Assembling Jobs
A look at how Wisconsin seeks to foster factories

Manufacturing plays a critical role in Wisconsin, providing nearly a half million jobs and higher than average wages to workers in counties around the state. To foster the industry, state officials over the past four decades have approved tax exemptions and incentives that are now worth more than $900 million a year. Many though not all of those benefits are offered by neighboring states to their manufacturers.

In offering incentive packages to Foxconn Technology Group and Kimberly-Clark Corp., the state of Wisconsin has renewed the debate over its tax credits for manufacturers and other businesses. The discussion, however, has focused mainly on individual firms and their incentive packages and on Governor-elect Evers’ proposal to end an income tax credit for manufacturers.

Broader context is needed, including consideration of manufacturing’s place in our economy, the overall tax advantages provided to the industry, and the approaches taken by other states. This edition of The Wisconsin Taxpayer seeks to provide that perspective.

CASE FOR AND AGAINST
There is no question Wisconsin’s economy continues to rely heavily on manufacturing. The state’s thousands of manufacturers contribute more to the overall workforce and economic output here than in almost any other state. As Figure 1 on page 2 shows, they pay significantly higher than average wages; account for a larger share of exports here than in other states; often locate in less populous communities; and employ workers with modest educations who might otherwise struggle to earn similar pay.

Manufacturing jobs are seen as having higher multiplier effects than other jobs, meaning that gaining or losing them will have a greater effect on other jobs in the region. Though the industry includes mature companies with limited possibilities for growth, it also encompasses high-tech businesses with greater potential to expand.

On the other hand, the manufacturing sector has not kept pace with the increasingly service-oriented economy and employment is projected to continue to lag in the future. Some economists also question whether government should show preference to any specific business or industry.

Also in this issue:
Federal Officials Approve Medicaid Work Rule • Milwaukee County Transit Lines Renewed For Now
Over more than 40 years, Wisconsin leaders of both parties have made a series of decisions to provide incentives to manufacturers. The state provided or authorized an estimated $928.1 million in tax advantages and incentive awards for the industry in fiscal 2016, up from an inflation-adjusted $724.5 million in 2008. Since 2016, the tax advantages and incentives for state manufacturers (and potentially their customers) have risen and will likely continue to do so as existing benefits are phased in and new ones added, such as the recent award to Foxconn.

To place them in context, the tax advantages and incentives to manufacturers totaled more than 80% of state funding for either the Department of Corrections or the University of Wisconsin System in fiscal 2016. In that 12-month period, manufacturing accounted for 465,100 Wisconsin jobs. So though these incentives are large and growing, they are spread across a vast workforce that helps contain the costs on a per job basis.

Some of these tax advantages are unusual, but many are provided by other upper Midwest states, potentially making them harder to drop. Two national reviews rated Wisconsin’s overall effective taxes on manufacturers and export industries as generally below the national average, though the taxes of neighboring states fall both below and above our own.

Wisconsin provides favorable treatment to other sectors of the economy as well, for instance exempting most services such as legal and accounting work from the sales tax. Changing any of these tax exemptions could be potentially disruptive to businesses and would be politically difficult. In the case of manufacturers,
and second only to Indiana. The industry is a major employer in many regions of the state, including rural counties. (See Figure 2 on page 2.) In addition, overall manufacturing jobs in Wisconsin still provide significantly higher than average pay despite factory workers being less likely to have a college degree. The average manufacturing job in the state paid $56,980 in 2017 compared to the average annual wage of $47,250 for all workers. Jobs in production, or on the factory line, provide relatively strong wages though they pay less than the average across all state occupations. Manufacturing workers are also more likely to belong to a union than other Wisconsin workers.

The industry also accounts for the vast majority of state exported goods. The U.S. Census Bureau reports manufacturing contributed $20.8 billion of Wisconsin’s $22.3 billion in total exported goods in 2017, or just over 93%—above the national average. (See Figure 3.) Manufactured goods have consistently made up that percentage or more of state exports over the past decade. The industry’s 2017 state exports were also 58.7% more than in 2000, even after accounting for inflation. This contribution is critical because the sales of these products represent money flowing in from outside the state. Unlike many businesses such as entertainment venues or restaurants that redistribute resources within a region, manufacturers can add to them.

