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**The Economic  
Impact of  
Immigration on  
Green Bay**

## REPORT FROM THE PRESIDENT:

Seventeen years ago our Institute did a major study on the impact of Hmong immigrants throughout the state. We predicted that the Hmong would make a serious contribution to Wisconsin's economy, even though at the time a large portion were on welfare. That prediction has gained credibility over the years. Today Wisconsin in general, and Green Bay in particular, face a different type of immigration. Hispanics have moved into Green Bay in large numbers to find low-income jobs in Green Bay's economy. Unlike the Hmong, the presence of illegal immigrants has complicated this issue.

We asked Dr. David Dodenhoff, a nationally known social science scholar, to examine data on their impact on Green Bay's economy. While the results are mixed, there is enough research to show a pattern of both short-term and long-term impacts. Short term the Hispanics are providing low-income workers that help Green Bay's economy. On the other hand, there is little doubt that the taxes they pay do not equal the amount that local government spends on them. The best example of this is public education. The children of immigrants put an enormous financial pressure on local public school systems. Tax payments from immigrants do not come close to matching education allocations.

This financial impact is complicated by the presence of illegal immigrants. The estimate on illegal immigrants, and it is only an estimate, puts the number at several thousand. That is an issue that must be dealt with in Green Bay. What this data really shows is that Green Bay may be the only city in Wisconsin that is following a major national trend. Hispanics are the fastest growing part of America's population. Estimates are that Hispanics will grow from 10.7 percent of the Green Bay population in 2006 to at least 17 percent by 2017 and nearly 30 percent by 2032 is similar to other cities around the country, particularly those in the Southwest.

This may cause some people tremendous anxiety, but Hispanic immigrants are no different from any other immigrant group that has come to Wisconsin. Why would anyone go to a northern climate from a place like Mexico unless they were serious about economic opportunities and are willing to fill entry-level jobs? More to the point, as Wisconsin's population ages we will need these immigrants in our future workforce to keep our economy vibrant. In that respect the impact of immigration on Green Bay may place it in the most advantageous position of any Wisconsin city. They have a work base for the future, and it is not clear that other cities in our state will be able to match Green Bay.



James H. Miller

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# THE ECONOMIC IMPACT OF IMMIGRATION ON GREEN BAY

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## EXECUTIVE SUMMARY

Over the past 15 years, the city of Green Bay has been transformed by immigration. From negligible proportions in 1980, the foreign-born and Hispanic populations of Green Bay grew steadily through the 1990s, and had established a significant community presence by the 2000s. Though this change did not come all at once, the release of the 2000 Census results crystallized locals' thinking. According to one observer, "About 50 percent said: 'This is great because the diversity will enrich us.' But another 50 percent said: 'Oh, my God, now what are we going to do?'" According to another, "For minorities to come here and live has created culture shock in Green Bay."<sup>1</sup>

This study seeks to provide new information on some of the actual and potential consequences of immigration for Green Bay and surrounding Brown County, Wisconsin. Specifically, the study finds that:

- If recent demographic trends continue, Hispanics will grow from 10.7 percent of the Green Bay population in 2006, to at least 17 percent in 2017, to nearly 30 percent in 2032. This last figure would put Green Bay's Hispanic population on par with that of contemporary Arizona, which shares a border with Mexico.
- Based on 2000 Census data, immigrant households in Brown County are estimated to have consumed somewhere between \$4 million and \$18 million more (in 2007 dollars) in state and local government services than they paid in state and local taxes. On the other hand, these same households most likely provided a partial subsidy of the federal programs and services that native Wisconsin taxpayers received. This is because immigrants (particularly illegal immigrants) make relatively large tax contributions to the federal government but are eligible for fewer benefits than the native-born population. At the state level, though, immigrant tax payments are relatively low, and the most expensive public service — K-12 public education — is available to the children of all immigrants, whether legal or illegal.
- Though the available data are suggestive rather than conclusive, there is little indication that immigration to Green Bay has harmed job opportunities for native workers. Furthermore, though the impacts are difficult to measure, Green Bay immigrants clearly have benefited the local economy by starting businesses, saving and investing money, purchasing consumable goods, hiring employees, and creating the conditions for more efficient use of capital through the provision of their labor.
- Data on the impact of immigration on wages in the Green Bay metro area are mixed and inconclusive. It seems unlikely, though, that any downward pressure on local wages due to immigration has been significant.

## INTRODUCTION

"Immigration"—these days, few words in American political discourse can incite passions the way this one can. As recently as five years ago, though, immigration was an arcane issue discussed chiefly among a small community of academics, think tank researchers, and government officials. It was never a particularly important subject among American voters, nor to the mainstream media. Because of this, discussions of immigration policy took place largely outside the spotlight of public scrutiny.

Things began to change in the aftermath of the terrorist attacks of September 11, 2001. Those attacks revealed how simple it was for enemies of the United States to enter the country legally—to live, work, and travel within the U.S. without fear of apprehension, let alone deportation; and to plan and carry out acts of mass murder with minimal interference.

The government investigations that followed the 9/11 attacks revealed a permissive, and in some ways highly dysfunctional, federal system for regulating immigration. That system was failing—not just at stopping national security threats, but also at the basic function of protecting the country's borders. Thus, the conversation about immigration soon expanded from national security issues to issues of economic security. What were the costs and consequences of the tide of immigrants, legal and illegal, surging across the country's southern border? Did anyone know? Even more important, could the government do anything about it?

President Bush and Congress took up the issue of immigration reform in 2004 and 2005, but their efforts were met with public skepticism. Ultimately, the "comprehensive" approach favored by the president and Congress, and ostensibly designed to address border security issues and the problem of existing illegal immigrants, failed to achieve majority support from the public. Comprehensive legislative reform failed, and further federal action stalled.

The legislative debate did, however, increase public awareness of immigration issues. Words and phrases such as “broken borders,” “amnesty,” “anchor babies,” and “security first” began to enter media accounts and the common parlance. Citizen groups like the Minutemen Civil Defense Corps not only organized for political action, they actually patrolled areas of the border where federal agents were thin on the ground. Bloggers and talk radio hosts pressed the immigration issue with relish. State and local officials, frustrated by the inaction of the federal government, acted on their own — to punish businesses that employed illegals, to deny public benefits to non-citizens, and to demand proof of citizenship as a precondition of voter registration. Finally, the major Democratic and Republican candidates for their parties’ 2008 presidential nominations excoriated the federal government for its failure to address what was suddenly a high-profile public issue.

To outside observers, all of this action might seem to have taken place a million miles away from Wisconsin. The state had no connection to the September 11 attacks, and is traditionally (and correctly) thought of as being populated disproportionately by whites. Wisconsin is also separated from Mexico by nearly an entire continent. Canada, on the other hand, is just a stone’s throw away. Thus, unless fishermen and fur trappers were stealthily migrating southward from the Great White North, immigration could hardly be an issue in the Badger State.

Could it?

Wisconsinites know better. From the Hmong resettlement in the 1970s and 1980s to the influx of Hispanic immigrants in more recent years, immigration has changed the complexion of Wisconsin, literally and figuratively. This study examines the impact of immigration on one Wisconsin community in particular, the city of Green Bay. As the city and the surrounding area of Brown County have become home to an increasing number of immigrants, public officials have reacted in controversial ways. Brown County, for its part, passed an ordinance in 2002 that declared English the official language of the county. More recently, in the summer of 2007, the Common Council of Green Bay adopted legislation allowing the city to revoke the license of any business that was found to be employing illegal immigrants. The leader of the effort to pass the ordinance, Council President Chad Fradette, described the new law as follows: “It’s a message to the illegal alien community that says you are not welcome. Don’t come here.”<sup>2</sup>

Obviously, city and county officials are concerned about the changes that immigration has brought to their part of Wisconsin. But should they be? This study seeks to provide some answers to that question by presenting and discussing several different kinds of data:

- information on the demographic changes in Green Bay in recent years, and projections of the future demographic make-up of the city;
- an analysis of the fiscal consequences of immigration in Brown County — specifically, the costs to government of providing services to the immigrant population, and the revenues brought in by that population; and
- the economic consequences of immigration for the native-born population of Green Bay in terms of employment and earnings.

These data present a complex picture of the impact of immigration on Green Bay and Brown County, Wisconsin. Our hope, though, is that this analysis will give residents and public officials in these areas a more concrete sense of the costs and benefits of the recent years’ wave of immigration.

## GREEN BAY DEMOGRAPHICS — PAST, PRESENT, AND FUTURE

### Recent demographic trends among Hispanics and the foreign-born

Table 1 presents some basic demographic data for the city of Green Bay and the United States as a whole, derived from the 2006 American Community Survey (ACS), which is administered by the United States Census Bureau.<sup>3</sup>

The table indicates that, consistent with popular understanding, Green Bay’s population is much less diverse — at least in racial and ethnic terms — than that of the country

**TABLE 1 RACE, ETHNICITY, AND BIRTHPLACE DATA FOR THE UNITED STATES AND GREEN BAY, WISCONSIN: 2006**

	Green Bay, Wisconsin	United States
<b>Percent white</b>	80.5%	73.9%
<b>Percent Asian</b>	3.8%	4.4%
<b>Percent Hispanic</b>	10.7%	14.8%
<b>Percent foreign-born</b>	8.2%	12.5%

**TABLE 2 RACE, ETHNICITY, AND BIRTHPLACE DATA FOR WISCONSIN AND THE CITY OF GREEN BAY, WISCONSIN: 2006**

	State of Wisconsin	Green Bay, Wisconsin
Percent white	87.5%	80.5%
Percent Asian	2.0%	3.8%
Percent Hispanic	4.6%	10.7%
Percent foreign-born	4.4%	8.2%

as a whole. Green Bay has a higher percentage of whites, and lower percentages of Asians, Hispanics, and foreign-born persons than the U.S. does.

Consider Table 2, however. Using ACS data again, this table replicates Table 1’s data for Green Bay, but replaces the U.S. data with data for the state of Wisconsin:

Notice here that Green Bay exhibits considerable differences

from the state of Wisconsin as a whole. As a state, Wisconsin is whiter than Green Bay, and also has a smaller percentage of Asians, Hispanics, and foreign-born residents. The differences in the Hispanic percentages are particularly noteworthy, with more than one in ten residents of Green Bay falling into this category, but fewer than one in twenty for the state of Wisconsin.

Things were not always this way in Green Bay. Figure 1 illustrates the changing proportions of Hispanics in the city over time.

