Regional Tax-Base Sharing: A Policy to Promote Fiscal Equity and Efficient Development Practices at the Metropolitan Scale¹

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Metropolitan areas across the United States are struggling with sprawling development patterns and the unequal distribution of opportunity across regional landscapes. One important reason for this is the highly fragmented structure of local governance that exists in many U.S. metropolitan areas. Communities in highly fragmented systems face significant, often overwhelming, pressures to compete for development that will expand their tax bases. These pressures often drive local land-use planning decisions, encourage sprawl and increase economic and social disparities.

Localities pay attention to the net effect that any new development will have on local revenues and expenditures—on whether the proposed development "pays its way." To win the most profitable land uses, local governments may offer public subsidies or infrastructure improvements. But perhaps the most common approach is "fiscal zoning"—making land-use decisions not based on the suitability of the land or the long-term needs of the region, but on the tax revenue a development can generate right away in a small part of the region. For example, many communities lay out great tracts of land for commercial development, regardless of whether it is the most appropriate use for the location.²

This competition is costly in several ways. First, from the entire region's perspective, it is wasteful of public resources. Public sector time, effort and money is likely to be expended to affect the location of businesses that would have located somewhere in the region anyway. Second, the competition can contribute to vicious cycles of decline. If a business relocates from one municipality to another, the loser must either raise tax rates to maintain revenues or decrease the amount or quality of services, diminishing its attractiveness to businesses in the next round of competition. Third, such uncoordinated competition often makes the task of providing regional infrastructure more expensive than it has to be. Finally, local income and property taxes magnify the fiscal benefits to localities of business compared to residential development. This can lead to inadequate provision of housing, especially affordable housing.

Table 1 shows the degree of local government fragmentation in the 25 largest U.S. metropolitan areas. The variation is enormous—from 1.77 local governments per 10,000 residents in Pittsburgh (or just 5,650 residents per local government) to .07 in San Diego (or more than 140,000 residents per local government). Older metropolitan areas in the Northeast and Midwest tend to show the greatest degrees of fragmentation, with lower rates typically in the newer metros of the South and West.

¹ This article is drawn (with some additions) from "Regional Tax-Base Sharing: A Policy to Promote Fiscal Equity And Efficient Development Practices at the Metropolitan Scale," in *Regional Planning for a Sustainable America: How Creative Programs are Promoting Prosperity and Saving the Environment*, Carleton Montgomery, ed., Rutgers University Press, 2011.

² See William A. Fischel, "Property Taxation and the Tiebout Model: Evidence for the Benefit View from Zoning and Voting," *Journal of Economic Literature* 30 (1992), pp. 171-77, for a discussion of fiscal zoning and why it occurs.

Table 1: Fragmentation in the 25 Largest U.S. Metropolitan Areas

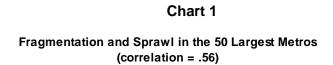
Metropolitan area	Counties	Municipalities and <u>Townships</u>	Total Local Governments	Local Govts. per 10,000 <u>Residents</u>
Pittsburgh	6	412	418	1.77
Minneapolis-St. Paul	13	331	344	1.24
St. Louis	12	300	312	1.23
Cincinnati	13	222	235	1.23
Kansas City	11	171	182	1.06
Cleveland	8	259	267	0.92
Philadelphia	14	428	442	0.74
Milwaukee	5	108	113	0.69
Chicago	13	554	567	0.66
Detroit	10	325	335	0.62
Boston	14	282	296	0.51
Dallas	12	184	196	0.42
Portland	8	79	87	0.41
New York	27	729	756	0.38
Atlanta	20	107	127	0.35
Denver	7	67	74	0.32
Houston	8	115	123	0.28
Seattle	6	88	94	0.28
Washington, D.C.	33	125	158	0.22
Tampa	4	35	39	0.18
San Francisco	10	104	114	0.17
Miami	2	55	57	0.16
Phoenix	2	32	34	0.12
Los Angeles	5	177	182	0.12
San Diego	1	18	19	0.07

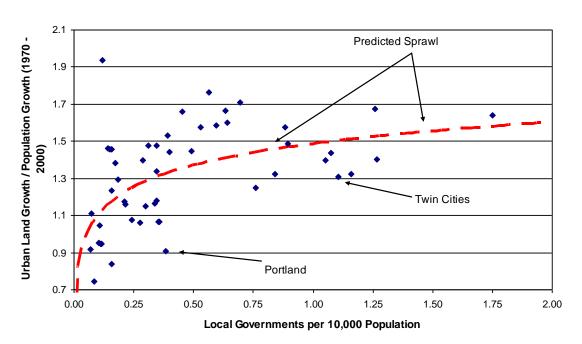
Source: Orfield, American Metropolitics.