Most of these numbers, however, are flat or trending modestly downward when compared to the overall state economy. For instance, manufacturing made up 18.2% of the state’s gross domestic product (GDP) in 2017, down from 24.3% in 2000. Figure 4 shows the state’s overall output grew more than twice as quickly as manufacturing output over the period.

Coming out of the Great Recession, manufacturing jobs initially grew more quickly than overall employment in Wisconsin. In general, however, industry jobs have lagged while employment has grown more rapidly in other high-paying sectors such as construction, information, financial activities, and professional services. As recently as 2000, manufacturers employed more workers than those other four sectors put together. It is now the opposite: in 2017 the four sectors combined for 177,400 more jobs than manufacturing provided. Though this shift is significant, some part of it may be due to manufacturers outsourcing functions such as payroll and custodial work as other businesses have done, making those jobs show up as “professional services.”

Over the past several decades, manufacturing workers have fallen in total numbers and as a share of the overall state workforce, from 21.7% in 2000 to 16.4% in 2017. (See Figure 5 on page 4.) The sector now has 132,100 fewer jobs than its 1998 high of 598,900. The Wisconsin Department of Workforce Development has projected that between 2016 and 2026, employment in the state will grow more than three and a half times as quickly as manufacturing jobs.

The industry trends for Wisconsin do look somewhat better than the nation as a whole. Manufacturing jobs nationwide dropped by 28.3% between 2000 and 2017 compared to 21.4% in Wisconsin, with the state faring worse than Iowa, Minnesota, and Indiana but significantly better than Illinois, Ohio, and Michigan. (See Figure 6 on page 4.)
At the same time, some other segments of the economy are growing more quickly. For instance, the pay gap between manufacturing workers and all workers in Wisconsin has narrowed from 25.8% more in 2000 to 20.6% more in 2017. So although the industry remains a critical part of Wisconsin’s economy—far more important in this state than most—its overall role has contracted in recent decades.

**STATE SUPPORT FOR MANUFACTURING**

Manufacturers receive significant support through state tax policy. It is worth noting, however, that certain other industries also receive tax exemptions. Farm and forest property, for example, is not taxed at full levels and the sales tax is not levied on most services, which exempts whole professions such as attorneys and accountants.

**Property tax exemption**

For a century, the state has been moving away from taxing personal property such as household furnishings and farm machinery. In 1973, the state approved a personal property tax exemption for most manufacturing machinery. A Wisconsin Department of Revenue (DOR) report estimated that in the 2015/16 tax year (covering property taxes levied in December 2015 and paid in 2016), manufacturers owned $15.7 billion in equipment that was exempt from personal property taxes.

No exact value can be given for the amount in property taxes that manufacturers saved because of this exemption. Property tax rates vary by locality, so a precise total would require knowing how much exempt property was in each taxing district statewide. In addition, if this equipment became taxable, local governments might not collect the extra taxes because of the state caps on property tax increases or political concerns. Instead, municipalities might lower their tax rates and levy smaller amounts on other property owners.

To determine a rough financial impact for this provision, one can take the estimated value of the exempt property and multiply it by the average statewide net tax rate on December 2015 property tax bills of $19.91 per $1,000 of value. That calculation yields an inflation-adjusted figure of $313.4 million that could have been collected by local governments or used to lower overall property tax rates. (See Table 1 on page 5.)

A review of other Upper Midwest states found all of them except Indiana offered some property tax exemptions for manufacturing equipment. (See Table 2 on page 5.) Illinois and Ohio do not tax any personal property and Iowa exempts manufacturing equipment purchased after 1993. In addition, several states provide property tax abatements for manufacturers and other businesses, with those states essentially allowing local governments to exempt part of the value of a new or expanded factory, including the building.