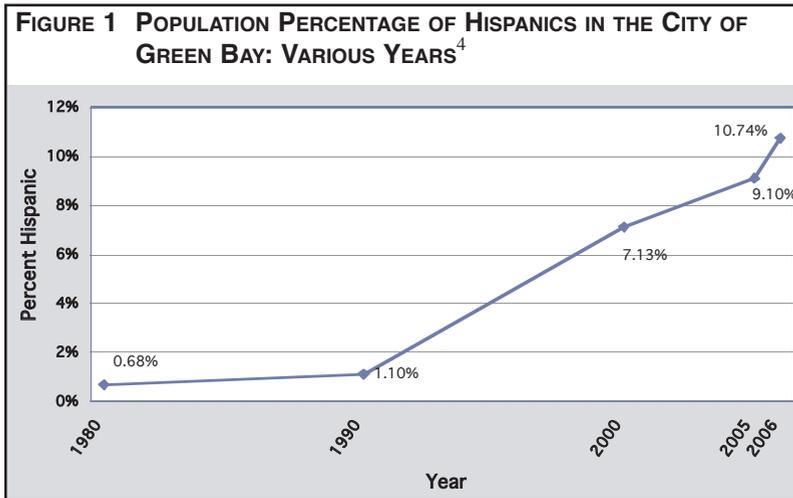
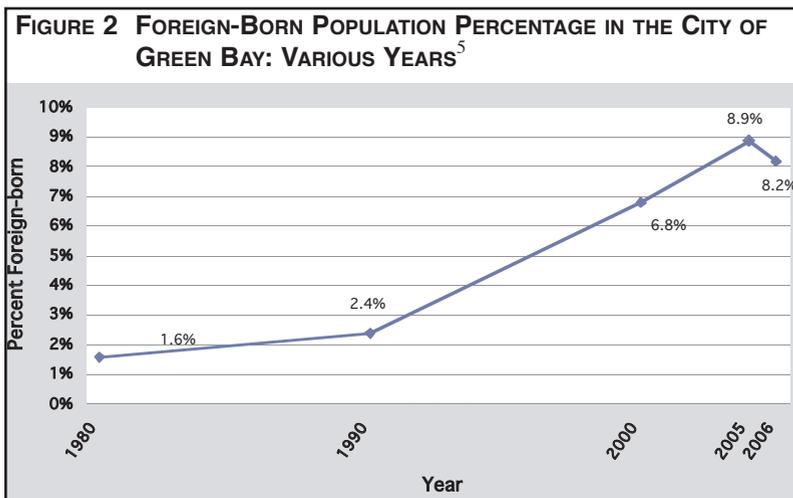


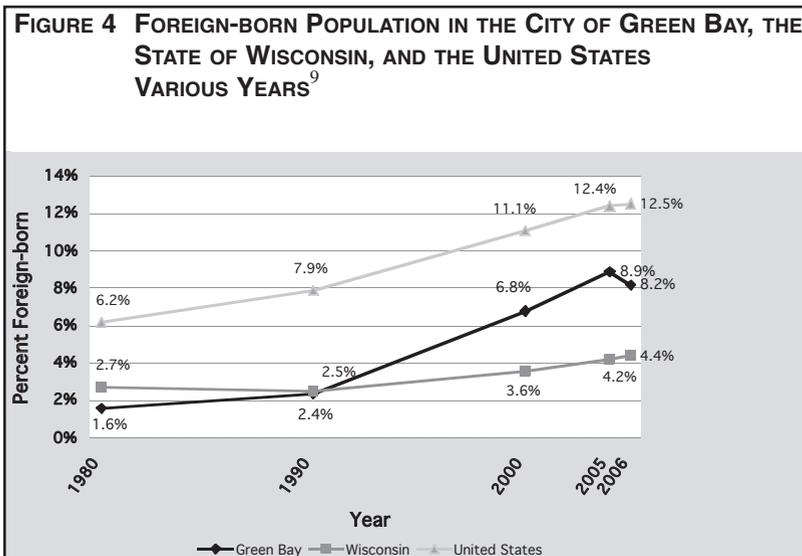
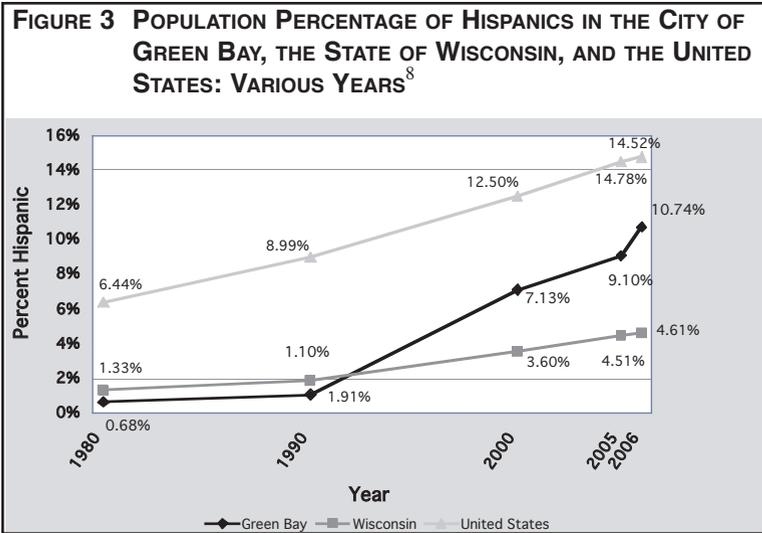
Figure 2 covers the same time period, but in this case shows the foreign-born population percentage in Green Bay.

The two charts depict very similar trends. In 1980, both Hispanics and the foreign-born were a negligible proportion of the Green Bay population. Their percentages grew very modestly between 1980 and 1990, but thereafter began to increase significantly. There is a noticeable jump in both trends between 1990 and 2000, and continued strong growth (particularly in the Hispanic population series) through the mid-2000s.<sup>6</sup> Thus, during the roughly 25-year period covered in these two charts, both Hispanic and foreign-born residents grew from a trivial presence in Green Bay to a relatively significant portion of the local population.<sup>7</sup>



Figures 3 and 4, respectively, compare the trends in Hispanic and foreign-born populations in Green Bay to those in Wisconsin and the United States as a whole.

The figures clearly demonstrate why immigration has become such a hot-button issue in the city of Green Bay. During the past 15 years, the city’s Hispanic population has grown by a



factor of more than four, bringing the city into much closer alignment with the U.S. as a whole. The growth of the Hispanic population in Wisconsin has been noteworthy since 1990 as well, but the rate of Hispanic growth in Green Bay has far outstripped that for the entire state.

The trends in the foreign-born population levels are similar, though not quite as dramatic. Once again, Green Bay showed significant growth in the percentage of foreign-born residents between 1990 and 2005, coming to more closely resemble the U.S. as a whole, but still lagging somewhat. The state of Wisconsin experienced some growth in its foreign-born population after 1990, but as recently as 2006 remained a much less popular destination for immigrants than Green Bay and other parts of the U.S.

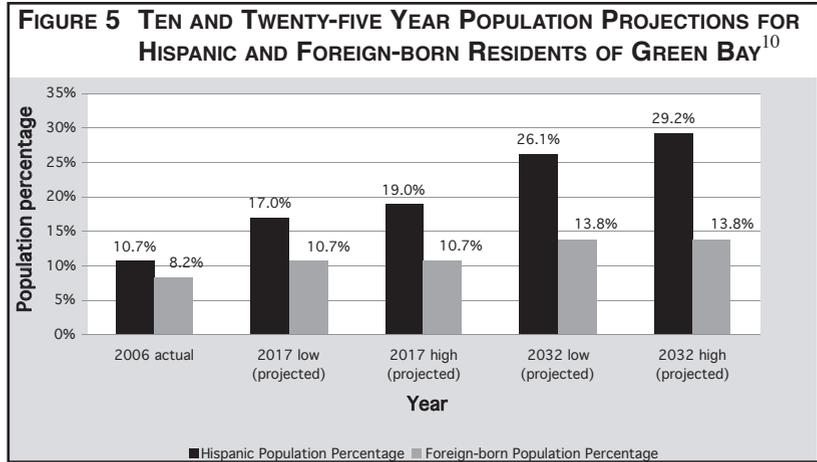
**What does the future hold for Green Bay?**

Projecting demographic trends is as much art as science, and depends critically on one’s assumptions. This section presents projections for Green Bay’s Hispanic and foreign-born populations that assume a continuation of growth trends from the recent past. Obviously, there are many reasons why growth in these population groups might not continue at the same pace as in recent years. Local, state, or national policy changes — both in the U.S. and in the home countries of prospective immigrants — might stem the tide of immigration, or make Hispanics feel less welcome in Green Bay. A downturn in the local economy might make Green Bay a less attractive location for immigrants to settle. U.S. cities with labor shortages, particularly in the low-wage job sector, might aggressively court some of the same individuals and families who are currently settling in Green Bay, drawing them away from the city.

Because of these possibilities, and many others, the numbers that appear below should be thought of as population projections — *not predictions*. In other words, they do not reflect the author’s best judgment about the likely composition of Green Bay’s population in the future. Instead, they reflect fairly straightforward mathematical calculations that project the recent years’ growth in foreign-born and Hispanic populations into the future. (Appendix A provides a detailed discussion of the methodology used to make the projections below.)

Figure 5 presents data for two different groups — Hispanics and the foreign-born. The left-most part of the figure shows the 2006 Green Bay population percentages for Hispanics and the foreign-born, respectively. These are the actual numbers estimated by the Census Bureau. The next two sets of projections are for the year 2017. One is labeled as the “low” (or conservative) projection, the other as the “high” (or more liberal) projection. These labels apply only to the Hispanic population projections, however, as the foreign-born population projection is the same in both cases. The final two sets of projections are for the year 2032. Again, there is a “low” projection and a “high” projection, but for the Hispanic population only.

What stands out in Figure 5? First, while the Green Bay foreign-born population is projected to continue growing, that growth will be relatively modest. Even looking approximately 25 years into the future, to 2032, Green Bay is not projected to become a “city of immigrants.” Instead, if trends from recent years continue, the city would be expected in 2032 to have a foreign-born population roughly equivalent to the current percentage of foreign-born residents in states such as Massachusetts and Illinois.



The projections for the Hispanic population, however, paint a different picture. From a 2006 population percentage of 10.7 percent, Hispanics are projected to constitute at least 17 percent of Green Bay’s population in 2017, and perhaps as much as 29 percent of the city’s population in 2032. The latter figure would make Green Bay a miniature version of contemporary Arizona, where nearly one-third of the population is Hispanic. This trend would be driven in part by an absolute increase in the number of Hispanics in Green Bay and by an absolute decrease in the number of non-Hispanics. (The latter trend is already in progress, and has been since at least 1990.) The net effect would be very slow population growth in Green Bay over time, but with an ever-increasing number and percentage of Hispanic city residents.

