

# Why Are Wisconsin's Taxes High?

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## 1. Introduction

During the early years of the postwar era, Wisconsin was not among the nation's highest taxed states in terms of state and local taxes<sup>1</sup>. Relative to personal income, Wisconsin's tax burden flirted with the "top ten," but did not reach it. That changed in 1963 when the full effect of sales and income tax increases enacted by the 1961 state legislature were felt. Wisconsin's tax rank jumped from 12<sup>th</sup> to fifth in a single year.

Since then, Wisconsin has left the ranks of the top-ten "tax elite" only twice, and that was in 1968 and 1980 when a combination of tax cuts and surging personal incomes pushed Wisconsin to 11<sup>th</sup> place. In 24 of the 38 years studied since 1962, the Badger State has been among the top five most-taxed states, including every year since 1991.

Many reasons are given for Wisconsin's high taxes. "State and local governments spend too much" is one. "The state does not get its share of federal money" is another. Both contribute to Wisconsin's high-tax status, but they tell only part of the story. Surprisingly, despite a long history of high taxes, there has been no comprehensive attempt to understand why.

This study aims to fill that need by taking a broad look at Wisconsin's tax burden:

- ? It begins with a short review of some of the most salient aspects of state political and cultural history during the formative years between the Civil and First World Wars. Decisions made then helped to shape the present political and policy-making environment.
- ? Turning from the qualitative to the quantitative, the study examines, through two different methodological lenses, the roles that revenue mix and expenditures play in fostering our high-tax status. And, within the spending discussion, particular attention is paid to several crucial areas that appear to play particularly important roles in pushing up both expenditures and taxes.
- ? The study then recognizes that spending varies not only by program area, e.g., education or roads, but also by level of government, i.e., state and local. This section explores the Badger State's approach to funding local budgets with state tax dollars to see what impact, if any, this unusual approach to state-local finance might have.
- ? Putting culture, revenue mix and expenditure patterns aside, the study closes by recognizing an inescapable reality of 21<sup>st</sup> century Badger-State politics: Public preferences for tax and spending priorities are ultimately articulated in a partisan arena. Our ethnic and religious roots manifest themselves, to some degree, in

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<sup>1</sup> Tax burdens in this study refer to total state and local taxes relative to state personal income. State and local taxes are used because they best represent the total tax burden of state residents. Looking only at state taxes would misrepresent the tax burden because some states have high state taxes and transfer some of that money to local governments. Others may tax locally for those local services. National average tax burdens refer to the sum of all state-local taxes divided by national personal income.

current political preferences. The last section explores the relationship between Wisconsin's current political preferences and its tax and spending decisions.

It is also important to clarify what this study does not do. While we find that higher spending in some areas goes a long way toward explaining the state's high tax burden, we make no assessment as to whether the associated spending levels are appropriate. Further, our work shows how Wisconsin's unique state-local relationship translates into higher taxes, but we do not attempt to find the ideal relationship. These kinds of issues are best left for others. The sole purpose of this work is to isolate the factors that are most important in explaining Wisconsin's above-average tax burden.

## 2. Cultural Origins

Natives know—and newcomers discover—that there is something different about Wisconsin. The relatively high tax burden and history of participatory politics are well known. But to even the casual observer, other attributes are readily apparent: The work ethic, the commitment to education and the belief in "local control" stand out. So do the many ethnic traditions rooted in German and Scandinavian culture.

In reading Wisconsin history, what emerges is the Badger State's rare combination of ethnic, religious and political traditions. Mix Yankee founders and northern European immigrants; combine Protestant reformers and a strong Roman Catholic presence; add the labor activism of the industrial era to agrarian roots; douse liberally with the "Social Gospel," the Wisconsin Idea and Progressive-era legislation . . . and you have Wisconsin's unusual brand of politics and government.

### 2.1 Political Culture

Just how unusual is suggested by Daniel Elazar, a leading student of states and federalism, who argued that the 50 states are pure or hybrid versions of three political cultures.

- *Individualistic*: This culture "emphasizes the centrality of private concerns" . . . placing "a premium on limiting community intervention." The individualistic culture originated in such mid-Atlantic, non-Puritan states as Pennsylvania, New Jersey, Delaware and Maryland and spread west to become dominant in Ohio, Indiana, Illinois and Missouri, and later in such states as Nevada, Wyoming and Alaska.
- *Traditionalistic*: This is a political culture that "accepts government as an actor with a positive role in the community," but seeks to "limit that role to securing the continued maintenance of the existing social order." Not surprisingly, the traditionalistic strain of American politics is a major factor in all of the border and southern states, extending west to Oklahoma, Texas, New Mexico and Arizona.
- *Moralistic*: The "moralistic" culture considers government "a positive instrument with a responsibility to promote the general welfare." This culture is predominant in 17 states that stretch from New England through the upper Midwest to the Pacific coast – what several observers of American history and politics have called "Greater New England." Even more significantly, this moralistic approach

is virtually the only political culture found in just nine states: Maine, Vermont, Michigan, Minnesota, North Dakota, Colorado, Utah, Oregon and, not surprisingly, Wisconsin.

Among this last group are states, Elazar notes, that were “settled initially by the Puritans of New England and their Yankee descendants . . . [who] came to these shores intending to establish the best possible earthly version of the holy commonwealth. Their religious outlook was imbued with a high level of political concern . . .” And, most significantly for states like Wisconsin and Minnesota, “they were joined by Scandinavians and other northern Europeans who, stemming from a related tradition (particularly in its religious orientation), reinforced the basic patterns of Yankee political culture, sealing them into the political systems of those states.”

Figure 1: The Regional Distribution of Political Cultures

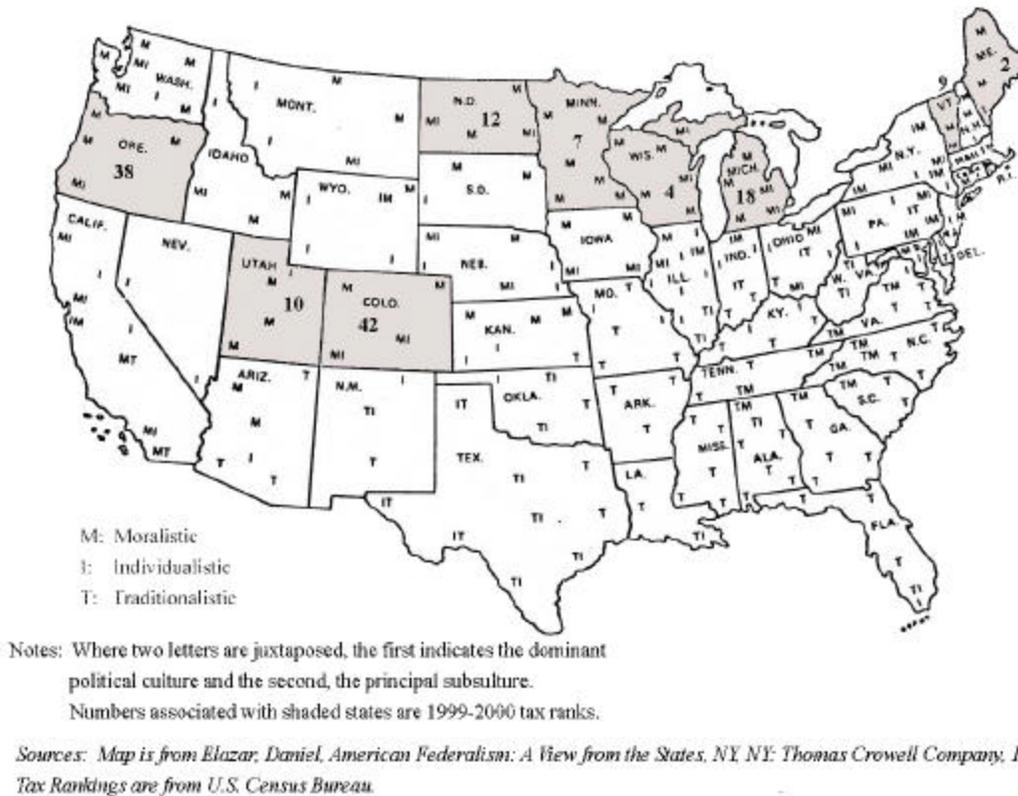


Figure 1 shows the distribution of political culture Elazar discussed. The nine “moralistic” states are shaded and 1999-2000 tax rankings are superimposed on the map. Seven of the nine “moralistic” states are among the top 18 in tax burden. The two that are not—Colorado and Oregon—benefited greatly from the technology boom of the 1990s, which raised their incomes significantly and reduced their tax burden. If we examine tax rankings from 1966, before the technology boom that changed many states,

we find Colorado had the sixth highest taxes, and Oregon was 23<sup>rd</sup>, lending some credence to the theory that historical political culture is related to current tax burdens.

## 2.2 Yankee Traditions

What was this Yankee culture that Wisconsin's founders brought with them and shared with later immigrants? It was originally Protestant, pietistic and evangelical. It was what Elazar calls "localistic," rooted in the New England traditions of town government that Tocqueville exalted in his classic *Democracy in America*. A strong commitment to personal involvement in church and community, and to universal literacy and education also characterized Yankee culture.

Even before statehood, at a time when schools were largely private, the Yankee-dominated territorial legislature, at the urging of New York-transplant Michael Frank, had given voters the right to tax themselves for public education. A 1948 history of Badger-State education called Frank not only the "educational father of our Wisconsin schools," but also one of the "founders of the American system of tax-supported schools."

In sum, the Yankee world-view was activist and favorably disposed to government. In his much-read history of the state, Robert Nesbit writes:

Rather than a laissez-faire view of the role of government, the Yankee accepted the idea that any contribution that government could make to the release of economic energies was good policy. . . the Yankee pioneer . . . found himself welcoming the immigrant for the muscle and gold he brought to the common task of subduing nature and building a community. The neighbor down the road might be a foreigner and a Papist, but he needed a road, could be taxed for a schoolhouse, and would support a subsidy for a canal or a railroad.

Even when overwhelmed in numbers by European immigrants, especially Germans, Nesbit finds that "Wisconsin was a Yankee state." A Maine-born journalist made a similar point in the State Historical Society's 1898 *Proceedings*: "Wisconsin institutions have been dominated by Americans of the Puritan seed from the beginning."

There were several reasons that Yankee values continued to dominate, even when their numbers did not. One was that native, English-speaking Yankees remained the business owners, the lawyers, the newspaper editors, the church leaders and the public officials. Another was that a similar moralistic perspective was prevalent among other immigrant groups: the British, the Scandinavians, the German Protestants and the evangelistic Dutch and Swiss. Even among some Germans, who vehemently disagreed with the Yankees and their allies on such issues as temperance and English language instruction, a social democratic strain brought from Europe ensured a predisposition toward active government.

### 2.3 Social Gospel and the Progressives

This moralistic, Yankee orientation played out in another way that proved to be especially significant to the emergence of the University of Wisconsin as one of the nation's foremost public institutions of higher learning; to the UW's pioneering involvement in the public arena, particularly during the reign of the Progressives; and, eventually, to the lasting impact of the Progressives on Wisconsin government.

Three UW figures who were key either to the spawning or eventual success of the Progressives—John Bascom, Richard T. Ely and John R. Commons—shared Yankee roots and evangelical Protestant upbringings. All three advocated the joining of religion and government to advance social reform, a notion that came to be known as the Social Gospel movement.

Writing for the state's Historical Society, J. D. Hoeveler recalled that UW President Bascom was one of the early advocates of the Social Gospel. Bascom "believed that evolutionary progress . . . required for its fulfillment the enlarged influence and activity of the state." He was also an advocate of prohibition, women's' rights and unionization.

Bascom's impact on one of his pupils, Robert LaFollette, was real, and more significantly, lasting. The student later credited his teacher with originating the Wisconsin Idea, which sought to link the university and the state. LaFollette also recalled that Bascom "was forever telling us what the state was doing for us and urging our return obligation . . ."

Two UW economists shared Bascom's affinity for government solutions to societal problems under the banner of the Social Gospel. Both were part of the university's new School of Economics, Political Science and History that Hoeveler reported "became a major link between the University's personnel and the progressive movement in Wisconsin politics." Richard T. Ely, the school's first director, advocated the New Economics, a "sound Christian political economy" that viewed "the state as an educational and ethical agency whose positive aid is an indispensable condition of human progress."

Ely brought colleague John R. Commons to Madison in 1904. Son of a mother whom he characterized as "the strictest of Presbyterian Puritans," Commons believed that "Christianity is the only solution for social problems." And it was he, perhaps more than any other university figure, who authored the reforms for which the Progressives are remembered, including civil service reform, utility regulation and workmen's compensation.

It was also during this period that the Progressives succeeded in enacting an inheritance tax and later, in 1911, the nation's first income tax. This was, of course, a change that permanently altered the nature of public finance in Wisconsin.

