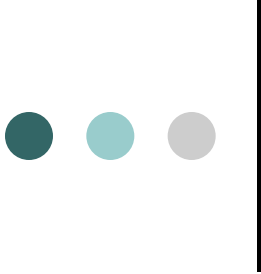
Note: Figures are weighted by population.

\* Statistically significant at 10%

\*\* Statistically significant at 5%

\*\*\* Statistically significant at 1%





Local option taxes do not compensate municipalities in proportion to their aid loss.

**Table 7. Distribution of Local-Option Tax Capacity by Quintile for State Aid Cut (per capita, in 2008 dollars)**

	Fourth-Highest					Correlation with Aid Cut
	Lowest Aid-Cut Quintile	Second-Lowest Aid-Cut Quintile	Middle Aid-Cut Quintile	Aid-Cut Quintile	Highest Aid- Cut Quintile	
Local Sales Tax Capacity	93	94	116	101	85	-0.15 **
Local Meals Tax Capacity	17	13	13	13	16	0.18 ***
Local Income Tax Capacity	679	386	368	297	245	-0.41 ***
Local Payroll Tax Capacity	302	191	252	206	337	0.33 ***

Note: Figures are weighted by population.

\* Statistically significant at 10%

\*\* Statistically significant at 5%

\*\*\* Statistically significant at 1%



# Policy Recommendations to Address Fiscal Disparities

- Increase equalizing state aid
- Modify aid formulas to better target “aid-worthy” communities
  - Use a formula based on need-capacity gap
  - Explicitly take account of new local option tax capacity



# Conclusion

- New local option taxes would generate considerable additional revenues.
- New capacity is not evenly distributed across population, income, wealth, or geographic location.
- New local option taxes are not likely to alleviate existing disparities.
- More equalizing aid and/or better targeted aid formulas are needed.