## THE FISCAL IMPLICATIONS OF IMMIGRATION IN BROWN COUNTY

### Issues

It should not be surprising that Green Bay families, policymakers, and media outlets (including blogs and talk radio) have begun to ask, “Is all this demographic change a good thing or a bad thing?” There are many potential answers to this question, depending on one’s particular interests: cultural diversity, economic growth, tax revenues and social service expenditures, community cohesion, and so on. This part of the study, however, focuses on a fairly narrow question — the fiscal implications of immigration for Brown County.

The standard exercise in studies such as this is to tote up the taxes paid by immigrant households and compare them to the costs of the services received by those households. There are two reasons for this. First, absolute figures may not mean much on their own. If one were to learn, for example, that the immigrant population of Green Bay paid \$20 million in state and local taxes in a particular year, would that be a lot or a little? It is difficult to say without some standard of comparison. Second, comparing taxes paid by immigrant households with the cost of services received by immigrant households gives some sense of the net cost, or benefit, of immigration for the community.

The decennial Census provides the only data source sufficiently large and sufficiently detailed to support the analysis in this section. Though the Census collects information on virtually every U.S. household, the full range of household- and person-level Census data is not made available to the public. Instead, researchers have access only to a relatively small sample of the much larger Census data collection effort. Unfortunately, the population of Green Bay is insufficiently large (in the context of publicly available Census data) to produce valid, reliable estimates of taxes paid by, and expenditures made on behalf of, the local immigrant population. Accordingly, the analysis below encompasses all of Brown County, where the data are available to make more valid, reliable — though far from error-free — estimates.

### How much do immigrants pay in state and local taxes?

The Wisconsin Department of Revenue regularly calculates the state and local tax burden for Wisconsin households, both in the aggregate and by income level. By assigning Brown County immigrant households to the Department's income categories, one can produce a rough estimate of state and local taxes paid by those households. (The full methodology is described in **Appendix B**.) This, of course, requires that income for Brown County immigrant households be determined. As noted above, the only data source large and detailed enough to provide that information is the decennial Census. Because the most recent Census was in 2000, income data from 1999 must be used.

**TABLE 3 ESTIMATED STATE/LOCAL TAXES PAID BY BROWN COUNTY IMMIGRANT HOUSEHOLDS: 2000**

Lower-end Estimate	Upper-end Estimate
\$19.1 million	\$25.4 million

Following the methodology in Appendix B, it is estimated that Brown County households headed by foreign-born individuals or couples paid just over \$22 million in state and local taxes in 2000. Because of sampling error in the Census data, however, this figure is more usefully presented as a range of revenues based on a 90 percent confidence interval. The lower end of this range is \$19.1 million. The upper end is \$25.4 million. Table 3 presents the data in graphical form.

### How much do immigrants consume in state and local services?

Data limitations mean that there are significant constraints on what one can reasonably conclude about immigrant households' use of state and local services in Brown County. The approach followed in this section, then, is to discuss only those services and dollar amounts of which one can be relatively confident. Government services for which costs cannot be allocated with confidence are noted, but are not expressly included in the analysis.

Fortunately, the single most expensive service consumed by immigrant households is also the one on which the best data are available — public education. Census 2000 data indicate that Brown County immigrant households had an estimated 4,021 students enrolled in kindergarten through 12th grade public schools. Department of Public Instruction statistics show that state/local spending per student in Brown County in the 1999/2000 school year was \$8,163.<sup>11</sup> Multiplying this figure by the number of students yields a one-year cost estimate of \$32,823,423. Because of sampling error in the Census data, though, the estimated number of students (4,021) may be low, or may be high. As above, the spending number is best presented as a range, based on a 90 percent confidence interval for the number of students. This range is from \$30,603,087 to \$35,043,759.

The Census also includes data on individuals' receipt of public assistance income. In the context of Census 2000, "public assistance income" meant income from the Wisconsin Works (W-2) program, the successor to the joint federal/state welfare program, Aid to Families with Dependent Children (AFDC). In 2000, W-2 provided cash benefits to qualifying Wisconsin families in exchange for participation in various work, training, and educational requirements. The program also provided supportive services such as education, job readiness assistance, and transportation subsidies.

Census 2000 data indicate that fewer than one percent of persons in Brown County immigrant households received income through W-2 in 1999. In part, this small number is probably due to sampling error. But it is also due, no doubt, to underreporting of income:

Since answers to income questions are frequently based on memory and not on records, many people tended to forget minor or sporadic sources of income and, therefore, underreport their income. Underreporting tends to be more pronounced for income sources that are not derived from earnings, such as public assistance, interest, dividends, and net rental income.<sup>12</sup>

Even recognizing this caveat, the best available estimates indicate that public assistance income in 2000 constituted a trivial amount of the total state and local expenditures for immigrant households in Brown County. Consider Census data for the state of Wisconsin as a whole. In 1999, only 1.7 percent of Wisconsin households received public assistance income. The average annual payment for those households was roughly \$2,500.<sup>13</sup> State data indicate that in 2000, the earliest year for which data are available, Brown County had only 118 unduplicated W-2 participants. Even if *every one* of these was a member of an immigrant household, the total cost of cash assistance for

Brown County immigrants would have been only \$295,000. Because of the way public assistance is funded in Wisconsin, however, the federal government would have been responsible for more than half of that spending. All told, then, cash assistance for Brown County immigrants on welfare in 2000 probably cost the state somewhere in the range of a few tens of thousands of dollars.

This amounts to little more than rounding error on the nearly \$33 million in state and local spending on public education for children from immigrant households. Of course, along with cash assistance one could include additional costs for transportation aid, education and training, and other services available under Wisconsin Works. Even with spending on these services included, though, there is no plausible set of assumptions that leads to public assistance costs of more than a few hundred thousand dollars per year for Brown County immigrant households.<sup>14</sup>

The state of Wisconsin does, however, have a relatively generous child care subsidy that is available to families with incomes up to 200 percent of the federal poverty line, whether or not they participate in the Wisconsin Works program. In 2000, the baseline year for the fiscal analysis, total child care subsidies in Wisconsin were roughly \$188 million.<sup>15</sup> Allocating those funds to Brown County proportionally (on the basis of population) results in a child care expenditure of approximately \$8 million. Allocating that \$8 million proportionally to the foreign-born population in Brown County results in a child care expenditure of just over \$300,000; much of which is paid for by the federal government. Accordingly, as with public assistance expenditures, expenditures on child care subsidies for immigrant households are relatively insignificant.

In contrast with cash public assistance income, health- and medical-related expenditures on behalf of Brown County immigrant households had the potential to be quite costly in 2000. The biggest-ticket item here was Medicaid coverage, for which the state of Wisconsin bears substantial funding responsibility. The decennial Census did not ask respondents about Medicaid coverage, so Census 2000 data cannot be used. The annual March Supplement to the Census' Current Population Survey (CPS) did, on the other hand, ask about Medicaid. Though the sample is too small to draw inferences at the county level, or inferences about immigrant households, state-level CPS data indicate that just over 9 percent of Wisconsin households had at least one person covered by Medicaid in 1999, and that the average household value of that coverage was \$4,323.<sup>16</sup>

What about immigrant households, and Brown County immigrant households in particular? Data based on the national CPS sample indicate that a substantially higher percentage of immigrant households (18.6%) relied on Medicaid in 1999 than did native households (12.1%), and that annual Medicaid expenditures for immigrant households were about 50 percent greater than those for native households.<sup>17</sup> In order to produce a reasonable, conservative estimate of Medicaid spending on Brown County immigrant households, the \$4,323 average household expenditure for Wisconsin as a whole was multiplied by the 18.6 percent national Medicaid coverage rate for immigrant households in 1999. This produced a total spending estimate of \$2,959,811. Because Medicaid costs are shared between the state and federal governments, however, only about \$1.2 million of this would have been paid for out of state revenues. (The exact estimate is \$1,221,334.<sup>18</sup>) This can serve as a very rough estimate of the cost to the state of Wisconsin in 1999 for providing Medicaid coverage to immigrant households in Brown County.

Table 4 presents the total state/local cost estimate to this point, based on the four categories of spending already discussed: K-12 education, Medicaid, public assistance, and child care.<sup>19</sup>

Though education and Medicaid coverage are the most expensive items that state/local government must finance for immigrants in

whole or in part, there are many other categories of expenditures that one could attempt to measure. These include:

- emergency medical services covered outside of traditional Medicaid insurance;
- higher education;
- vocational education/training outside of the W-2 program;
- unemployment insurance payments;
- workers' compensation payments;

**TABLE 4 ESTIMATED STATE/LOCAL COSTS OF K-12 EDUCATION, PUBLIC ASSISTANCE, CHILD CARE AND MEDICAID FOR BROWN COUNTY IMMIGRANT HOUSEHOLDS: 2000**

Lower-end Estimate	Upper-end Estimate
\$32.5 million	\$37 million

- costs of judicial proceedings such as arrest, detention, litigation, and incarceration;
- state and local tax deductions and tax credits, which can (and should) be accounted for as expenditures of public funds;<sup>20</sup>
- substance abuse and mental health services; and
- immunizations, maternal/child health, and other public health services.

Furthermore, these are just the areas in which costs could, in theory, be directly attributed to a specific individual, family, or household. There are many other collective goods provided by state and local government in Brown County, a portion of the spending on which could be allocated to immigrant families: the cost of new school construction; basic civic services (police, fire, ambulance, sanitation); maintenance of roads and highways; public transportation; and so on.

In each of these cases, one runs into some of the same problems already seen above: lack of valid/reliable expenditure data, and/or lack of a reasonable methodology for attributing public spending to Brown County immigrant households. There are two mitigating considerations here, however. First, in the case of most of these categories of spending, the amounts that one might attribute to immigrant households in Brown County would be trivial. Second, even if one were able to manage a complete, accurate allocation of these costs, they would only provide further evidence to support the conclusion drawn below — that immigrant households do not pay sufficient taxes to cover the costs of services they receive. The calculations underlying that point appear in the next section.

### What is the net result of immigration on state and local finances?

The estimates presented above indicated that Brown County immigrant households in 2000 paid state and local taxes estimated at somewhere between \$19.1 million and \$25.4 million. As noted in Appendix B, however, this estimate excluded some taxpayers and several consumption-based taxes, and also applied the tax structure in 2001 to income earned in 1999. The likely net effect of this for purposes of the current analysis was to underestimate taxes paid by Brown County immigrant households in 2000.

