

# Indiana's School Funding Formula Impact Study for 2005

This report was prepared for the  
Indiana School Finance Issues Group

January 2006



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By

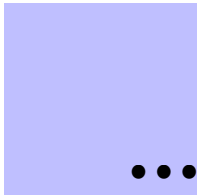
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IU School of Education professors Neil Theobald and Barry Bull deserve special recognition for their development and refinement of the metrics included in this report.

For her numerous contributions to the current and previous versions of this report, we dedicate this report to the memory of Patty S. Bond, former Director, Division of School Finance, Indiana Department of Education.





2. Compared to the previous year, Target revenue per-pupil increased 0.81 percent in 2005.
3. During the 2005-2007 biennium, Target revenue per-pupil is projected to decrease the most for urban corporations, followed by rural, suburban, and town corporations.

### **Property Tax Rates**

1. Between 1993 and 2005, the variability in tax rates among the 292 school corporations declined.
2. After a slight increase in 2003 due to property reassessment and subsequent decline through 2005, variability in tax rates is projected to increase slightly during the 2005-07 biennium.
3. Low tax rate school corporations experienced the largest increase in tax rates between 1993 and 2005.

### **Reward-for-Effort**

1. Differences in reward-for-effort decreased steadily from 1993 to 2005.
2. After a slight increase in 2003, differences are projected to continue to diminish in the 2005-07 biennium.
3. The correlation between a school corporation's property wealth per-pupil and regular revenue per-pupil was moderate at the beginning of the decade (1993) but now approaches zero.



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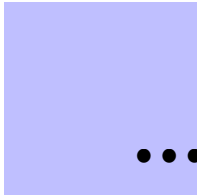
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## Introduction

In America, the individual states have a long tradition of providing financial support for the K-12 public schools within their respective borders. The rationale for this support is based on the requirement in each state's constitution to provide educational opportunity for its citizens. Although "[a]ll fifty state constitutions contain an education clause designed to establish some form of education system,"<sup>1</sup> the states vary widely in both the amount of funding provided to public schools and the distribution of funding among schools.<sup>2</sup>

### Fundamental Issues in School Funding

Public school corporations generate almost no money by themselves and instead depend on local, state, and federal tax dollars to fund virtually all of their operations. Federal funds provide less than 10 percent of the total that schools receive and are not included in this discussion, which focuses on local and state revenues. To support schools, individuals are required to pay multiple types of taxes, including, but not limited to, local property tax, state income tax, and state sales tax.

**Local vs. State Sources.** An important distinction in discussions of school finance is the difference between local and state sources of dollars for schools. In Indiana the local dollars are raised from property taxes along with vehicle taxes and financial institution taxes. The historical reliance on local property taxes as the primary source of revenue for funding local schools placed a large tax burden on property owners, compared to individuals whose income came from less tangible assets and those who did not shoulder as heavy a burden for funding

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1. Jensen, R. M. (1997). Advancing education through education clauses of state constitutions. *BYU Education & Law Journal*. (p. 1). Retrieved January 5, 2005, from <http://www.law2.byu.edu/jel/sp1997/html/jensen.htm>

2. Park, J. (2004). More different than alike: State strategies for funding education. *The Journal of School Business Officials*, 16(2), 14-26.

schools. In recent decades, state governments have instituted income and sales taxes to reduce the burden on property owners, by generating state tax dollars for school funding, and, in particular, by increasing dollars for schools in low wealth communities.

## Variations in Community Wealth

If most of the dollars for a school corporation were to originate in the local community — dollars generated by local property taxes — then the wealth of the community would play a large role in the amount of dollars available for its schools. High wealth communities could generate relatively large amounts of per-pupil dollars with low-to-moderate tax rates (i.e., low tax effort), while low wealth communities would be able to generate only low-to-moderate amounts of per-pupil dollars despite relatively high tax rates (i.e., high tax effort). Property taxpayers in the low wealth communities would be more likely to notice the burden.

To illustrate, the first four rows of Table 1.1 show the taxable assessed valuations per pupil for urban, suburban, town and rural corporations in Indiana, and the bottom row shows the same information for all of Indiana’s 292 school corporations.<sup>3</sup>

**Table 1.1 Estimated Taxable Assessed Value per Pupil, 2006.**

	Count	Mean	St. Dev.	Minimum	Maximum	Range
Urban	27	\$ 260,512	\$ 83,619	\$ 122,217	\$ 447,100	\$ 324,883
Suburban	43	\$ 306,123	\$ 96,652	\$ 130,087	\$ 549,609	\$ 419,529
Town	98	\$ 258,323	\$ 83,549	\$ 106,175	\$ 575,250	\$ 469,075
Rural	124	\$ 264,111	\$ 87,718	\$ 121,370	\$ 739,957	\$ 618,586
All	292	\$ 268,022	\$ 88,375	\$ 106,174	\$ 739,957	\$ 633,783

overall, while two out of three school corporations have taxable property per pupil that falls between \$188,245 and \$347,597, the distribution is skewed by one corporation that has an unusually high assessed property value per pupil — \$739,957 per pupil. This is Fremont Community Schools (Steuben county), and this amount is 1.86 standard deviations above the next highest corporation (Wawasee Community School Corporation, with \$575,250 assess value per

3. Data were supplied by the Indiana Legislative Services Agency.



pupil), and is 6.97 times greater than the corporation with the least amount of assessed property value per pupil — Scott County School District 1 with \$106,175 per pupil. The variation in the estimated taxable property per pupil for Indiana’s 292 school corporations in 2006 is displayed graphically in Figure 1.1.

Concern about such variation is not new. Stoneburner reported, “The lack of equality in the assessed value of property in the state caused the legislature in 1852 to establish boards of equalization throughout the state. These boards were given the power to increase or decrease property assessments for the purpose of equalizing the tax burden.”<sup>4</sup> Since that time various methods have been used to equalize both tax rates and revenues for schools.

## Equalization of School Corporation Revenue

Almost three decades ago a report on Indiana school finance noted “A strong relationship exists between corporation wealth and the expenditure per pupil . . . as characterized by a correlation coefficient of .728 . . .” The report interpreted this coefficient to mean that “. . . approximately 53 percent of the variation among corporations in terms of [General Fund expenditure] per pupil is the result of variation in [assessed valuation] per pupil” (p. 30).<sup>5</sup> The authors of that report saw a strong, positive relationship between community wealth and expenditure per pupil. At that time a much larger portion of expenditures came from local sources than is the case today.

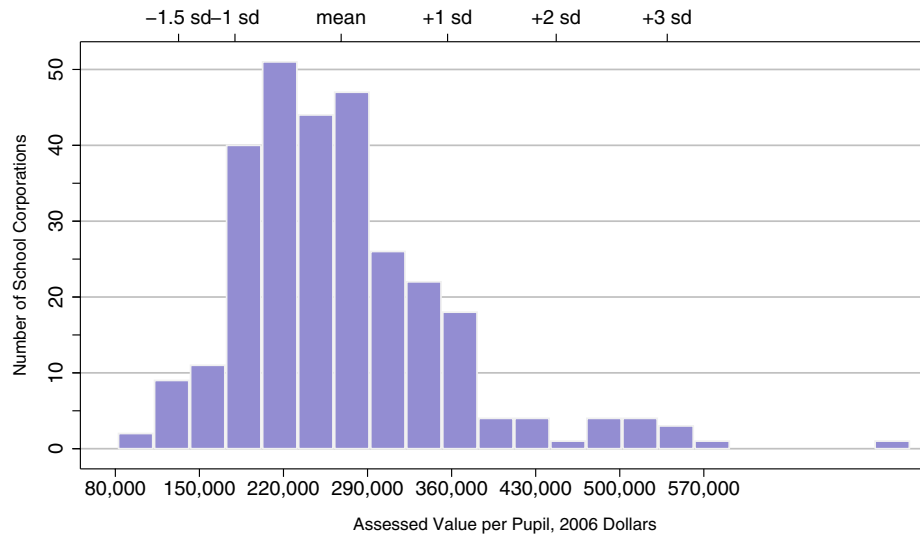
Several types of school funding programs have been developed to equalize revenue per pupil across school corporations, regardless of community wealth. One such method is known as a Foundation Program and has been used in Indiana for many years. The Foundation Program is designed to break the connection between the wealth of a community and the resources available for providing public education.

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4. Stoneburner, William E. (1940). *A History of Public School Finance in Indiana*. (p. 145). Unpublished doctoral dissertation, Indiana University, Bloomington, IN.

5. Wilkerson, William R. (1978). *Indiana School Finance: A Summary Report*. Indianapolis.

**Figure 1.1 2006 Assessed valuation per pupil for 292 Indiana School Corps.**



## School Finance Litigation

The movement toward Foundation Programs has been driven by school finance litigation.<sup>6</sup> Specifically, the wide variations in the amount of funding for schools in different communities was challenged in the courts, first in other states, and more recently, in Indiana. More than 30 years ago, two landmark cases, *Serrano v. Priest* in California (1971) and *Rodriguez v. San Antonio* in Texas (1973), challenged the school finance systems in those two states. In the intervening three decades, similar challenges of education finance systems have been filed in 45 of the 50 states.<sup>7</sup>

In 1987, the Lake Central School Corporation in northwestern Indiana initiated a lawsuit raising concerns that the state’s school finance system was unconstitutional due to persisting inequities in funding (*Lake Central v. State of Indiana*, 1987).<sup>8</sup> The governor and state legislature agreed with the plaintiffs to settle the pending litigation by making several changes to the state’s Foundation Program in 1993.

6. Fulton, M., & Long, D. (April 1993). *School Finance Litigation: A Historical Summary*. Denver, CO: Education Commission of the States.  
 7. Whitney, T. N. (December 1999). *State School Finance Litigation: 1999 Summary and Analysis*. NCLS State Legislative Report, 24 (8), 1-20.  
 8. Lake Central School Corporation and others v. State of Indiana and others. Cause No. 56C01-8703-CP-801. (Newton County Circuit Court 1987).



As a result of such litigation, school finance systems in Indiana and many other states were modified to reduce the strength of the relationship between a local community's property wealth and its level of education spending, and thereby reduce the dependence of education spending on local property tax dollars.

Reducing the dependence on local property tax dollars was achieved by increasing the proportion of education dollars from state sources, particularly for low wealth school corporations, and thereby reducing variations in per-pupil dollars across all school corporations. As these goals were articulated and pursued, school finance systems also attempted to improve equity in the tax rates that generated the dollars most directly supporting instruction (i.e., General Fund dollars). More recently, the goal of funding adequacy has received increased attention.

## Indiana's Foundation Program

Dating back to 1949, Indiana has used a Foundation Program to generate and distribute funding for public school corporations. As one might expect, the details of the Foundation Program have changed dramatically over time.

Generally speaking, the premise underlying a Foundation Program is that the state guarantees school corporations a specific amount of per-pupil funding for regular education operations, known as the *foundation level*, provided that the school corporation raises a designated local share of dollars through property taxes.<sup>9</sup>

During the past 55 years, Indiana has made several changes in its Foundation Program that have resulted a significant reduction in the portion of dollars from local sources and increased the portion of dollars from state-level sources.

These changes were designed to: a) eliminate the traditional dependence of per-pupil funding on community property wealth per pupil, b) reduce variability in per-pupil funding across school corporations, c) increase per-pupil funding, and d) reduce variability in property tax rates across school corporations.

### Changes in 1993

Some of the most important recent changes in Indiana's Foundation Program occurred in 1993. In this year the General Assembly made several modifications to the state's Foundation Program. As a result, the modified program,

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9. Augenblick, J., Fulton, M., & Piphio, C. (1991). *School finance: A primer*. Denver, CO: Education Commission of the States.

- Continued setting a minimum expenditure per-pupil target for each corporation;
- Specified that local property tax rates should be the same for school corporations with similar levels of expenditures;
- Mandated that property tax rates could not exceed specified ceilings; and
- Provided a means for adjusting the foundation level per pupil based on a school corporation's socioeconomic status.

More recently, the focus of school finance discussions has shifted to the question, "Do school corporations receive an adequate level of regular education per-pupil dollars to enable them to provide students the opportunity for an adequate education?"<sup>10</sup> This debate has acquired greater significance due to the Federal *No Child Left Behind* act and the state's accountability law, P.L. 221.

The current attention devoted to funding adequacy may obscure the importance of funding equity, for community wealth appears to be a reliable predictor of student achievement. An assumption underlying the increase in the state funds directed to less wealthy school corporations is that the increase in school funding, regardless of community wealth, will compensate in some way for experiences (or lack thereof) in low wealth communities and, thus, the added stated funds will help raise student achievement to levels comparable to those exhibited by students in wealthier communities.

## How the Foundation Program Works Today

Under Indiana's Foundation Program, the state first determines the total amount of dollars that enable school corporations to fund their regular education operations. Second, the portion of these dollars that can be raised locally (Tuition Support Levy) to support education through local property taxes is established. Finally, the portion of dollars that cannot be covered by local sources is designated as the amount of state share (Tuition Support) for each corporation.