**Income, sales tax benefits**

In 2011, Wisconsin approved a tax cut on factory and farm profits that applies to both the state’s individual and corporate income.
The credit equals a percentage of agricultural and manufacturing income and was phased in over four years, starting at 1.875% in tax year 2013 and rising to 7.5% in 2016. Given that the corporate tax rate is set at 7.9% of net income and individual income tax rates range from 4% to 7.65% depending on the bracket, the credit will cover most and sometimes all of a taxpayer’s liability. It can be carried forward up to 15 years. The Legislative Fiscal Bureau (LFB) has estimated the credit saved factory owners $244.7 million after its full phase-in in fiscal 2017. That year the amount was the equivalent of $527 per manufacturing worker across the state.

In addition, manufacturers in Wisconsin receive exemptions from sales taxes. The first exempts machinery and repair parts used for manufacturing and was estimated by DOR to total $210.4 million in fiscal 2016. The second covers the fuel and electricity used by factories and was estimated to lower taxes in the same year by $125.6 million. Last, the state also exempts raw materials and other inputs in the manufacturing process—a major provision for which DOR does not provide an estimated value.

Experts say exempting inputs like these can make sense because it prevents sales taxes from being applied first to raw materials and then to finished products. Otherwise, taxes would be imposed on other taxes, a practice known as “pyramiding.” As with other taxes, these added costs may have an effect on consumers and not just the manufacturer.

For that reason, it is not surprising the six comparison states all exempt sales of manufacturing machinery from sales taxes, and several exempt fuel and electricity used in production. In general, they also exempt raw materials used in manufacturing from sales taxes—a provision that Ohio and Indiana estimate as having a multi-billion dollar fiscal impact in those states.

Our review did not find any income tax exemption in the other states that was equivalent to Wisconsin’s manufacturing and agriculture credit. However, unlike all of the states except Illinois, Wisconsin uses a “throwback rule” that effectively applies its corporate tax to the profits on more out of state sales, potentially diminishing the comparative advantage of the manufacturing and agriculture credit.

On one final point, all the relevant states took the same approach. They all used a company’s sales alone, not its property or payroll, to determine how much of its income is subject to corporate tax in each state. This approach can have the effect of lowering taxes for manufacturers if they have much of their sales out of state.

### Incentives to Companies

To boost jobs and investment, Wisconsin and the other states examined also provide direct incentives to companies in a variety of industries, including manufacturing. The Illinois EDGE program, for instance, typically provides non-refundable corporate tax credits equal to 50% of the income tax withholdings of qualifying newly created jobs. The Indiana program...

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### Table 1: Tax Advantages Rise for WI Manufacturers

<table>
<thead>
<tr>
<th>Exemption or Incentive</th>
<th>2008</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal property tax exemption</td>
<td>238.2</td>
<td>313.4</td>
</tr>
<tr>
<td>Manufacturing and agriculture credit</td>
<td>-----</td>
<td>193.2</td>
</tr>
<tr>
<td>Machinery sales tax exemption</td>
<td>192.9</td>
<td>210.4</td>
</tr>
<tr>
<td>Fuel and electricity sales tax exemption</td>
<td>118.3</td>
<td>125.6</td>
</tr>
<tr>
<td>Personal property consumed in manufacturing</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Assorted income tax credits</td>
<td>0.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Department of Commerce/WEDC incentives</td>
<td>26.8</td>
<td>74.3</td>
</tr>
<tr>
<td>Local industrial revenue bonds</td>
<td>148.2</td>
<td>8.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>724.5</strong></td>
<td><strong>928.1</strong></td>
</tr>
</tbody>
</table>

* Amounts awarded - amounts earned may vary; 2008 data may also lack some awards.

Source: State of Wisconsin, WPF analysis

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### Table 2: WI Benefits Have Similarities, Differences With Other States

<table>
<thead>
<tr>
<th>Tax benefit for manufacturers</th>
<th>WI</th>
<th>MN</th>
<th>IA</th>
<th>MI</th>
<th>IN</th>
<th>OH</th>
<th>IL</th>
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</thead>
<tbody>
<tr>
<td>Personal property tax exemption</td>
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<td>✔</td>
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<td>Manufacturing and agriculture credit</td>
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<td>✔</td>
<td>✔</td>
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<tr>
<td>Machinery sales tax exemption</td>
<td>✔</td>
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<td>✔</td>
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</tr>
<tr>
<td>Fuel and electricity sales tax exemption</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Sales tax exemption for materials</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
<tr>
<td>Single sales factor for corporate income tax</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Avoids throwback provision for out of state sales</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
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<tr>
<td>Manufacturing property tax abatement</td>
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<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
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<tr>
<td>Direct incentives to companies</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
<td>✔</td>
</tr>
</tbody>
</table>

Sources: Selected states, WPF research

* In certain cases
of the same name provides refundable credits equal to 100% of the expected increased tax withholdings from new jobs. Wisconsin’s enterprise zone program typically provides refundable tax credits of up to 7% of qualifying payroll, a rate that is just below the state’s highest marginal tax rate on personal income.