Statewide, excluding some taxpayers and consumption-based taxes from the estimates reduced total estimated tax revenues by about 10 percent. Ideally, one would like to be able to estimate the portion of that 10 percent attributable to Brown County immigrant households. Lacking any empirical basis for doing so, however, the most reasonable approach is to inflate the upper and lower ends of the current revenue estimate by 10 percent each.<sup>21</sup> This results in updated state/local revenue estimates with a lower end of \$21 million and an upper end of \$27.9 million.

The revenue estimates presented in Table 3 also understated total tax revenues in that they were based on Wisconsin's tax structure in 2001, which took in a lower percentage of income than did the tax structure applicable to 1999 income. As calculated in Appendix B, this resulted in an underestimate of revenues of approximately 5 percent. Again, assuming that that 5 percent applied consistently across income levels, and to immigrant and non-immigrant households alike, Brown County immigrant household tax payments should be adjusted upward again to a range from \$22 million to \$29.3 million.

Recall that the spending estimates derived above ranged from a low of \$32.5 million to a high of \$37 million. Let us now compare estimated revenues with estimated expenditures to arrive at a net fiscal balance. Table 5 presents the relevant data:

**TABLE 5 ESTIMATED STATE/LOCAL TAXES PAID BY BROWN COUNTY IMMIGRANT HOUSEHOLDS, IN COMPARISON WITH THE COST OF SERVICES RECEIVED BY THESE HOUSEHOLDS: 2000**

<b>Estimates Used in Calculation</b>	<b>Result</b>
Lower-end revenue estimate less upper-end cost estimate =	-\$15.0 million
Lower-end revenue estimate less lower-end cost estimate =	-\$10.5 million
Upper-end revenue estimate less upper-end cost estimate =	-\$7.7 million
Upper-end revenue estimate less lower-end cost estimate =	-\$3.2 million

Table 5 indicates that under every combination of revenues and expenditures, the net fiscal balance attributable to Brown County immigrant households in 2000 was negative. In other words, these households are estimated to have consumed more in state and local government resources than they paid in state and local taxes. The estimates of the magnitude of this deficit range from a low of -\$3.2 million to a high of -\$15 million, with an average of -\$9.1 million. In 2007 dollars, that \$9 million would be equivalent to a little over \$11 million. Keep in mind, too, that the estimates in Table 5 exclude a number of spending categories identified in the text. Thus, according to any reasonable set of assumptions, Brown County immigrants in 2000 consumed more in state and local services than they paid in state and local taxes.

Depending on which levels of government were responsible for paying the costs identified above, and which ones received the tax revenues; either Wisconsin state government or local Brown County governments could still come out fiscal winners. (For the sake of simplicity, Brown County government, municipal governments within Brown County, and Brown County school districts are treated as a single unit of government.) This would clearly be the case if, say, the state received most of the revenue from immigrant households in Brown County, but was responsible only for Medicaid spending and a negligible portion of the education costs for those households. In that case, the state might actually see a net surplus from Brown County immigrants, while local government in Brown County would experience a large deficit.

Based on statewide totals, one can estimate that the state probably received about two-thirds of the taxes paid by Brown County households.<sup>22</sup> In turn, the state was responsible for somewhere between one-half and two-thirds of the costs associated with the spending categories identified above.<sup>23</sup> This means that at best state government was in a break-even position relative to tax dollars received from, and spent on, immigrant households in Brown County. In this case, Brown County governments collectively would have borne the full funding deficit themselves. It is more likely, though, that both state and local government were in a net negative fiscal position with respect to Brown County immigrants.

## Caveats

One should keep in mind a few caveats about the analysis in the preceding section. First, one element was clearly excluded from that analysis — immigrants' *indirect* contributions to tax revenues and expenditures. Like other households, immigrant households start businesses, save and invest their money, purchase consumable goods, hire employees, and allow for more efficient use of capital through the provision of their labor. These activities result in economic growth. Economic growth increases revenues and raises incomes, the latter of which may result in a reduced need for social services. These *indirect* effects of immigration on tax revenues and public service expenditures are not captured in the analysis, but they undoubtedly have a significant impact on fiscal balances, particularly over time.

Second, measuring the costs and benefits of immigration as a function of its fiscal impact on a community in one year is an inherently narrow exercise. Certainly, there are taxpayers in every community who contribute less in revenues than they receive in social services. On its own, this tells us very little about the desirability of such individuals as community members. Consider children, for example — they pay virtually no taxes and consume tens of millions of dollars in social services. Generally, this does not result in their being considered a burden to the community.

Furthermore, as children grow older, many begin paying more in taxes than they receive in services. In fact, many make a strongly positive impact on the community's fiscal health over the course of a lifetime. The same holds true for immigrant households. In a single year, they may consume more in public resources than they provide in tax payments. Over time, though, this situation can reverse. Over a lifetime, they may produce a net positive impact — perhaps a significant one. The analysis above was not designed to capture that lifetime impact.

Finally, one could undertake the very same exercise with respect to Brown County immigrants' contribution to federal taxes and spending. That exercise was not undertaken here because: a) the intended focus of this research was on the state and local impacts of Green Bay's recent immigration, not the impact on federal finances; and b) determining federal tax payments by Brown County immigrant households poses significant methodological difficulties. Research on the federal fiscal impact of immigration has been done, however, sometimes in combination with studies of the fiscal impact on a particular state. A reasonable conclusion from the most methodologically sound of these studies is as follows:

States (and local governments) pay most of the costs of providing public services to immigrants, which include public education to immigrant children and Medicaid to poor immigrant households. . . . The federal government, in contrast, appears to enjoy a net fiscal surplus from immigration.<sup>24</sup>

This is true for several reasons, among them:

- illegal immigrants are ineligible to participate in the Social Security and Medicare programs, but still pay billions of dollars in payroll taxes to support them;
- many immigrants who *are* eligible to participate in these two programs pay significant taxes in support of them today, but are not eligible to draw down benefits until many years in the future; and
- while immigrants are major contributors to federal revenues, they often raise the marginal cost of providing public goods by only a trivial amount, or even zero. (Think, for example, about the impact of immigrants on the cost of providing national defense, or the cost of managing public lands.<sup>25</sup>)

While this may seem like an esoteric economic point, it has implications for the findings in this study. Specifically, native state and local taxpayers in Wisconsin may be subsidizing the services received by immigrant households in Brown County, but those same immigrant households are also likely subsidizing the *federal* services that native Wisconsin taxpayers receive.

## THE IMPACT OF IMMIGRATION ON JOBS AND WAGES

### Issues

In addition to concerns over the impact of immigration on the fiscal health of communities such as Green Bay, there are also arguments over the net effect of immigration on jobs and wages. On the one hand are those who argue that immigrants increase competition for limited jobs in the local labor market, thereby driving down wages for native workers, increasing their unemployment, or both. On the other hand are those who claim that immigrants have a minimal impact on local economic conditions. For example, some in this camp say that immigrants “take jobs that Americans won’t do;” that they do not threaten economic opportunities because they choose locations where such opportunities are already abundant; and that over time, local economies successfully adapt to immigrant populations as business owners re-allocate resources to accommodate the new labor supply, and native workers increase their education and skill levels.

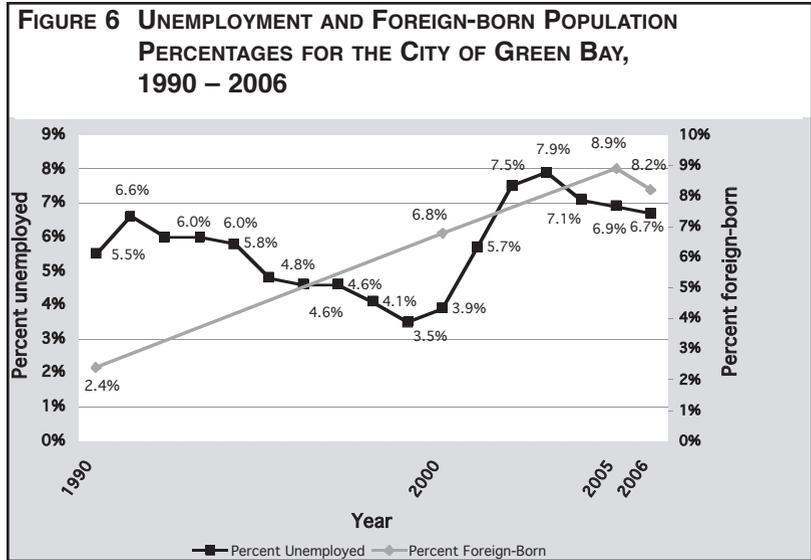
Regrettably, the ability to resolve these issues with respect to Green Bay’s economy is significantly limited by the available data and analytic tools. A city like Green Bay is not a closed system; hundreds of factors other than immigration can affect local employment and wages. Isolating the effect of the one factor of interest — the immigrant workforce — is essentially impossible. Thus, though data are presented below comparing Green Bay to other cities, one simply cannot make the critical *ceteris paribus* assumption; that is, one cannot simply assume that these cities differ *only* in terms of their immigrant populations. Furthermore, extensive, detailed time-series data on employment and earnings among Green Bay’s immigrant and native-born populations, respectively, simply do not exist.

The best one can do, then, is to present some limited, very suggestive, but ultimately inconclusive time-series and cross-sectional data on wages and unemployment in Green Bay and several other Wisconsin cities. The next two sections undertake that task.

### Impact of immigration on unemployment

One very simple way to assess the impact of immigration on unemployment in Green Bay is to examine both variables over time. If unemployment rises as immigration does, that would suggest the possibility of a causal connection between the two variables. Figure 6 presents data comparing trends in the growth of Green Bay’s foreign-born population to unemployment rates in Green Bay in the years from 1990 to 2006.<sup>26</sup>

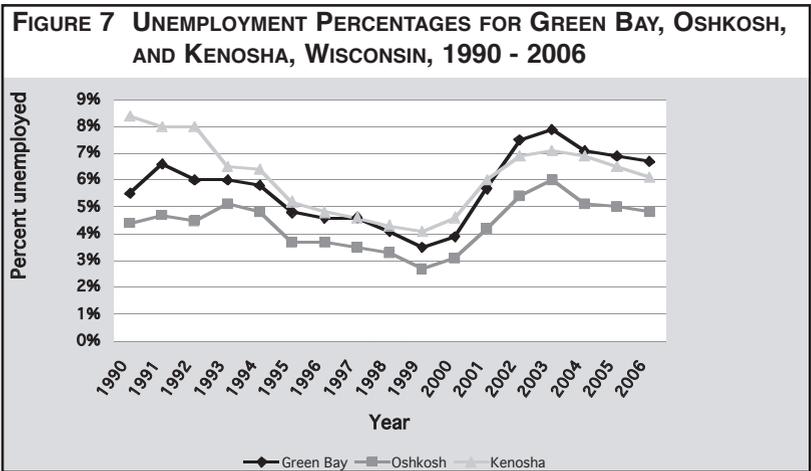
For most of the period from 1990 through 2000, the immigrant population was increasing rapidly in Green Bay, but the unemployment rate was dropping sharply. This would seem an unlikely development if a rising immigrant population led to increased unemployment. On the other hand, it might be the case that immigrants in the 1990s were attracted to Green Bay in large numbers *because* of the favorable employment climate. After a certain point, though, the continued arrival of immigrants could have produced labor market saturation, leading to higher unemployment thereafter. And indeed, the data from 2000 onward show a generally rising unemployment rate, and much higher unemployment at the end of the series than at the beginning.