Chart 1 shows the relationship between fragmentation and sprawl—the more fragmented the region, the greater its rate of sprawl in recent decades.³ The sprawl measure varies from .74 to 1.93. (A value less than 1 implies that population grew more quickly than

³ Sprawl is measured by {(urban land in 2000 / urban land in 1970)} / {(population in 2000 / population in 1970)}. Urban land is defined as a census tract with a housing density of more than one unit per four acres, the density currently used by the Census Bureau to define urbanized land at the fringes of metropolitan areas. The "predicted sprawl" line shows the simple regression line between the log of the sprawl ratio and the log of the fragmentation measure for the 50 largest metropolitan areas. The log-log relationship is the strongest specification with a simple correlation of .56 (significant at the 99 percent confidence level). If the lone outlier (New Orleans, the high outlier in the upper left quadrant) is removed the correlation increases to .64. The positive relationship between fragmentation and sprawl remains statistically significant when metropolitan population, population growth, dummy variables for coastal locations, water constraints on development, and the existence of a strong regional planning organization are added as independent variables.

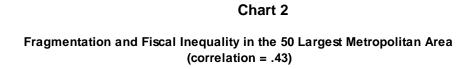
urbanized land; a value greater than 1 implies that urbanized land grew more quickly.) Interestingly, the two metropolitan with the most powerful regional planning organizations in the country—Portland Metro in Portland and the Metropolitan Council in the Twin Cities—are among the metros showing the greatest differences between their actual and predicted sprawl rates. Both show sprawl rates considerably lower than would be expected given their levels of fragmentation, indicating that strong regional planning is one way to combat the negative effects of local government fragmentation. Portland is the farthest below the line among less-fragmented metros and the Twin Cities is the farthest below among highly-fragmented regions.

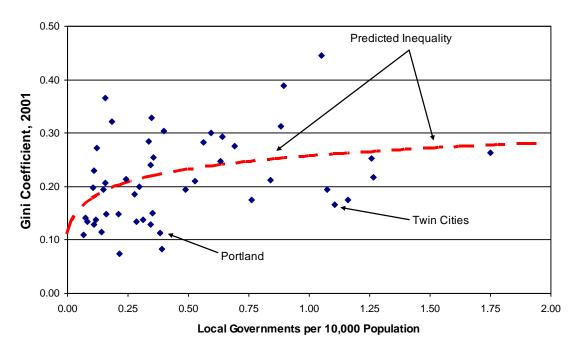




Fragmentation is also associated with fiscal inequality in large metropolitan areas. Chart 2 shows this relationship—more fragmented metropolitan areas tend to show greater inequities in local tax bases. As with sprawl, two of the metropolitan areas showing the greatest difference between actual and predicted sprawl rates are the Twin Cities and Portland, the two large metropolitan areas with the most extensive regional planning systems. In the Twin Cities, the Fiscal Disparities tax-base sharing program further enhances the region's positive standing.

⁴ Fiscal inequality is measured by the Gini coefficient. The Gini coefficient measures the difference between the actual distribution of tax base and a perfectly equal distribution. It varies between 0 and 1, taking on a value of 0 if the distribution is perfectly equal (all jurisdictions have the same tax base per household) and 1 if the distribution is perfectly unequal (one jurisdiction with only one household has all of the tax base). The "predicted inequality" line shows the simple regression line between the log of the Gini coefficient and the log of the fragmentation measure for the 50 largest metropolitan areas. The log-log relationship is the strongest specification with a simple correlation of .43 (significant at the 99 percent confidence level). The positive relationship between the Gini coefficient and fragmentation remains statistically significant if metropolitan population, population growth, and a dummy variable for the existence of a strong regional planning organization are added as independent variables.





The implications of tax-base disparities like those implied by the Gini coefficients in Chart 2 are important. Municipalities at the low end of the spectrum face a very difficult choice between providing regionally competitive levels of local public services like police and fire protection by assessing tax rates that are higher than their regional counterparts—sometimes much higher—and assessing competitive tax rates while providing much lower than average local services. Either combination puts them at a serious disadvantage when competing for new residents or businesses. Tax base disparities greater than ten to one are not uncommon in U.S. metropolitan areas.⁵ Disparities of this magnitude clearly create the potential for vicious cycles of decline in low tax base places.