Manufacturers receive a larger portion of state incentives than their share of state GDP might predict, but they also pledge more jobs than other award recipients.

Manufacturers receive a larger portion of state incentives than their share of state GDP might predict, but in return they also pledge more jobs than other award recipients. In fiscal 2016, the Wisconsin Economic Development Corp. (WEDC) awarded $148.4 million in tax credits, grants, loans, and other incentives to companies. Half of that total ($74.3 million) went to manufacturers, or more than two and a half times their share of the state’s economic output or workforce. This is a similar share of the total in 2008—the earliest year for which data are readily available. In that year, WEDC’s predecessor, the Department of Commerce, awarded an inflation-adjusted $26.8 million in incentives to manufacturers.

The 2008 numbers may lack certain awards that had become inactive by the time the data was captured. In addition, the data for both years omit certain awards like industrial revenue bonds, which are authorized by WEDC but issued by local governments. There was an inflation-adjusted $148.2 million in such bonding authorized by the Department of Commerce in 2008 and $8.9 million authorized by WEDC in 2016.

Manufacturers made an outsized contribution to the total capital investment and job creation and retention pledges secured by WEDC’s 2016 awards, providing more than three out of the five jobs pledged even though they accounted for half of the total awards. In many cases, the businesses receiving the WEDC awards still had to meet various benchmarks to draw down the full incentives.

WEDC incentives for manufacturers reached a new high in 2017, primarily due to the $2.85 billion in tax credits awarded to Foxconn Technology Group of Taiwan for a liquid crystal display factory in Racine County that is expected to employ up to 13,000 workers. The credits are greater than usual because of the massive scope of the project and because they were offered at higher rates, including 17% of qualifying payroll rather than 7%. Like other firms receiving similar WEDC incentives, Foxconn will have to verify its spending on payroll and capital investments over the next 15 years. If it does, the credits could potentially reach $311.9 million in fiscal 2023 alone. Gov. Walker has proposed—and lawmakers are considering—providing a similar level of incentives to Kimberly-Clark Corp. to prevent a paper plant in Fox Crossing from closing at an estimated fiscal impact of $70 million over 15 years.

Total Incentives and Exemptions
Wisconsin manufacturers received an estimated $928.1 million in state tax advantages and incentive awards in 2016. The amount could rise by hundreds of millions of dollars in the succeeding years with the full phase-in of the manufacturing and agriculture credit and the expected credits to Foxconn. As with any decrease in business costs, some of it may be shared with customers.

So how do Wisconsin’s overall taxes on manufacturers compare to other states? A brief scan of relevant studies finds differing conclusions.

![Figure 7: Growth or Loss in Jobs Varies Widely by Manufacturing Segment](image-url)

Source: Wisconsin Department of Workforce Development
A 2015 study by the Upjohn Institute for Employment Research ranked Wisconsin taxes on export industries like manufacturing and agriculture as 11th lowest out of the 33 states examined, with the taxes in Ohio being lower than Wisconsin and those in Indiana, Michigan, Iowa, Illinois, and Minnesota being higher. In 2015, the Tax Foundation ranked Wisconsin 15th in the country for low taxes on capital-intensive manufacturers and 28th for labor-intensive manufacturers, which was better than Indiana and Illinois but not as good as the rankings for Ohio, Minnesota, Michigan, and Iowa.

CONSIDERING THE BENEFITS

Are these tax advantages and direct incentives appropriate and are they the best use of public money? That question would be difficult to answer through economic and policy research alone and lies beyond the scope of this report. However, we offer a few important points to help frame the issue.