Could this post-2000 increase in unemployment be due to heavy immigration into the city? One way of answering this question is to look at unemployment data for Wisconsin cities that did *not* see a heavy influx of immigrants after 1990. If such cities show roughly the same unemployment patterns, this would suggest that larger macroeconomic trends were responsible for the observed incidence of unemployment in Green Bay.

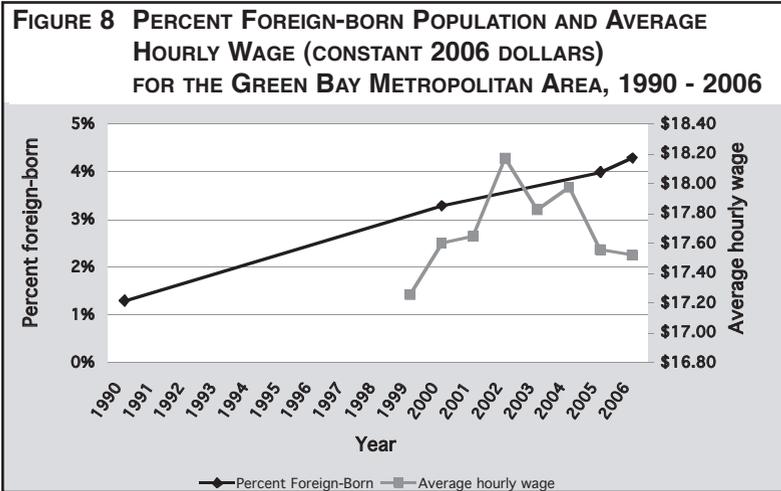
Figure 7 presents the same unemployment data for Green Bay that appeared in Figure 6, but also adds data for Oshkosh and Kenosha, Wisconsin. These are two relatively large cities that share some broad demographic similarities with Green Bay. Unlike Green Bay, though, they experienced very modest growth in their immigrant populations in the 1990s. Oshkosh saw its foreign-born population grow from 2.8 percent in 1990 to just 3.4 percent in 2000. Kenosha, for its part, saw its immigrant population grow from 5 percent of city residents to just 5.8 percent across the decade.<sup>27</sup> Whatever factors may have been driving the Oshkosh and Kenosha economies over the past 15 or so years, changes in the local immigrant population seem unlikely to have been among them.

Figure 7 clearly shows that the unemployment rate in each of the three cities followed the same basic pattern between 1990 and 2006 — a decrease in the 1990s, a sharp increase in the first few years of the new decade, and a modest decrease thereafter. The figure would appear to indicate, then, that large-scale economic changes drove the unemployment patterns in each of these three cities between 1990 and 2006. Coupling the results of Figure 6 with those of Figure 7, it seems unlikely that Green Bay immigration has had any meaningful impact on local unemployment rates. As noted above, however, this conclusion can only be considered provisional, not definitive.



**Impact of immigration on wages**

Considering the potential impact of immigration on wages in Green Bay is also a challenge. First, data on wages are limited to years after 1999. Second, data are not available for the city itself, but only for the much larger Green Bay Metropolitan Statistical Area (MSA), which includes Brown County, Kewaunee County, and Oconto County.

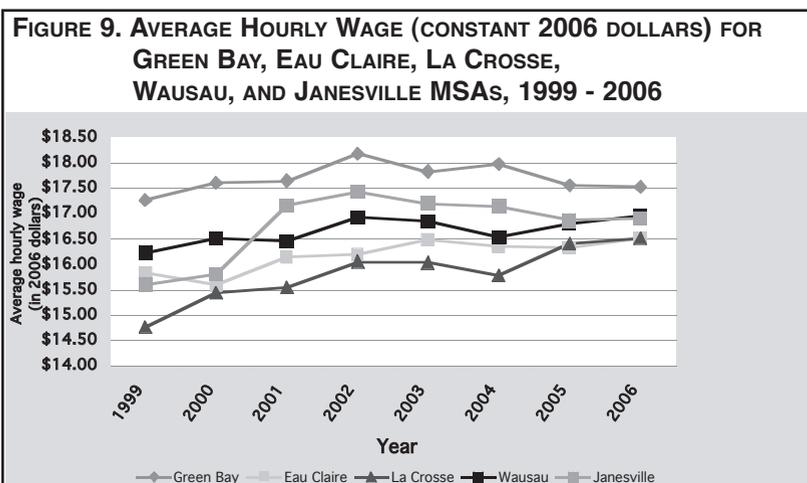


For this area as a whole, the increase in immigration was much less dramatic than in the city of Green Bay. The MSA’s immigrant population grew from 1.3 percent to 3.3 percent between 1990 and 2000, while the city’s grew from 2.4 percent to 6.8 percent. Still, one must make do with the data that are available.

Figure 8 plots average hourly wages in the Green Bay MSA against the foreign-born percentage of the population in the MSA for years from 1990 through 2006. (Wage data are presented only for years from 1999 onward.)<sup>28</sup>

Figure 8 shows a pattern similar to that seen in Figure 6, which addressed employment issues. Specifically, Figure 8 indicates that hourly wages in the Green Bay MSA were generally rising in the late 1990s and early 2000s, a period during which immigration was also increasing. As in Figure 6, these data suggest that the increase in immigration did not have an adverse impact on wages. In the mid-2000s, however, wages began to fall in the Green Bay MSA, indicating the possibility of some delayed downward pressure on earnings brought about by the increase in immigration.

As with the unemployment data, additional light can be shed on this issue by examining wage growth in metropolitan statistical areas other than Green Bay. Figure 9 below presents the wage data from Figure 8 for the Green Bay MSA, but also presents data for the following Wisconsin MSAs: Eau Claire, La Crosse, Wausau, and Janesville. The first three of these had slow growth in their immigrant populations in the 1990s and early 2000s (relative to Green Bay), while the fourth had a pattern of immigration growth very similar to that in Green Bay.



It is interesting to note that the Green Bay MSA shows the highest overall wage level in Figure 9, despite beginning the period with the second-highest percentage of immigrants among the five MSAs in the chart. This fact, then, seems to suggest that immigration did not exert a strong dampening effect on Green Bay’s wages prior to 1999. The chart also shows, however, that the Green Bay MSA experienced the lowest rate of wage growth after 1999. Could this be related to the relatively large increase in its immigrant population in the preceding years?

Wage growth for the Eau Claire, La Crosse, and Wausau MSAs are consistent with that possibility. Each of these areas had a much slower increase in immigration levels than did the Green Bay MSA in the 1990s, and each also had a faster rate of wage growth. But the data from the Janesville MSA provide a counterpoint. Janesville began the period with a higher proportion of immigrants than did the Green Bay MSA, and its immigrant population grew at a faster pace

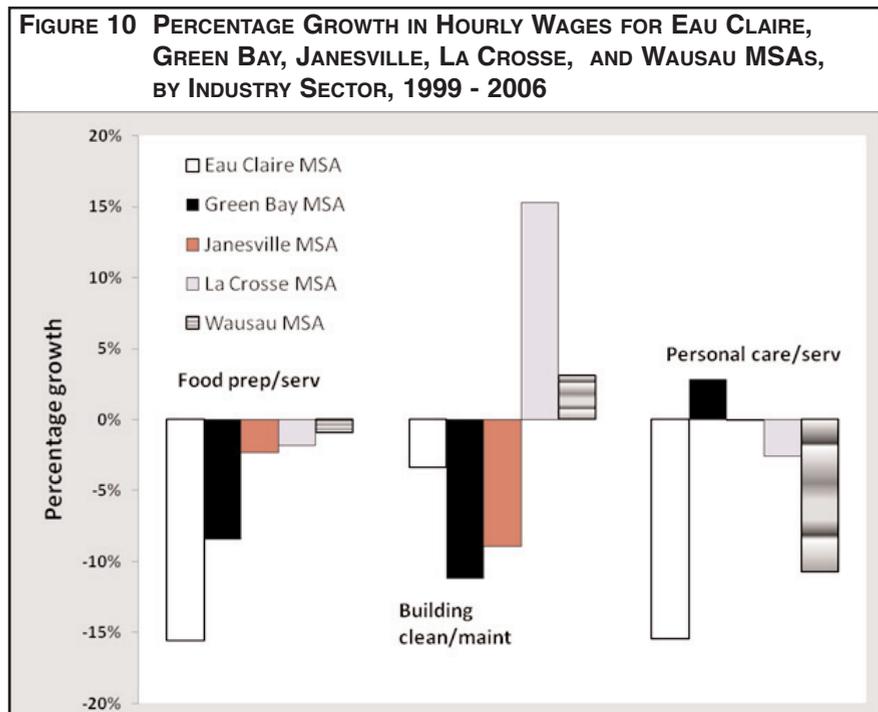
between 1990 and 2005 than did Green Bay's. The Janesville MSA's wages, however, showed the second fastest rate of growth of the five metro areas in Figure 8. Again, if a relatively large and growing immigrant population were putting the brake on wage growth, one might expect Janesville's wages to be flat, not rising rapidly as they are in Figure 8.

Many researchers analyzing the connection between immigration and wages pay particular attention to the impact of immigration on low-wage industries. This is because immigrants tend to be significantly overrepresented among the lower-skilled, lesser-educated portion of the workforce. If immigration does depress wages, then, it should be expected to do so most visibly in industries in which lower-paying, entry-level jobs are abundant.<sup>29</sup>

Figure 10 presents data on average wage growth between 1999 and 2006 in three relatively large, relatively low-paying industries: food preparation and serving, building and office cleaning/maintenance, and personal care and service. The data are presented for the same MSAs as in Figure 9.