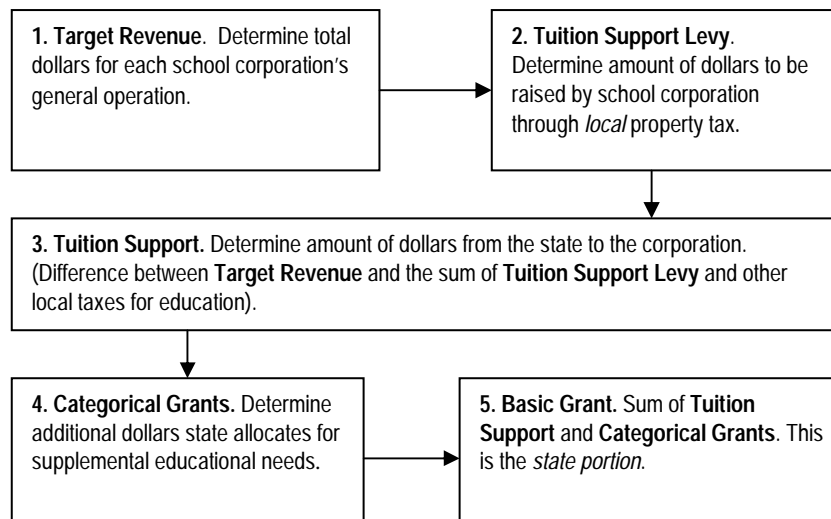
The manner in which a Foundation Program calculates local and state portions of funding depends on a number of formulas. For example, the share of dollars to be raised locally might be determined by multiplying a specific tax rate by the assessed value of taxable property in the school corporation's district. The

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10. Augenblick, J. G., Sharp, J. A., Silverstein, J. R., & Palaich, R. M. (2004). Politics and the meaning of adequacy: States work to integrate the concept into K to 12 school finance. In K. DeMoss and K. K. Wong (Eds.), *Money, politics, and law: Intersections and conflicts in the provision of educational opportunity* (pp. 17-35). Larchmont, NY: Eye on Education.

dollars generated through the Foundation Program are allocated to the General Fund for each of Indiana's 292 school corporations. Figure 1.2 shows the major steps for calculating the amount of dollars each school corporation receives through the state's Foundation Program. Complete details can be found in Reed (2006).<sup>11</sup>

**Figure 1.2 Steps in Calculating School Corporation Funding in Indiana.**



The definitions for these terms are:

**Target Revenue** — The amount of money the Foundation Program allocates to a school corporation for funding its regular education programs.

**Tuition Support Levy** — The portion of a school corporation's Target Revenue that the Foundation Program indicates should be raised by local property taxes.

**Tuition Support** — The difference between Target Revenue and local tax revenues. This difference is the amount the state funds (state support).

**Categorical Grants** — These are additional dollars the Foundation Program allocates to meet needs that are supplemental to a school corporation's regular education program. Special education and Prime Time are examples. The funding for categorical grants comes from state sources.

11. Reed, S. (2006). *Digest of public school finance in Indiana: 2005-2007 Biennium*. Indianapolis, IN: Indiana Department of Education. Retrieval from <http://www.doe.state.in.us/publications/financedigest.html>.

**Basic Grant** — The sum of Tuition Support plus the Categorical Grants (state support).

## Calculating Target Revenue

Three options exist for calculating Target Revenue. These are:

- 1 Foundation Grant**, which is the product of multiplying the foundation level times the Complexity Index times the adjusted ADM,
- 2 Variable Grant**, which is the product of the previous year revenue per pupil times the current ADM, and
- 3 Transition**, which is a calculation that begins moving a corporation along a six-year transition to the Foundation Grant.

## Foundation Grant

The Foundation Grant calculation involves three components: the foundation level, the complexity index, and the adjusted ADM.

### Foundation Level

The per-pupil foundation level is an amount established by the General Assembly and changes each year. Table 1.2 shows the foundation levels for ten years.

**Table 1.2 Foundation Level per Pupil, 1998-2007.**

Year	Foundation Level	Inflation Adjusted
1998	\$ 3,675	\$ 3,357
1999	\$ 3,885	\$ 3,503
2000	\$ 4,079	\$ 3,605
2001	\$ 4,267	\$ 3,684
2002	\$ 4,400	\$ 3,730
2003	\$ 4,560	\$ 3,797
2004	\$ 4,350	\$ 3,552
2005	\$ 4,365	\$ 3,493
2006	\$ 4,517	\$ 3,545
2007	\$ 4,563	\$ 3,509

The right column shows the inflation adjusted values, using 1993 dollars as the base. During this ten year period the foundation level increased 4.53 percent.

### **Complexity Index**

For each school corporation the foundation level is adjusted by multiplying it times the Complexity Index. Thus, the Foundation Formula Grant is sensitive not only to changes in the corporation's student enrollment but also to selected community socioeconomic factors that are considered to increase the cost of educating students. This index is designed to generate more dollars for school corporations located in lower socioeconomic communities and is the weighted average of the following indicators plus one:

- Percentage of families in the school corporation with a single parent in 2000. Weight for 2005-06: 0.1233.
- Percentage of school corporation's population 25 years of age with less than a 12th-grade education in 2000. Weight for 2005-06: 0.2256.
- Percentage of families in the school corporation with children less than 18 and who have a family income below the poverty level in 2000. Weight for 2005-06: 0.0768.
- Percentage of school corporation's students eligible for free school lunches in 2004-05. Weight for 2005-06: 0.2789.

- Percentage of school corporation's students classified as limited English proficient in 2004-05. Weight for 2005-06 is 0.1001.

The values for the first three variables are obtained from the U.S. Census and are updated once every decade. Values for the last two variables are obtained annually from each school corporation. These five variables are intended to represent the poverty, educational attainment, family status, and English language proficiency of students within each school corporation. The weight assigned to each of these variables is based on previous research concerning the relationship between the variable and student performance for the corporation on the state's ISTEP+ test.<sup>12</sup>

The premise underlying the Complexity index is that school corporations with more complex student populations, as indicated by higher Complexity Index values, require more dollars per-pupil to obtain a similar level of student performance as school corporations with less complex student populations, as indicated by lower Complexity Index values. The weights for these five variables are summed and added to 1. If the result is equal to 1.25 or greater, then 1.25 is subtracted from the index and the difference multiplied by 0.5 and added to the initial result. This becomes the adjusted Complexity Index for the corporation.

### **Enrollment Change Adjustment**

Instead of using the actual ADM which is subject to the possibility of large fluctuations from year to year, the Foundation Program uses an adjusted ADM count based on changes in the preceding five years. The ADM for school corporations with *growing* enrollments is adjusted downward by 25 percent of growth, compared to their raw 2005-06 ADM. The ADM for school corporations with *declining* enrollments is adjusted upwards to the five year average of their previous years' ADMs.

### **Source of Target Revenue**

Prior to 2006, three separate formulas were used to calculate the amount of revenue each school corporation might receive, and the school corporation received the largest amount generated by the three calculations. Prior to 2006, 79 percent of school corporations received funding through the Minimum Guarantee Grant, which provided for a fixed percent increase in Target Revenue, regardless of decreases in ADM.

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12. Bull, B., and Michael, R. S. (2003). An updated, preliminary examination of Indiana's Complexity Index. Prepared for the Indiana School Finance Issues Group. Bloomington: Indiana Education Policy Center.



Table 1.3 shows that in 2006, only 15 percent (44 school corporations) are receiving the amount of revenue that the algorithms of the Foundation Formula Grant specify. Eighty-five percent of the corporations are receiving either above or below the amount the formula specifies. In the 2005-07 biennium these corporations will begin transitioning, over a six year interval, to the Foundation Grant.

**Table 1.3 Source of Target Revenue for 292 Indiana School Corporations, 2000-07.**

Year	Foundation Grant	Variable Grant	Minimum Guarantee	In Transition
2000	46%	24%	31%	0%
2001	55%	7%	37%	0%
2002	20%	20%	61%	0%
2003	38%	13%	49%	0%
2004	17%	4%	79%	0%
2005	15%	7%	78%	0%
2006	15%	27%	0%	40%+ 19% -
2007	26%	28%	0%	39%+ 7% -

One consequence of using only a single formula is school corporations that received considerably more dollars in previous years might experience such a large reduction in revenue that general operations would be unduly hampered. To prevent this from occurring the Foundation Program includes a provision to guarantee that the maximum decline in adjusted Target Revenue, through the Variable Grant, is no more than one percent in 2006. This guarantees that the adjusted Target Revenue will not fall below 99 percent of the previous year's Target Revenue per ADM.

### Transition to the Foundation Formula

The first step in the transition is to calculate one-sixth of the difference between the previous year Target Revenue per ADM and the 2005-06 adjusted ADM.

If the absolute value of the difference between the previous year revenue per previous year ADM is less than or equal to \$50, then for 2006 the Foundation Formula amount per-pupil is the product of the Complexity Index multiplied by the foundation level (\$4,517).



If the difference between the previous year revenue per previous year adjusted ADM and the 2005-06 Foundation Formula amount is less than a negative \$50, then one-sixth of the absolute value of the difference or \$50 is deducted from the previous year revenue per previous year adjusted ADM.

If the difference between the previous year revenue per previous year ADM is \$50.01 or greater, then the larger of one-sixth of the difference or \$50 is added to the previous year revenue per previous year adjusted ADM.

## Calculating Tuition Support Levy

After the Target Revenue is established, the next step is to determine the portion that is to be funded through local property taxes and vehicle and financial institution taxes. The Foundation Formula does this by multiplying the maximum General Fund tax rate by the current assessed value of taxable property within the school corporation's boundary.

## Calculating the Target Tax Rate<sup>13</sup>

**Foundation Formula Corporations.** School corporations funded by the foundation formula have a target tax rate of \$0.72, provided the school corporation did not increase levies due to a P. L. 874 loss or a new facility appeal in 2005. School corporations experiencing a P. L. 874 loss or a new facility appeal add a rate for the 2005 levy increases.

**Transition to Foundation Formula Corporations.** School corporations transitioning to the Foundation Formula have the same target tax rate of \$0.72 plus a rate for the difference between the Foundation Formula Grant and the Variable Grant.

## General Fund Property Tax Rate and Levy<sup>14</sup>

The target tax rate is modified by the tax rate adjustment factor and the difference between the adjusted target rate and the 2005 General Fund tax rate. The 2005 General Fund tax rate may be adjusted downward if the school corporation transferred referendum dollars approved before 2002 to the Referendum Levy fund. The 2005 General Fund tax rate is increased by a maximum of \$0.03 or decreased by a maximum of \$0.08. The resulting rate is multiplied by the 2005 assessed value and divided by 100 to determine the levy.

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13. Division of School Finance. 2005 Budget Workshop. Presented June 29, 2005. Pike Township High School.

14. Division of School Finance. 2005 Budget Workshop. Presented June 29, 2005. Pike Township High School.

## Calculating Tuition Support

After the amount of tax dollars to be generated by the property tax and other local taxes is established, the next step is to calculate the state portion (Tuition Support) of Target Revenue. The difference between the Target Revenue and the local portion (Tuition Support Levy plus other local taxes) is known as Tuition Support.

## Categorical Grants

Indiana's Foundation Program includes four categorical grants, which are dollars from the state for specific supplemental purposes beyond basic education services.

- 1 Academic Honors Diploma Grant.** This supplemental grant provides school corporations with an additional \$900 dollars for each Academic Honors Diploma awarded during the previous year. This grant provides an incentive to school corporations and compensates them for the additional expenses incurred in operating this program.
- 2 Special Education Grant.** Indiana's Foundation Program provides additional dollars to school corporations to offset the cost of providing education to students with special needs. The current amounts provided are \$8,246 per pupil (unduplicated count) with severe disabilities, \$2,238 per pupil (unduplicated count) with moderate disabilities, \$531 per pupil (duplicated count) with communications disorders, and \$531 per pupil (cumulative count) for homebound services.
- 3 Vocational Education Grant.** This grant is intended to offset the cost of providing vocational education services. The Foundation Program provides dollars for credit hours taught, with the amount of dollars varying based on the demand and wages for field in which training is provided (see Reed (2006) for details).
- 4 Prime Time Grant.** The dollars in this grant are designated to assist school corporations in keeping the student-adult ratio (teachers and/or teacher-aids) at specified levels in kindergarten and grades 1-3. The calculation is described in detail by Reed (2006).

## Calculating the Basic Grant

The Basic Grant is the amount of state dollars each school corporation receives from the state for their General Fund in order to deliver both general and supplemental education services. Thus the Basic Grant is the sum of the Tuition Support plus all of the supplemental Categorical Grants listed above.

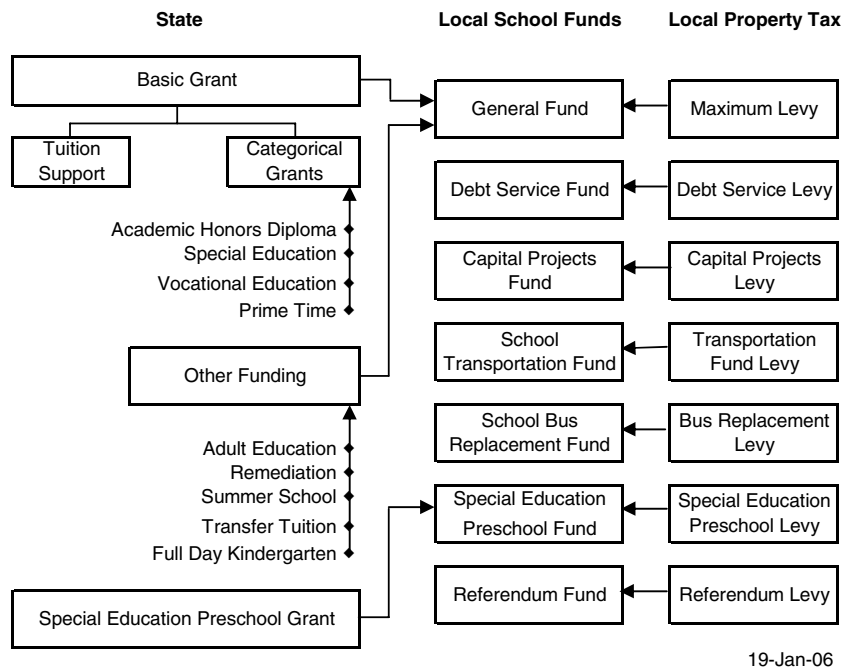
## Other Funds

So far we have focused on the General Fund and explained how, as a result of the calculations that occur within the Foundation Program, dollars flow into it. However, public school corporations may levy and collect property taxes not only for the General Fund, but also for Debt Service, Capital Projects, School Transportation, School Bus Replacement, Special Education Preschool, and the Referendum fund, as shown in Figure 1.3.