With the income tax, Wisconsin also initiated the nation's first sharing of state revenues with local governments. Originally, 90% of income tax revenues were returned to municipalities and counties. But with state government's appetite for new revenues, that share was already down to 50% by 1925. Indeed, in a Wisconsin Bar Association series on state legal history, it was observed that "without the new taxes the Progressives probably would not have been able to fund many of their programs" that Nesbit has collectively called "the regulatory state."

The late 19<sup>th</sup> century and the early part of the 20<sup>th</sup> century were formative years for Wisconsin in other ways, besides politics. It was at this time that Wisconsin *cum* “German state” was at its peak. Despite their large numbers, a robust German-language press and a rich concentration of ethnic clubs, Wisconsin’s Germans were a fragmented lot—southern Catholics, northern Lutherans, anti-clerics and socialists.

Nevertheless, these many factions all contributed, in their own ways, to making Wisconsin what it is today. Among these contributions were: a rich, intellectual tradition; a passion for education; and, a good part of the early brains and brawn behind the trade union movement.

Also, one cannot ignore the impact that socialists, many with German roots, had in running the city of Milwaukee for many years and in statewide politics. Social Democrat and Socialist candidates garnered significant votes in gubernatorial races from 1902 until 1932. In 1920, socialist candidates for president and governor garnered over 80,000 (11.5% of the total) and 71,000 (10.3%) votes, respectively. Had it not been for a separate Progressive party in the 1930s and 1940s, that political influence might have continued for several more decades.

As Wisconsin moved further into the 20<sup>th</sup> century, the Progressive movement withered. Some adherents returned to the Republican party, ensuring a range of views within the GOP. Others became Democrats and laid the groundwork for the modern Democratic party in Wisconsin.

## 2.4 Current Approaches

Today’s approaches to government are understandably different than they were in 1910 or even 1950. That said, the political culture nurtured in the mid-1800s, stoked by the Civil War, galvanized during the Progressive era and “cemented” by the 1920s, remains with us today.

From the melting pot of evangelical Protestants and immigrant Catholics, Yankee natives, northern Europeans and German socialists came Elazar’s “moralistic culture” that:

- created a system of numerous local governments funded to an increasing degree by state, rather than local taxpayers;
- valued tax-funded public education from the very start;
- promoted a multi-campus university that was engaged in the state’s public life;
- fostered an environment that was eventually more receptive to private and, now, public sector unions than exists in many other states;
- built an extensive network of health and social service programs; and
- initiated income and inheritance taxes that could both redistribute wealth and income – and provide the funding base needed to support the active government that many Yankees, Scandinavians and Germans supported.

All these factors and developments contribute to understanding why Wisconsin is a “high-tax, high-service” state today. Indeed, some of the current political battles are, in fact, very old ones. The ongoing debates over statewide school finance equity vs. local control, taxpayer- vs. student-funding of higher education, and expanded state services vs. lower state taxes are just three examples.

With this political and cultural history as a backdrop, we now turn to the state's current taxing and spending situation. First, we investigate Wisconsin's state-local tax burden, answering the question, "Why are Wisconsin's taxes higher than the national norm?"

### **3. Disaggregating Wisconsin's Current Tax Burden**

The state's traditional view of government as a means to improve society and its strong German/Scandinavian heritage are manifested in past spending and taxing decisions. Wisconsin's current tax burden reflects the accumulation of these decisions.

In 1999-2000, Wisconsin's combined state and local taxes claimed 12.89% of personal income, according to the most recent U.S. Census Bureau figures. This placed the state fourth in the nation behind New York (14.10%), Maine (13.91%) and Alaska (13.16%). The national average was 11.21%. Unless stated otherwise, all Census information used in this study is from fiscal 2000.

The 1.68 percentage point difference in tax burdens means that Wisconsin's state and local tax collections were \$2.4 billion more in 2000 than if they had been at the national average.<sup>2</sup> There are several explanations for the difference. First, Wisconsin spends more than average, which means government revenues, including taxes, have to be above national norms. Some of this additional spending is due to higher spending on services that state and local governments typically provide, and some is due to Wisconsin governments providing services that private entities provide in other states. In this report, no attempt is made to distinguish between these two sources of increased expenditures. Second, Wisconsin funds its spending differently than the nation. The state relies to a greater degree on taxes and less on fees and charges, or other revenue sources.

In this section, we disaggregate the difference between Wisconsin's tax burden and the nation's into these two parts. We also examine the role the state's lower incomes play in the higher tax burden.

#### **3.1 Methodologies**

We use two procedures to estimate the effects of these revenue and spending differences. The first is arithmetic and looks individually at the deviations between Wisconsin and the U.S. average in revenue mix and spending. We use these differences to estimate the additional tax burden that can be attributed to a particular factor; for example, lower state fees or higher education spending.

The second approach looks at the effects simultaneously, using multiple regression analysis. Rather than comparing Wisconsin to the national average, this method uses data from all 50 states. The regression model is used, along with U.S.-Wisconsin differences, to estimate the additional tax burden due to the several factors.

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<sup>2</sup> Multiplying the 11.21% national rate by Wisconsin's total personal income yields a tax burden of \$16.13 billion, which is \$2.42 billion less than the state's actual tax collections of \$18.55 billion.

### ***Arithmetic Approach***

The intuition behind the first approach is as follows. First, assume spending levels and incomes for Wisconsin and the nation remain fixed at their fiscal 2000 levels. Then, the only way to reduce Wisconsin's tax burden is to fund current spending from sources other than taxes. For example, if incomes and spending remain unchanged, then an increase in federal dollars or higher user fees would directly offset taxes.

By comparing national revenues (as a percentage of income) to Wisconsin's for each revenue category, we can estimate the change in Wisconsin's taxes that would result from increasing each revenue category (other than taxes) to the same percentage of income as the U.S. average.

A simple example might be illustrative here. First, suppose, federal revenues to all states averaged 4% of personal income nationwide, but the amount flowing to Wisconsin was only 3% of state income. In this case, Wisconsin is perceived to be below average in its receipt of federal revenues. Then ask, what would happen to taxes if the state received an "average" share of federal revenues as a percent of income? Since spending and incomes are unchanged, any hypothetical increase in federal revenues could be used to reduce taxes.

To estimate the amount by which taxes would be reduced under this example, we first multiply Wisconsin income by the 4% national average to get the dollar amount of federal money the state would have received had it been average. Subtracting the state's actual federal dollars from this total gives us the dollar amount the state is "below average." This is the amount by which taxes could be reduced. The below-average amount is then taken as a percentage of the \$2.4 billion tax difference cited earlier to estimate the share of additional tax burden due to differences in federal revenues. This process is presented graphically using actual amounts in Figure 2 on page 10.

Since this process involves simply adding to one revenue category (federal revenues in our example) and subtracting the same amount from taxes, total revenues remain unchanged. This exercise is repeated separately for each kind of revenue. Summing over the estimates for the several revenue categories that make up general revenues yields a total revenue factor—an estimate of the difference between Wisconsin and U.S. tax burdens due to Wisconsin's different revenue mix.

Next, we carry out a similar exercise for spending. We calculate the difference between U.S. and Wisconsin spending per capita in several expenditure categories. However, we recognize that not all spending is funded with tax revenues. Thus, to estimate the effect that a particular spending differential has on taxes, we multiply the calculated spending difference by the percentage of the spending category that is funded through taxes. This total is then taken as a percentage of the \$2.4 billion tax difference.

Both the revenue and expenditure exercises are performed under the assumption that state leaders can change revenue mix and spending, but have no control over incomes. A discussion of the potential income effect follows these analyses.

### ***Regression Analysis***

The second procedure uses regression analysis to estimate the impact of differences in each revenue and spending category. This method also allows us to estimate any income effect. Using state-by-state revenue and expenditure data, we estimate a regression model of tax burdens. In the model, a state's tax burden depends on

its revenue mix, spending levels and income. The model's coefficients are used along with U.S.-Wisconsin differences to generate estimates of the importance of each factor.

Similar results from the two methods give us confidence in our estimates.

### 3.2 Arithmetic Disaggregation

The first method used to disaggregate the difference between Wisconsin's tax burden and the national norm is a straightforward arithmetic procedure. We start with differences in revenue mix and then turn to spending differences.

#### *Revenue Mix*

State and local general revenues consist of four revenue sources—taxes, federal monies, miscellaneous revenues (interest income, special assessments and property sales are examples), and fees and charges. This last source includes fees and charges both in and out of higher education, with the former comprised of tuition and fees collected by public higher-education institutions. Because total dollars from higher-education fees depend not only on the size of the fee, but also on the size of higher education system (more students means more total fee revenues), we analyze these fees later, in conjunction with higher education spending.

**Table 1. Wisconsin Revenues, Taxes Above Average**

Wisconsin, U.S. Revenues Per Capita and Share of Income, 1999-2000

	Amt. In		Per Capita		
	Billions	% of Income	Wis.	U.S.*	U.S.*
General Revenues	\$30,572	21.25%	19.81%	\$5,699	\$5,477
Taxes	\$18,547	12.89%	11.21%	\$3,458	\$3,100
Federal Revenues	\$5,059	3.52%	3.75%	\$943	\$1,037
Miscellaneous Gen'l Rev.	\$2,658	1.85%	1.97%	\$495	\$546
Non-Higher Educ. Fees	\$2,920	2.03%	2.16%	\$544	\$598
Higher Education Fees	\$1,389	0.97%	0.71%	\$259	\$196

Source: U.S. Census Bureau *State and Local Finances, 1999-2000*

\*Calculated as U.S. revenue total divided by U.S. total income

Table 1 shows how Wisconsin's revenues differ from national averages. As a share of personal income and per capita, Wisconsin has higher taxes, but lower federal revenues, miscellaneous revenues and non-higher education fees. In Wisconsin, taxes were 60.7% of general revenues, compared to 56.6% nationally.

*Federal Revenues and Taxes.* Wisconsin received \$5.1 billion in federal revenues in 2000, or 3.52% of state personal income and 16<sup>th</sup> lowest in the nation on a percent-of-income basis. Nationally, federal monies to state and local governments averaged 3.75% of U.S. personal income. If Wisconsin had received an "average" amount of federal revenues—equal to 3.75% of state income—it would have had an additional \$339.6 million,<sup>3</sup> increasing that revenue category to \$5.4 billion. Figure 2 graphically displays

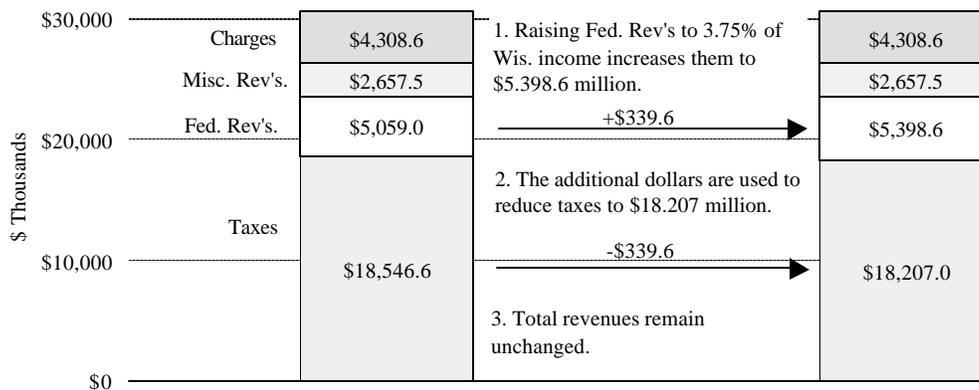
<sup>3</sup> The effect that a change in federal revenues has on taxes is somewhat ambiguous. Typically, federal monies are used to leverage state and local dollars, helping state and local governments fund various programs. Thus, an increase in federal money is likely to be associated with more spending, and ultimately more taxes. However, for any particular program, if state lawmakers are able to secure more federal dollars

the impact of this hypothetical change. Assuming unchanged state and local spending, those dollars could have reduced the state’s tax burden by that same amount, from \$18.547 billion to \$18.207 billion.

It is important to recognize in Figure 2 that, since spending is assumed to remain unchanged, total revenues also are unchanged. The hypothetical increase in federal revenues serves as a dollar-for-dollar offset of taxes.

As a percent of income, Wisconsin’s tax burden would have fallen from 12.89% of income to 12.66%. The \$339.6 million difference represents 14.1% of the \$2.4 billion difference in Wisconsin and U.S. tax burdens.

**Figure 2. How Increased Federal Money Could Affect Taxes**  
Wisconsin's General Revenues



*Miscellaneous Revenues.* A second, smaller source of general revenues is miscellaneous revenues, such as interest earnings, special assessments, property sales and “other general revenues.” In 2000, Wisconsin’s state and local governments collected \$2.7 billion in miscellaneous revenues, or 1.85% of personal income. Nationally, miscellaneous revenues were slightly higher at 1.97% of personal income. Wisconsin had less interest, property-sale and “other general” revenues, but more special assessments.