Tax-base sharing (TBS) is one way to significantly improve both the equity and efficiency of regional fiscal systems. In such a system, a portion of local tax base (usually a percentage of growth) is put into a regional pool which is then redistributed back to local areas based on some criteria other than their contributions to the pool.

The formula that distributes the pool back to communities can take a variety of forms. It can be very redistributive—sending disproportionate shares of the pool to high-poverty or low-tax-base places for instance. Or it can be relatively neutral—distributing the pool by population or household shares. It can also be designed to compensate local areas for extra costs of public services. The age of the housing stock—a good proxy for the age of infrastructure—could be used in this way. In any of these cases, because contributions to the pool are based on local tax bases, the system reduces fiscal disparities across the region.

⁵ Orfield, Myron, *American Metropolitics, The New Suburban Reality*, Brookings Institution, 2002, Table 3-3, p. 56.

If the contribution formula is designed properly, TBS can also improve the efficiency of local economies and fiscal systems. In the Twin Cities version communities contribute 40 percent of the increase in commercial-industrial property tax base to the pool, which is then redistributed with a formula based on population and local tax base. This reduces the incentives for communities to compete for tax base, because they do not keep all of the resulting revenues. However, because localities retain enough of the tax base to cover the costs of growth, the incentive is not so strong that local areas will be unwilling to allow new development within their borders. Since localities will be spend less time and effort trying to lure businesses to their area, business activity will gravitate toward areas generating the greatest economic returns, improving the overall performance of the regional economy.

This means that there is potential for individual communities to benefit from TBS in several direct and indirect ways. Places that contribute less tax base than they get from the distribution formula receive an obvious fiscal benefit—more tax-base that allows them to increase public services, lower tax rates, or both. However, other indirect benefits accrue to both net receivers and net contributors. Reduced competition for tax-base will mean that fewer public resources (spending and other incentives) will be devoted to the "ratables chase," freeing up local resources for other purposes in all types of communities. A more efficient regional economy should grow more quickly, increasing local tax-bases and the regional pool beyond what would exist without TBS.

Other indirect benefits of TBS that apply to both net receivers and net contributors involve the potential effects of enhanced inter-local or regional cooperation for economic development and planning. TBS ensures that all share in the benefits of regional growth and reduces the stakes for individual jurisdictions in the location of specific economic activities. This lowers barriers to cooperative economic development programs, enhancing the entire region's growth prospects.

These TBS outcomes also reduce opposition to regional planning efforts that can affect local tax bases, including affordable housing initiatives and environmental protection. Housing initiatives designed to enhance the economic opportunities available to moderate and low income families by locating affordable housing in areas with strong job growth often face local opposition because of the potential effects on local tax-base. TBS can be a central part of an incentive structure that reduces these fiscal disincentives.

Regional efforts to protect environmental assets, like open space, lakes, streams and clean air can face local opposition for many of the same reasons. Because of the amenity value, land near sensitive natural areas often represents very valuable local tax-base. This means that costs of protecting such areas—in the form of foregone tax-base—are often highly localized while the benefits are much more diffused across the entire region and beyond. As a result, local governments do not face the proper incentives to conserve sensitive areas. They will do too little because the purely local benefits from protection—low because benefits are so diffused—do not outweigh the highly concentrated costs. TBS eases these difficulties by reducing the fiscal incentives to develop sensitive areas and by facilitating regional environmental planning efforts that weigh all of the costs and benefits.

In sum, TBS can thus be designed to serve several purposes. It can:

• Reduce the incentives for localities to compete with each other for tax-base;

⁶ For a more extensive discussion of tax base sharing, see "Regional Tax Base Sharing: the Twin Cities Experience", Thomas Luce, in *Local Government Tax and Land Use Policies in the United States: Understanding the Links*, Helen Ladd, Lincoln Institute of Land Policy, 1998.

- Reduce inequalities in tax-base, tax rates and local public services;
- Encourage joint regional or multi-jurisdictional economic development efforts;
- Complement regional land-use planning efforts;
- Provide insurance against future changes in growth patterns—no part of a region can count on being a regional growth leader forever.