Figure 10 paints somewhat of a mixed picture. In the food preparation/serving sector, the Green Bay MSA does indeed have substantially larger wage decreases than two MSAs that saw little growth in immigration in the 1990s. The Eau Claire MSA, on the other hand, an area with limited immigration in the 1990s, shows a much higher rate of wage reduction than in the Green Bay MSA. Furthermore, the Janesville MSA, which had even more rapid growth in its immigrant population than did Green Bay, shows a wage decrease on par with that in La Crosse and Wausau. Overall, this would tend to call into question the connection between wages and immigration.

With respect to building cleaning and maintenance, however, Figure 10 is generally consistent with the argument that immigration depresses wages. The two MSAs with the greatest growth in immigration — Green Bay and Janesville — also show the sharpest decrease in wages in this sector. But looking at the last sector, personal care and services, the Green Bay MSA was the only area to show a wage increase, while Janesville wages were essentially flat. The three areas that showed the slowest immigration growth showed the biggest wage decreases — again, a counter-intuitive finding, if indeed slower immigration growth means faster wage growth (or slower wage reduction).



## Conclusions

While the unemployment data above suggest a weak or non-existent relationship between immigration and unemployment in Green Bay, the wage data are less clear-cut. Some elements of the data suggest a dampening effect of immigration on wages, though others are inconsistent with such an effect. While these data could be usefully supplemented with qualitative research techniques — industry case studies and employer and worker focus groups and surveys, for example — firm conclusions will be elusive until higher quality, more comprehensive economic data become available. Even so, the data above are clearly inconsistent with any *dramatic* impact of immigration on either wages or unemployment.<sup>30</sup>

**WHAT ABOUT ILLEGAL IMMIGRANTS?**

The various data exercises above have not distinguished between legal and illegal immigrants. This is due to a shortage of useable data on the subset of Green Bay/Brown County immigrants who are in the country illegally. Clearly, though, illegal immigrants were on the minds of Green Bay officials last summer when they passed the ordinance threatening to shut down businesses that employed illegals. Before it was revised, that ordinance began with this preamble:

The unlawful employment and crime committed by unauthorized aliens harm the health, safety and welfare of citizens of the City of Green Bay. Unauthorized aliens cause dramatic adverse economic effects for our hospitals and schools thereby relegating legal residents to substandard quality of care and education, depressed wages, burdening of other public services, increasing costs while decreasing availability to legal residents, and diminishing overall quality of life.<sup>31</sup>

This is a serious indictment, and one that might be offered as a rebuttal to some of the findings above. Where those findings were positive or neutral, one might argue that if the analysis were limited to illegal immigrants, the findings would have been negative. And where the findings were negative, one might argue that looking solely at illegal immigrants would have made them more so.

**How big a population?**

The logical place to begin addressing these issues is with an estimate of the size of the illegal immigrant population in Green Bay. For the 2002 to 2004 time period, the Pew Hispanic Center estimated that somewhere between 40 and 54 percent of foreign-born residents of Wisconsin were in the state illegally.<sup>32</sup> Applying those percentages to the total number of foreign-born residents of Green Bay in 2000, one arrives at an estimate of illegal immigrants ranging from (roughly) 2,800 to 3,800. For 2005, the numbers range from 3,400 to 4,500.

Pew Hispanic Center data also allow one to estimate the number of illegals using a somewhat more refined approach. Pew provides estimates of the percentage of illegal immigrants among foreign-born groups from different countries/regions of origin: Mexico, for example, Asia, Europe, and so on. One can apply those percentages to foreign-born population groupings in Green Bay in 2000 (the most recent year in which country of origin data are available). Doing so yields an illegal immigrant population of approximately 2,200. That figure constitutes just over 30 percent of Green Bay’s total foreign-born population in 2000.

One final estimate comes from the Federation for American Immigration Reform, or FAIR. FAIR estimates that in 2007, the illegal immigrant population in the state of Wisconsin as a whole was 90,000.<sup>33</sup> Though Census data on the foreign-born in Wisconsin are not available for 2007, they are available for 2006. The figure for that year was 245,006.<sup>34</sup> Combining the FAIR figure with the Census figure, one can estimate that illegal immigrants constituted

37 percent of Wisconsin’s foreign-born population in 2006/2007. Applying that percentage to Green Bay’s foreign-born population in 2000 yields an estimate of illegal immigrants of about 2,600. Applying the percentage to Green Bay’s foreign-born population in 2005 yields an estimated illegal immigrant population of about 3,100.

Table 6 summarizes these various estimates for the years 2000 and 2005.

**TABLE 6 ESTIMATED ILLEGAL IMMIGRANT POPULATION, CITY OF GREEN BAY, 2000 AND 2005**

Year	Lower-end Estimate	Upper-end Estimate
2000	2,200	3,800
2005	3,100	4,500

**Fiscal impact**

Unless an illegal immigrant is working completely “off the books,” he or she pays the same taxes that legal immigrants and native workers do: sales taxes, property taxes, income taxes, payroll taxes, and so on. At the same time, because of their legal status, illegal immigrants qualify for far fewer public services than do legal immigrants. Thus, many illegals *do* pay considerable taxes but *do not* qualify for the full range of government services available to others. This tends to limit their adverse impact on state and local finances.

On the other hand, illegal immigrants on average earn less than legal immigrants.<sup>35</sup> This means that even illegals who are working on the books tend to pay less in taxes than legal immigrants. Furthermore, a significant percentage of illegal immigrants do, in fact, work off the books. One might conservatively estimate this number at 40 percent.<sup>36</sup> This group pays no income or payroll taxes at all. Finally, illegal immigrants are more likely than legal immigrants to send home cash remittances to support relatives in their country of origin.<sup>37</sup> Because of this, illegals spend less of their money in the United States, and therefore generate less tax revenue for state and local governments.

The net effect of these assorted factors is that illegal immigrants in Green Bay are a fiscal drain on state and local governments, similar to the immigrant population as a whole. This is because illegal immigrants: a) pay considerably less in taxes than legal immigrants, but, b) qualify, without restriction, for the most expensive public service analyzed above: K-12 public education. In short, Green Bay illegal immigrant households cost state and local governments almost as much as legal immigrant households, but contribute much less to state and local government revenues.

Before leaving this topic, one final area deserves special consideration: the contribution of illegal immigrants to law enforcement costs. This is one of the few expenditure categories in which relatively good data are available on illegal immigrants, thanks to the federal State Criminal Alien Assistance Program (SCAAP). SCAAP partially offsets state and local costs associated with the incarceration of illegal immigrants. In 2007, for example, the federal government awarded all government entities in the state of Wisconsin a total of \$3.2 million under the SCAAP program. Brown County received approximately \$78,000 of this money.<sup>38</sup> The Governmental Accountability Office estimates that SCAAP funds account for 25 percent or less of the actual cost of incarcerating illegal aliens.<sup>39</sup> Assuming the 25 percent figure is correct, then the total cost to state and local government for incarcerating Brown County illegal aliens in the most recent year was approximately \$795,000.<sup>40</sup> While not an inconsequential figure, this is still a fraction of the costs presented above for public education and Medicaid. Furthermore, the latter costs were calculated for 2000, while the SCAAP figure was for 2007. Thus, it is clear that that law enforcement-related costs associated with illegal immigrants add up to very little, at least compared with the costs of more traditional social services.<sup>41</sup>

## Economic impact

Given data limitations, any discussion of the impact of illegal immigrants on Green Bay's economy must be largely abstract and theoretical. But let us begin by considering numbers from 2005. Even if one uses the upper-end estimate for the number of illegals (4,500), and even if one assumes that every one of those individuals was in the Green Bay labor force, either employed or looking for work, then illegals would have accounted for about 8 percent of the workforce in Green Bay.<sup>42</sup> However, if one makes appropriate assumptions about labor force participation among members of the illegal population (children and the elderly, for example, are unlikely job-seekers), a more realistic figure for the illegal portion of the Green Bay workforce is about 5 percent.<sup>43</sup>

Of course, this illegal workforce would not have arrived in Green Bay all at once, producing a one-time shock to the local economy. Instead, it would have arrived gradually over the past 15 years or so. Economic theory and research, and the data reviewed above, suggest that any negative impact of this expanded workforce on native worker employment and earnings in Green Bay is likely to be small. Furthermore, it is almost certainly limited to workers at the lower end of the skill and education scale.<sup>44</sup> On the other hand, whatever the negative impact on workers, Green Bay businesses have benefited from the availability of inexpensive labor, and Green Bay consumers have benefited from the generally lower prices for goods and services that inexpensive labor makes possible. On balance, then, whether one deems illegal immigration an economic plus or minus for Green Bay's economy probably depends on one's economic position: as a low-skilled worker in competition with illegals for entry-level work; as a more skilled worker promoted to a higher-paying supervisory position, with illegals under his or her supervision; or as a local business or consumer whose dollars stretch further because of the availability of cheap, illegal labor.

## SUMMARY AND CONCLUSION

In the summer of 2007, the city of Green Bay garnered national attention when it passed an ordinance allowing for the closure of any business found to have undocumented workers in its employ. To outsiders, this action may have seemed strange: Green Bay, Wisconsin? In the upper Midwest? Fourteen hundred miles from the Mexican border? Outsiders, though, were unaware of the dramatic growth in Green Bay's foreign-born and Hispanic populations in the preceding 15 years. That development fundamentally changed the town, its culture, its politics, its neighborhoods, its finances, and its schools. The city ordinance was just one response to the question everyone had begun to ask: were all of these changes good or bad?

This report has attempted to bring some new information to bear on that question. Among the findings presented above were the following:

- if recent trends continue, Green Bay's Hispanic residents will soon constitute 20 percent of the city's population; eventually, that number could reach as high as 30 percent;
- Brown County immigrant households consume more in state and local public services than they provide in tax revenues, at least on the basis of a single-year analysis;
- immigration into Green Bay appears not to have had an adverse impact on local employment opportunities (though the available data are inadequate to reach firm conclusions); and
- immigration into the Green Bay metropolitan area may or may not have had an adverse impact on local wages; the available data include evidence in support of both possibilities.

There are, of course, a number of issues that this study did not address: the value of cultural and ethnic diversity; the reputation of Green Bay as a progressive, welcoming city; pedagogical changes required to accommodate the influx of immigrant children in Green Bay's schools; the impact of immigrants on measures of economic well-being other than employment and wages; and so on. In some respects, however, resolution of these issues — and even those examined in the preceding pages — is a moot point. Green Bay is no longer the city it was 20 years ago. "Is that a good thing or a bad thing?" is a natural response, and an important question. But an equally important line of thinking might run as follows: "Like it or not, our city has changed. Looking ahead, then, what are the best ways to make that change work for us?"