An increase in miscellaneous revenues to the national average (1.97% of income) would have generated an additional \$181.7 million that could have been used to reduce taxes. That amount represents approximately 7.5% of the difference between the state’s tax burden and the nation’s.

*Fees and Charges.* State and local governments also charge user fees for various services they provide. These fees range from automobile license fees to campground fees to charges for copying documents. In 2000, Wisconsin’s state and local governments collected \$2.9 billion in fees and charges outside of higher education. That total

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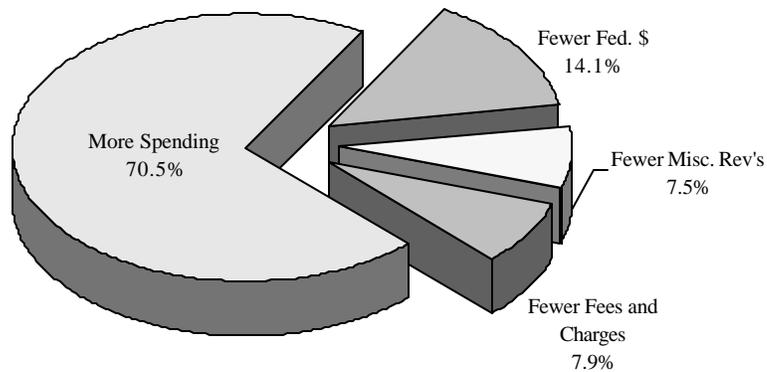
to fund current spending, then the additional federal money could serve to reduce taxes on a dollar-for-dollar basis. For example, if Wisconsin were treated as a “high-cost” state for Medicare purposes, the state would receive more federal reimbursements. These dollars could be used to reduce taxes that are currently supporting the Medicare program. In this arithmetic analysis, it is assumed that any increase in federal money is used to offset taxes one-for-one. That assumption is relaxed in the regression analysis that follows.

represented 2.03% of state personal income. Many other states use fees and charges to a greater extent than Wisconsin. Nationally, these averaged 2.16% of personal income.

If the Badger State had used fees and charges to the same extent as the U.S., state and local governments would have raised an additional \$190.3 million. Assuming spending remained unchanged, those dollars would have reduced state and local taxes by that same amount. Lower fees and charges outside of higher education accounted for 7.9% of the tax gap between the U.S. and Wisconsin.

Taken together, Wisconsin's greater reliance on taxes, rather than on: a) federal dollars, b) miscellaneous revenues, and c) fees and charges, accounted for \$711.6 million, or 29.5% of Wisconsin's higher tax burden (See Figure 3).

**Figure 3. Why is Wisconsin a High-Tax State?**  
Estimates From Arithmetic Disaggregation of Tax Burden



### *Spending Differences*

If less than 30% of the difference between Wisconsin's tax burden and the national average is due to revenue-mix differences, then more than 70% must result from higher spending here relative to the nation. As mentioned previously, this could arise from spending more on services typically provided by government, or from providing services other state and local governments may not provide.

In fiscal 2000, Wisconsin's direct general expenditures were 21.4% of personal income, or more than two percentage points higher than the national average of 19.3%. Per capita spending here totaled \$5,735, 7.4% more than the national average of \$5,334. Table 2 compares Wisconsin spending to national averages.

**Table 2. Wisconsin Spending Above National Average**  
Wisconsin and U.S. Government Spending, 1999-2000

	Amt. In				
	Billions	% of Income		Per Capita	
	Wis.	Wis.	U.S.*	Wis.	U.S.*
Direct general expenditure	\$30,762	21.4%	19.3%	\$5,735	\$5,340
Elementary & Secondary	\$7,793	5.4%	4.7%	\$1,453	\$1,298
Higher Education	\$3,228	2.2%	1.7%	\$602	\$477
Public Welfare	\$4,470	3.1%	3.0%	\$833	\$829
Health/Hospitals	\$1,839	1.3%	1.6%	\$343	\$452
Highways	\$2,711	1.9%	1.3%	\$505	\$360
Police/Fire	\$1,582	1.1%	1.0%	\$295	\$284
Corrections	\$1,030	0.7%	0.6%	\$192	\$173
Parks/Nat. Resources	\$983	0.7%	0.6%	\$183	\$161
Administration	\$1,479	1.0%	1.0%	\$276	\$290
Int. on Debt	\$1,363	0.9%	0.9%	\$254	\$248
Other Spending	\$4,286	3.0%	2.8%	\$799	\$767

Source: U.S. Census Bureau State and Local Finances, 1999-2000

\*Calculated as U.S. expenditure total divided by U.S. total income or population

Census Bureau information allows further analysis of this spending effect by broad program area, with particular attention paid to K-12 and higher education. These two spending areas are particularly important because they account for more than 35% of state-local direct general spending in Wisconsin, and data on enrollments, spending and revenues allow comparisons of Wisconsin spending to the national average.

*K-12 Education.* Wisconsin spends significantly more per student on K-12 education than the national average. On a per capita basis, Wisconsin's 2000 K-12 spending (\$1,453) was 11.9% higher than the U.S. average (\$1,298). However, relative to population, Wisconsin has fewer K-12 students. After adjusting for the number of students, the gap increases.

In 2000, Wisconsin's public school revenues<sup>4</sup> totaled \$8,884 per student, 12.6% more than the national average of \$7,892. Given the number of Wisconsin public school students, the \$992 per student revenue difference means that, had Wisconsin been average, school districts statewide would have generated \$870.7 million fewer revenues for K-12 education than they did.

To estimate the tax impact of the higher K-12 spending, we assume that all state aids to Wisconsin school districts are derived from state taxes. Under that assumption, 89.4% of Wisconsin school district revenues come from state and local taxes. The rest are from fees and federal monies.

Applying that percentage to the \$870.7 million spending difference gives an approximate \$778.4 million tax burden resulting from the above-average K-12 revenues. That total is higher than the entire revenue-mix difference (\$711.6 million) discussed previously. Wisconsin's above-average K-12 education spending represented 32.2% of the \$2.4 billion difference in Wisconsin's tax burden relative to the nation—the single largest factor.

<sup>4</sup> Revenues are used here so that we can ignore any gap between revenues and spending.

*Higher Education.* Wisconsin also spends more on higher education. In census data, higher education includes all public universities and colleges, including technical colleges. In 2000, Wisconsin's public higher education institutions spent \$602 per capita, compared to the national average of \$477 (see Table 2). There are two main reasons for the higher spending here. First, Wisconsin's higher education system is 22% larger than the national average. In the fall of 1999, Wisconsin had 34.7 full-time equivalent students in public higher education institutions for every 1,000 residents. Nationally, the ratio was 28.5<sup>5</sup>.

Second, Wisconsin spends more per student than the national average. In 2000, Wisconsin's higher education spending was \$17,353 per full-time equivalent student.<sup>6</sup> Nationally, spending was \$601 per student lower at \$16,752. Again, these figures cover all types of postsecondary students, including high-cost technical and graduate students.

A third factor that affects the tax burden is Wisconsin's level of tax support of public higher education. In 1996-97, the last year for which data were available, Wisconsin state-local tax support of higher education totaled 43.1% of higher education revenues<sup>7</sup>. Nationally, that share was 39.5%. Data from the UW System and Wisconsin Technical College Board show government support for higher education in Wisconsin has declined by about one percentage point since 1996-97. However, we have no information on national changes during this same time.

The first two factors drive Wisconsin's higher education spending above the national average. Because of that higher spending, state and local taxes are higher. The third factor shows how Wisconsin's higher education funding is more reliant on state taxpayers, and less on students. This also increases tax burdens.

Because the state spends more per student on higher education, Wisconsin taxes were approximately \$48.2 million higher<sup>8</sup>, accounting for 2.0% of the Wisconsin-U.S. tax difference. Wisconsin's larger higher education system raised state taxes by about \$239.3 million<sup>9</sup> and accounted for 9.9% of the tax gap. Finally, because Wisconsin uses tax revenues to a higher degree than other states to support higher education, taxes here were about \$23.9 million higher, or 1.0% of the gap. Taken together, Wisconsin's higher education revenue and spending decisions accounted for \$311.4 million, or 12.9%, of the tax gap.

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<sup>5</sup> According to data from the National Center for Education Statistics, Wisconsin had 186,006 full-time equivalent students in public degree-granting higher education institutions. Nationally, the corresponding figure was 8,020,074. These student counts include not only resident university undergraduates, but also nonresidents, technical college students, and a variety of graduate students both from Wisconsin and elsewhere.

<sup>6</sup> This is calculated by dividing the Census Bureau figures on higher education spending by the number of full-time equivalent students, as reported by the National Center for Education Statistics.

<sup>7</sup> To measure state and local share of education costs, state and local revenues are taken as a share of all revenues. Data are from the National Center for Education Statistics.

<sup>8</sup> This figure is estimated by taking the \$601 per student difference between spending here and the nation and multiplying it by the number of full-time equivalent students. That total (\$111,711,000) is then multiplied by Wisconsin's 43.1% tax share.

<sup>9</sup> If Wisconsin's higher education system was the same size as the national average, the state would have had 33,141 fewer full-time equivalent students. Because we have already accounted for spending differences, that total is multiplied by the national spending per student to get the total savings. Using Wisconsin's 43.1% tax share yields the \$239.3 million total.

*Other Spending.* Spending differences outside of education accounted for the remaining 25.4% of the difference between state and U.S. average tax burdens. The category with the biggest difference between Wisconsin and U.S. per capita spending, in both dollars and percentage, was state and local roads and highways. Wisconsin spent \$505 per capita on roads and highways in 2000, which was \$145 per person, or 40.3%, more than the national average. We examine highway spending in more detail later. Wisconsin's state and local governments also spent 13.9%, or \$22 per person, more on natural resources and parks, 11.8% (\$19) more on sewer and solid waste, and 10.7% (\$19) more on corrections. The Badger State spent 24.2%, or \$110 per person, less on public health and hospitals.

Table 3 summarizes the findings of the arithmetic disaggregation. Based on this analysis, Wisconsin's \$2.4 billion of higher taxes can be attributed to:

- Fewer federal revenues—\$339.6 million in additional taxes, or 14.1% of the Wisconsin-U.S. difference in taxes;
- Fewer miscellaneous revenues—\$181.7 million, 7.5% of the tax difference;
- Lower non-higher education fees—\$190.3 million, 7.9% of the tax difference;
- More spending on K-12 education—\$778.4 million, 32.2% of additional taxes;
- A larger higher education system and lower student tuition and fees—\$311.4 million, 12.9% of Wisconsin's additional taxes; and
- Higher spending in other areas—\$614.0 million, 25.4% of the state's higher taxes.

**Table 3. Higher Spending Drives Wisconsin's Higher Taxes**  
Summary of Arithmetic Disaggregation

Revenues	% of Income		Additional Tax*	
	Wis.	U.S.	Amt.	% of Total
Federal Revenues	3.52%	3.75%	\$339.6	14.1%
Miscellaneous Gen'l Rev.	1.85%	1.97%	\$181.7	7.5%
Non-Higher Educ. Fees	2.03%	2.16%	\$190.3	7.9%
Revenue Sub-Total	7.39%	7.89%	\$711.6	29.5%
Expenditures	Per Capita		Additional Tax	
	Wis.	U.S.	Amt.	% of Total
K-12 Education	\$1,453	\$1,298	\$778.4	32.2%
Higher Education	\$602	\$477	\$311.4	12.9%
Other Expenditures	\$3,680	\$3,565	\$614.0	25.4%
Expenditure Sub-Total	\$5,735	\$5,340	\$1,704	70.5%

\*Amount of add'l tax in Wis. due to fewer revenues or higher spending

### 3.3 An Aside: Do Incomes Matter?

The arithmetic analysis assumes Wisconsin and U.S. incomes remain unchanged. However, some analysts point to the state's below-average income as a major factor in Wisconsin's high tax rank. "If we could only raise Wisconsin's per capita incomes, then the state's tax rank would not be so high," the argument goes.

While this is plausible, close examination reveals the shortcomings of the argument. The premise implicitly assumes that tax revenues and spending would not increase with income, i.e. the total tax take and spending levels would remain the same

despite higher state incomes. Clearly, though, if personal incomes were to increase, the revenues from taxes on incomes, sales and property would also rise. Thus, implicit in this theory is that tax rates would be reduced to keep tax revenues constant. Yet, national data show a strong correlation between higher incomes and higher spending.

Nevertheless, we can examine several “what if” scenarios to explore the hypothetical effects that increased income might have on the state’s tax burden, assuming no change in tax revenues and spending. In particular, we answer the question, “How much would incomes need to rise to reduce the state’s tax burden to specified levels?”