School corporations generally may not move dollars between funds, but rather, must use the dollars within a particular fund for that fund's stated purpose. For example, a school corporation may not take dollars from the School Bus Replacement Fund and spend them for designing a new building, for buildings must be financed with dollars from the Capital Projects Fund. Thus, these seven funds are fiscally independent of one another.

All of these funds are depicted in Figure 1.3. The source of dollars, whether state or local, is also shown. The Foundation Program sets a property tax limit for the General Fund, and a tax rate limit exists for the Capital Projects and Special

**Figure 1.3 Funds in the Foundation Program.**



Education Preschool Funds. The Debt Service Fund tax rate is set so that sufficient dollars are available to meet the annual debt payments of the school corporation. The Transportation Fund, limited to a maximum 6 percent yearly levy increase, provides for the day-to-day operating expenses associated with transporting students, while the Bus Replacement Fund generates dollars for purchasing new school buses.

This description of Indiana's Foundation Program is a simplified summary that omits many details of the calculations. Perhaps the most important points to remember are: a) the Foundation Formula Grant equalizes per-pupil Target revenue across school corporations, and b) dollars from state sources are used to supplement the local dollars in order to meet the Target revenue.





## Trends in Average Daily Membership

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*Finding:* The percent change in average daily membership for all corporations increased steadily from 1993 to 2005, with a slight dip only in 2001. Disaggregation by school corporation type shows suburban corporations gained more students than town or rural corporations, while average daily membership decreased in urban corporations.

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As noted in Chapter 1, the Indiana Foundation Formula Grant is responsive to changes in enrollment, specifically attendance data recorded as the “average daily membership” (ADM). The ADM for Indiana’s 292 school corporations in 1993 was 927,838, and increased by 38,565 students, to a total of 976,403 in 2005. Table 2.1 presents the ADM counts, percent change, and average annual change for the interval.

**Table 2.1** Changes in Average Daily Membership for 1993 and 2005.

Category & Number	1993	2005	Percent Change	Average Annual Change
All Corporations (n = 292)	927,838	976,403	5.23 %	0.46 %
Urban (n = 27)	319,969	298,049	-6.85 %	-0.64 %
Suburban (n = 43)	185,240	238,318	28.65 %	2.32 %
Town (n = 98)	229,368	244,064	6.41 %	0.57 %
Rural (n = 124)	193,261	195,971	1.40 %	0.13 %

From Table 2.1 we see that ADM increased the most in suburban corporations and decreased the most in urban corporations.

Figure 2.1 displays the percent change in the ADM, using 1993 as the base year. The average annual increase in ADM from 1993 to 2005 was 0.46 percent, and the ADM is projected to increase to 989,365 by 2007.

**Figure 2.1 Cumulative Percent Change in Average Daily Membership 1993-2007**

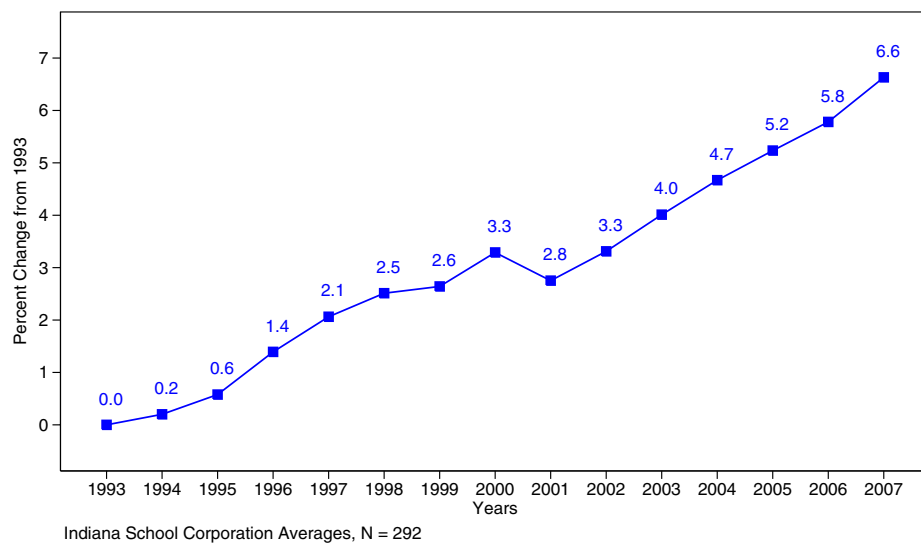
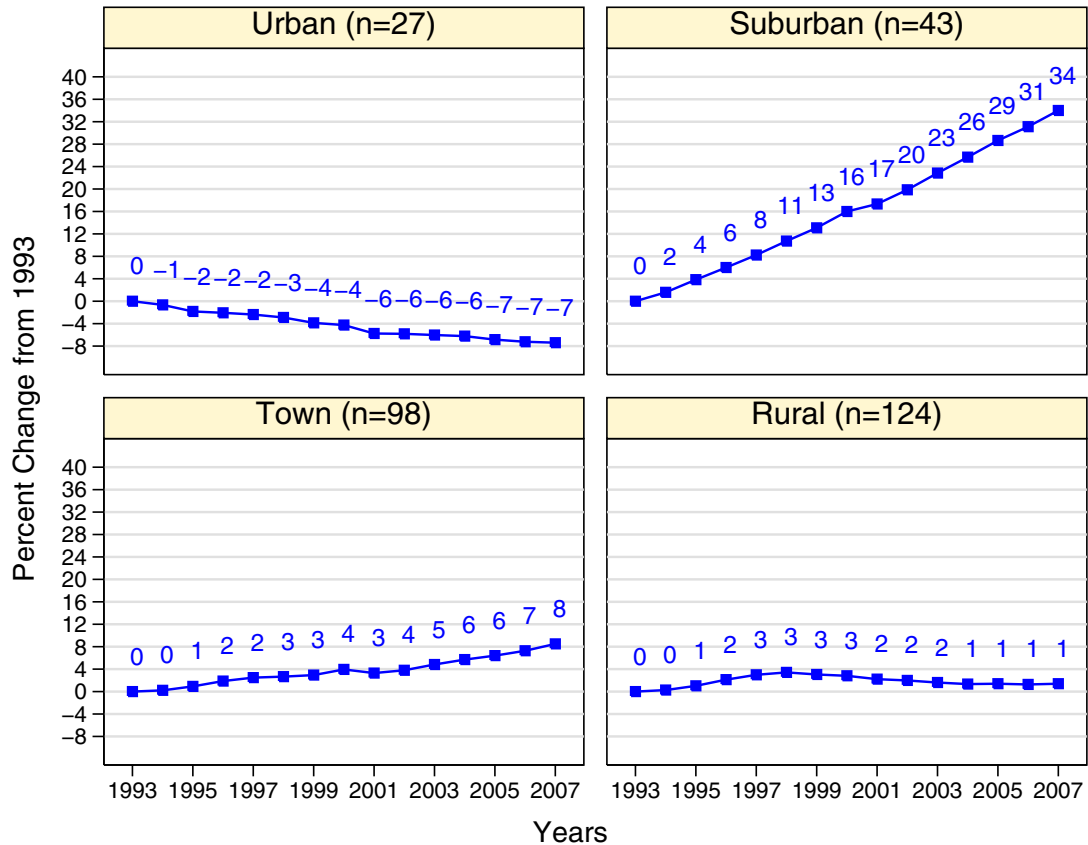


Figure 2.2 shows the percent change, to the nearest integer, in ADM for each of the four types of corporations. Rural corporations experienced the least change in ADM during the interval, as indicated by the 1.4 percent change from 1993 to 2005. Town corporations exhibited moderate growth, with a percent change of 6.41 percent in 2005. The growth in town corporations is about one percentage point higher than the overall growth for the state. Suburban corporations show the largest percent change during the interval, rising to 28.65 percent in 2005, and ADM declined in urban corporations with a -6.85 change in 2005.

Figure 2.2 Cumulative Percent Change in Average Daily Membership by School Corporation Type 1993-2007.



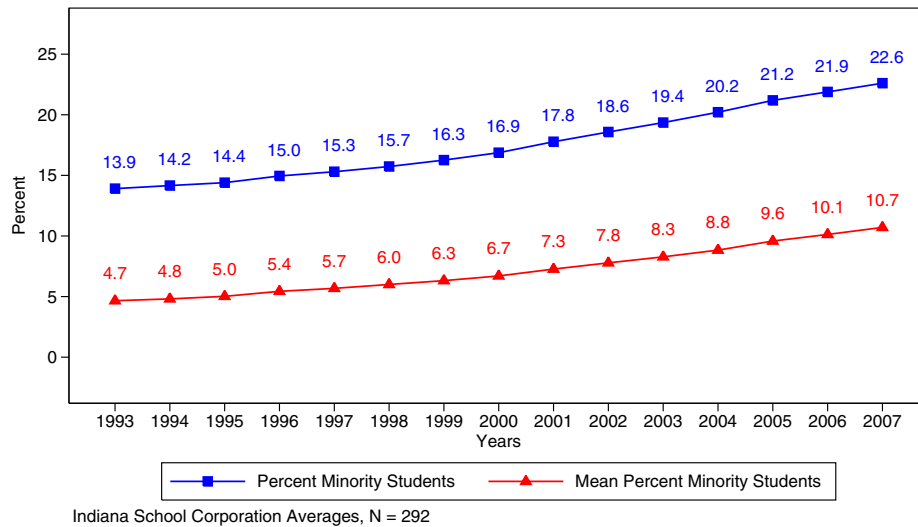
## Changes in Average Daily Membership by Minority Status

Figure 2.3 shows the percent of minority<sup>1</sup> students in 292 Indiana school corporations. The top line, “Percent Minority Students,” is the sum of all minority students divided by the sum of ADM for the corresponding year. In 1993 about 14 percent of the students in Indiana school corporations were minority and this percent rose to 21.2 in 2005.

1. Minority data were retrieved December 2003 and December 2005 from <http://idea-net.doe.state.in.us/htmls/education.html>. For 1993 to 1995, corporation level counts include the following categories: asian, black, hispanic, indian, and white. For 1996 to 2005, corporation level counts are grouped into the following categories: asian, black, hispanic, indian, multi-race, and white. “Minority” includes all categories except white.

The bottom line in Figure 2.3, the “Mean Percent Minority Students,” is produced by calculating first the percent of minority students in each corporation and then calculating the mean of the minority percent for all 292 corporations. In 1993, the mean percent of minority students within a corporation was 4.7 percent and rose to 9.6 percent in 2005.

**Figure 2.3 Minority Percent in Average Daily Membership 1993-2007.**

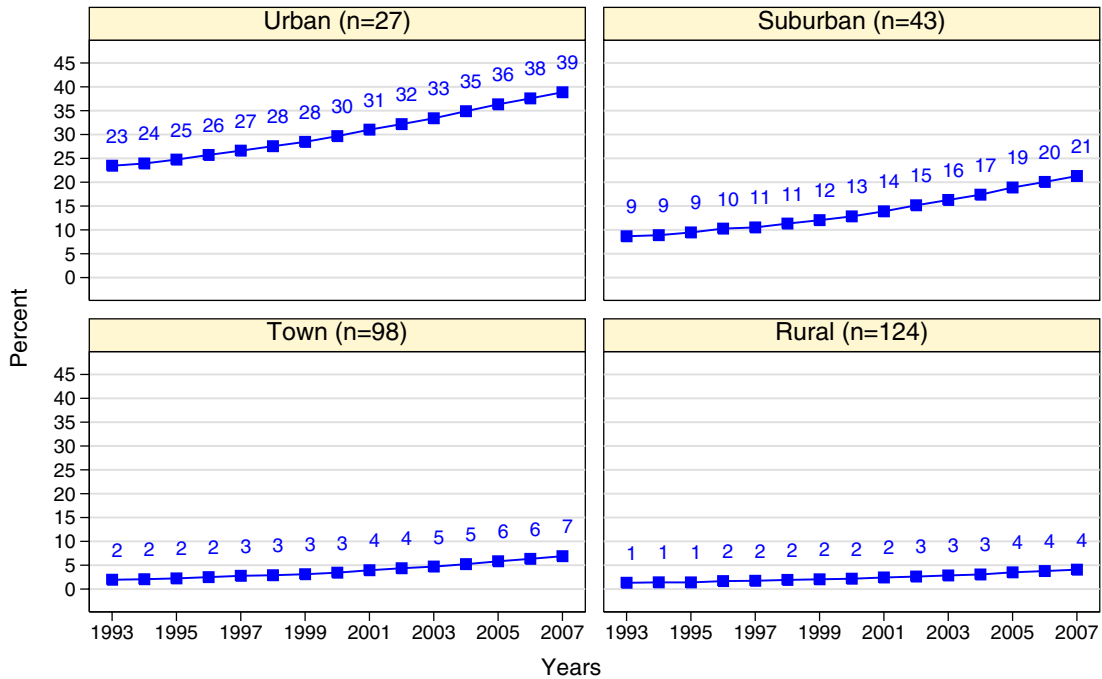


These two lines differ because of the higher concentration of minority students in larger (urban) school corporations.

Figure 2.4 displays, to the nearest integer, the mean percent of minority students for each school corporation type. Urban corporations have the largest mean percent of minority students. In 1993 this mean percent was 23, increasing 10 percentage points to a mean of 36 percent in 2005. Suburban corporations show the next largest mean percent of minority students. In 1993 the mean percent for Suburban corporations was 9 percent which was less than half of the mean for Urbans. By 2005 the mean percent for Suburbans grew by 8 points to 17 percent. The mean percent of minority students in Town and Rural corporations was 2 and 1 percent respectively, and increased to 6 and 4 percent respectively by 2005.