## NOTES

1. Both quotes are from Georgia Pabst, “Learning to live together,” *Milwaukee Journal Sentinel*, online edition, posted January 1, 2008, available at: <http://tinyurl.com/29k7q3>.
2. Pabst, *ibid*.
3. ACS data are available via the Census Bureau’s American Factfinder tool: <http://tinyurl.com/ufd9>.
4. Sources: Values for 1980, 1990, and 2000 were calculated from the United States Department of Housing and Urban Development (HUD) State of the Cities Data Systems, available online at: <http://tinyurl.com/2ashax>. Values for 2005 and 2006 were derived from the United States Census Bureau’s American Factfinder tool, available online at: <http://tinyurl.com/ufd9>.
5. Sources: *ibid*.
6. One should note that estimates of foreign-born populations in the United States, including those presented in this paper, are almost certainly too conservative. This is because a certain segment of the foreign-born population — even some naturalized U.S. citizens — will not identify itself as such for fear of legal problems or other undesirable consequences associated with foreign-born status.
7. Why Green Bay?, one might ask. In some respects, it seems an unlikely choice for the foreign-born, particularly Hispanic immigrants. Media accounts and interviews with local public officials, however, suggest four primary reasons: 1) as states near the Mexican border have become saturated with immigrants, other states have become more attractive destinations; 2) during low unemployment periods in the late-1990s, Green Bay employers actively recruited workers in Latin America; 3) Green Bay has a relative abundance of positions in industries that are “immigrant-friendly,” such as landscaping, food processing, agriculture, and dairy; and 4) Green Bay has a low cost of living.
8. Sources: Green Bay values are derived from the same sources as in Figure 2. State of Wisconsin values for 1980, 1990, and 2000 are derived from the University of Wisconsin Extension and Applied Population Laboratory, *Wisconsin’s Hispanic or Latino Population* (“Wisconsin Hispanic Chartbook”), undated, available online at: <http://tinyurl.com/ysykhw>. State of Wisconsin values for 2005 and 2006 are derived from the United States Census Bureau’s American Factfinder tool. (See Note 2.) The U.S. value for 1980 is derived from the United States Census Bureau publication, *Statistical Abstract of the United States*, 1999 Edition, Section 1, Population Table No. 12, p.14, available online at: <http://tinyurl.com/i1ze>. The remaining U.S. values are derived from the Census Bureau’s American Factfinder tool.
9. Sources: Green Bay values are derived from the same sources as in Figure 3. State of Wisconsin values for 1980 and 1990 are derived from an United States Census Bureau Internet Table, “Nativity of the Population, for Regions, Divisions, and States: 1850 to 1990,” released March 9, 1999, available online at: <http://tinyurl.com/ypqdyv>. State of Wisconsin values for 2000 are derived from the United States Census Bureau’s State & County QuickFacts tool, available online at: <http://tinyurl.com/35x8x>. State of Wisconsin values for 2005 and 2006 are derived from the United States Census Bureau’s American Factfinder tool. (See Note 2.) Values for the United States are derived from the same sources as values for the state of Wisconsin.
10. Source: See Appendix A.
11. Source: Author’s calculations from data published online at: <http://tinyurl.com/2yocws>.
12. United States Census Bureau, *Public Use Microdata Sample (2000 Census of Population and Housing): Technical Documentation*, December 2005, p.B-20.
13. Source: Author’s calculations from Census 2000 data extracted via the American Factfinder tool. (See Note 2.)
14. In 2002/2003, for example, Brown County estimated that it spent \$317,000 on supplemental services for its entire W-2 population — not just immigrant households. See State of Wisconsin Legislative Audit Bureau, *An Evaluation: Wisconsin Work s (W-2) Program*, Report 05-6, April 2005, Appendix 9.
15. This figure is for the 2000 calendar year rather than the fiscal year. The data are available through the State of Wisconsin Department of Workforce Development website: <http://tinyurl.com/2equgj>.
16. Source: Author’s calculations from United States Census Bureau, Current Population Survey, March 2000 Supplement microdata for the state of Wisconsin.
17. Source: Steven A. Camarota, “Back Where We Started: An Examination of Trends in Immigrant Welfare Use Since Welfare Reform,” Center for Immigration Studies, March 2003, Table 1, p.6, available online at: <http://tinyurl.com/yrus76>.

18. This is based on the ratio of state to federal Medicaid expenditures in Wisconsin in 1999, as given in Milbank Memorial Fund, the National Association of State Budget Officers, and the Reforming States Group, "1998-1999 State Health Care Expenditure Report," March 2001, available online at: <http://tinyurl.com/2gyvxh>.
19. Consistent with the discussion in the text, public assistance and child care spending were essentially treated as "rounding error." The lower-end estimate in Table 4 was rounded up by roughly \$700,000 to reach \$32.5 million. The upper-end estimate was also rounded up by about \$700,000 to reach \$37 million.
20. State of Wisconsin tax credits alone amount to roughly \$1.5 billion in foregone revenues or actual cash payments (the latter in the case of refundable credits) per year. Most of these benefits accrue to middle-class taxpayers. Even so, Wisconsin's refundable Earned Income Credit for the working poor amounts to a noteworthy \$82 million per year. See State of Wisconsin, Department of Revenue, "Summary of Tax Exemption Devices," February 2007, available online at: <http://www.revenue.wi.gov/ra/07sumrpt.pdf>.
21. Technically, the estimates should be inflated by 11 percent each; a 10 percent reduction must be offset by an 11 percent increase. But because the estimates are presented in rounded form in the text, and as a range, 10 percent was used for ease of discussion. Whether inflating the estimates by 10 percent or 11 percent, though, this approach could significantly under- or overstate consumption taxes paid by Brown County immigrant households. Imagine an extreme example in which: a) all of the consumption taxes in Wisconsin were paid by households falling in the bottom 20 percent of household income, but b) no Brown County immigrant household fell into this lowest-income quintile. In such a case, allocating any consumption taxes to Brown County immigrant households would be a mistake. In point of fact, such households are distributed evenly enough among the income groupings that application of the full amount of consumption taxes is a defensible approach.
22. Source: Author's calculations from State of Wisconsin Department of Revenue, Division of Research and Policy, *Wisconsin State and Local Taxes – FY85 - FY04*, November 18, 2005, Table 4, p.5, available online at: <http://tinyurl.com/2zeuob>.
23. This is based on an assumption that the state was entirely responsible for funding Medicaid and public assistance outlays, and was responsible for 55 percent of education funding in Brown County. This last figure was calculated by the author from the "1999/2000 Comparative Revenue Per Member" report from the Wisconsin Department of Public Instruction, available online at: <http://tinyurl.com/yw5fug>.
24. Gordon H. Hanson, "The Economic Logic of Illegal Immigration," Council on Foreign Relations, CRS No. 26, April 2007, p.25. Parentheses added.
25. Ibid.
26. Unemployment data in this section are drawn from the Bureau of Labor Statistics, United States Department of Labor, Local Area Unemployment Statistics tool, available online at: <http://tinyurl.com/2yxlsf>.
27. For purposes of comparison in this context, a city needs to: a) show reasonable similarity to Green Bay in terms of population size and demography, b) have seen very slow growth in immigration in the 1990s, and c) have readily available data on local unemployment. Oshkosh and Kenosha were the only cities meeting all three of these criteria. Data on foreign-born populations in these cities, and in the remainder of this section, were drawn from the Census Bureau's American Factfinder tool. (See Note 2.)
28. Data on average wages in this section are derived from the Occupational Employment Statistics program within the Bureau of Labor Statistics, part of the United States Department of Labor. Access to the data is available online via: <http://tinyurl.com/2ym7el>. The 1999 and 2000 overall wage figures in this section were calculated by the author from industry/occupation-specific data.
29. For an extended discussion of this point, see David Card, "Is the New Immigration Really So Bad?," January 2005, unpublished manuscript, available online at: <http://tinyurl.com/2halqn>.
30. A recent analysis by the Congressional Budget Office also supports the conclusion that immigration has, at worst, a modest dampening effect on native wages. See United States Congressional Budget Office, "Cost Estimate: S. 2611, Comprehensive Immigration Reform Act of 2006," May 16, 2006, especially "Additional Information on the Estimated Budgetary and Economic Effects of S. 2611," pp.4-6, available online at: <http://tinyurl.com/2zjxzz>.
31. This language was excerpted from a draft copy of the ordinance provided to the author by a Green Bay immigrant rights advocate.
32. Jeffrey S. Passel, "Unauthorized Migrants: Numbers and Characteristics," Pew Hispanic Center, June 14, 2005, p.15, available online at: <http://pewhispanic.org/files/reports/46.pdf>.
33. See "Extended Immigration Data for Wisconsin," available online at: <http://tinyurl.com/ytvng7>.
34. Derived from the United States Census Bureau's American Factfinder tool, available online at: <http://tinyurl.com/ufd9>.