In calendar year 1999 (fiscal year 2000 for taxes<sup>10</sup>), Wisconsin’s per capita personal income (PCPI) was 3.2% below the national average. Had the state’s PCPI been average (and tax revenues remained unchanged), Wisconsin state-local taxes would have been 12.47% of income instead of 12.89%. The state would have ranked sixth in the nation in state-local tax burden, rather than fourth.

However, the last time Wisconsin’s PCPI was on par with the nation was in 1979. Additionally, 1978 and 1979 were the only years in the last 40 that Wisconsin’s incomes were equal to the nation’s. Thus, increasing state incomes enough to move Wisconsin’s tax ranking to sixth would be a challenge. And, even when the state’s income was on par with the nation, higher spending kept tax burdens above average. The 1979-80 period is a case study in national income parity failing to reduce tax rankings (see box below).

To leave the top ten most-taxed states, Wisconsin’s tax burden would have needed to be below 11.97% of income in 2000. That would require Wisconsin’s 1999 income to be 7.7% higher, putting it at \$29,057 per capita, or 4.2% above the national average and 14<sup>th</sup> nationally. Since 1929, the highest Wisconsin’s income has been relative to the nation was 3.8% higher in 1951.

Finally, to move down to the national average (11.21%) in terms of tax burden would require an even larger increase in personal incomes. State incomes would have to rise 15.0%, to \$31,015 per capita, or 11.2% higher than the national average. At that level, state PCPI would rank sixth nationally, ahead of states like California, Illinois, Minnesota, Colorado and

***The 1979-80 Experience – Spending Matters***

The 1979-80 fiscal year makes clear the importance of spending in explaining Wisconsin’s high tax burden. In 1979, Wisconsin’s per capita personal income was slightly above the national average (\$9,281 vs. \$9,230). That year, the state received more federal money relative to income (4.12% vs. 4.01%) than average. The Badger State also took advantage of fees and charges outside of higher education to a greater extent than the rest of the nation (1.73% vs. 1.48% of income). Wisconsin also received more education fees relative to the nation (0.96% vs. 0.66% of income), but had slightly fewer miscellaneous revenues (1.31% vs. 1.52% of income).

Taken together, these non-tax revenues totaled 8.12% of state personal income. Nationally, these averaged 7.66% of income. However, Wisconsin’s tax burden in that year was still above the national average (11.53% vs. 10.78%).

In that year, Wisconsin’s direct general expenditures were 19.5% of personal income compared to the national average of 17.7%. Income differences could not explain the state’s high taxes. The claim that we did not get our share of federal money, or that fees and charges were not used to the same extent here were also moot. The only explanation for the state’s above-average tax burden that year was higher levels of government spending.

<sup>10</sup> Standard procedure in analyzing Census data is to use prior year income along with fiscal year taxes. For fiscal year 1999-2000, personal income from 1999 is used.

New Hampshire. In short, raising personal incomes in Wisconsin is a laudable and needed goal. However, in historical context, it is certainly not a panacea.

### 3.4 Regression Analysis

The arithmetic decomposition—our first approach to understanding state-local taxes in Wisconsin—assumed a dollar-for-dollar tradeoff between taxes and other revenue sources, and unchanged incomes. But, as we mentioned previously, increases in other revenues, particularly federal dollars, are likely to be associated with some level of increased spending. Further, research has shown, in some spending categories, higher incomes are associated with higher spending. A more sophisticated statistical analysis allows us to relax these assumptions.

#### *A Model of Tax Burdens*

State-by-state data for 1997-2000 revenues and expenditures from the U.S. Census bureau are used to model state tax burdens. The model, specified below, attempts to replicate the prior arithmetic work.

$$(T/Y)_i = \mathbf{a}_0 + \mathbf{B}(REV/Y)_i + \Phi(EXP/P)_i + \mathbf{g}_1 \ln PCPI_i + \mathbf{g}_2(DEF/Y)_i + \mathbf{e}_i$$

In this model, state and local taxes as a share of personal income (T/Y) depend on revenue mix (REV/Y), per capita spending (EXP/P) and income (LnPCPI), and a state's deficit (DEF/Y), if any. Revenue-mix variables include federal dollars, miscellaneous revenues and current charges outside of higher education (all as a percentage of personal income). Spending variables are K-12 and higher education, roads and highways,<sup>11</sup> and other general revenue spending (all per capita). Also included here are higher education fees and charges. We use the natural log of per capita income to account for the likely nonlinear relationship between incomes and tax burdens.

The deficit measure is included because annual spending and revenues are not necessarily equal. These deficits must be paid for with future or past revenues (previous surpluses that show up as beginning balances). Since these revenues are likely to be taxes, this variable captures the longer-term tax effect of a deficit.

The estimated regression coefficients tell us about the movement in tax burden for a given change in the variable. We would expect the coefficients on the revenue variables to be negative—an increase in any of these non-tax revenues (holding incomes and spending constant) should mean a decrease in taxes. On the spending side, the signs should be positive, as increased spending should be associated with higher taxes. Income should be negatively related to tax burdens because, holding spending and revenue mix constant, a lower level of income raises the tax burden.

We conducted this analysis separately for each of the last four fiscal years for which data are available, and for all four years combined. We obtained similar results using both approaches. Only the results for 2000 are reported here to be consistent with the preceding arithmetic analysis.

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<sup>11</sup> Highway spending is included here because of the large difference between Wisconsin and the U.S. in this category. It was not included in the arithmetic decomposition because of the difficulty estimating the tax share of spending. The regression analysis will show that differences in highway spending account for almost all of the non-education spending difference.

To estimate the effect that an individual variable, such as federal money, has on the difference between the U.S. and Wisconsin tax burden, the estimated coefficient is multiplied by the difference between the U.S. and Wisconsin value for that variable<sup>12</sup>. The results are reported in Table 4. In addition to reporting the coefficients, we report the tax effects<sup>13</sup> of U.S.-Wisconsin differences in the variables along with the estimated percentage of the U.S.-Wisconsin tax gap that can be accounted for by the variable.

### ***Estimation Results***

The regression results are consistent with the previous analysis. Based on the regression, Wisconsin's different revenue mix accounted for 25.4% of the difference in tax burdens, only slightly less than the earlier 29.5% arithmetic estimate. Fewer federal dollars accounted for 10.8% of the difference (compared to the arithmetic estimate of 14.1%); smaller miscellaneous revenues were 6.7% of the difference (7.5%, arithmetically); and Wisconsin's lesser use of fees and charges accounted for 7.9% (7.9%, arithmetically) of the gap. The last two columns in Table 4 show the small differences between the two approaches.

**Table 4. Regression Estimates of Tax Burden Model**  
Coefficients, Tax Effects and Percent of Tax Gap

<b>Variable</b>	<b>Coeff.*</b>	<b>Tax Effect</b>	<b>% of Tax Gap</b>	<b>Memo: Table 3 Comp.</b>
(Constant)	53.944			
Fed \$/Y	-0.767	-0.18 pts.**	10.8%	14.1%
Misc. Rev./Y	-0.894	-0.11	6.7%	7.5%
Charges/Y	-0.998	-0.13	7.9%	7.9%
H.E. Exp./Pop.	0.005	-0.59	35.2%	} 12.9%
H.E. Charges/Pop.	-0.004	0.27	-16.0%	
K-12 Exp./Pop.	0.003	-0.52	31.2%	} 25.4%
Highway Exp./Pop.	0.003	-0.47	28.1%	
Other Exp./Pop.	0.003	0.10	-5.8%	
PCPI	-16.199	-0.49	29.2%	
Deficit/Y	-0.790	0.50	-29.5%	

\*All are significant at 5% level

\*\*Percentage points of taxes relative to income

On the expenditure side, Wisconsin's greater spending on elementary and secondary education accounted for 31.2% (32.2%, arithmetically) of the tax difference. Above-average highway spending explains 28.1% of the tax gap. Higher education—the net effect of higher spending per capita and more higher education fees per capita—accounted for 19.2% (12.9% arithmetically) of the tax differential. The state spent

<sup>12</sup> Detailed calculations can be found in Appendix 1.

<sup>13</sup> The tax effect is the change in tax burden that would result if Wisconsin looked like the nation on that variable. For example, the estimated tax effect of -0.18 for federal revenues means that if Wisconsin's federal revenues were the same share of income as the nation's, the state's tax burden would be 0.18 points lower.

slightly less in other areas (-5.8%). Taken together, higher spending accounted for 72.7% of the U.S.-Wisconsin gap, only slightly higher than the previous estimate (70.5%).

Other factors account for the remainder of the difference. First, Wisconsin's per capita income is below average. Using the estimated coefficients along with the difference between the U.S. and Wisconsin income, the state's tax burden would have been 0.49 points lower had state income been average.

Second, in 2000, Wisconsin's spending was greater than its revenues. Nationally, the opposite was true. Because Wisconsin state government budgets on a biennial basis, part of this state-local deficit spending could be financed with revenues from previous years (carryover of past windfalls) or future years. However, in the short term, state-local taxes would have been 0.50 percentage points higher if the gap between revenues and expenditures was similar to the nation. Nationally, revenues were more than expenditures. Had Wisconsin's revenues simply matched spending, taxes would have been 0.10 points higher.

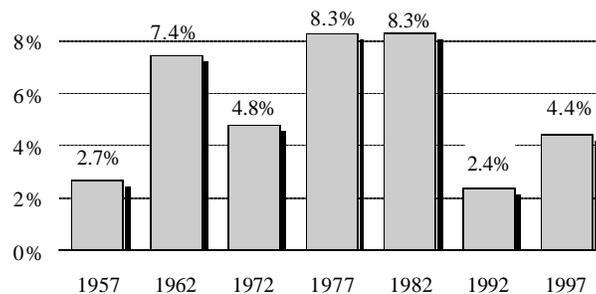
There are several reasons to be confident in these results. First, the adjusted  $R^2$  of the regression is over 0.94. Second, we would expect non-higher education fees and charges to be related to taxes on a dollar-for-dollar basis. The coefficient on non-higher education fees is not significantly different from minus one in the regression.

Third, the regression analysis confirms the arithmetic work as the tax effects of the variables are approximately the same. The results point to higher state and local spending as the primary factor behind Wisconsin's high taxes. An in-depth examination of state and local spending in Wisconsin can help understand what causes the higher spending here. That is undertaken next.

#### 4. A History of Spending

Wisconsin has long spent more than the national average on state and local government. Data from the U.S. Census Bureau's Census of Governments show Wisconsin's spending has been above average since at least 1957 (see Chart 1). In that year, Wisconsin spent 2.7% more per capita than the national average. By 1962, that difference had grown to 7.4%. Since then, Wisconsin's spending has fluctuated between 2% and 9% above the U.S. average.

**Chart 1. Wis. State-Local Spending**  
Wis. Spending as Pct. Above U.S. Average



Source: U.S. Census Bureau Census of Governments

The most recent estimates indicate that, in 2000, per capita spending here was 7.4% above the national norm. Despite the fluctuations, it is clear that Wisconsin's governments have consistently spent above the U.S. average.

By category, Wisconsin's per capita spending outpaced the nation in many key areas between 1957 and 2000. Elementary and secondary education spending rose 7.4% per year here versus 7.0% nationally. Higher education spending also grew four-tenths of a percent faster per year here than nationally (9.5% vs. 9.1%). In 1957, spending on all levels of education (elementary, secondary and higher) accounted for 32.4% of state-local spending in Wisconsin, less than the national average (35.0%). By 1972, education was more than 43% of spending here compared to 39% nationally. As of 2000, education spending here remained more than 2.5 percentage points above the U.S. average.

Spending on roads and highways (5.3% vs. 4.9%) and public welfare (9.3% vs. 9.1%) also rose faster than the national average over the 43 years. But, health and hospital (6.9% vs. 7.7%), and fire protection (6.4% vs. 6.8%) spending grew more slowly here. Other spending grew at national rates.

#### **4.1 Elementary and Secondary Education Spending**

Our analysis of Wisconsin's tax burden in section three shows K-12 spending accounted for more than 30% of the tax gap between Wisconsin and the U.S. Further, it is more than one-fourth of state-local government spending. Because of its importance, K-12 education is one of several spending categories explored in greater detail.

#### **Wisconsin Spending in Context**

Wisconsin's higher K-12 education spending is rooted in state history. Michigan, Minnesota, Iowa and, to some degree, Illinois experienced similar settlement patterns, and thus we might expect similar patterns of education spending among these states. While Wisconsin spends significantly more than the national average on K-12 education, it also spends more than surrounding states. In 2000, Wisconsin's current expenditures were \$7,716 per student,<sup>14</sup> 12.9% higher than the U.S. average, and 6.2% above the average for the surrounding states. That year, Wisconsin's per student spending was higher than all surrounding states.