The Twin Cities Fiscal Disparities Program

The Twin Cities Fiscal Disparities Program is the best existing example of regional tax base sharing. The program covers the seven core counties of the Twin Cities metropolitan area. There are 192 municipalities, 50 school districts and more than 100 special districts covered by the program. In existence since 1971, it pools 40 percent of the growth in commercial-industrial tax base since that time and redistributes it based on population and total local property tax base per capita. If a municipality's property tax base per capita is less than the regional average, it receives a portion of the pool greater than its share of the region's population; if its tax base is greater than average it receives a portion less than its population share.⁷

As of 2012, 38 percent of the region's commercial-industrial tax base—12 percent of total tax base—was in the pool and 64 percent of the region's population lived in municipalities that were net beneficiaries of the program. The program reduces tax base inequality in the region by about 20 percent, as measured by the Gini coefficient. The effects are even more pronounced at the extremes of the distribution. In most years, the program reduces the ratio of the highest to lowest tax base per household from about 25-to-one to about eight-to-one, and of the second highest to second lowest from about 10-to-one to roughly four-to-one.

The region's two central cities are affected in significantly different ways. St. Paul, with much of its prime real estate devoted to state office buildings and other non-profit purposes, is a major beneficiary of the program. Its average tax on a homesteaded residence is about nine percent lower in a typical year than it would be in the absence of the program. Minneapolis, on the other hand, has had periods when it contributed more to the pool than it received from it and other times when it has been a net receiver.

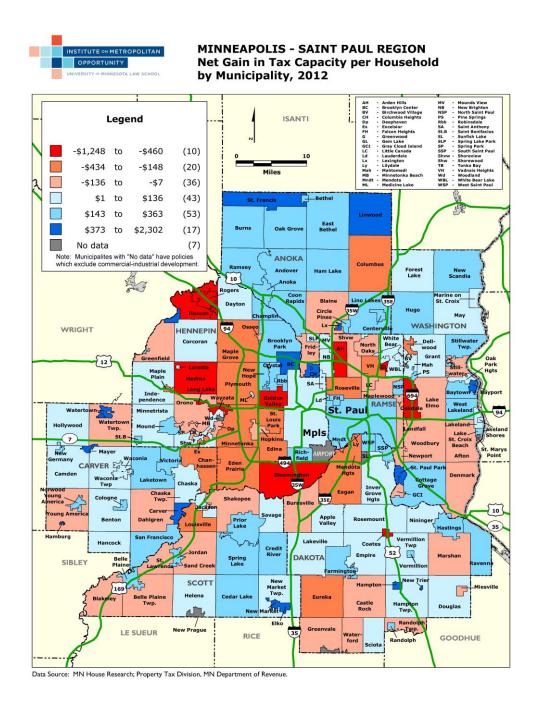
Map 1 shows the geographic distribution of net gains in tax capacity from Fiscal Disparities. ⁹ Net contributors to the program—municipalities which contribute more tax base to the pool than they receive from the pool—are largely middle ring suburbs that fall along the interstate highway system, including the ring-roads (I-494 and I-694.), I-35W, I-35E and I-94. The pattern shows very clearly the impact that highway investments have on the distribution of tax-base within a region. Net receivers of the program—municipalities that receive more tax base than they contribute—are a combination of central cities, inner suburbs, and outer suburbs.

Map 1

⁷ See Hinze, Steve and Karen Baker, "Minnesota's Fiscal Disparities Programs," Minnesota House of Representatives Research, January 2005 for a complete description of the formula.

⁸ The 20 percent effect represents a decline from about .21 to about .17 in most years.

⁹ In Minnesota, the primary local tax instrument is the property tax. State law sets the rate structure for different types of property. The rate per dollar of assessed value is greater for commercial-industrial property than for owner-occupied residential property, for instance. A particular locality's mix of property types then determines how productive its tax base is (in terms of revenue generated per dollar of property values). This is the locality's "tax capacity." Local governments then determine their overall tax rate by varying the percentage of tax capacity that they tap.



Other Tax-Base Sharing Programs

The Twin Cities Fiscal Disparities Programs is the only full-scale regional TBS program in the U.S. However, there are other smaller-scale examples in New Jersey, Ohio, and Minnesota. In addition, other county or region-wide programs have been proposed.

The New Jersey program operates in the area surrounding the Meadowlands Stadium complex. The New Jersey Meadowlands Commission has overseen a TBS program since 1970 that collects 40 percent of the growth in property tax revenues in portions of 14 Bergen and Hudson county communities. The revenues are redistributed annually based on the share of the Meadowlands district that falls in each community. Because all participating communities share in revenue generated by development no matter where it takes place, the commission, which oversees land use planning in the district, is able to plan for both conservation and development where they are most needed.

