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TACIR FAST FACTS

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The Education Improvement Act, the BEP, & Fiscal Capacity

The Education Improvement Act (EIA) of 1992 established the Basic Education Program (BEP), which is the funding formula that determines the full amount of funding required to be provided for Tennessee's K-12 schools.

BEP funds are split among three groups: instructional positions, other classroom components and non-classroom components. School systems are collectively responsible for 35% of BEP funds for instructional positions, 25% of funds for other classroom components and 50% of funds for non-classroom components. The EIA requires the local shares to be equalized based on local ability to raise revenue for education.

The TACIR Fiscal Capacity model is used to equalize local funding. It calculates each county's share of the locals' collective total funding. This model has been used since fiscal year 1992-93.

TACIR's Fiscal Capacity Model: Equalizing Funding for Education

– Harry A. Green
– Lynnisse Roehrich-Patrick

Fiscal Year 2005

Tennessee's fiscal capacity model was developed by TACIR and adopted by the State Board of Education to fulfill the requirement of the Education Improvement Act for fiscal equalization in the Basic Education Program (BEP). It is used to help determine the local funding shares for each school system. Fiscal capacity is the potential ability of local governments to fund education from their own taxable sources, relative to their cost of providing services. The TACIR formula estimates the **per pupil dollar** amount that each county area can afford to pay to fund education. This amount is multiplied by the number of students in each county. The total fiscal capacity for all counties is summed and proportions are calculated for each county. This amount is called the fiscal capacity index. Converted to percentages, this number constitutes the share that each county has of total statewide capacity (see chart).

Variables Used in the Model

Fiscal capacity is determined using **three-year averages** of the following factors for each of the 95 counties:

Per Pupil Own-Source Revenue: This is the amount of local money that the school systems in the county report that they spend on education, divided by enrollment (average daily membership (ADM)).

Per Pupil Equalized Property Assessment: The total property assessment for the county area, equalized by the appropriate county appraisal-to-sales ratio, and then divided by ADM. This is a measure of the local ability to raise revenue.

Per Pupil Taxable Sales: The local sales tax base divided by ADM. This is a measure of the local ability to raise revenue.

Per Capita Income: Per capita income is included in the fiscal capacity model as a proxy measurement for ability to pay for education; and for all other local revenue not accounted for by property or sales taxes.

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Tennessee's Fiscal Capacity Model: Equalizing Funding for Education (continued)

ADM Divided by Population (Service Burden): This measure is included as a reflection of spending needs. The greater the number of pupils per 100 residents, the greater the fiscal burden for each taxpayer.

Equalized Residential and Farm Assessment Divided by Total Equalized Assessment (Tax Burden): This variable is intended as a proxy for a county's potential ability to export taxes. A high residential and farm ratio indicates a low ability to pass taxes on to non-residents and hence, a potential for higher local tax burdens.

Methodology

The fiscal capacity model is based on a set of averages. The method, which is called multiple regression analysis, takes one factor (variable) at a time and compares it with all counties. From this process, an average (called a coefficient) is calculated for each factor. These averages are multiplied by the value of each factor for each county and summed. This produces a per pupil fiscal capacity amount. These per pupil amounts will vary county-by-county because the factor values are different for each county. Multiple regression analysis is a very commonly used statistical method.

Because of a time lag in the collection and publication of official statistics, the data is frequently 18 to 24 months old. Moreover, the formula is based on a three-year "moving" average of the data used. This averaging helps "smooth out" major changes in the model's results and reduces volatility from year to year.

Once TACIR determines per pupil capacity for each county, this value is multiplied by average daily membership. This produces a countywide measure of total fiscal capacity. The values of the 95 counties are summed, and each county is expressed as a proportion of the total. The fiscal capacity index for each county is this proportion. The county index is also used for non-county school systems in multi-system counties.

The index for each county represents that county's share of the total local capacity to fund education. If county A has an index of 3.45% in fiscal year 2004-05, then county A is responsible for 3.45% of the total local share of the Basic Education Program. If the index goes up or down, that share changes.

Year to Year Changes in a County's Fiscal Capacity

It is likely that there will be some change in a county's fiscal capacity each year. However, experience shows that for most counties the changes are small. The influence of a change in the tax base in a specific county will be related to similar tax changes in other counties. A change in any specific fiscal capacity factor will not necessarily mean a change in fiscal capacity. The per pupil capacity of a specific county can move up or down without necessarily causing a major change in the index. However, this depends on what changes occur in all 95 counties.

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Fiscal Year 2005 Fiscal Capacity Results by County Area