**Figure 2.4 Minority Percent in Average Daily Membership by School Corporation Type 1993-2007.**



### Changes in Minority and Non-Minority Groups

Table 2.2 provides a breakdown of the change in ADM from 1993 to 2005 for minorities, including the minority ADM counts, percent change for the interval, and the difference in the actual number of students between 1993 and 2005. The minority group includes all pupils *not* counted as white.

The minority ADM for Indiana’s 292 school corporations in 1993 was 129,037 and increased by 77,855 minority students to a total of 206,892 in 2005.

**Table 2.2 Changes in Minority Average Daily Membership for 1993 and 2005**

Category & Number	1993	2005	Percent Change	Difference 2005-1993
All Corporations (n = 292)	129,037	206,892	60.34 %	77,855
Urban (n = 27)	100,307	125,709	25.32 %	25,402
Suburban (n = 43)	20,964	56,615	170.06 %	35,651
Town (n = 98)	4,953	16,731	237.80 %	11,778
Rural (n = 124)	2,813	7,837	178.60 %	5,024

Table 2.3 presents the *non-minority* ADM counts, percent change for the decade, and the difference in actual number of students. The non-minority group includes only students counted as white. The non-minority ADM for Indiana's 292 school corporations in 1993 was 798,801 and declined by 29,291 students to 769,510 by 2005.

**Table 2.3 Changes in Non-Minority Average Daily Membership for 1993 and 2005**

Category & Number	1993	2005	Percent Change	Difference 2005-1993
All Corporations (n = 292)	798,801	769,510	- 3.81 %	- 29,291
Urban (n = 27)	219,662	172,340	- 27.46 %	47,322
Suburban (n = 43)	164,276	181,704	10.61 %	17,428
Town (n = 98)	224,449	227,333	1.30 %	2,919
Rural (n = 124)	190,449	188,134	-1.23 %	- 2,315

For the 292 Indiana school corporations minority pupils increased 60.34 percent during the 1993-2005 interval while the non-minority group decreased 3.81 percent. Town corporations showed the largest percent increase in minorities (237.80 percent) along with a 1.30 percent increase in the non-minority group. Likewise, Rural corporations showed a 178.60 percent increase in the minority group and a small decrease (-1.30 percent) in the non-minority group.

The minority percent increase (170.06 percent) for Suburban corporations was nearly as large as the Rural corporations, but the non-minority group also increased 10.61 percent in Suburban corporations, the largest increase among the four types of school corporations.

Urban corporations experienced the least amount of change for the minority group, which increased 25.32 percent. However, the decrease in the non-minority group, -27.46 percent, was larger than in any of the other three types of school corporations.



## Changes in Average Daily Membership by Free Lunch Status

The percent of students eligible for free lunch is one of the components of the Complexity Index and thus influences the revenue the Foundation Formula Grant generates for a school corporation. The free lunch ADM for Indiana's 292 school corporations in 1993 was 205,720 and increased by 69,495 students to a total of 275,215 in 2005. Table 2.4 displays the ADM free lunch counts, percent change, and difference in the number of students between the beginning and end of the 1993-2005 interval.

**Table 2.4** Changes in Free Lunch Average Daily Membership for 1993 and 2005

Category & Number	1993	2005	Percent Change	Difference 2005-1993
All Corporations (n = 292)	205,720	275,215	33.78 %	69,495
Urban (n = 27)	115,023	136,669	18.82 %	21,646
Suburban (n = 43)	22,882	46,461	103.05 %	23,579
Town (n = 98)	37,880	55,157	46.61 %	17,277
Rural (n = 124)	29,935	36,928	23.36 %	6,993

The average annual increase from 1993 to 2005 is 2.45 percent and the number of students projected to be receiving free lunch in 2007 is 288,691.

The top line in Figure 2.5 is the sum of all free lunch students divided by the sum of ADM for the corresponding year. The bottom line is the mean of all the mean percents of free lunch students in each corporation. Values for 2006 and 2007 are projections.

**Figure 2.5** Free Lunch Percent in Average Daily Membership 1993-2007.

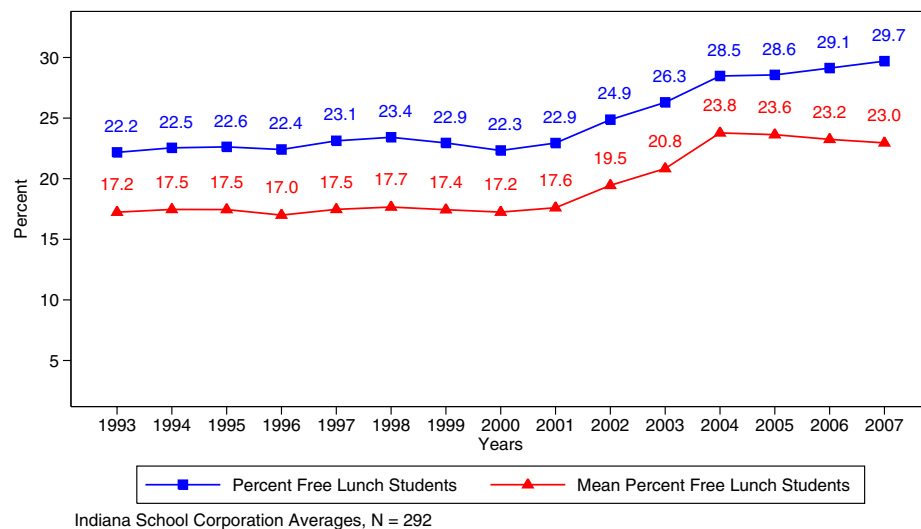
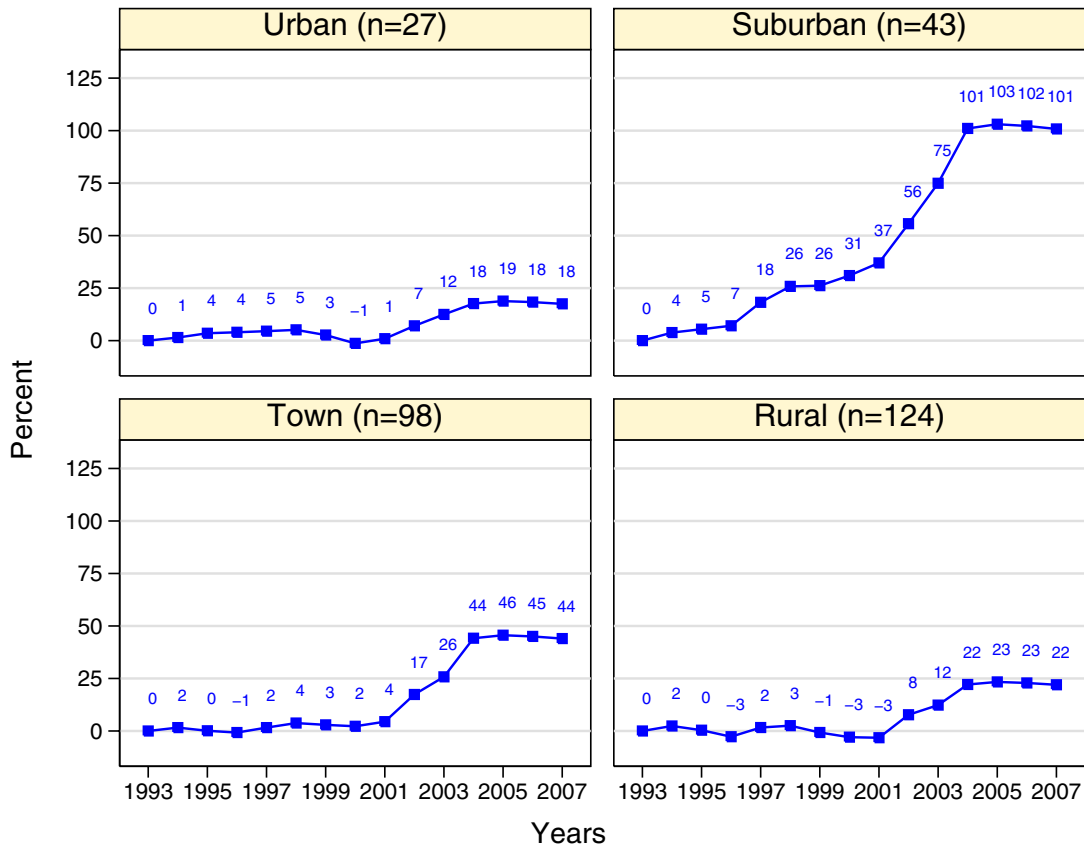
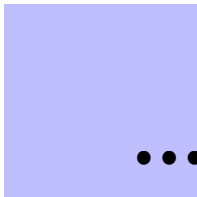


Figure 2.6 shows the free lunch percent change in average daily membership by school corporation type. Suburban corporations show the largest change followed by town, rural, and urban corporations.

**Figure 2.6 Free Lunch Cumulative Percent Change in Average Daily Membership by School Corporation Type 1993-2007.**





## Revenue per-Pupil

The goals for Indiana’s Foundation Program include: a) Increase funding per-pupil, b) Increase the state’s share of school revenue, c) Make funding per-pupil more dependent on school corporation complexity, d) Break the traditional dependence of funding per-pupil on property wealth per-pupil, e) Make general fund property tax rates more dependent on Target Revenue per-pupil, f) Reduce variability in funding per-pupil across school corporations, g) Limit increases in property taxes, and h) Reduce variability in property tax rates across school corporations.

This chapter examines changes in Target revenue per-pupil, the role of outside provisions, General Fund revenue per-pupil, and the state share of revenue.

### Target Revenue per-Pupil

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*Finding:* Target revenue per-pupil, in current dollars, increases each year of the 2005-07 biennium, but in terms of inflation-adjusted dollars, decreases -0.87 percent. Inflation-adjusted Target revenue per-pupil in 2007 is projected to be 21.53 percent higher than it was in 1993.

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Target revenue per-pupil is the sum of Tuition Support Levy, vehicle and financial institution taxes, Tuition Support, and the At-Risk distribution<sup>1</sup>, divided by unadjusted Average Daily Membership. For 2002 and subsequent years, Target revenue per-pupil also includes dollars from various “outside

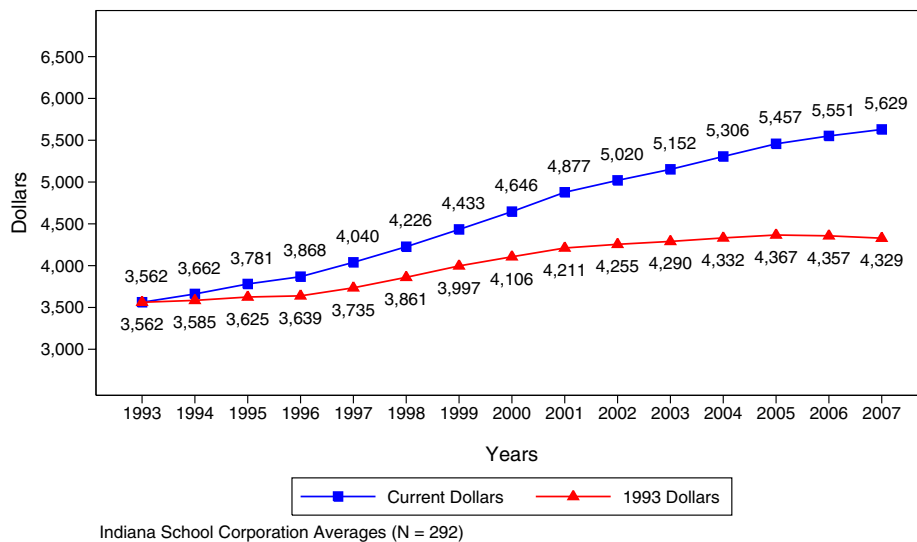
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1. Included in Target Revenue for years 1993 to 2003.

provisions”; i.e., dollars made available for General Fund expenditures but originating from sources other than those dollars generated by the Foundation Program’s General Fund formulas.

Figure 3.1 displays the average Target revenue per-pupil for the 292 traditional Indiana school corporations from 1993 to 2007. The top line (blue) shows Target revenue per-pupil in current dollars and the bottom line (red), is Target revenue per-pupil in inflation-adjusted dollars. Note that the Target revenue per-pupil dollar amounts include the At-Risk distribution and thus are higher than those appearing in reports released prior to 2004.

**Figure 3.1 Target Revenue per-Pupil in Current and Constant 1993 Dollars 1993-2007.**



## Trends in Target Revenue per-Pupil by Biennium

During the 2005-07 biennium, the Target revenue per-pupil is expected to increase \$172 in current dollars, from \$5,457 in 2005 to \$5,629 in 2007. When corrected for inflation, the Target revenue per-pupil is projected to decrease 0.87 percent over the biennium, or an average annual decrease of 0.44 percent. This compares to an average annual increase of 0.89 percent for the preceding biennium and an annual average increase of 1.64 percent for the entire 14-year

period. Between 1993 and 2007 the increase in Target revenue per-pupil is 58 percent in current dollars and 21.53 percent in inflation-adjusted dollars. The percent change and the average annual change for each biennium since 1993 is displayed in Table 3.1.

**Table 3.1: Changes in Target Revenue per-Pupil by Bienniums 1993 to 2007, for 292 Indiana School Corporations, Constant 1993 Dollars.**

	1993-95	1995-97	1997-99	1999-01	2001-03	2003-05	2005-07
Percent Change	1.77%	3.03%	7.01%	5.35%	1.88%	1.79%	-0.87%
Avg. Ann. Change	0.88%	1.51%	3.45%	2.64%	0.93%	0.89%	-.44%

Figure 3.2 shows, for selected years, the average Target revenue per-pupil for urban, suburban, town and rural corporations in inflation-adjusted 1993 dollars.