The seeds of equity-based tax-sharing program are also in place in the Miami Valley of Ohio. Montgomery County—the county containing Dayton—has established what it calls the Economic Development/Government Equity (ED/GE) program to "share some of the economic benefits ... resulting from new economic development among the jurisdictions of Montgomery County." The program creates an annual countywide funding pool for economic development projects, as well as a "government equity" fund that shares a portion of growth in municipalities' property and income tax revenues each year. All 30 communities in the county, including the city of Dayton, participate in the voluntary program.

Minnesota also has a second TBS program, initiated in 1996. Established on the Iron Range in northern Minnesota, the program covers all or parts of five counties, including the city of Duluth. The program was set up to work exactly the same way as the Fiscal Disparities Program except that it uses 1995 as the base year. The first year of implementation was 1998. By 2004, the program had grown to include 8 percent of the commercial-industrial tax base (1.6 percent of total tax base).

Another prominent example of a region-wide tax base sharing proposal occurred in 2002 in Sacramento. The program would have pooled local sales tax revenues from new commercialindustrial development in the region. One third of the pool would have been redistributed to the cities in the region based on population; another third would have reverted to the city where the development occurred; and the final third would also have gone to the host city if it met certain smart growth goals involving affordable housing, infill development and open space conservation. 11 The proposal passed both houses of the California legislature but the two bills were never reconciled because of a threatened veto by the governor. California is potentially fertile ground for proposals of this sort because the local sales tax, the most important local tax in the state, generates such strong incentives for inter-local competition for commercial developments like auto malls—the holy grail of local economic development programs in California.¹²

Simulations of Tax-Base Sharing in Other Regions

Other research has shown how effective TBS can be in reducing fiscal inequality. Simulations for the 25 largest metropolitan areas show that programs with designs and scales similar to the Twin Cities Fiscal Disparities Program would be more efficient than existing state aid systems in reducing inequality. 13 The simulations, which created regional pools equal to 10

8 • Papers

¹⁰ Montgomery County Economic Development/Government Equity (Ed/Ge) Handbook: 2001-2010 (Dayton: Montgomery County, Ohio, 2001).

Simulations showed that more than 60 percent of the region's residents would have been in places that

were net receivers.

12 Simulations of sales tax-base sharing for 15 California metropolitan areas implied that two-thirds of the regions' residents lived in places that would have been net receivers.

¹³ Orfield, Myron, American Metropolitics, The New Suburban Reality, Brookings Institution 2002, pp. 107-109.

percent of total regional tax bases, reduced inequality (measured by the Gini coefficient) by 20 percent on average.

A comparable, more detailed study of the Twin Cities, Chicago, Philadelphia, Portland and Seattle shows similar results and illustrates two other important characteristics of TBS. ¹⁴ First, contrary to what one might expect, central cities are not always the major beneficiaries of TBS. Although three of the seven central cities in these metros (St. Paul, Philadelphia and Tacoma) experienced tax-base gains of more than 10 percent, two others (Minneapolis and Chicago) gained much less (two and seven percent, respectively), and the final two (Portland and Seattle) were net contributors. Second, equity effects of tax base sharing were greatest at the extremes of the tax-base distributions. In all five metropolitan areas, TBS reduced a measure of inequality at the extremes of the distributions (the ratio of the 95th to 5th percentiles) by proportionately more than the Gini coefficient (which is affected most by differences in the core of the distribution).

Ameregis, a consulting firm specializing in metropolitan studies, simulated the effects of TBS in many metropolitan areas. These studies highlight other features of the approach. In principle, TBS can be employed with any local tax. In most states, the property tax is the most important local tax. But in some states income or sales taxes are as (or more) important. Simulations in Lexington, Kentucky, Cleveland, Ohio, Southern New Jersey and Los Angeles illustrate that TBS can be just as effective with taxes other than the property tax.

In Kentucky, both property and income (or payroll) taxes are important local revenue sources. Happens 3 and 4 show the results of simulations of the effects of tax base sharing with these two bases in the Lexington region. In each case, the maps show the net distribution (contribution minus distribution) per household for municipalities and unincorporated areas if a tax base sharing program had pooled 40 percent of the increase in tax base between 1994 and 2004 and redistributed it to municipalities based on the number of households in each place.

In the simulation for the property tax (Map 2), tax base sharing would increase the tax base available in 38 of the 52 municipalities and unincorporated areas in the region—areas serving 65 percent of the households outside of Lexington. Lexington, itself, would have been a small net contributor to the system. Its total property tax base would have been roughly 2 percent lower in 2004, or by about the amount its base grew in six months during the period.