Wisconsin's capital expenditures (\$1,087 per student), or direct expenditures for buildings, land, equipment or capital leases, were 15.9% higher than the U.S. average and 1.3% higher than the average of the surrounding states. Iowa had the smallest capital outlays in the region, \$707 per student. Wisconsin school districts also paid \$259 per student for debt service, which was 41.4% above the national average, but 0.5% below the average of other states in the region.

When intergovernmental payments<sup>15</sup> are included, Wisconsin's K-12 spending totaled \$9,228 per student in 2000, which was above U.S. (\$7,985) and regional (\$8,602) averages. These data clearly portray Wisconsin as a high-spending state in elementary and secondary education.

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<sup>14</sup> Current expenditures exclude debt service and capital expenditures.

<sup>15</sup> These are amounts paid to other governments for performance of specific functions or for general financial support.

Part of the reason is regional, as average spending for the surrounding states is also above the national average. However, Wisconsin spends more than even these states.

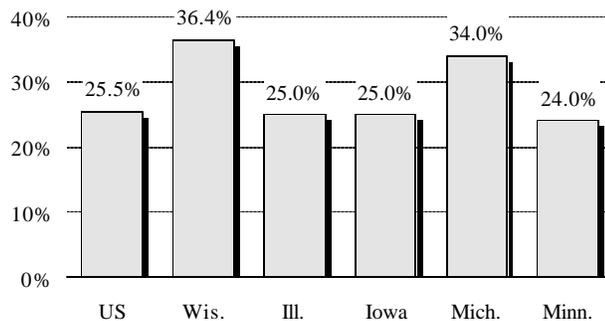
**Spending Drivers**

Several areas stand out in explaining the difference in K-12 spending between Wisconsin and elsewhere. First, Wisconsin school districts spend significantly more than the nation and the region on employee benefits. Second, relative to the number of students, Wisconsin has more teachers than either the nation or the region. Finally, recent spending on capital projects is well above national norms.

*Employee Benefits.* Wisconsin school district employees have some of the best benefits in the nation. In 2000, Wisconsin school districts paid benefits totaling 36.4% of salaries and wages. That was significantly higher than national (25.5%) and regional (28.0%) averages (see Chart 2).<sup>16</sup> The higher benefits cost Wisconsin taxpayers \$448.2 million in fiscal 2000. That amount represents more than 60% of the difference between the U.S. and Wisconsin’s K-12 current expenditures. Had Wisconsin been at the average of the surrounding states, districts would have spent \$346.2 million less than they actually did, closing about 50% of the K-12 spending gap. Since most school district costs are funded with state and local taxes, higher benefits result in higher state and local taxes.

However, we cannot look at benefits in isolation. Higher benefits may be compensating for lower pay. In Wisconsin, though, that is not the case. In 2000, average instructional<sup>17</sup> salaries here were \$44,105, or 0.8% higher than the national average (\$43,768). Teachers’ salaries averaged \$41,153, or 1.4% below the national norm. When school district pay and benefits are combined, compensation for instructional personnel in Wisconsin was more than 9% greater than the national average.

**Chart 2. Benefits as Percent of Salaries**  
K-12 Employees, 1999-2000



Source: U.S. Census Bureau, Public Elem. Sec. Educ. Finances

<sup>16</sup> For instructional staff, benefits averaged 35.5% of pay in Wisconsin compared to 25.1% nationally and 27.0% regionally. For support staff, the percentages were 40.7% in Wisconsin, 26.3% nationally and 30.7% regionally.

<sup>17</sup> Instructional staff includes teachers, instructional aides, principals and assistant principals, guidance counselors and librarians.

How do teacher salaries compare with salaries in other occupations in Wisconsin? In 2000, Wisconsin's average wage per job was 14.8% below the U.S. average. The gap was similar for occupations that require a college degree. Occupations in management, law, business and financial operations, computer and mathematics, and architecture all averaged 9% to 14% below national averages. The combination of above-average teacher compensation and low average wages for other occupations means tax rates to fund education must be higher here than nationally (see box, "Teacher Pay and Tax Burdens in Low-Wage States).

Two factors account for much of the above-average instructional compensation here, and both are related to the state's history. First, state residents have placed a high value on public education dating back to Wisconsin's formative years. That is reflected in teacher compensation.

Second is organizational influence. Wisconsin has a strong union history, in both the public and private sectors. Until state lawmakers capped salary and benefit increases for teachers in 1993, fairly generous compensation packages for school personnel were approved. From 1985 to 1993, average salaries and benefits for teachers rose 6.5% per year in Wisconsin. After accounting for inflation, they rose 2.6% annually. Many times, in lieu of large pay increases, benefit packages were enhanced. In the eight years ending in 1993, benefits rose 8.4% per year. The result was total compensation packages that exceeded national norms.

*Lower Student-Teacher Ratios.* In addition to higher benefits, a second factor that accounts for a large share of the difference in K-12 education spending between U.S. and Wisconsin is the greater number of teachers here. Relative to student populations, Wisconsin school districts employ 11.6% more teachers than the national average, and 13.9% more than the surrounding states. In 2000, Wisconsin had 1.73 teachers for every 25 students. The national average was 1.55.

Teacher-student ratios vary significantly from state to state. Vermont has more than two teachers per 25 students, while Utah has only 1.14. Among the surrounding states, Michigan (1.39) has the fewest followed by Illinois (1.54), Minnesota (1.64) and Iowa (1.68).

There is a strong correlation between the teacher-student ratio and school costs. This is to be expected since teachers account for more than half of school district personnel, and labor costs are more than 80% of current education costs. If Wisconsin had the same student-teacher ratio as the national average, school districts would have spent \$337.6 million

#### **Teacher Pay and Tax Burdens in Low-Wage States**

Combined pay and benefits for Wisconsin teachers are above national norms. That means taxes need to be higher here to pay teachers. However, average worker pay here is below average, reducing state residents' ability to pay. Combining these two factors means the state's tax burden is well above average.

In 1999-2000, average teacher pay and benefits in Wisconsin were 7.2% above the national average. At the same time, overall average worker earnings were 14.8% below average. Further, relative to the number of students, Wisconsin had 11.8% more teachers than the U.S. average.

How does this affect tax burdens? Suppose that school costs were paid for solely with a tax on wages and Wisconsin's student teacher ratios were at the national average. Then, above-average teacher pay and benefits being paid with below-average wages means Wisconsin's tax rate to support teachers needs to be more than 23% higher than the national norm. Add to that the state's lower student-teacher ratios, and Wisconsin's tax rate needs to be more than 37% higher than the national average.

less in 2000.<sup>18</sup> That amount account for 43% of the difference between U.S. and Wisconsin K-12 current education spending. If the state had the same student-teacher ratio and had pay and benefits equal to the national average, school districts would have spent \$548.3 million less, an amount equal to 70% of the K-12 current expenditure gap.

These two factors explain most of the difference in current expenditures. But, it should also be noted that, relative to student populations, Wisconsin has more than double the number of instructional coordinators as the national average, 43% more librarians, 40% more student support staff, and 3% more principals and assistant principals.

*Capital Expenditures.* When all school spending is accounted for, the gap between Wisconsin and the U.S. widens. The recent surge in capital expenditures here explains the rest of the difference between Wisconsin's total K-12 expenditures and the nation's.

Over the last decade, Wisconsin outspent the nation on capital projects. That shows up in 2000 capital expenditures, in debt service payments, and in total school district debt. Wisconsin districts paid \$1,087 per student on capital expenditures in 2000, 15.9% more than the national average, but slightly less than the surrounding states. Major capital projects during the 1990s were financed with long-term debt and show up in debt service payments in 2000. Wisconsin's (\$259 per student) were above the U.S. average (\$183), and about the same as the region (\$260). Taken together, Wisconsin's higher spending on capital projects and debt cost state school districts and taxpayers \$198.7 million more than if they spent at the national norm.

The additional spending on capital projects is also reflected in total school district debt. According to the Census Bureau, Wisconsin school districts had \$4.9 billion, or \$5,593 per student, of debt outstanding in 2000. That amount was 49.4% higher than the national average. The high debt per student means that future spending on instruction here will likely be lower in order to fund higher debt payments.

The higher debt and debt service payments can be attributed to the significant increase in school district building during the mid- and late-1990s. In 1996-97, Wisconsin state government increased its share of school district funding, promising to provide, on average, two-thirds of state-local revenues. The increased state funding reduced the local cost of building, placing more of the burden on state taxpayers. Districts responded with more building projects.

### ***A Look Back***

Has it always been this way? The answer is a qualified yes. Wisconsin has a history of higher spending on education, though expenditures during the 1990s were uncharacteristically high. And higher teacher compensation combined with low student-teacher ratios has also been the historic norm.

Wisconsin has spent more than the national average on K-12 education since at least 1959-60.<sup>19</sup> In that year, Wisconsin's current expenditures per student were 10.1% higher than the U.S. average (see Chart 3). A decade later, school spending here was

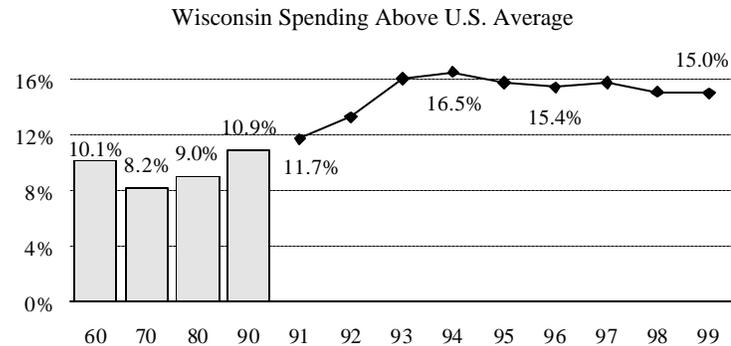
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<sup>18</sup> This is not in addition to any savings previously estimated for benefits. This figure is arrived at by multiplying Wisconsin's average annual teacher pay and benefits by the 6,057 fewer teachers that would be required had Wisconsin been average.

<sup>19</sup> Data are from the National Center for Education Statistics.

8.2% above the U.S. norm, and in 1979-80, it was 9.0% higher. In each of those years, Wisconsin's school spending ranked 13<sup>th</sup>. In 1960 and 1970, Wisconsin's spending trailed all surrounding states except Iowa. By 1980, the state had passed Minnesota. During the 1980s, state spending moved past Illinois and by 1989-90 was at 10.9% above average, 12<sup>th</sup> highest nationally. In the region, only Michigan's spending was above Wisconsin's in 1990.

**Chart 3. K-12 Current Expend's Above Average**



Source: National Center for Education Statistics

From there, Wisconsin school spending greatly outpaced the nation until 1993-94. By that year, spending here had climbed to 16.5% above the U.S. average and Wisconsin was the ninth highest-spending state nationally and number one in the region. Spending has remained high since; and, in 1999, was 15.0% above the U.S. Among the surrounding states, only Michigan spent more.

As mentioned previously, capital spending, including that for buildings, surged during the 1990s in Wisconsin. As a result, total K-12 expenditures rose from 10.4% above the U.S. average in 1991, to 15.0% in 1994, and to 17.2% above in 1999.

*Historic Spending Drivers.* The same factors that explain the state's higher current expenditures in 2000 help explain the state's historically high spending. The first has been the decision to pay teachers near or above the national average. The second has been to keep student-teacher ratios well below the U.S. norm.

In 1969-70, Wisconsin's average teacher pay was 3.9% above the national average. Ten years later it was 0.2% higher, and in 1989-90, it was 1.8% above national norms. The limits that the legislature placed on increases in teacher pay beginning in 1993 have slowed the growth of wages here, and by 1999-2000 the average Wisconsin teacher earned 1.4% less than the U.S. average. Thus, over the last thirty years, Wisconsin teacher pay has been near the national averages.

Also, benefits have been historically high. Using data from teacher contract settlements,<sup>20</sup> benefits as a percent of salaries in Wisconsin averaged 31% in 1985. By 2000, benefits were over 40% of pay.<sup>21</sup>

At the same time, Wisconsin consistently has had more teachers relative to the number of students than the U.S. average. In 1969-70, Wisconsin had 1.20 teachers for

<sup>20</sup> Wisconsin Association of School Boards teacher settlement trends.

<sup>21</sup> This number is higher than the 36.4% previously reported because that number includes employees without benefits.

every 25 students, 8.4% more than the national average. Twenty years later, the gap (8.2%) was about the same, but both Wisconsin and the U.S. had more teachers.<sup>22</sup> Partly due to Wisconsin's SAGE<sup>23</sup> program, the number of teachers in Wisconsin public schools rose to 11.8% above the national average in 1999-2000.