**Figure 3.2 Target Revenue per-Pupil for Corporations, Selected Years, Constant 1993 Dollars.**

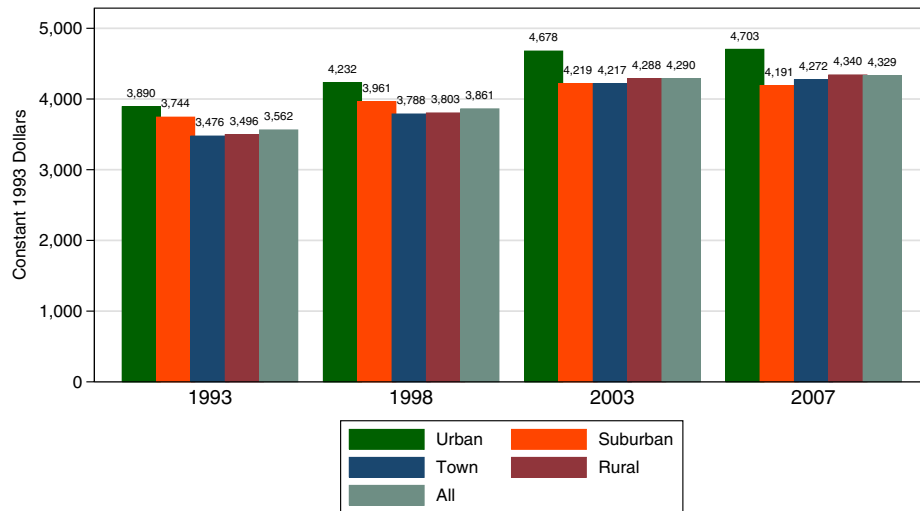


Table 3.2 lists the average annual changes in Target revenue per-pupil for each demographic type of school corporation. For the 27 urban corporations, Target revenue per-pupil is projected to decrease -0.56 percent annually during the 2005-07 biennium, and decrease -0.41 percent annually for the 43 suburban



corporations. Since 1993 Target revenue per-pupil has increased, in inflation-adjusted dollars, 20.9 percent for urban corporations and 11.9 percent for suburban corporations.

For the 98 town corporations, Target revenue per-pupil is projected to decrease -0.28 percent annually and the 124 rural corporations are projected to experience an average annual decrease during the biennium of -0.53 percent. Since 1993 Target revenue per-pupil has increased, in inflation-adjusted dollars, 22.9 percent for town corporations and 24.1 percent for rural corporations.

**Table 3.2: Average Annual Changes in Target Revenue per-Pupil by Bienniums 1993 to 2007, for 292 Indiana School Corporations, Constant 1993 Dollars.**

	1993-95	1995-97	1997-99	1999-01	2001-03	2003-05	2005-07
Urban	1.48%	1.02%	3.51%	2.67%	0.66%	0.83%	-0.56%
Suburban	0.60%	1.04%	2.38%	1.69%	0.32%	0.08%	-0.41%
Town	0.86%	1.75%	3.61%	2.82%	0.74%	0.93%	-0.28%
Rural	0.85%	1.59%	3.71%	2.84%	1.36%	1.14%	-0.53%

## Outside Provisions

Due to the declining rate of revenue increases occurring in 2002, The General Assembly permitted school corporations to transfer equivalent revenue amounts from other local funds to the General Fund. The sources of these transfer funds are listed by biennium.

**2001—03 Biennium.** In this biennium the General Assembly permitted school corporations to “transfer” an amount equivalent to the reduction in base revenue support into their General Fund from the following local funds: Capital Projects, Debt Service, Transportation, and School Bus Replacement.

Strictly speaking, corporations were permitted to pay expenditures billable to the General Fund with dollars designated as belonging to the local funds listed in the preceding sentence. While dollars were not actually transferred first into the General Fund, this produces the same effect as if the funds were actually transferred from the Capital Projects fund to the General Fund. We shall use the term “transfer” as a short hand reference to the actual procedure.

**2003—05 Biennium.** School corporations were permitted to transfer funds from utility and insurance and supplemental utility and insurance funds into their General Fund. Additionally, local contributions to the Teacher Retirement Fund were reduced as a result of increased state payments.

**2005—2007 Biennium.** School corporations were permitted to augment General Fund revenues with a variety of non-foundation formula provisions.

- Additional free textbook relief. School corporations were permitted to cover any unreimbursed amount (in the School Textbook Reimbursement Contingency Fund) with dollars from the Debt Service fund.
- Additional Capital Projects fund transfer. School corporations were permitted a 0.75 percent per year increase in authority to cover property insurance and utility costs with funds from Capital Projects.
- Referendum adjustment. School corporations are permitted to move pre-2002 referendum levies outside this fund.
- Additional Teacher Retirement Fund contribution rate relief. The state increased contributions and thereby reduced the increment required of school corporations.
- Transportation levy adjustment. School corporations are permitted to recoup lost state transportation monies (50 percent in 2005 and 100 percent in 2007) by adjusting their Transportation Fund levy.

The sources of funds used to supplement the General Fund and the years in which dollars could be used from these other local sources are summarized in the following table.

**Table 3.3: Sources of Outside Provisions, 2001 to 2007.**

	2001-03	2003-05	2005-07
Capital Projects	✓		
Debt Service	✓		✓
Transportation	✓		✓
School Bus Replacement	✓		
Capital Projects (utility & insurance costs)		✓	✓
Capital Projects (supplemental utility & insurance costs)		✓	
Reduced local contribution to Teacher Retirement Fund		✓	✓
Referendum Adjustment			✓

To see the effect of these outside provisions on the Target revenue calculations, the bottom pair of lines in Figure 3.3 displays the inflation-adjusted Target revenue per-pupil with outside provisions excluded (bottom line), and with outside provisions included (second line from bottom). The top two lines presents the same information in current dollars.

**Figure 3.3 Target Revenue per-Pupil with and without Outside Provisions in Current and Constant 1993 Dollars, 2002 to 2007.**

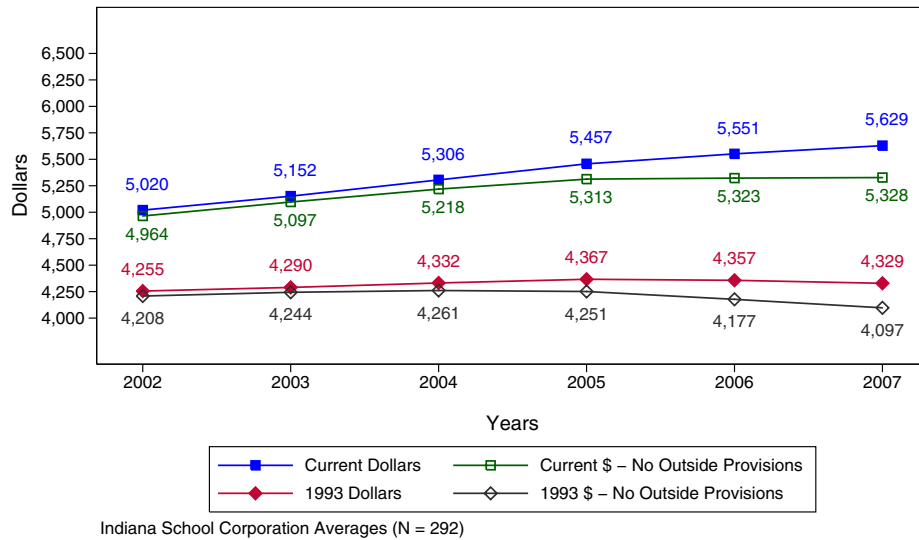


Table 3.4 lists the difference that outside provisions make in both dollars and percents. The contribution of outside provisions to Target revenue per-pupil was relatively minor prior to 2005, but increased substantially in the next biennium.

**Table 3.4: Dollar Impact of adding Outside Provisions to Average Target Revenue per-Pupil 2002 to 2007, Constant 1993 Dollars.**

	2002	2003	2004	2005	2006	2007
Difference	\$ 47	\$ 46	\$ 71	\$ 116	\$ 180	\$ 232
Percent	1.12%	1.08%	1.67%	2.73%	4.31%	5.66%

## General Fund Revenue per-Pupil

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*Finding:* General Fund revenue per-pupil, in current dollars, increases each year of the 2005-07 biennium, but in terms of inflation-adjusted dollars, decreases -0.91 percent. Inflation-adjusted General Fund revenue per-pupil in 2007 is projected to be 24.84 percent higher than it was in 1993.

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The composition of General Fund revenue per-pupil has changed over the years. For 2006-07 the General Fund revenue is the sum of the following:

- Target revenue,
- Academic honors diploma grant (\$900 for each student who received an academic honors diploma in the 2004-05 school year),
- Special education grant
  1. \$8,246 per severe disabilities pupil
  2. \$2,238 per mild and moderate disabilities pupil
  3. \$531 per communication and homebound pupil,
- Vocational education grant
  1. More than Moderate Need and High Wages: \$450 per pupil credit hour
  2. More than Moderate Need and Moderate Wages: \$375 per pupil credit hour
  3. Moderate Need and High Wages: \$375 per pupil credit hour
  4. Moderate Need and Moderate Wages: \$300 per pupil credit hour
  5. Less than Moderate Need and High Wages: \$300 per pupil credit hour
  6. All other Vocational Education Programs: \$250 per student
  7. Area Participation: \$150 per student,
- Prime Time grant. The details of the Prime Time calculation are found in Reed (2006).<sup>2</sup>

In 1993, school corporations in Indiana received an average of \$3,861 in General Fund revenue per-pupil. The Foundation Program increases the General Fund revenue per-pupil, in current dollars, every year between 1993 and 2007, amounting to a 62.34 percent increase by 2007, compared to 1993. In inflation-adjusted dollars, the General Fund per-pupil increases 24.84 percent from 1993

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2. Reed, Suellen (2006). *Digest of Public School Finance in Indiana: 2005-07 Biennium*. Indianapolis: Indiana Department of Education.

to 2007. The inflation-adjusted General Fund per-pupil amount was \$4,864 in 2005 and decreases in 2006 to \$4,850 and in 2007 declines to \$4,820 during the 2005-07 biennium.

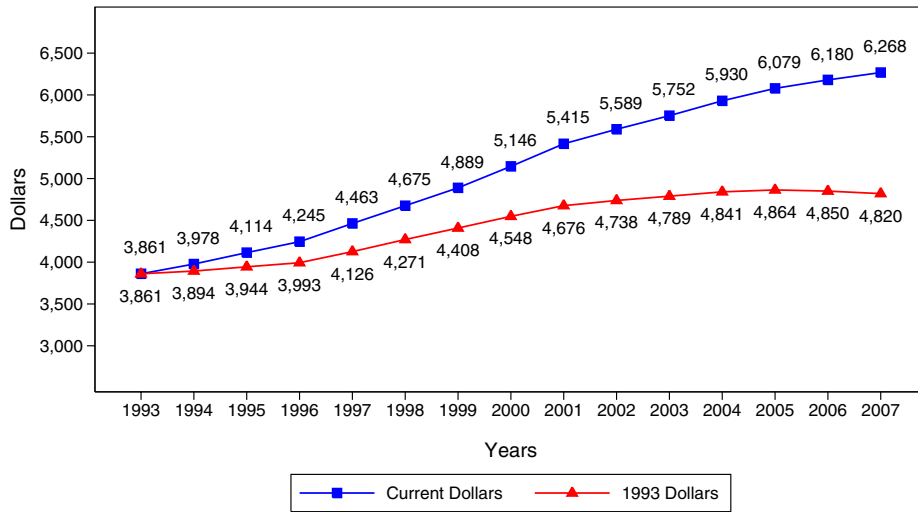
Table 3.5 shows the percent of General Fund revenue that is derived from Target revenue. In 1993 Target revenue per-pupil was 92.2 percent of General Fund and declines yearly to a projected 89.8 percent in 2007.

**Table 3.5: Target Revenue per-Pupil as Percent of General Fund per-Pupil, 1993 to 2007, Selected Years.**

1993	1995	1997	1999	2001	2003	2005	2006	2007
92.2%	91.9%	90.5%	90.7%	90.1%	89.6%	89.8%	89.8%	89.8%

Figure 3.4 displays the average General Fund dollars per-pupil for the 292 traditional school corporations.

**Figure 3.4 General Fund Revenue per-pupil in Current and Constant 1993 Dollars, 1993-2007.**

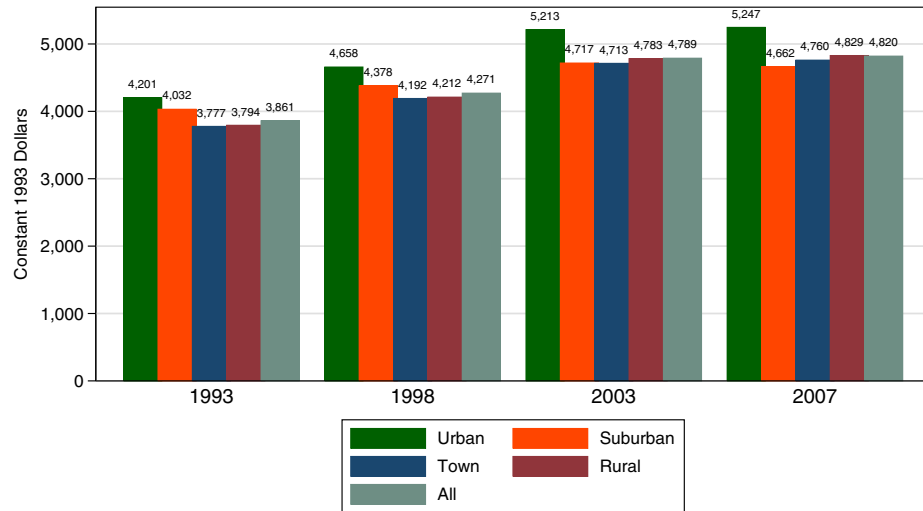


Indiana School Corporation Averages (N = 292)

During the 2005-07 biennium, the General Fund revenue per-pupil is expected to increase \$189 in current dollars, from \$6,079 in 2005 to \$6,268 in 2007. When adjusted for inflation, this is a decrease of \$44 or -0.91 percent. This compares to an average annual increase of 1.87 percent for the entire 14 -year period.