35. Steve A. Camarota, "The High Cost of Cheap Labor: Illegal Immigration and the Federal Budget," Center for Immigration Studies, August 2004, pdf version p.37, available online at: <http://tinyurl.com/omo77>.
36. Karin Brulliard, "Study: Immigrants Pay Tax Share," *Washington Post*, online edition, June 5, 2006, p.B01, available online at: <http://tinyurl.com/hc4qw>.
37. Roger Waldinger, "Between Here and There: How Attached Are Latino Immigrants To Their Native Country?," Pew Hispanic Center, October 25, 2007, available online at: <http://pewhispanic.org/files/reports/80.pdf>; and Louis Aguilar, "Immigrants' cash clout," *The Denver Post*, November 25, 2003, available online at: <http://tinyurl.com/2enf8d>. Waldinger and Aguilar do not actually distinguish between legal and illegal immigrants in terms of the likelihood of their sending remittances. Their data do show, however, that more recent immigrants and those with lower incomes are more likely to send remittances to their home countries. Because length of time in the U.S. and income correlate with legal status, it is reasonable to assume that illegal immigrants are more likely to send remittances than legal immigrants.
38. Data on 2007 SCAAP funds awards are available through the United States Department of Justice, Bureau of Justice Statistics. See the following online report: <http://www.ojp.usdoj.gov/BJA/grant/07SCPpay.pdf>.
39. United States Government Accountability Office; "Information on Criminal Aliens Incarcerated in Federal and State Prisons and Local Jails;" information provided to the United States House of Representatives, Committee on the Judiciary, Subcommittee on Immigration, Border Security, and Claims; April 7, 2005, p.3, available online at: <http://www.gao.gov/new.items/d05337r.pdf>.
40. This figure is derived by adding Brown County SCAAP funds to Brown County's proportional share of State of Wisconsin SCAAP funds.
41. Of course, *any* resource commitment to criminal justice activities involving immigrants (whether legal or illegal) raises government expenditures. The best and most recent evidence, however, shows that in general, immigrants have substantially lower incarceration rates than the native born, whether or not one controls for education. See Ruben G. Rumbaut and Walter A. Ewing, "The Myth of Immigrant Criminality and the Paradox of Assimilation: Incarceration Rates Among Native and Foreign-born Men," Immigration Policy Center, Spring 2007, available online at: [http://www.aifl.org/ipc/special\\_report/sr\\_022107.pdf](http://www.aifl.org/ipc/special_report/sr_022107.pdf).
42. See endnote 23 for the labor force data source.
43. This estimate is based on Jeffrey S. Passel, "The Size and Characteristics of the Unauthorized Migrant Population in the U.S.," Pew Hispanic Center, March 7, 2006, p.9, available online at: <http://pewhispanic.org/files/reports/61.pdf>.
44. See United States Congressional Budget Office, "Cost Estimate," *ibid.*, especially "Additional Information on the Estimated Budgetary and Economic Effects of S. 2611," pp.4-6; Card, "New Immigration," *ibid.*, Executive Office of the President, Council of Economic Advisers, "Immigration's Economic Impact," June 20, 2007, available online at: [http://www.whitehouse.gov/cea/cea\\_immigration\\_062007.pdf](http://www.whitehouse.gov/cea/cea_immigration_062007.pdf); and Tim Annett, "Illegal Immigrants and the Economy," *The Wall Street Journal*, April 13, 2006, available online at: <http://tinyurl.com/ywkwfb>.
45. Note that the Demographic Service's projections for 2017 and 2032 had to be interpolated and extrapolated, respectively, based on data published online at: <http://tinyurl.com/yv56ea>.
46. See State of Wisconsin Department of Revenue, "Wisconsin State and Local Taxes, FY87 – FY06," published April 3, 2007, Table 1, p.1, available online at: <http://tinyurl.com/28ldsr>.

## APPENDIX A - POPULATION PROJECTION METHODOLOGY

The Green Bay population projections in the text are based on a methodology described by the State of Wisconsin's Demographic Services Center (part of the Department of Administration) in a publication entitled "Methodology for Developing Minor Civil Division Projections." The publication is available online at: <http://tinyurl.com/yu6vs3>.

For large geographic entities in which detailed demographic data are available, population projections are typically made using the "cohort-component method." This method entails breaking the geographic entity's population into age-sex or age-sex-race cohorts, and then making assumptions about fertility, mortality, and migration behavior within each cohort. These assumptions are used to produce population projections within cohorts, which are then summed across all cohorts to produce an overall projection for the population as a whole.

For smaller geographic entities such as the city of Green Bay — for which detailed demographic data within age, sex, and race cohorts do not exist — projections have to be based primarily on historical data. Specifically, the average historical growth of populations of interest is calculated by taking an "average of averages" over different historical time intervals. That average of averages is then used to project population growth (or contraction) in the future.

When considering growth in the Green Bay Hispanic population, for example, four different historical averages were considered. These were the average annual growth in the number of Hispanics in Green Bay:

- between 1980 and 2006,
- between 1990 and 2006,
- between 2000 and 2006, and
- between 2005 and 2006.

Each of these averages was calculated separately, and the results were totaled. These totaled results were then divided by four to produce the average of averages referred to above — an average annual growth number based on four separate, and successively shorter, time periods. Finally, that average annual growth number was applied to the actual number of Hispanics in the Green Bay population to develop the population projection in the texts.

As a simplified example of this last part of the process, imagine that in 2006, there were 1,000 Hispanics in Green Bay. And imagine that the average of averages calculations described above had produced an estimate of annual growth in the Green Bay Hispanic population of 10 persons. The Hispanic population projection for Green Bay in 2017, then, would be 1,110. (This can be derived by starting with a baseline of 1,000, and adding 10 persons to it for each year between 2006 and 2017 — a total of 110 persons.)

In order to test the methodological soundness of this approach, a projection (really, a "post-jection") of Green Bay's 2005 Hispanic population was developed based on data from 1980, 1990, and 2000. The projection was then compared to actual data for 2005 to determine the projection model's validity. The model "over-projected" the size of the actual 2005 Hispanic population in Green Bay by 2.8 percent, and the size of the actual non-Hispanic population by 1.97 percent. When extended to 2017, the combined Hispanic and non-Hispanic population projections for Green Bay using this method exceeded the State Demographic Service's projection for Green Bay's total population by roughly 2.5 percent. When extended to 2032, the combined Hispanic and non-Hispanic population projections for Green Bay exceeded the State Demographic Service's projections by 4.47 percent.<sup>45</sup>

Because they over-projected population growth in Green Bay — at least in comparison with the State Demographic Service's population projections — the results of these estimates were presented in the text as the 2017 and 2032 "high" estimates. The "low" estimates for these years were calculated by constraining the projected growth in the Hispanic population such that the combined Hispanic and non-Hispanic population projections in 2017 and 2032 would match the Demographic Service's total population projections for Green Bay for the same years. Only the projected growth in the Hispanic population was constrained because the non-Hispanic population was already projected to show negative growth.

The projected percentages of foreign-born residents of Green Bay were developed using the same basic methodology described above, though sample "post-jections" were tested against actual data for 2006 rather than 2005. The model over-projected the size of the 2006 foreign-born population in Green Bay by 3.7 percent, and the non-foreign-born population by 2.05 percent. Attempting to make ad hoc reductions in the projected growth of both populations, though, resulted in only trivial differences in the projected relative percentages of the foreign-born and non-foreign-born populations. It appears to be the case, then, that while the model over-projects the total growth in the Green Bay population, it does so without exaggerating the size of the foreign-born and non-foreign-born populations relative to each other.

## APPENDIX B - METHODOLOGY FOR ESTIMATING TAXES FOR IMMIGRANT HOUSEHOLDS

The tax revenue figures presented in the text were derived from two primary sources: a) a Wisconsin Department of Revenue study entitled, “Wisconsin Tax Incidence Study,” published December 16, 2004, and available online at: <http://tinyurl.com/2fzh2d>; and b) Census 2000 Public Use Microdata (from the five-percent sample).

The tax incidence study provides a range of estimates (for tax year 2001) of state and local taxes paid by Wisconsin households. The “plausible variant” for total revenues measured by the study is given as approximately \$13.6 billion. (See Table V.2, p.45.) This figure does not include Wisconsin taxes paid by non-Wisconsin residents, nor does it include estate taxes, the motor fuels tax, excise taxes, or the insurance premium tax. Furthermore, certain Wisconsin tax-filers and households are excluded from the \$13.6 billion total, largely for methodological reasons.

All told, the \$13.6 billion represents about 90 percent of the state and local taxes paid by Wisconsin residents in tax year 2001.

Using this \$13.6 billion as a starting point, the next step was to allocate an appropriate percentage to immigrant households in Brown County, Wisconsin. (“Immigrant households” are defined as households in which the household is identified by Census 2000 as “foreign born.”) Unfortunately, there is no indication in the tax incidence study as to what percentage of the \$13.6 billion was paid by Wisconsin immigrant households, let alone the households of Brown County immigrants. The tax incidence study does, however, indicate the average state and local tax burden at different household income levels:

- the poorest 20 percent,
- the second 20 percent,
- the third 20 percent,
- the fourth 20 percent,
- the next 10 percent,
- the next 9 percent, and
- the top 1 percent.

Because the Census includes household income data, one can assign each immigrant household in Brown County to one of the income groupings above. Then, using the average state and local tax burden per income grouping from the tax incidence study, one can calculate an estimated tax amount for each household. When those amounts are totaled across all Brown County immigrant households, one has an estimate for total state and local taxes paid by Brown County immigrants.

Unfortunately, matters are not quite as simple as that. First, the tax incidence study and the Census define households and income differently — a household in one might not be considered a household in the other, and income captured by one might not be captured by the other. (Census studies are notorious for respondent under-reporting of income. The tax incidence study, by contrast, is based primarily on actual tax returns.) Second, the tax incidence study uses income from tax year 2001, while the Census household income data are from 1999.

In order to examine the potential problems created by these differences, the basic methodology from the tax study was applied to 2000 Census data for the state of Wisconsin as a whole. That is, all Wisconsin households included in the 2000 Census Public Use Microdata five-percent sample were divided into the income groups identified above: the poorest 20 percent, the second 20 percent, and so on. The number of households in each group was then multiplied by the average income for each group, the result of which was then multiplied by the average tax burden for each group. (The first two of these figures was calculated directly from the Census data. The third was taken from the tax incidence study.) The dollar amounts for each group were then totaled to produce a total revenue estimate of approximately \$13 billion.

This estimate is roughly five percent lower than the estimate of \$13.6 billion from the tax incidence study itself. Nominal (that is, non-inflation adjusted) household income in Wisconsin was about five percent lower in 1999 than in 2001, however. This means that applying the basic methodology from the tax incidence study to Census 2000 data produces an apparently accurate estimate of revenues. Assuming that the tax incidence study was conducted correctly, then, one can combine its findings with 2000 Census data to produce estimates for state and local taxes paid by immigrant-headed households in Brown County.

There is one final matter to consider, however. If there were significant tax changes in Wisconsin between 1999 and 2001, then the estimates based on 1999 income data from the Census might be either too low or too high, depending on the nature of the changes. And indeed, data from the Department of Revenue indicate that the average state/local tax burden in Wisconsin as a share of personal income fell from 12 percent in 1999 to 11.4 percent in 2001.<sup>46</sup> Applying the higher rate to Wisconsin's 1999 personal income of \$145 billion would yield approximately \$17.4 billion in revenue. Applying the lower rate would yield approximately \$16.5 billion, a difference of \$900 million, or negative five percent. Thus, the basic revenue figure presented in the text could be an underestimate of actual taxes paid by immigrant households in Brown County, depending on the extent to which the additional tax burden in 1999 fell upon them, as opposed to other taxpayers.

## ABOUT THE INSTITUTE

The **Wisconsin Policy Research Institute** is a not-for-profit institute established to study public-policy issues affecting the state of Wisconsin.

Under the new federalism, government policy increasingly is made at the state and local levels. These public-policy decisions affect the life of every citizen in the state. Our goal is to provide nonpartisan research on key issues affecting Wisconsinites, so that their elected representatives can make informed decisions to improve the quality of life and future of the state.

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