Taken together, the history of average pay, high benefits and more teachers means that Wisconsin's total spending on K-12 education has consistently been above the national average. And, the tax burden associated with these policies is higher because Wisconsin tends to have lower wage jobs (see box: Teacher Pay and Tax Burdens in Low-Wage States).

*The 1990s.* Chart 3 shows Wisconsin's spending surging during the 1990s. How much did the extra spending during the 1990s cost state taxpayers? If Wisconsin school districts had spent only 10% above the U.S. average in 1998-99—a level similar to relative spending levels in 1960, 1970, 1980 and 1990—expenditures would have been approximately \$285.8 million less. For the ten years ending in 1999 combined, Wisconsin school districts spent \$2.2 billion more than this historic norm.

What drove spending higher in these years? From 1991 to 1994, increases in instructional salaries and benefits accounted for more than 70% of the rise in Wisconsin current expenditures relative to the nation. While instructional salaries per student rose 9.2% nationwide, they jumped 15.4% here. Benefits rose 22.4% in Wisconsin compared to a national average of 17.6%. Part of this rise was due to average wages and benefits rising faster here. Part was due to the hiring of more instructional staff during those years. After 1993, caps on increases in salaries and benefits for school personnel and school district revenue limits slowed growth in Wisconsin K-12 spending. As a result, Wisconsin spending relative to the nation declined from 16.5% above in 1994 to 15.0% above in 1999.

## 4.2 Higher Education

Based on our earlier work, Wisconsin's greater spending on higher education accounted for between 13% and 20% of the difference between U.S. and Wisconsin tax burdens. Several factors account for the difference: higher spending per student; a larger higher-education system; and tax dollars accounting for a larger share of costs. However, a more in-depth look at higher education shows that low resident tuition and system size are major reasons for the state's above-average taxes.

### *UW System*

*Low Resident Tuition.* A 2002 study from the Washington Higher Education Coordinating Board highlights the bargain that Wisconsin's university system is for resident students. The study examined the flagship public university in each state. In 2002-03, resident undergraduate tuition and required fees at the University of Wisconsin-Madison were \$4,566, 5.2% less than the national average.

However, the University of Wisconsin is a premier public university, comparable to other prestigious state universities. Compared to other public Big Ten universities,

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<sup>22</sup> The numbers were 1.57 teachers per 25 students in Wisconsin and 1.45 nationally.

<sup>23</sup> SAGE (Student Achievement Guarantee in Education) is a state program to reduce class sizes in grades K-3 in schools with low-income students.

higher education appears to be an even bigger bargain here. Resident tuition and fees at the UW were 28% below the median (\$6,142) of the nine other Big Ten schools.

Graduate tuition and fees are not as affordable, but are still below the Big Ten norm. Resident graduate student tuition and fees here were 2.8% less than at other conference schools, but one-third higher than the national average. In 2002-03, Wisconsin charged resident graduate students \$6,877 compared to the national average of \$5,166 and the conference median of \$7,077.

While the UW is a bargain for state residents, it is pricey for nonresidents. Undergraduate tuition and fees for out-of-state students were 39% higher than the U.S. average and 17% higher than the conference median. Wisconsin's policy is to charge nonresident students at least the full cost of their education. Indeed, nonresidents now subsidize residents.

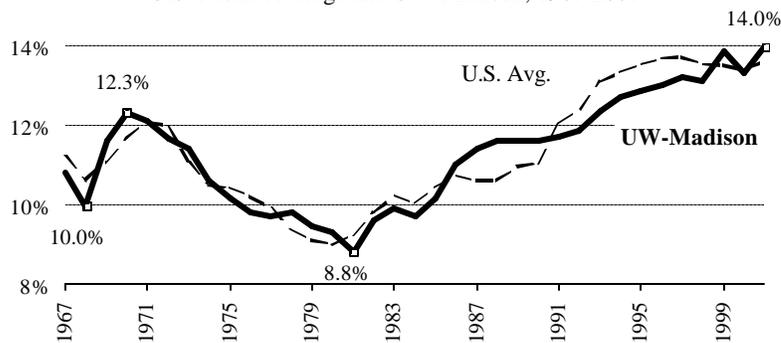
The pattern is similar for the four-year comprehensive campuses, such as UW-Eau Claire, UW-Oshkosh and UW-Whitewater. According to the Washington report, average undergraduate tuition and fees on Wisconsin's comprehensive campuses were \$3,526 in 2002-03. That was 5% lower than the national average (\$3,718) and 14% below the median (\$4,075) of schools in Big Ten states. And, like the Madison campus, nonresident tuition at the comprehensive campuses (\$13,572) was well above the national average (\$9,594) and the median (\$10,385) of schools in Big Ten states.

Wisconsin has a history of low tuition. In 1965, the Coordinating Committee for Higher Education in Wisconsin (CCHC) urged the state to "seek a return to the historically established principle of free public higher education." While the state has not moved in that direction, there has been a deliberate effort to keep tuition low.

Chart 4 shows resident tuition and fees relative to per capita personal income for UW-Madison from 1967-68 to 2001-02. UW-Madison is compared to the national average of four-year public universities, which include smaller comprehensive campuses and universities that do not have the reputation of the UW.

**Chart 4. Tuition and Fees Relative to PCPI**

U.S. Public Average and UW-Madison, 1967-2001



Source: UW System, Nat'l Center for Educ. Stats. and U.S. Bureau of Econ.

Tuition and fees at the UW relative to income track the national average very closely. Relative to ability to pay, UW-Madison requires only an average investment by the individual in return for a first-rate education. Tuition and fees at the comprehensive campuses require an even smaller investment, despite documented financial returns to

higher education. Studies have shown average returns to university education of about 15% per year.<sup>24</sup>

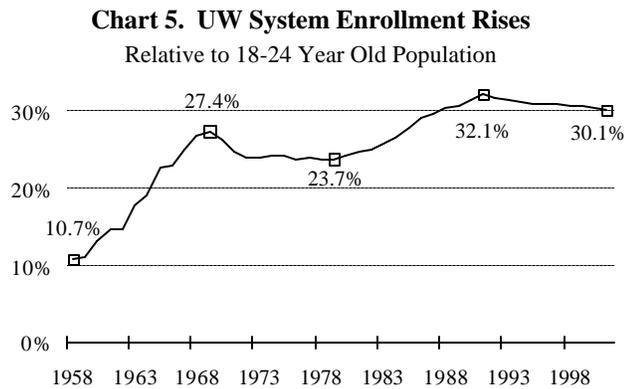
Because the state's university system is a relative bargain for residents, taxes must be higher to subsidize resident attendance. With tuition and fees at Wisconsin's universities much lower than the Big Ten median,<sup>25</sup> state taxes are about \$80 million higher.

*Large System.* In addition to low tuition, Wisconsin has a history of an expansive higher education system. NCES<sup>26</sup> data from 1970 to 1999 show Wisconsin has long had a large and highly accessible higher education system. Based on fall enrollments<sup>27</sup>, the state had 38.5 students per 1,000 residents in 1970, or 22.0% more than the national average and 13<sup>th</sup> highest. By 1999, the state had 46.8 fall enrollees per 1,000 residents, 15.5% higher than the U.S. average and 11<sup>th</sup> nationally.

The real growth in the UW System occurred during the late 1950s and 1960s. During those years, the baby-boom generation began turning 18. In addition, there was a general movement nationally to send more young people to college. Wisconsin was one of the first states to address the issue of burgeoning higher education.

In 1955, the state established the CCHE to make a continuing study of higher education in the state and to recommend necessary changes to the system. Early on, the committee recognized the growing need for higher education and helped the state plan for growing enrollments.

From 1958 to 1969, enrollment in UW System schools rose from 10.7% to 27.4% of the 18-24 year old population (see Chart 5). Enrollments rose again through the 1980s as the returns to higher education rose. As a percent of the 18-24 year old population, they peaked in 1991 at 32.1%.



Source: UW System and U.S. Census Bureau

Nationally, in 1999, 4-year public universities enrolled about 22% of the 18-24 year old population. At 30.1% of the 18-24 year old state population, the UW system is

<sup>24</sup> Organization for Economic Cooperation and Development, Education at a Glance 2002.

<sup>25</sup> This calculation is based on raising UW-Madison tuition to the Big Ten median, the comprehensive Universities to the average of comprehensive campuses in Big Ten states, and adjusting UW-Milwaukee's tuition and fees to the average of Madison' and the comprehensive's adjusted rates.

<sup>26</sup> National Center for Education Statistics.

<sup>27</sup> These are enrollees at all degree-granting public higher education institutions.

about 30,000 students larger than the national average—the equivalent of the LaCrosse, Oshkosh and Whitewater campuses combined. Wisconsin’s larger than average public university system accounts for about \$194 million in additional tax dollars.

However, while the UW system is larger than most and tuition is lower, taxpayer support has not kept pace with other states for the last 30 years. From 1961 to 1971, state support for higher education increased 17.1% annually here, the same as the national average.<sup>28</sup> However, since 1971, state support has increased 6.4% per year, on average, versus 7.5% nationwide.

### **Technical Colleges**

The other important part of Wisconsin higher education is technical colleges. As of 2002, the state’s 16 technical colleges had 63,783 full-time equivalent students. The average operational cost per student was \$11,329.

*Low Tuition.* Taxpayers support Wisconsin’s technical college system to a greater extent than the UW system. State taxes are about 32% of the UW system’s revenues. At the state’s technical colleges, state and local tax support totaled 58.5% of revenues in 2002, with most of that support coming from local property taxes. Tuition and fees accounted for only 11.3% of revenues. As a percentage of operational costs, tuition and fees were 17.8%.

The share of costs paid by technical college students is less than at the UW system. There, resident undergraduates paid 38.1% of instructional costs in 2001-02, and non-residents paid at least the full cost of instruction. If technical college students were required to pay, on average, 35% of operating costs, state property taxes in 2001-02 could have been \$123.4 million lower. That amounts to 5% of the total tax difference between the U.S. and Wisconsin.

Taken together, raising the student cost of higher education in the state, at the technical college and university level, could reduce taxes by about \$200 million, though some of those tax savings would be offset with higher financial aid.

### **4.3 Highway Spending**

While education expenditures accounted for the majority of the tax difference on the spending side, one other area is important for explaining Wisconsin’s higher spending, and ultimately higher taxes. In 2000, Wisconsin spent \$505 per person on

#### **Higher-Education Funding Alternatives**

In funding American higher education, there is a continuum of approaches ranging from total support (no tuition and no financial aid needed) to no support (high tuition and considerable financial aid). The theory behind the low tuition approaches is that they allow greater access for students from low- and modest-income families. The low tuition model requires greater state subsidies and thus higher taxes. Through the lower tuition, subsidies are provided to students without regard to family income and ability to pay.

A second family of approaches uses higher tuition and higher financial aid. This model provides access for students from low- and modest-income families through greater financial aid. It also requires fewer taxes because the student is paying a greater share for his or her education rather than the state.

Wisconsin has historically used the low-tuition, low-aid approach. However, with severe state budget problems, reductions in state funding might move the University toward the second funding model.

<sup>28</sup> The data come from Grapevine Center for Higher Education and Educational Finance, and include state support for all higher education institutions. The vast majority of these dollars go to the UW system, and relatively few to the technical colleges.

state and local roads,<sup>29</sup> 40% more than the national average of \$360.

The state's weather—particularly winter snowfall and temperatures—partly explains the higher spending. Of the top 20 states in highway expenditures, all have cold weather. Using snowfall averages for the major city in each state, these 20 states average 43 inches of snow per year. The average of the 50 states is 28 inches.

Weather does not, however, explain all of spending difference between Wisconsin and elsewhere. Two of Wisconsin's neighbors, Michigan and Illinois, spend significantly less on roads and highways than Wisconsin, despite having similar weather conditions. Illinois is 38<sup>th</sup> in highway spending and Michigan is 44<sup>th</sup>.

One reason for the difference between Wisconsin and these neighbors is the scope of the road systems. Wisconsin has 20.9 miles of road per 1,000 residents, 17<sup>th</sup> most in the nation. Of those road miles, 17.2, or 82%, are paved. The state is sixth nationally in paved road miles per capita. Illinois has only 8.3 paved road miles per capita and Michigan 7.2. Both rank in the bottom third nationally.

It is important to recognize that these figures include local spending on roads and highways. Wisconsin's network of local roads are a large factor in the state's higher road spending. The state is 31<sup>st</sup> in state road miles per capita, but 14<sup>th</sup> in local miles. In 2000, Wisconsin ranked 36<sup>th</sup> on state highway spending per capita, but third in local spending.<sup>30</sup>

The amount of federal money a state receives is also an important factor in highway spending. While the state ranked 17<sup>th</sup> in spending, and was in the top ten in paved roads per capita, it was 25<sup>th</sup> in federal highway dollars per capita. As a result, Wisconsin ranked ninth in highway spending from state and local money, 49% higher than the U.S. average.