Figure 3.5 displays the average General Fund revenue per-pupil for urban, suburban, town, and rural corporations in constant 1993 dollars.

**Figure 3.5 General Fund Revenue per-Pupil for Selected Years, Constant 1993 Dollars.**



292 Indiana School Corporations

A -0.93 percent decrease in General Fund revenue per-pupil is projected to occur in the 2005-07 biennium for the 27 urban corporations and a -1.37 percent decrease for the 43 suburban corporations. Since 1993 the General Fund per-pupil has increased, in inflation-adjusted dollars, 24.9 percent for urban corporations and 15.63 percent for suburban corporations.

The average General Fund revenue per-pupil is projected to decrease -0.65 percent for the 98 town corporations, and the 124 rural corporations will see a -0.95 percent decrease during the biennium. Since 1993 the General Fund revenue per-pupil has increased, in inflation-adjusted dollars, 26 percent for town corporations and 27.27 percent for rural corporations.

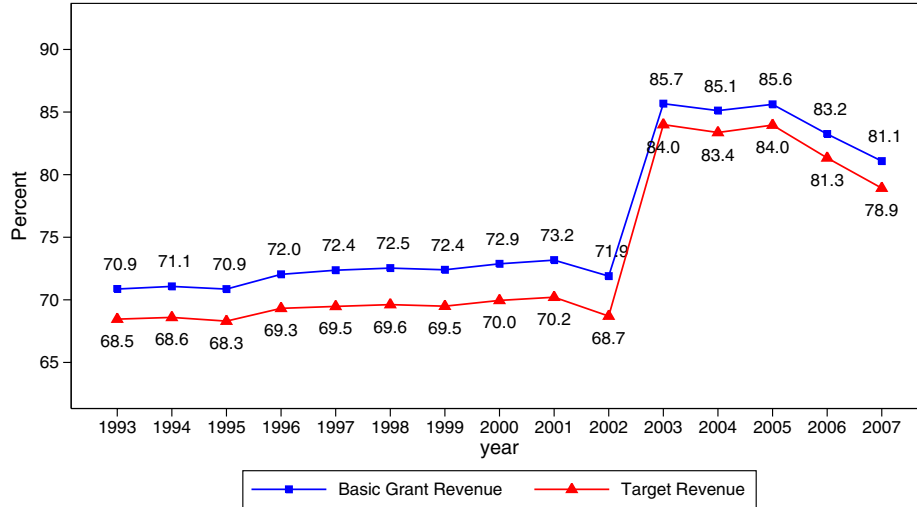


# State Share of Revenue

*Finding:* The share of public school revenues provided by the state remained fairly constant from 1993-2002, but the state share increased dramatically in 2003, due to an increase in the Property Tax Replacement Credit (PTRC). The state share is projected to decline during the 2005-07 biennium.

Figure 3.6 shows the state provided 68.5 percent of Target revenue in 1993 and 70.9 percent of General Fund revenue.<sup>3</sup> By 2001 the state share of Target revenue grew to 70.2 percent, a 0.38 percent average annual increase based on percentages, and a 2.44 percent average annual increase based on the actual dollars. The state share of General Fund revenue grew to 73.2 percent by 2001 which is a 0.45 percent average annual increase based on state share percentages, and a 2.82 percent average annual increase based on the dollars.

**Figure 3.6 State Share of Revenue 1993 to 2007.**



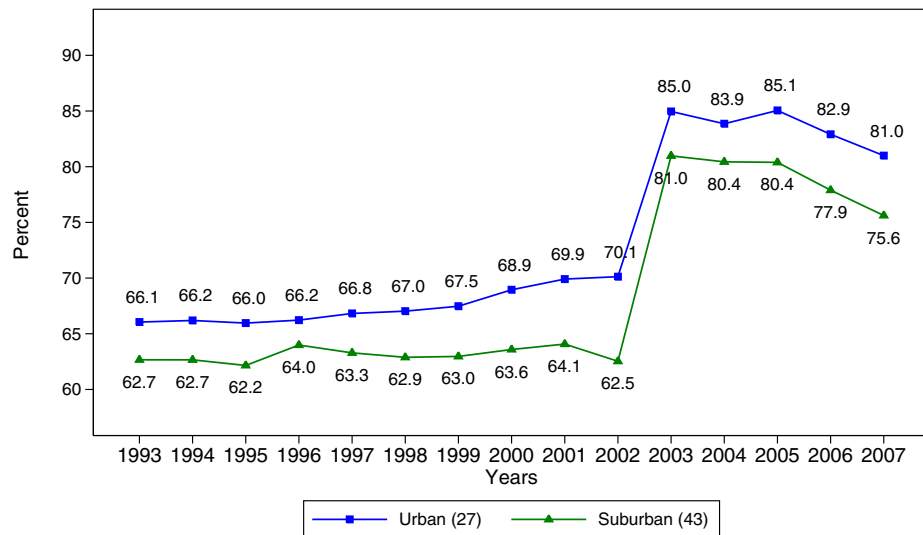
3. In previous reports the Homestead Credit Deduction (HCD) was undifferentiated and contributed to the local share. Values for the HCD were supplied by the LSA and in this report subtracted from the local share and added to the state share. The values supplied for 2002 are also used for subsequent years.

After a slight decrease in 2002, the state share of Target revenue increased to 84 percent. The state share of General Fund revenue increased 13.9 percentage points during the same period to 85.7 percent. This large increase was due to the effect of the PTRC, and occurred when the state used the revenue from increasing the state sales tax by 1 percent to lower property taxes. During the 2005-07 biennium, however, the state share of Target revenue is expected to decline by -6.46 percent and General Fund revenue by -5.55 percent.<sup>4</sup>

## State Share by School Corporation Type

Figure 3.7 shows the state share of Target revenue for urban and suburban corporations and Figure 3.8 shows the state share for town and rural corporations. The state share of Target revenue for town and rural corporations approximates the percentages for all corporations, as displayed in Figure 3.6. From 1993 to 2000, the state share for urban is a few points lower than for all corporations, and from 2001-2007 the state share for urban school corporations is very similar to the state share for all corporations. Suburban corporations consistently receive the smallest state share of Target revenue.

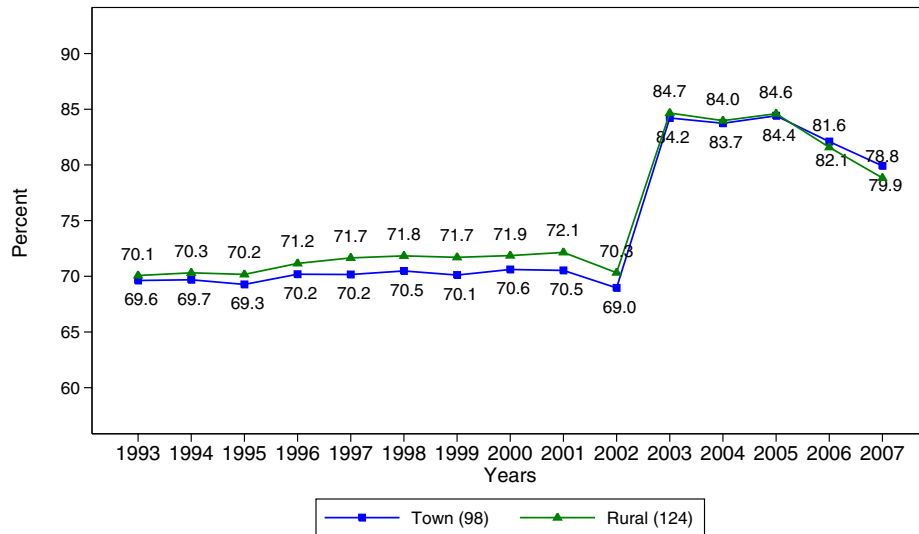
**Figure 3.7 Urban and Suburban School Corporations. State Share of Revenue 1993 to 2007.**



4. Some of this reduction is due to the use of the 2002 Homestead Credit Deduction value for subsequent years.



**Figure 3.8 Town and Rural School Corporations. State Share of Revenue 1993 to 2007.**



## Variability in Funding

In this section we examine the variations that exist among school corporations in total funding. Historically, this topic appears in the school finance literature under the term, “equity.” Discussions in the literature often focus on three particular types of variability, referred to as fiscal neutrality, horizontal equity, and vertical equity. The goal of fiscal neutrality is achieved when the amount of revenue a school corporation receives is unrelated to its community wealth. We examine fiscal neutrality in Chapter 5. The following discussion is based on a work in progress by Toutkoushian and Michael (2005).<sup>5</sup>

The second type of variability is known as *horizontal equity*, meaning that school districts considered to be similar to each other along dimensions relating to the cost of providing basic education — such as wealth, size and socioeconomic status — should have comparable levels of funding. This is often referred to as the “equal treatment of equals” in the school finance literature. A third equity principle, *vertical equity*, states that in order for education funding

5. Toutkoushian, Robert K. & Michael, Robert S. (2005). A Unified Approach for Assessing Horizontal and Vertical Equity in School Funding. Presented March 2005 at American Education Finance Association, Louisville, KY.



to be equitable, school districts with more costly to educate student populations should receive more funding than do their counterparts — this is referred to as the “unequal treatment of unequals.” Odden and Picus<sup>6</sup> describe some of the ways that foundation programs have been modified to provide more financial resources towards districts with student populations that are more costly to educate.

## Horizontal Variability Indicators

The principle of horizontal equity asserts that similar school corporations should receive similar amounts of funding. Horizontal equity is assessed by looking at the coefficient of variation between actual and predicted per-pupil funding levels from a multiple regression model that relates per-pupil revenues to specific vertical equity and cost-related factors (cf. Toutkoushian & Michael, 2005). This yields a better measurement of the equal treatment of equals, for no longer must one assume that all school districts have comparable funding needs. As the coefficient of variation decreases, the variations in per-pupil revenues decrease, which is an improvement in horizontal equity.

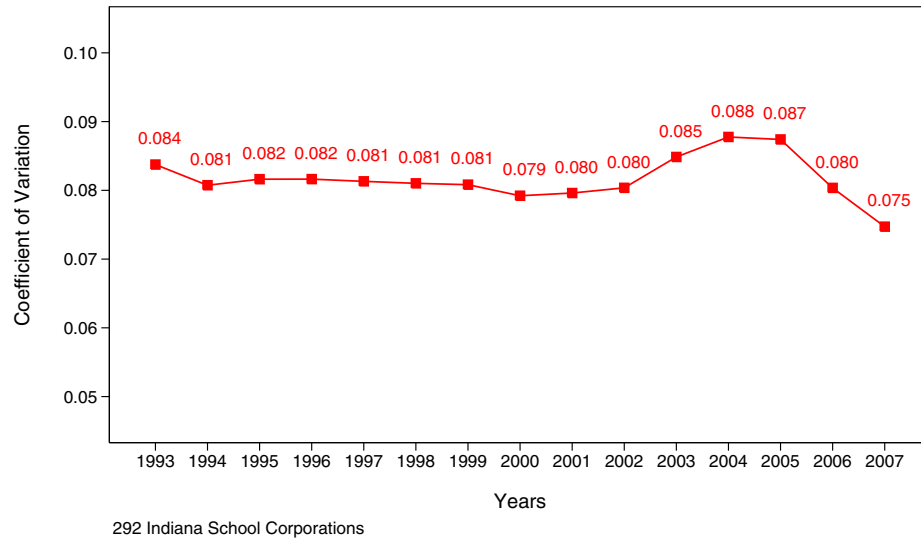
Figure 3.9 shows horizontal variability since 1993 and projections to 2007. Between 1993 and 2002 horizontal variability improved slightly<sup>7</sup> but overall remained relatively constant. In 2003 and following years horizontal variability increases, indicating that an increasing number of similar corporations were receiving differential funding. At the same time, an increasing percentage of corporations were funded via the minimum guarantee and the variable grant, while the percentage funded by the foundation formula declined sharply (cf. Table 1.3, page 11). With the elimination of the minimum guarantee and the transition of an increasing number of corporations to the Foundation Formula Grant, horizontal variability is projected to improve markedly during the 2005-07 biennium.

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6. Odden, A., and Picus, L. (2004). *School Finance: A Policy Perspective* (3rd Edition). Boston: McGraw-Hill.