The payroll tax simulation (Map 3) yields similar results. In this case, tax base sharing would increase the tax base available to 26 of the 36 localities included in the simulation. The net receivers represent 68 percent of households in the included municipalities outside of Lexington, while Lexington would essentially break even. (Lexington's net contribution would have been less than one percent of its base.)

Overall, net contributors to the regional property tax pool (municipalities that would have contributed more property tax base than they received) would have had about 4 percent less tax base in 2004 than their actual base. Net contributors in the payroll tax simulation would have had about 5 percent less tax base in 2004 as a group. However, if tax base sharing had actually been in place, municipalities and counties would have had much more incentive to engage in

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¹⁴ Luce, Thomas F., Jr. "Applying the Twin Cities Model of Tax-base Sharing in other Metropolitan Areas: Simulations for Chicago, Philadelphia, Portland, and Seattle," *National Tax Association 1997 Annual Conference Proceedings*, National Tax Association, 1998.

¹⁵ Ameregis studies on more than 30 U.S. metropolitan areas and states are available at www.law.umn.edu/metro. Many of the studies include tax-base sharing simulations.

www.law.umn.edu/metro. Many of the studies include tax-base sharing simulations.

16 This analysis is from *Bluegrass Metropatterns: An Agenda for Economic and Community Progress in Central Kentucky*, Ameregis, Inc., October 2006.

cooperative economic development activities. If these incentives had led to just four- or fivetenths of a percent faster growth per year in their tax bases (depending on the tax-base), the resulting tax base in these places would have been greater in 2004 than it was without the program.

Recent simulations for an area in northeastern Ohio significantly larger than a single metropolitan area show similar results. Performed by the Center for Housing Research and Policy, Cleveland State University, the models use commercial-industrial property and income tax-base changes from 1996 to 2006. A 16-county region including the Cleveland, Akron, Canton and Youngstown metropolitan areas plus six adjoining non-metropolitan counties were included in the analysis. For each of the taxes, contributions from each locality were forty percent of growth in tax base and distributions were determined by the share of regional households and the age or housing stock (a proxy for the age of infrastructure).

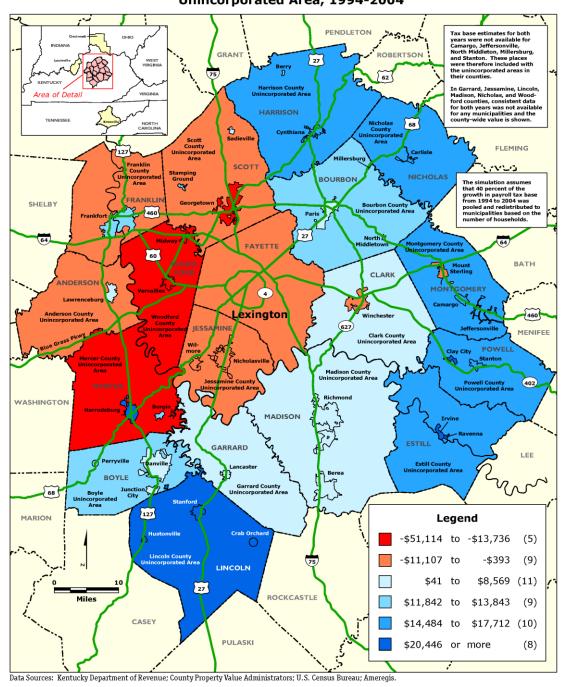
In the results for the property tax, 366 of 487 communities in the region, including Cleveland, were net receivers of tax-base in the simulation. Comprised of the regions central cities, inner suburbs and outlying areas for the most part, net receivers represented 69 percent of regional population. Most net contributors were clustered around the interstate highway system in the second and third ring suburbs of Cleveland and Akron. The program would have reduced commercial industrial property tax-base disparities (measured by the ratio of the average for the top 10 percent to the bottom 10 percent) by about 10 percent (from 5.3 to 4.8).

The results for the local income tax were different in interesting ways. Only communities that currently use the tax were included. 113 of 190 communities, representing 62 percent of regional population were net beneficiaries. Net contributors included Cleveland and many of the suburbs between Cleveland and Akron. In this case, tax-base disparities (measured by the ratio of the top 10 percent to the bottom 10 percent) were reduced by 38 percent (from 13.6 to 8.5).