Estimating the tax cost of above-average highway spending is difficult because federal money typically is tied to state and local spending. However, by assuming the state would continue to receive the same state highway dollars but reduce its local share of costs to the national average, Wisconsin's state and local governments would spend \$728.2 million less on roads and highways. If overall highway spending was reduced to the national average and the state continued to receive the same proportion of federal dollars, \$634.8 million less would be needed. Since nearly all transportation funding is tax revenue,<sup>31</sup> these are reasonable estimates of the tax cost of the additional spending. These amounts range from 26.3% to 30.1% of the \$2.4 billion tax gap.

Our regression analysis results indicated higher road and highway spending accounted for 28.1% of the \$2.4 billion tax difference between Wisconsin and the U.S. Using those figures, the estimated tax cost of the extra spending was \$672 million, within our range of national estimates cited above.

However, if northern states have more road expenses due to weather, it would be useful to try to correct for this factor. One way is to compare Wisconsin spending to surrounding states. Since these states have similar weather, averaging spending in these states should factor out some of the weather costs. If Wisconsin reduced its local share of costs to the "regional" average, the state would have spent \$528.2 million less on roads and highways. If road and highway spending was reduced to the regional average and

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<sup>29</sup> In the Census data, this category is referred to as "highways."

<sup>30</sup> Census Bureau state and local finance data.

<sup>31</sup> In the Census Bureau data, motor vehicle registration and license fees are considered motor vehicle taxes.

Wisconsin continued to receive the same proportion of federal dollars, \$476.4 million less would have been needed.

## **5. State Funding of Local Governments**

Wisconsin's tax-heavy revenue mix,<sup>32</sup> higher spending and lower incomes explain most of the state's above-average tax burden. But other, more subtle factors play a role in the state's above-average spending and taxing. Over the last century, Wisconsin's local governments, particularly schools, have relied, to an increasing degree, on state and federal revenues to fund their spending. From the late 1970s until 1997, state support waned. However, the large increases in aid to school districts since 1996-97 have increased state support for all local units to above average levels. The implication of this reliance for overall taxes and spending is analyzed in this section.

Two themes dominated early state residents' view of government. The first was that government be active in promoting societal good. The second was a belief in local government. However, when these ideals are combined with increasing differentials in local ability to fund government services across communities, the result is increased reliance on state taxes to fund local services. This has implications for spending and taxes.

### **5.1 Shifting Tides**

In 1901, Wisconsin state government collected about \$3.5 million in taxes, or 16% of state and local collections. The increasing dominance of state government in revenue collections was apparent by 1951. In that year, state collections had grown to \$180 million, or about 38% of total state and local collections.

In 1962, state government collected 45.5% of all state-local general revenues, but accounted for only 25.1% of spending. The gap between the percentage of state-collected revenues and state expenditures was 20.4 points (45.5 – 25.1). That difference fluctuated over the next 30 years; but by 1992, it had widened to 22.7 points. The state's commitment to provide two-thirds of state and local school revenues beginning in 1996-97 pushed the gap to its current level.

In fiscal 2000, state government raised 64.5% of Wisconsin's own-source (non-federal) revenues,<sup>33</sup> but accounted for only 39.9% of state-local spending. The gap between state collections and state spending ("revenue-expenditure" gap), 24.6 percentage points, was second highest in the nation. Only Michigan (25.5 points) was higher.

Looked at another way, we can track state and federal transfers to local governments as a percent of local spending (see Chart 6). This reveals how much local spending is paid for with monies not raised locally. In 1962, transfers to Wisconsin local governments accounted for 40.2% of local spending; in 2000, that percentage was 51.0%.

The biggest change in the state-local relationship occurred between 1972 and 1977. During those years, changes to the state's revenue sharing program and increasing school aids propelled non-local revenues from 42.5% of local spending to more than 53%. According to Census Bureau data, between 1972 and 1977, aids to various local units doubled. The biggest beneficiaries were schools, whose aids jumped 178%.

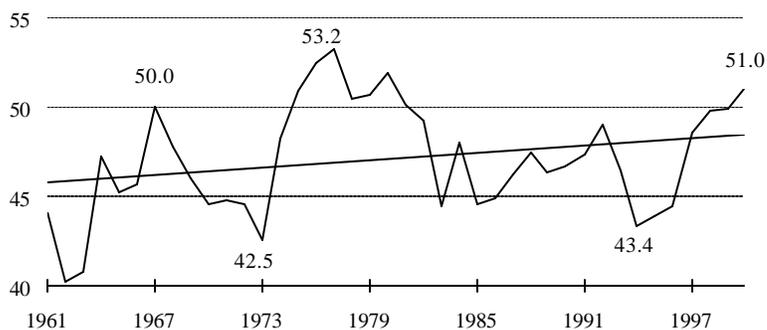
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<sup>32</sup> Wisconsin's taxes as a share of general revenues were 60.7% in 2000, seventh highest nationally.

<sup>33</sup> State government collected 67.8% of taxes.

**Chart 6. Non-local Financing of Spending Increases**

State & Federal Revenues as Percent of Local Spending



Source: U.S. Census Bureau, *State and Local Finances*

A number of economists suggest that the divergence between where revenues are raised and where they are spent is a significant factor in understanding overall tax burdens. If local spending can be financed with state and federal dollars, it should, all other things being equal, subsidize increased local spending and, therefore, increased taxes. Research has repeatedly documented this phenomenon.<sup>34</sup> In lay terms, it would make sense that government officials are more willing to use “other people’s money” to fund new programs than their own.

### ***Effect on Local Spending***

*Across States.* Both cross-sectional and time series data provide evidence of the impact of this pattern of state taxing and local service delivery on spending. Using Census Bureau data for fiscal year 2000, local spending per capita was regressed on per capita personal income (PCPI) and local “own-source” revenues as a percent of local expenditures:

$$(LOCSP / POP)_i = b_0 + b_1(PCPI)_i + b_2(OSREV / LOCSP)_i + e_i$$

Per capita income is included because research shows that demand for local services rises with incomes. This allows us to account for the fact that local spending will tend to be higher in high-income states.

According to this simple model, after accounting for income differences, local governments that fund a higher share of their spending with local monies have lower spending levels than those that fund a smaller percentage locally. For every percentage-point increase in locally-raised revenues, per capita spending is about \$21 lower (see Table 5). The estimate is statistically significant at the 5% level, providing further confirmation of revenue-spending gap theory found by other economists.

<sup>34</sup> See, for example, Hines and Thaler, “Anomalies: The Flypaper Effect,” in *The Journal of Economic Perspectives*, Volume 9, Issue 4, 1995, 217-226.

**Table 5. Cross Section Regression Estimates**

Dep. Var.: Local DGE Per Capita

Variable	Coeff.	S.E.	t-stat.*
(Constant)	1630	703.24	2.32
PCPI	0.092	0.02096	4.39
Pct. Own Source Rev.	-21.1	10.32	-2.05

Adj. R<sup>2</sup> = 0.265

S.E.E. = 538.51

\*All are significant at 5% level

*Wisconsin's Experience.* More relevant to this study, though, is Wisconsin's experience. How has the increase in state funding of local programs affected local spending in Wisconsin? Census figures for Wisconsin from 1961 to 2000 help answer that question.

Local spending per capita, PCPI and own-source revenue share of spending are used, but are inflation-adjusted to 2000 dollars. This allows a direct comparison of the Wisconsin-based coefficients with the earlier cross-sectional model that compared various states.

Several issues must be dealt with in the time series analysis. First, statistical tests show the local spending variable is nonstationary. To remedy this, we transform all of the data into first-differences.<sup>35</sup>

Second, it is likely that the relationship between local spending and funding source changed after 1970. The 1960s were anomalous, a time of relatively fast population growth due to the unusual surge of births after World War II. The increased numbers of students at the K-12 level meant spending at the local level (in this case, schools) was rising rapidly. At the same time, spending pressures for higher education limited the dollars available to aid local schools. Thus, there may have been higher local spending associated with smaller state support during these years.

Also, Wisconsin changed its shared revenue program<sup>36</sup> in 1971. Before that year, the program returned income and sales taxes to local governments based on where the revenues originated. The system was changed in the early 1970s to help equalize property tax rates. More revenues were provided to "property-poor" communities, while less were sent to "property-wealthy" communities; and total funding rose. School aids were also increased significantly during the 1970s.

To account for these issues, we use a piecewise linear estimation procedure. This procedure allows for a separate estimate of the relationship between spending and local funding prior to 1971 and then from 1971 to 2000.

The time-series analysis confirms the prior cross-sectional analysis of the 50 states. The coefficient on the "own-revenues" variable (-12.4<sup>37</sup>) is consistent with the previous work, though slightly smaller (see Table 6). This would indicate that a one

<sup>35</sup> A first difference is simply the annual change in the variable.

<sup>36</sup> The shared revenue program was originally called the shared taxes program. It sends state income and sales taxes back to counties, towns, villages and cities.

<sup>37</sup> Statistically significant at the 5% level.

percentage point increase in local funding of spending is associated with \$12.40 per capita decrease in local spending.

The coefficient on income is positive, though not significantly different from zero. And, as we anticipated, the coefficient on own-source revenues during the 1960s is positive (18.23<sup>38</sup>), supporting the conjecture that behavior during the 1960s was different compared to after the 1971 aid changes, likely due to increased population and spending pressures.

**Table 6. Wis. Time Series Regression Est.**

Dep. Var.: Wis. Loc. DGE Per Capita

Variable	Coeff.	S.E.	t-stat.
(Constant)*	32.65	15.48	2.11
PCPI	0.038	0.026	1.43
% Own Srce. Rev.*	-12.40	5.86	-2.12
1960's O.S.R.**	18.23	9.57	1.90

Adj. R<sup>2</sup> = 0.096

S.E.E. = 71.76

\*Significant at 5% level

\*\*Significant at 10% level

Both the cross-sectional and time-series analyses provide support for the theory that local governments' increased reliance on non-local revenues increases local spending, and ultimately raises taxes. Chart 6 showed the increasing reliance of Wisconsin's local governments on non-local revenues. The end result was likely increased local spending, and ultimately higher taxes. Next we discuss how this disconnect can lead to an "accountability gap" on taxes.

### ***Accountability Gap***

One argument advanced for explaining the link between the taxing-spending gap and higher taxes is that it tends to create an "accountability gap." If citizens perceive local taxes to be too high, they will protest to state and local government officials. The gap between state taxing and local spending allows public officials to place at least part of the blame on each other. Local officials can claim that state aids have not kept up with the costs of dual-funded programs, thus placing a larger burden on property taxpayers. State officials can deflect the blame for high taxes to local governments, maintaining that, despite a large portion of state tax dollars being returned to local governments, local taxes are high because local governments are spending more.

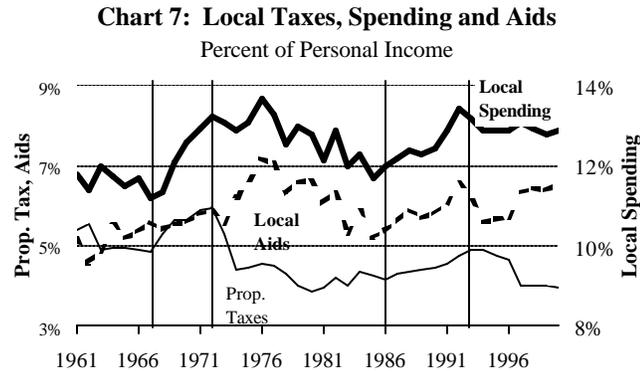
Two periods illustrate this behavior. From 1967 to 1972, local property taxes rose from 4.8% of personal income to 6.0% (see Chart 7). During this period, local governments could argue that, although aids were rising, they were not keeping pace with the demand for local services. Thus, local property taxpayers had to fund a greater share of local services. State officials could make the case that it was local spending, which rose nearly 13% per year, that was driving up local taxes.

Similarly, property taxes rose from 4.2% of income in 1986 to 4.9% in 1993. State aids rose during this time, but not as fast as local spending. Taxpayers were left to

<sup>38</sup> Statistically significant at the 10% level.

determine if the state was not funding local governments enough, or if local governments were spending too much.

In both cases, the state’s solution was more “property tax relief.” State aids and property tax relief credits were increased. In the latter period, spending caps were also placed on local school districts, to keep some local spending in check. In both cases, state funding of local governments, broadly defined, increased.



Sources: Wis. Department of Revenue and U.S. Census Bureau

## 6. Taxes, Spending and Political Culture Today

As was suggested at the outset, the unusual political and social culture that emerged during Wisconsin’s early years set the stage for the many taxing and spending decisions that were documented in this report. The separate ethnic identities of early Wisconsin are largely gone, but the heritage and values remain, albeit in muted form.