7. A decline indicates improvement, viz., less variability.

**Figure 3.9 Reduction in Coefficient of Variation between Actual and Predicted per-pupil Funding for Similar Indiana School Corporations, 1993-2007.**



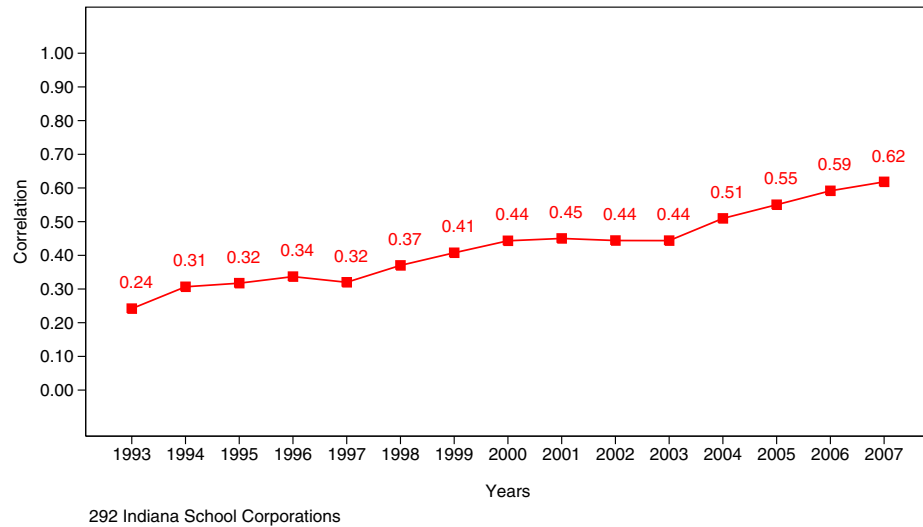
## Vertical Equity Indicators

Vertical equity improves when the correlations between per-pupil revenues and vertical equity characteristics increase. The vertical equity characteristics are those community attributes that are considered to require more effort and expense to raise students to a specified performance level. Vertical equity is assessed based on the strength of the linear relationships (i.e., correlation coefficients) between per-pupil funding and the vertical equity factors (i.e., At-Risk Index and Complexity Index) used in the state. Figure 3.10 displays the correlation between inflation-adjusted target revenue per-pupil and the At-Risk index (1993-2003) or the Complexity Index (2004-07).<sup>8</sup>

8. The components of the Complexity Index are listed and explained in Chapter 1.



**Figure 3.10 Correlation between Target Revenue per-Pupil and At-Risk Index and/or Complexity Index, 1993-2007.**



The increasing strength of the relationship over the years indicates that, overall, more Target revenue per-pupil dollars are being directed to those school corporations with larger percentages of students who require more effort and expense to perform at a particular level of achievement. The maximum (positive) value for the correlation coefficient is 1.0; thus, there is room for further improvement in vertical equity in future years.

Table 3.6 shows the partial effects of the five Complexity Index components on inflation-adjusted target revenue per-pupil for selected years. These results show that by 2007, three of the five components of the Complexity Index have a positive (direct) relationship with Target revenue. Interestingly, after controlling for the other Complexity Index factors, neither limited English proficiency nor adults without a high school education, have positive partial effects on per-pupil revenues, even though these are used in the calculation of Target revenue within the Foundation Grant.

**Table 3.6: Partial Effects<sup>a</sup> of Complexity Index Components, 292 Indiana School Corporations, 2003-2007.**

Components (percents)	— Partial Effects —				
	2003	2004	2005	2006	2007
No High School	- 6.05	+ 0.91	+ 3.68	+ 3.94	+ 4.48
One Parent Family	- 0.20	+ 6.86	+ 9.14*	+ 8.32*	+ 7.33*
Poverty	+ 32.31***	+ 27.77***	+ 27.82***	+ 26.73***	+ 26.65***
Free Lunch Eligible	+ 7.17*	+ 6.16	+ 6.58	+ 7.74*	+ 8.07**
Limited Eng. Prof.	+ 9.10	- 0.96	- 6.08	- 5.76	- 6.04

a. Partial effects show the changes in each component that affect Target revenue per-pupil while holding the other components constant.

\*\*\*p<.01, \*\*p<.05, \*p<.10. A positive (+) and statistically significant (\*) partial effect means progress towards vertical equity is occurring for this component, while holding other components constant.

The recent changes in the Foundation Program seem to be producing improvement in both horizontal and vertical equity. We expect this trend will continue as more corporations complete the transition to the Foundation Grant formula.





## Property Taxes

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*Finding:* From 1993 to 2005, Indiana succeeded in decreasing the variability in property tax rates across the 292 Indiana school corporations. Variability in tax rates is projected to continue decreasing during the 2005-07 biennium.

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Reassessment of property values now occurs annually, but between 2003 and 1993 reassessment occurred only twice. The first reassessment occurred in 1996, the second began in 2003. In addition, prior to 2002, property values in Indiana were taxed at one-third of true tax value. In 2002, a statewide revaluation occurred where property was taxed at full true tax value. Reassessment and revaluation of property values changes tax rates but does not necessarily change the amount of local revenue that is raised. Thus, property tax rates must be adjusted over time to take into account the effects of the reassessment and revaluation.

To rectify the taxpayer inequity charged in *Lake Central vs. State of Indiana*, the post-1993 formula increased dramatically the tax rates in low rate school corporations (i.e., those located in relatively wealthy communities) in order to bring their General Fund property tax rates closer to those in the other corporations in the state. The degree to which the Foundation Program has accomplished this goal can be seen by examining changes in tax rates.

The first row in Table 4.1 lists the raw tax rates from 1993 to 2007. The second row shows the rates reduced by a third for the years 1993-2001. The third row contains the rates adjusted on the basis of the 2003 reassessment of property values, and the last row reflects the application of the Property Tax Replacement Credit.

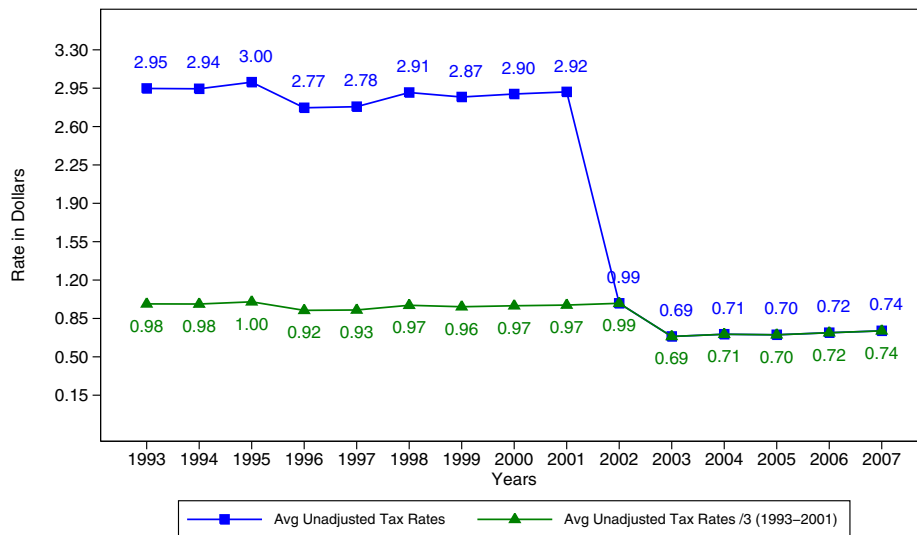
**Table 4.1 Average General Fund Tax Rates for 1993 to 2007, 292 Indiana School Corporations.**

	1993	1994	1995	1996	1997	1998	1999
Raw Rate	\$2.9478	\$2.9446	\$3.0010	\$2.7715	\$2.7841	\$2.9107	\$2.8699
Raw Rate / 3	\$0.9826	\$0.9815	\$1.0017	\$0.9238	\$0.9271	\$0.9702	\$0.9566
Adjusted	\$0.6371	\$0.6369	\$0.6497	\$0.6648	\$0.6688	\$0.6978	\$0.6884
Adjusted + PTRC	\$0.5089	\$0.5101	\$0.5250	\$0.5358	\$0.5410	\$0.5646	\$0.5563
	<b>2000</b>	<b>2001</b>	<b>2002<sup>a</sup></b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>
Raw Rate	\$2.8971	\$2.9166	\$0.9881	\$0.6856	\$0.7059	\$0.7009	\$0.7198
Raw Rate / 3	\$0.9657	\$0.9722					
Adjusted	\$0.6952	\$0.7000	\$0.7117	\$0.7181	\$0.7059	\$0.7009	\$0.7198
Adjusted + PTRC	\$0.5605	\$0.5656	\$0.5750	\$0.2495	\$0.2701	\$0.2199	\$0.2481
	<b>2007</b>						
Raw Rate	\$0.7371						
Raw Rate / 3							
Adjusted	\$0.7371						
Adjusted + PTRC	\$0.2731						

a. Raw rates no longer divided by 3 due to statewide revaluation.

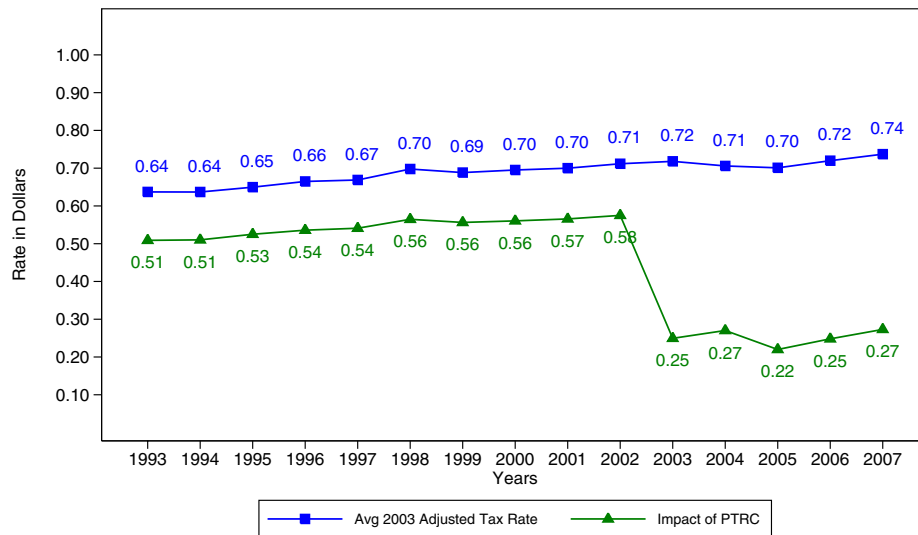
Figure 4.1 displays the raw rates for 1993-2007 (upper line), along with the same rates reduced by a third, for the years 1993-2001 (lower line). In 2002 rates were no longer set at one-third of market value and so the two lines converge.

**Figure 4.1 General Fund Property Tax Rates, Unadjusted 1993 to 2007.**



In 1993, school corporations in Indiana levied General Fund property tax rates that averaged \$0.64 per \$100 of adjusted property value (AV).<sup>1</sup> The upper line in Figure 4.2 shows the effect of adjusting tax rates in terms of the 2003 reassessment, compared to the lower line of Figure 4.1. The adjusted, average General Fund property tax rate shown in Figure 4.2 (top line) increased 6 cents from 1993 to 2005 and is projected to increase an additional 4 cents<sup>2</sup> by 2007.

**Figure 4.2 General Fund Property Tax Rates, Adjusted, 1993 to 2007.**



The lower line in Figure 4.2 reflects the impact of the Property Tax Replacement Credit (PTRC). In 1993 the inclusion of the PTRC lowers the General Fund property tax rate about 13 cents, or 20 percent, to an adjusted, average of 51 cents per \$100 of reassessed property value, and increases 7 cents by 2002 to an adjusted, average of 58 cents per \$100 of reassessed property value. In 2003 the PTRC reduces the adjusted, average General Fund tax rate by about 47 cents to 25 cents per \$100 of reassessed property value, or a reduction of about 66 percent. In effect, this is the actual maximum rate, in 2003 adjusted terms, at which local property is taxed for the General Fund. This rate is projected to rise to 27 cents by 2007.

Figure 4.3 displays four indicators of tax rate variability based on tax rates adjusted for the 2003 property reassessment.

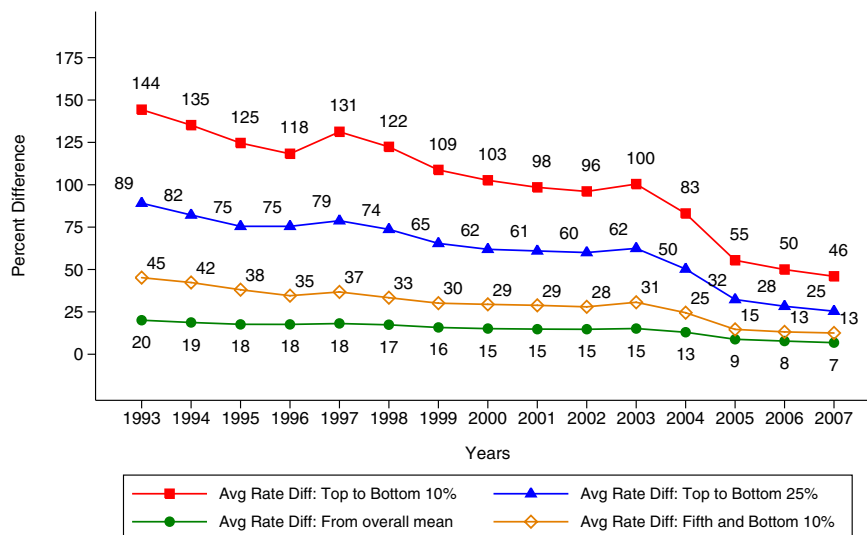
1. All real property in Indiana was reassessed in 1996 and in 2003. The actual annual general fund property tax rates per \$100 of assessed valuation in 1999, 2000, 2001, 2002, and 2003 were \$2.95, \$2.94, \$3.00, \$0.99, and \$0.69 respectively. In order to compare property tax rates over time, this report adjusts pre-2002 tax rates based on 2003 valuations.
2. Tax rates in figures are rounded.

**Average rate difference from overall mean.** (Bottom line). In 1993 the average General Fund property tax rate paid in an Indiana school corporation was 20 percentage points away from the mean tax rate for all 292 Indiana school corporations. By 2005 this difference decreased to 9 percent and is projected to drop an additional two points to 7 percent in 2007. This decline in the average distance from the mean indicates that variability in tax rates is declining.

**Average rate difference of top and bottom percentiles.** (Top line). In 1993, tax payers in school corporations with adjusted General Fund tax rates sufficiently high to place their corporation in the top 10 percent based on tax rates (mean = \$0.9978), paid more than double the tax rates paid by tax payers in school corporations that were in the bottom 10 percent (mean = \$0.4073). The average rate difference between the top and bottom deciles shows an overall decline from 1993 onward, dropping 89 points by 2005, and projected to decline an additional 9 points by 2007, to an average rate difference of 46 percent between the top and bottom deciles. This indicator is the most sensitive of the four indicators to extreme values and the general decline suggests that extremely high and extremely low tax rates are moving toward the mean.