County Area	Total Local Revenue	Total Fiscal Capacity	Fiscal Capacity Index	Ratio of Revenue to Capacity
Anderson	$ 38,824,654	$ 27,530,055	1.2921%	1.41
Bedford	8,457,863	10,503,684	0.4930%	0.81
Benton	4,632,041	3,621,752	0.1700%	1.28
Bledsoe	1,477,007	1,574,741	0.0739%	0.94
Blount	41,307,472	36,486,148	1.7125%	1.13
Bradley	26,885,468	29,190,207	1.3700%	0.92
Campbell	7,167,824	7,841,983	0.3681%	0.91
Cannon	1,844,825	2,247,960	0.1055%	0.82
Carroll	7,383,778	6,440,421	0.3023%	1.15
Carter	11,844,137	10,224,499	0.4799%	1.16
Cheatham	7,646,027	8,397,471	0.3941%	0.91
Chester	2,057,440	2,967,152	0.1393%	0.69
Claiborne	6,549,606	5,749,427	0.2698%	1.14
Clay	1,511,305	1,254,227	0.0589%	1.20
Cocke	6,851,730	7,596,861	0.3566%	0.90
Coffee	21,441,405	18,213,537	0.8549%	1.18
Crockett	2,375,908	3,135,090	0.1471%	0.76
Cumberland	9,788,877	12,521,849	0.5877%	0.78
Davidson	290,891,800	301,108,013	14.1325%	0.97
Decatur	2,204,442	2,589,093	0.1215%	0.85
DeKalb	2,669,947	3,710,641	0.1742%	0.72
Dickson	14,901,619	15,040,845	0.7059%	0.99
Dyer	14,706,337	12,135,457	0.5696%	1.21
Fayette	4,882,947	5,631,542	0.2643%	0.87
Fentress	2,433,920	3,209,975	0.1507%	0.76
Franklin	9,653,015	8,862,721	0.4160%	1.09
Gibson	13,206,433	13,218,874	0.6204%	1.00
Giles	7,452,424	8,581,124	0.4028%	0.87
Grainger	2,454,544	2,463,893	0.1156%	1.00
Greene	19,979,489	17,797,954	0.8353%	1.12
Grundy	1,658,840	2,318,006	0.1088%	0.72
Hamblen	20,760,741	21,869,840	1.0265%	0.95
Hamilton	133,440,555	132,745,590	6.2304%	1.01
Hancock	772,054	583,556	0.0274%	1.32
Hardeman	5,860,472	4,546,529	0.2134%	1.29
Hardin	6,188,789	6,522,133	0.3061%	0.95
Hawkins	11,635,589	10,981,017	0.5154%	1.06
Haywood	5,029,940	4,455,609	0.2091%	1.13
Henderson	5,089,773	6,868,159	0.3224%	0.74
Henry	9,864,569	8,928,103	0.4190%	1.10
Hickman	3,465,376	3,355,922	0.1575%	1.03
Houston	1,213,435	1,224,240	0.0575%	0.99
Humphreys	3,920,513	4,660,409	0.2187%	0.84
Jackson	1,772,704	1,750,762	0.0822%	1.01
Jefferson	7,637,362	9,672,927	0.4540%	0.79
Johnson	3,224,780	2,023,748	0.0950%	1.59
Knox	176,199,386	168,558,918	7.9113%	1.05
Lake	1,009,405	834,135	0.0392%	1.21
Lauderdale	4,804,946	4,951,600	0.2324%	0.97
Lawrence	8,299,274	10,404,958	0.4884%	0.80
Lewis	1,481,694	1,912,879	0.0898%	0.77
Lincoln	7,344,714	7,279,449	0.3417%	1.01
Loudon	12,925,994	12,580,031	0.5904%	1.03
McMinn	13,711,873	14,689,733	0.6895%	0.93
McNairy	4,632,192	5,784,702	0.2715%	0.80
Macon	3,609,611	4,037,345	0.1895%	0.89
Madison	39,970,581	39,954,819	1.8753%	1.00
Marion	5,892,841	7,348,387	0.3449%	0.80
Marshall	9,628,397	8,944,365	0.4198%	1.08
Maury	21,948,341	21,860,077	1.0260%	1.00
Meigs	1,656,759	1,246,528	0.0585%	1.33
Monroe	8,717,601	9,028,794	0.4238%	0.97
Montgomery	42,597,364	47,727,035	2.2401%	0.89
Moore	1,674,536	1,087,605	0.0510%	1.54
Morgan	2,440,677	2,074,684	0.0974%	1.18
Obion	12,496,210	10,668,666	0.5007%	1.17
Overton	3,310,665	3,577,234	0.1679%	0.93
Perry	1,226,144	1,588,178	0.0745%	0.77
Pickett	870,571	768,237	0.0361%	1.13
Polk	2,922,511	2,615,619	0.1228%	1.12
Putnam	18,343,933	23,288,271	1.0930%	0.79
Rhea	5,108,274	5,891,130	0.2765%	0.87
Roane	13,077,666	12,540,935	0.5886%	1.04
Robertson	15,523,074	15,488,691	0.7270%	1.00
Rutherford	75,153,903	73,044,812	3.4284%	1.03
Scott	4,622,053	4,542,773	0.2132%	1.02
Sequatchie	3,060,220	2,059,912	0.0967%	1.49
Sevier	38,497,827	40,182,137	1.8859%	0.96
Shelby	486,946,325	453,782,641	21.2983%	1.07
Smith	3,280,831	4,381,302	0.2056%	0.75
Stewart	1,196,564	1,761,660	0.0827%	0.68
Sullivan	77,911,938	56,608,606	2.6569%	1.38
Sumner	40,374,798	40,768,748	1.9135%	0.99
Tipton	9,399,516	9,593,867	0.4503%	0.98
Trousdale	1,203,940	1,199,692	0.0563%	1.00
Unicoi	2,972,435	3,759,105	0.1764%	0.79
Union	2,392,981	1,660,173	0.0779%	1.44
Van Buren	888,609	546,023	0.0256%	1.63
Warren	10,509,719	11,180,207	0.5247%	0.94
Washington	43,386,807	39,032,209	1.8320%	1.11
Wayne	2,247,657	2,197,275	0.1031%	1.02
Weakley	5,864,017	7,706,003	0.3617%	0.76
White	3,745,767	4,632,894	0.2174%	0.81
Williamson	82,416,363	82,961,244	3.8938%	0.99
Wilson	28,427,910	29,919,237	1.4043%	0.95
Statewide	$2,130,607,273	$ 2,130,607,273	100.0000%	1.00