Map 2



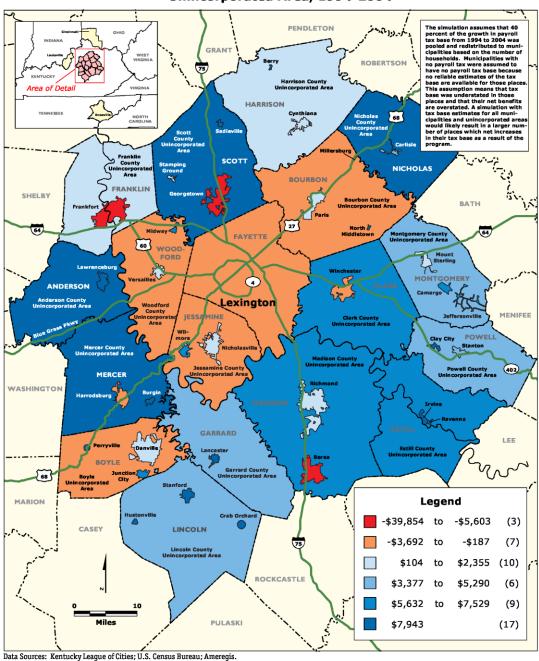
BLUEGRASS REGION: Simulated Change in Property Tax-Base per Household Resulting from a Property Tax-Base-Sharing Program by Municipality and County Unincorporated Area, 1994-2004



Map 3



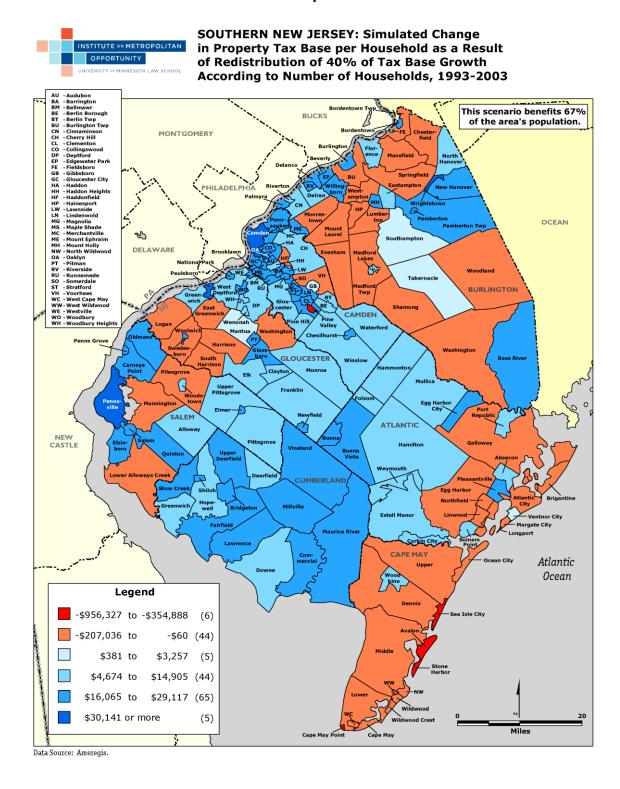
BLUEGRASS REGION: Simulated Change in Payroll Tax-Base per Household Resulting from a Payroll Tax-Base-Sharing Program by Municipality and County Unincorporated Area, 1994-2004



Another example shows the geographic flexibility of TBS. Map 4 shows the results for simulations performed in New Jersey. The region shown—South Jersey—represents one of the three regions used in the work which, combined, make up the entire state of New Jersey. Many of New Jersey's municipalities are part of metropolitan areas not centered in New Jersey—Philadelphia and New York. As a result, none of the regions used in the analysis are single metropolitan area or combination of entire metros. The south Jersey region includes a large number of Philadelphia suburbs, resort areas along the Atlantic shore and the rural and exurban areas around them. Communities that were net receivers in the simulation are clustered in the Philadelphia suburbs along the Pennsylvania/New Jersey portion of the Delaware River and in outlying areas. Sixty-seven percent of the region's population is in these cities and towns. Net contributors are largely in resort areas along the Atlantic shore and in suburban areas around the New Jersey Turnpike (which parallels the Delaware River).

A final example shows the simulated results of a system sharing the growth in sales tax base in the Los Angeles region (Map 5). The simulation assumed that 40 percent of the growth in local sales tax bases from each local area in the metropolitan area between 2003 and 2013 was allocated to a regional pool. The pool was then distributed back to localities based on their shares of the region's population. Local sales tax base disparities are so dramatic that even this relatively benign distribution formula would result in increases in the local tax bases of communities serving fully 72 percent of the region's population.