The remaining two indicators, average rate difference between the top and bottom quartiles and the average rate difference between the fifth and bottom percentiles, also reflect decreasing horizontal variability.

**Figure 4.3** General Fund Tax Rate, Adjusted. Differences Across 292 Indiana School Corporations 1993 to 2007.



Next, we look at this same information by quartiles.

## Changes in Low Rate Corporations

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*Finding:* While the General Fund adjusted tax rate with PTRC decreased dramatically in 2003 for all school corporations, low rate corporations are projected to experience the greatest increase in rates during the 2005-07 biennium.

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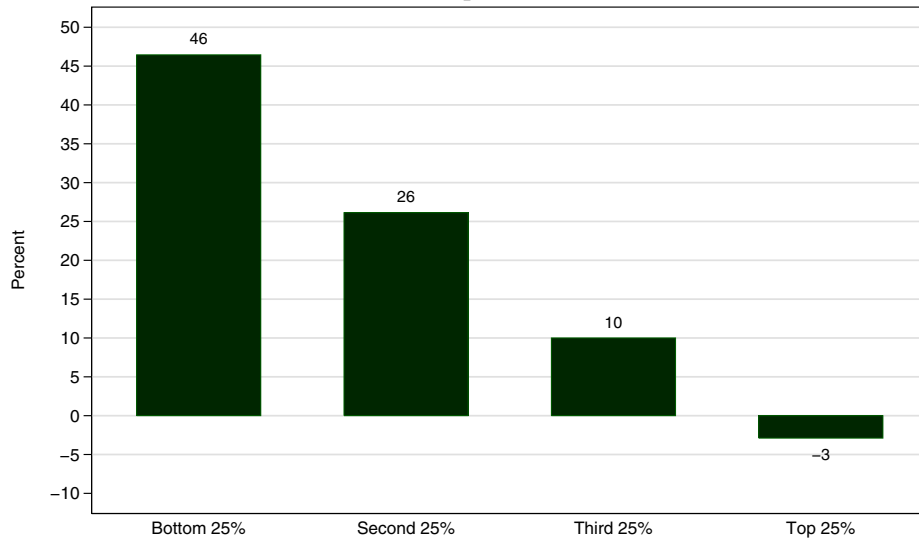
**Average rate difference between top and bottom quartiles.** This difference is represented by the second line from top in Figure 4.3. Another way to look the adjusted tax rates for 1993 to 2007 is Table 4.2 which lists rates by quartiles. The last column shows the percent difference between the top and bottom quartile for each year. For example, in 1993, the top quartile mean tax rate is 0.86, which is 89 percent higher than the mean tax rate of the bottom quartile (0.46). By 2007 this difference is projected to be 25 percent. From 1993 to 2005, the differences between top and bottom quartile means declines 64 percent and from 1993 to 2007, the decline is 72 percent. These represent dramatic improvements in taxpayer equity.

Table 4.2 Average General Fund Tax Rates by Quartiles, Adjusted to 2003 Rate, for 292 Indiana School Corporations, 1993-2007.

Year	Bottom Quartile	Second Quartile	Third Quartile	Top Quartile	Pct Top - Bottom
1993	0.4652	0.5469	0.6644	0.8629	89%
1994	0.4653	0.5713	0.6634	0.8476	82%
1995	0.4865	0.5853	0.6733	0.8537	75%
1996	0.5018	0.5990	0.6779	0.8806	75%
1997	0.5000	0.6000	0.6812	0.8939	79%
1998	0.5315	0.6268	0.7097	0.9231	74%
1999	0.5396	0.6258	0.6968	0.8925	65%
2000	0.5490	0.6356	0.7072	0.8889	62%
2001	0.5530	0.6418	0.7153	0.8900	61%
2002	0.5648	0.6518	0.7265	0.9037	60%
2003	0.5636	0.6589	0.7342	0.9157	62%
2004	0.5810	0.6535	0.7182	0.8731	50%
2005	0.6196	0.6653	0.7006	0.8197	32%
2006	0.6461	0.6887	0.7167	0.8290	28%
2007	0.6682	0.7126	0.7309	0.8379	25%

From 1993 to 2005, the mean tax rate for the bottom quartile increased 33 percent, from 0.46 to 0.62, and is projected to increase 7.8 percent during the 2005-07 biennium. During the same 1993-2005 interval, the mean tax rate for the top (high tax rate corporations) quartile decreased 5 percent, and is projected to increase 2.2 percent during the 2005-07 biennium. Figure 4.4 shows the changes for the entire 1993 to 2007 interval.

**Figure 4.4** General Fund Tax Rate: Average Increases from 1993-2007 by Quartile for 292 Indiana School Corporations.





## Reward for Effort

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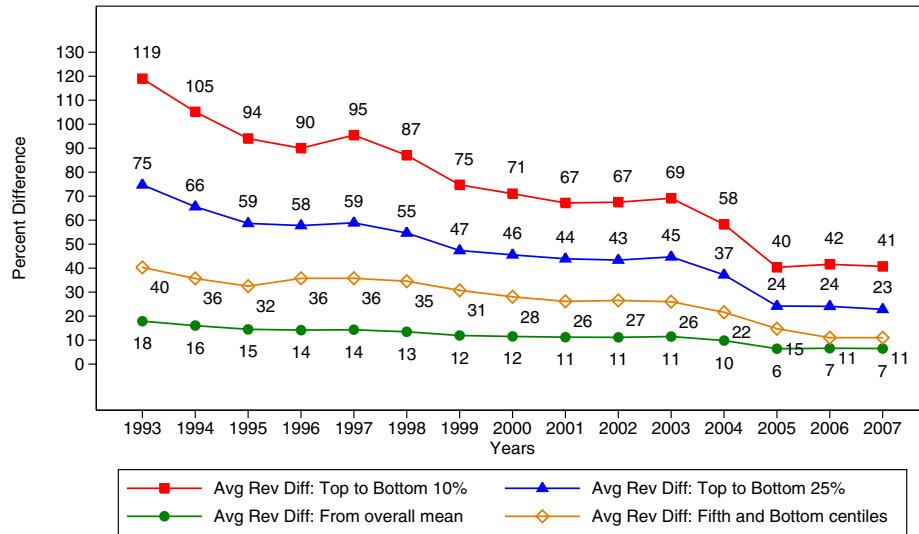
*Finding:* Between 1993 and 2002, the Indiana school funding formula dramatically reduced the differences across school corporations in the revenue they receive per-pupil for their General Fund property tax effort. The reassessment in 2003 produced a slight disruption in this trend, but the reward-for-effort equity continued to improve in 2004 and is expected to remain stable during the 2005-2007 biennium.

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One goal of Indiana's finance 1993 reform of the Foundation Program was to increase the connection between General Fund tax rates and Target revenues per-pupil. This is indicated by the variations in reward-for-effort across corporations. A stronger relationship between tax rates and revenues will lead to a reduction in variations in these ratios. Reward-for-effort is calculated as the Target revenue per-pupil divided by the 2003-adjusted General Fund tax rate.

The lower line in Figure 5.1 shows that in 1993, on average, the revenue per dollar of General Fund property tax rate received by the 292 Indiana school corporations was 18 percentage points away from the mean statewide average revenue per dollar of tax rate. By 2002 the average difference between the revenue per dollar of tax rate paid in the 292 corporations and the mean reward-for-effort rate dropped by 7 percentage points to 11 percent, and shows slight improvement in subsequent years.

**Figure 5.1 Reward for Effort Differences: 292 Indiana School Corporations 1993 to 2007.**



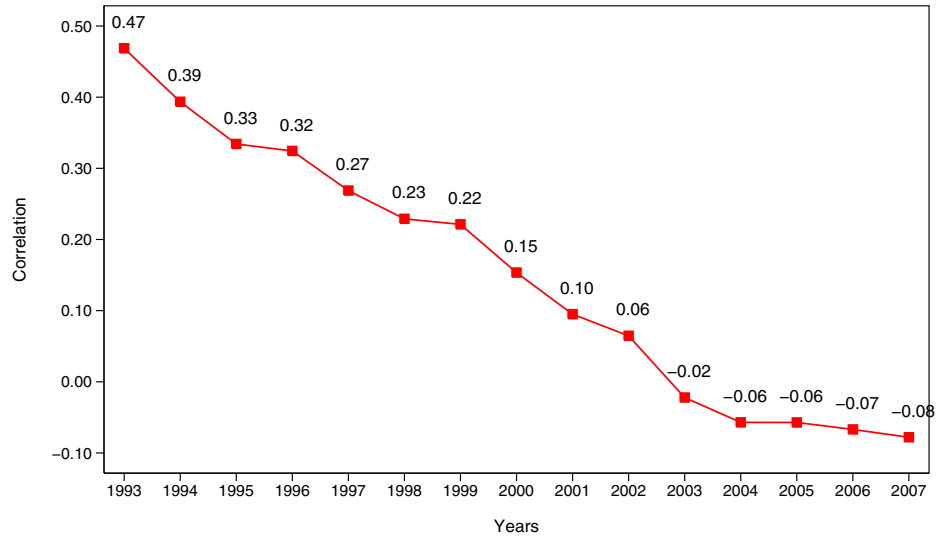
## Fiscal Neutrality

*Finding:* By 2003, Indiana succeeded in eliminating the effect of a school corporation’s property wealth on its Target revenue per-pupil, and this result is projected to remain virtually unchanged in 2005-07.

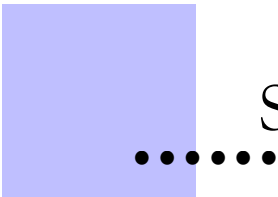
*Lake Central vs. State of Indiana* charged that the previous system of school finance allowed property-rich school corporations to generate more per-pupil Target revenue than property-poor school corporations. In other words, the previous system of school finance was not fiscally neutral because fiscal neutrality is achieved when the amount of revenue a school corporation receives is unrelated to its community wealth.

In 1993, the difference in property values was the most important single factor in explaining why some school corporations had access to more per-pupil revenue than did other school corporations. By 2003 the differences in property values have virtually no correlation with a school corporation’s Target revenue per-pupil (Figure 5.2). This result, which an exemplar of fiscal neutrality, is expected to remain virtually unchanged in the 2005-07 biennium.

**Figure 5.2** Correlation of Regular Revenue per-Pupil with Assessed Valuation per-Pupil, 292 Indiana School Corporations 1993 to 2007.







## Summary

The post-1993 Foundation Program was developed to achieve eight specific goals which are listed in Table 6.1 along with an indication of the current progress towards each goal, and a prognosis for progress during the upcoming biennium.

**Table 6.1 Summary of Progress Towards Goals for Indiana's Foundation Program, 1993 to 2007.**

Goal	Progress Since 1993	Progress: 2005-07
1. Increase funding per-pupil.	Good	Mixed
2. Increase the state's share of school revenue.	Good	Mixed
3. Make funding per-pupil more dependent on school corporation complexity (i.e., provide higher funding to school corporations with more socioeconomically disadvantaged students).	Good	Good
4. Break the traditional dependence of funding per-pupil on property wealth per-pupil.	Good	Good
5. Make General Fund property tax rates more dependent on Target Revenue per-pupil.	Good	Good
6. Reduce variability in funding per-pupil across school corporations.	Mixed	Good
7. Limit increases in property taxes.	Good	Mixed
8. Reduce variability in property taxes rates across school corporations.	Good	Good

**Goal 1.** Target Revenue per-Pupil increased from 1993 to 2005 as shown in Figure 3.1 (page 26). This, along with the changes in Target revenue per-pupil listed in Table 3.1 (page 27), suggests steady progress has been made toward achieving Goal 1, and this progress is expected to decline only slightly during the 2005-2007 biennium.

**Goal 2.** Figure 3.6 (page 34) indicates state share of Target revenue in 1993 was 68 percent and increased to 84 percent in 2005. Although the state share is projected to decline somewhat in the 2005-2007 biennium, overall state share of Target revenue has clearly increased from 1993 to 2007.

**Goal 3.** Figure 3.10 (page 39) shows the strength of the relationship is steadily increasing between Target revenue per-pupil and those school corporations with larger percentages of students who are more expensive to educate. The objection for the 2005-2007 biennium suggests vertical equity will continue to improve.

**Goal 4.** Figure 5.2 (page 55) shows the correlation between Target Revenue per-pupil and assessed valuation per-pupil. The downward slope of the line shows a definite weakening of the moderate correlation that existed in 1993. By 2003 no correlation existed, and projects for the 2005-2007 biennium indicate a somewhat slight change, with a growing inverse relationship emerging. For the present, fiscal neutrality exists but may weaken if the inverse relationship continues to strengthen after the 2005-2007 biennium.

**Goal 5.** General Fund property tax rates have become more dependent on Target revenue per-pupil as seen in Figure 5.1 (page 54).

**Goal 6.** Figure 3.9 (page 38) indicates that the variation between actual and predicted Target revenue per-pupil for similar school corporations declined from 1993 to 2002 and then increased until 2005. During the 2002 to 2005 interval, the number of corporations funded by the minimum guarantee increased. Because the minimum guarantee is no longer an option and with more corporations beginning the transition to the Foundation Formula, horizontal equity is projected to improve during the 2005-2007 biennium.

**Goal 7.** Progress toward limiting increases in General Fund property tax rates is demonstrated by the 2003-adjusted tax rates displayed in Figure 4.2 (page 49), although slight increases are projected for the 2005-2007 biennium.

**Goal 8.** Figure 4.3 (page 50) suggests progress toward Goal 8, equalizing General Fund property tax rates across school corporations, will continue in the 2005-07 biennium.