First, the public and policy makers may want to consider the extent to which manufacturers play a vital and hard-to-replace role in the state economy. As previously noted, manufacturers account for most state exports, pay higher than average wages, provide jobs in regions around the state, and often employ workers without a four-year college degree. In addition, Wisconsin manufacturers form a key link in larger supply chains, from the paper makers that are tied to the timber and printing industries to the cheese processors that provide a market for the state’s dairy farms.

State officials and the public could also consider what aid to manufacturers will produce the best return. For instance, core state funding for the Wisconsin Manufacturing Extension Partnership and the Manufacturing Outreach Center at UW-Stout has hovered at or around $1.3 million a year going back to fiscal 2012 (the oldest year available.) The Upjohn Institute has found that similar programs offering consulting services to small and medium companies can be some of the most cost-effective ways to boost manufacturing. Providing custom job training that meets the needs of individual employers also produces good returns, the group has reported.

At the same time, it should be noted manufacturing jobs and output have not kept pace with the rest of the overall economy and are not expected to do so in the near future. Manufacturers often represent mature companies in industries such as paper-making and printing that find it more difficult to achieve further growth.

This is not always the case. A 2016 Brookings Institute report found manufacturing accounted for 35 of the nation’s 50 highly productive “advanced industries.” Still, job growth varies widely across the industry, with some segments such as food processing seeing expansion and other areas such as paper-making shrinking significantly. (See Figure 7 on page 6.)

To illustrate the nuances on both sides, manufacturing wages remain above average but, in percentage terms, the gap between them and the average wage is narrowing. (See Figure 8.) Officials may want to consider all of these factors when deciding on public investments.

In addition, the state could compare support for the industry here to other approaches inside and outside Wisconsin. The comparison could look at how public investment in manufacturing matches up with support for other industries and priorities, such as education and infrastructure, which have their own role to play in fostering growth. Last, policy makers could consider what benefits other states are offering to specific industries and companies and how they compare to those in Wisconsin. Many, though not all, of the benefits available here are also present in neighboring states. In a competitive marketplace, that may represent a reason to retain the benefits.

Balancing these complex and often competing questions is not just an economic exercise—it has been and likely will continue to be a political question. Manufacturing has played and will play an important part in Wisconsin’s economy, ensuring the state will grapple with how to foster the industry for years to come.
POLICY NOTES

Federal Officials OK Medicaid Work Rule

Wisconsin’s plan to require some low-income recipients to work or eventually lose Medicaid health coverage was approved last month by federal officials.

The Centers for Medicare & Medicaid Services (CMS) signed off on the proposal affecting able-bodied adults without children between the ages of 19 and 49. Under the plan, recipients in this group are limited to 48 months of Medicaid coverage known as BadgerCare unless they are working or doing job training for at least 80 hours a month. If they lose coverage because of the rule, they can reapply for benefits after six months.

The federal government also approved allowing premiums for BadgerCare recipients of up to $8 a month depending on income and $8 copayments for emergency room visits. Premiums can be lowered for participants who maintain a healthy weight and avoid smoking.

CMS, however, did not approve Wisconsin’s request to require Medicaid recipients to undergo potential drug screening and treatment in order to qualify for Medicaid. Instead, recipients will be required to submit a health risk assessment that includes questions on drug use. Participants could then be referred for treatment but would not necessarily have to undergo it to qualify for coverage. To help enable treatment, Medicaid will fully cover residential treatment for substance abuse.

Milwaukee County Transit Lines Renewed

Milwaukee County recently approved a budget amendment to extend the life of two bus routes designed to connect central city residents with jobs in Waukesha County suburbs. With the temporary funding source supporting the “JobLines” bus routes running out and the routes attracting modest ridership, the Milwaukee County Transit System (MCTS) was set to eliminate the lines in January 2019. Instead, the county will use approximately $662,000 of local property taxes to operate the routes through August 2019 as it looks for a longer-term financial solution.

Previous WPF research has highlighted the long-standing financial challenges MCTS faces, which make it especially difficult to balance two of its competing priorities: providing more frequent bus services in areas with strong ridership versus providing services that extend out to otherwise unserved locations.

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