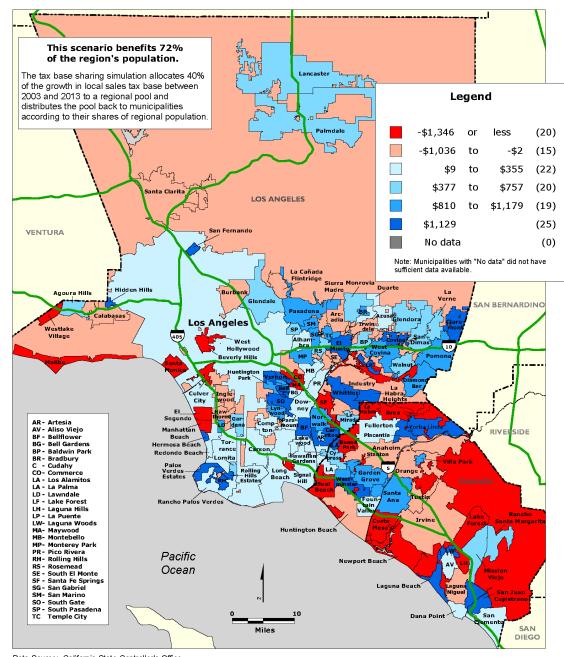
Map 4



Map 5



LOS ANGELES REGION: Simulated Change in Tax Base per Household Resulting from a Tax Base Sharing Program 2003 to 2013



Data Source: California State Controller's Office

Summary and Conclusions

Highly fragmented local government systems encourage sprawl and foster fiscal inequality. TBS programs can ease both of these problems by reducing incentives for inefficient competition for economic activity among local governments and redistributing local tax-base from high-capacity to low-capacity communities. The record in the Twin Cities with the Fiscal Disparities Program and simulations in a variety of metropolitan areas show that a properly structured program can achieve both of these goals.

TBS also complements other components of regional policy-making. By ensuring that all parts of a region share in the tax benefits of new economic development, TBS encourages multi-jurisdictional and region-wide cooperation on development planning. Spreading the rewards of new developments also supports regional planning efforts by reducing the intensity of the competition for land uses with the greatest fiscal rewards, easing the tradeoffs facing regional decision-makers. This also reduces barriers to regional approaches to issues like affordable housing and environmental protection that often face local opposition because of their local fiscal outcomes. Indeed, in the Twin Cities, the Fiscal Disparities Program was part of a quid pro quo that led to concurrent implementation of regional planning and tax-base sharing.¹⁷

The simulations show how flexible TBS can be. It can be used with any local tax, not just the property tax. Indeed, local income taxes (especially if they are paid in one's place of work) and sales taxes create incentives distorting regional economies that are at least as strong as property taxes. TBS can also be applied to a variety of geographies—to part of a metropolitan area (as in Dayton or the Meadowlands); in an entire metropolitan area (as in the Twin Cities and in the Sacramento proposals); to "mega-regions" comprised of a number of linked metropolitan areas (as in Northeast Ohio); and to diverse combinations of suburbs and non-metropolitan communities (as in South Jersey).

The simulations also show that, regardless of the tax instrument or the geography, the characteristic outcomes of TBS provide political ammunition for its proponents. Because of the way that economic activity tends to cluster, TBS almost invariably provides tax-base benefits to large majorities of regional populations. In most cases, roughly two-thirds of residents are in areas that are net receivers. And because many central cities are still competitive in regional markets for commercial-industrial tax-base (the target of most TBS schemes), TBS proposals can often avoids the pitfalls of antagonisms that dominate city-suburb relations in many metropolitan areas.

In sum, tax-base sharing enjoys a unique place in the hierarchy of economic policy-making. It is a policy that avoids one of the most famous trade-offs in economics. Arthur Okun's famous essay, *Equality and Efficiency: the Big Trade-off*, argued that policies designed to improve the efficiency of the economy almost invariably worsen equity outcomes and that equity-enhancing policies typically reduce the efficiency of the economy. ¹⁸ Tax-base sharing can do both. It enhances the efficiency of regional economies by reducing wasteful competition for tax-base and improves equity outcomes by redistributing tax-base from high-capacity to low-capacity places.

¹⁷ Orfield, Myron, *Metropolitics: A Regional Agenda for Community and Stability*, Brookings Institution Press and the Lincoln Institute of Land Policy, 1997, pp.124-125.

¹⁸ Okun, Arthur, *Equality and Efficiency: the Big Trade-off*, Brookings Institution, 1975.