One way these values find voice today is through the political process. So, it is to contemporary political culture that we now turn for some final insights into why Badger State taxes are high.

It is relatively easy to describe qualitatively differences in political culture across the various states, as Elazar did with words like “moralistic” or “traditionalistic.” It is far harder to quantify this elusive concept in any meaningful way. A state’s political culture is far more than its “leaning Democratic” or “leaning Republican.” Nevertheless, electoral results are one of the few readily available sources from which to develop a measure of political culture. Such a measure is described below and then compared to spending preferences in two areas, public welfare and education, and to levels of taxation.

### 6.1 Measuring Political Culture

We start by recalling the conventional political spectrum that runs from left to right. Political scientists often characterize political parties on the left side of this spectrum as favoring a more active role for government. Political parties on the right side of the spectrum are viewed as favoring a less active role for the public sector. If these perceptions are valid, states with center-left political tendencies are likely to have more active governments and, presumably, higher levels of taxes and public expenditures. The opposite would be true for states with center-right leanings.

To quantify political culture, we turn to the 2000 presidential contest and do the following:

(1) Assign positive numbers to candidates from the right of center and negative numbers to those representing parties to the left (the sign on these numbers could easily be reversed, but this assignment provides for an easy left-to-right visual in our presentation). Messrs. Bush and Gore were the more “centrist” of the four major candidates, so the Republican receives a +1 and the Democrat, a -1. Because Green Party candidate Ralph Nader was farther left, he is represented with a -2; the more conservative Reform candidate, Pat Buchanan, is represented by a +2.

(2) Multiply a candidate’s actual vote percentage in each state by the appropriate number from above. Thus, in Wisconsin, Al Gore’s 47.8% of the vote would be expressed as -47.8 ( $47.8 \times -1$ ), and George Bush’s percentage would be unchanged at 47.6%. The votes for Messrs. Nader ( $3.6\% \times -2 = -7.2\%$ ) and Buchanan ( $0.5\% \times +1$ ) are both double-weighted with the appropriate sign attached.

(3) Separately combine these values for the two major candidates on the right and left and add them together. Thus, the negative values on the left (Gore plus two times the Nader vote) have the effect of subtracting the votes for the left-leaning candidates from the votes for the right-leaning candidates (Bush plus two times the Buchanan vote).

## **6.2 Political Culture and Public Finance Preferences**

The resulting measure of political culture is more positive for states on the right and more negative for states on the left. This measure can now be compared to public finance preferences.

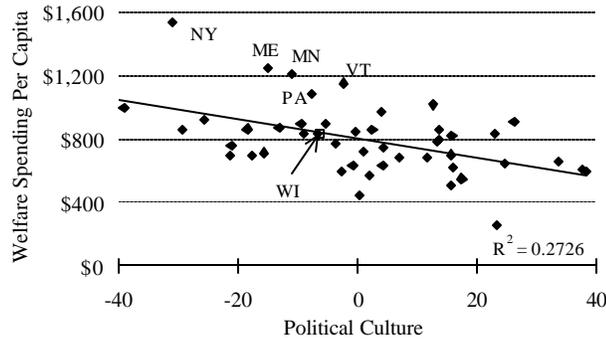
### ***Public Welfare***

Spending on public welfare is one proxy for the perceived role of government in a state. Political cultures that view state and local government as a force for good in society will likely spend more on public welfare than those cultures that view government’s role as more limited.

Plotting per capita welfare spending against political culture measure shows the relationship between current political leanings and the perceived role of government (Figure 4). While there is some variation, political cultures to the left spend more on public welfare than those to the right.

Wisconsin is illustrative. It spends slightly more than the national average on welfare. And, in the 2000 election, Wisconsin’s presidential tendencies were slightly left-of-center, since Messrs. Gore and Nader received a larger share of the vote than Bush and Buchanan. Several other states with Yankee-based cultures similar to Wisconsin’s (New York, Maine, Minnesota and Vermont) have even higher levels of public welfare spending, while generally exhibiting a greater preference for Messrs. Gore and Nader.

**Figure 4. Political Affiliation and Welfare Spending**



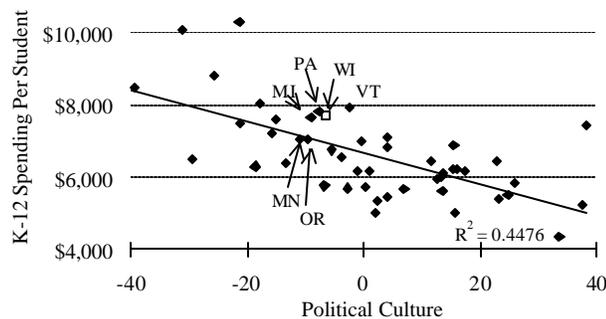
Sources: Federal Election Commission and U.S. Census Bureau

### **Education**

Another important characteristic of Wisconsin's history is the value residents have traditionally placed on education at all levels. As previously documented, the state has a history of spending well above national norms on K-12 education, and more recently, on higher education.

Figure 5 (below) shows how spending on K-12 education is related to political tendencies. States with current political cultures to the left of center tend to spend more on education than those to the right. Many states with cultural backgrounds similar to Wisconsin's have similar levels of education spending. Michigan and Vermont, for example, spend about the same amount as Wisconsin on education. Minnesota and Oregon have similar cultural backgrounds, but spend slightly less.

**Figure 5. Political Affiliation and Educ. Spending**



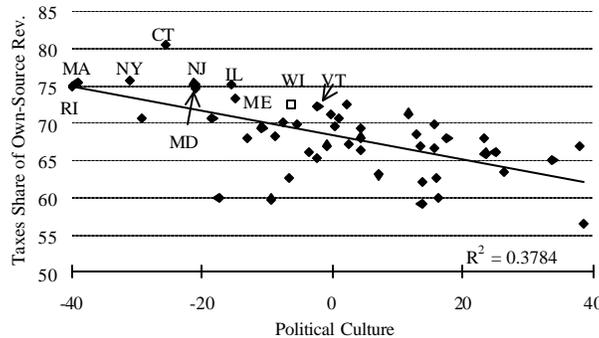
Sources: Federal Election Commission and U.S. Census Bureau

### **Taxes or Fees?**

Wisconsin has long emphasized the use of taxes to finance government rather than user fees. Today, more than 70% of Wisconsin's own-source revenues are from taxes, which is ninth highest in the nation. States with higher percentages are: the New England states of Rhode Island, Massachusetts, Maine and Connecticut (Vermont is 11<sup>th</sup>); the midwestern states of New York, New Jersey and Maryland; as well as Illinois. Many have some remnants of early Yankee influence.

To examine how political culture and taxes were related in 2000, we plot taxes as a share of own-source revenues against political culture (see Figure 5, following). Political cultures on the right tend to use taxes to a lesser degree to fund spending than cultures on the left. Further, we see a clustering of the states with historic ties to Wisconsin above the 70% level, providing evidence that the Yankee influence remains today.

**Figure 6. Political Affiliation and Taxes**



Sources: Federal Election Commission and U.S. Census Bureau

Clearly, other factors affect levels of spending, and to a lesser degree the decision to use taxes or fees to fund spending. To further clarify the relationships we found in these scatterplots, we regressed the two spending variables on political culture, per capita income, the percent of the workforce that is unionized and federal monies per capita. The tax share of own-source revenues is regressed on income and the political culture measure. The results, though not presented here, confirm the relationships described above.

One final note should be added. It must be also said that this measure of political culture is by no means perfect. The demography of states continues to evolve, and with it political culture. New England, the source of Wisconsin’s early politics, is a good example. While these states tend to be left-of-center politically, they span the left side of our measure, from  $-2.4$  in Vermont to  $-40$  in Rhode Island. Part of the reason for this range is that these once Puritan-Yankee states subsequently welcomed immigrants from many backgrounds, including Ireland, Italy and Portugal.

## 7. Conclusions

In this study, we have attempted to answer the question: “Why is Wisconsin a high tax state?” We review the evidence from both historical and empirical perspectives.

The empirical evidence points to higher spending as the most important factor for explaining Wisconsin’s higher taxes. In fact, higher spending by Wisconsin’s state and local governments accounts for about 70% of the difference between Wisconsin’s current tax levels and the national norm. Above-average spending on education, both K-12 and higher, and on roads and highways account for most of the additional Wisconsin spending. Approximately 30% of Wisconsin’s higher taxes are due to “revenue mix,” that is, fewer federal and miscellaneous dollars, and lower fees and charges for government services here compared to elsewhere.

Exploring spending in more detail, we find three main factors explain most of Wisconsin's higher K-12 spending. State school districts spend significantly more on employee benefits than the national norm. Wisconsin has much smaller student-teacher ratios. And, the state spends more on capital expenditures and debt.

Two factors explain the greater higher education spending here. First, Wisconsin's public university and technical college system is about 22% larger than average. Second, resident tuition for both systems is low, and, thus, taxpayer subsidies are high.

Wisconsin's extensive state and local road system results in road and highway spending that is 40% above the national average. Although weather is a factor, more important for explaining Wisconsin's state-local road spending is the fact that Wisconsin is sixth in paved road miles per capita.

Wisconsin's unique state-local relationship also plays a role in Wisconsin's higher spending. We show that Wisconsin's increasing tendency to tax at the state level but spend locally has likely led to higher local spending.

We suggest that many of these empirical findings are rooted in Wisconsin's history. The state's Yankee/immigrant heritage laid the groundwork for our current levels of government spending and taxing. The state's long-held view of government as an active participant in society has influenced spending decisions throughout the last century. The tradition of strong local governments has meant services are provided locally in Wisconsin. But, the inability of many local governments to fund services at the local level has led to a system increasing state funding of local governments. Our work shows that this "disconnect" between who taxes and who spends has likely led to higher levels of spending.

Finally, we show how the state's roots are played out in current electoral politics. Wisconsin's political culture remains one that values education, and thus spends more in this area. It believes in an active role for government, thus the state's marginally higher spending on public welfare. And, the culture remains one that prefers taxes to fund government spending, rather than fees and charges. Thus, Wisconsin's high reliance on taxes and large tax subsidies for higher education.

## Appendix 1

The regression model used to disaggregate Wisconsin's higher than average tax burden is:

$$(T/Y)_i = a_0 + B(REV/Y)_i + \Phi(EXP/P)_i + g_1 LnPCPI_i + g_2(DEF/Y)_i + e_i$$

where revenues (REV) include federal monies, fees and charges, and miscellaneous revenues, expenditures (EXP) include K-12 spending, higher education spending and charges, road and highway spending, and other expenditures. The deficit measure (DEF) is simply expenditures minus revenues.

The model's summary statistics are:

$$R^2 = 0.956 \quad \text{Adjusted } R^2 = 0.945 \quad \text{S.E.E.} = 0.2616 \quad N = 50$$

The table below shows how the regression coefficients were used to estimate the impact of each variable on Wisconsin taxes.

**Regression Disaggregation of Wisconsin's Tax Burden**

	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
	<b>Coeff.</b>	<b>Values</b>		<b>Diff.</b>	<b>Tax Eff.</b>	<b>% of Diff.</b>
Variable		U.S.	Wis.	Col 2 - Col 3	Col. 1 * Col. 4	Col. 5 / (-1.68)
(Constant)	53.944					
Fed \$/Y	-0.767	3.75	3.52	0.24	-0.18	10.8%
Misc. Rev./Y	-0.894	1.97	1.85	0.13	-0.11	6.7%
Charges/Y	-0.998	2.16	2.03	0.13	-0.13	7.9%
H.E. Exp./Pop.	0.005	477.40	601.73	-124.33	-0.59	35.2%
H.E. Charges/Pop.	-0.004	196.48	258.92	-62.44	0.27	-16.0%
El. Sec. Ed./Pop.	0.003	1297.63	1452.76	-155.14	-0.52	31.2%
Highway Sp.	0.003	360.09	505.35	-145.26	-0.47	28.1%
Other Sp./Pop.	0.003	3204.79	3175.07	29.72	0.10	-5.8%
Ln(PCPI)	-16.199	3.32	3.29	0.03	-0.49	29.2%
Deficit/Y	-0.790	-0.50	0.13	-0.63	0.50	-29.5%
Taxes/Y		11.21	12.89	-1.68		
Predicted Value		11.17	12.81	-1.64		

The difference between Wisconsin and the U.S. on each variable is calculated first (Column 4). To determine the effect on taxes, this difference is then multiplied by the coefficient (Column 5). This number shows how many percentage points Wisconsin's taxes would rise or fall if that variable were the same as the U.S. average. The bottom of the table shows the actual difference between Wisconsin and the U.S. in tax burdens. To calculate how much of that additional burden is due to each variable, the tax effect (Column 5) is divided by the -1.68 point differential.

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