



Wisconsin's Manufacturing Advantage Endured*

The Manufacturing and Agriculture Credit, 2013–2025

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Executive Summary

Wisconsin substantially changed the tax treatment of manufacturing in 2011. The Manufacturing and Agriculture Credit (MAC), phased in beginning in 2013, reduces the Wisconsin income-tax burden on qualifying manufacturing production by as much as 7.5 percentage points. The credit differs from both a general corporate-rate cut and a negotiated incentive: it is tied more directly to production in Wisconsin, but it applies under a general rule rather than through company-by-company negotiations.

Manufacturing is unusually exposed to interstate competition. A manufacturer can often serve the same customers from Wisconsin or from a neighboring state. That makes the border a useful place to examine whether Wisconsin manufacturing gained relative to neighboring counties after the tax change. With final 2025 employment data, we can now see whether the early Wisconsin advantage lasted.

For every 100 manufacturing jobs in Wisconsin's border counties in 2012, there were about **117** in 2025. Across the state line, 100 had become **96**. Had Wisconsin's border counties followed their neighbors' path, they would have had roughly **11,900 fewer manufacturing jobs** in 2025. That figure gives the scale of the divergence, not a causal estimate of jobs created by the MAC.

To address the uneven impact of the Great Recession, we also start in 2007 and remove three border counties. Wisconsin still leads by 13.6 points through 2025.

The divergence was much larger in manufacturing than in household-serving industries. From 2012 to 2025, manufacturing employment grew 21.1 percentage points more on the Wisconsin side than across the state line, compared with a 5.5-point advantage in health care, retail, restaurants, and other locally oriented services. The manufacturing gap was nearly four times as large.

Census data on business dynamics show that the gap opened mainly through expansion at existing plants. Existing Wisconsin manufacturing plants added jobs much faster than existing plants across the state line, while job creation from new establishments was nearly identical. The same border counties also gained share of Wisconsin's manufacturing property base.

The largest divergence appeared along the Illinois border, where the manufacturing base immediately across the state line was by far the largest. Manufacturing employment in Wisconsin's Illinois-border counties rose 29.8% from 2012 to 2025 while employment in the neighboring Illinois counties fell 11.5%. Wisconsin also adopted right-to-work while the MAC was phasing in, and other policies changed on both sides of the line, so the Illinois comparison does not isolate the MAC.

Taken together, the evidence suggests that the MAC materially improved Wisconsin's position as a place to manufacture.

1 The MAC and the Border Comparison

Manufacturing is unusually important to Wisconsin's economy. In 2023, it accounted for 18.6% of Wisconsin employment and 16.4% of state GDP, compared with 9.8% and 10.3% nationally (Gentry, 2025).

Manufacturing is also unusually exposed to interstate competition. A plant in Wisconsin can serve national and global markets, and the same production can often be located in Illinois, Minnesota, Iowa, Indiana, or elsewhere. States compete for that activity through taxes, incentives, infrastructure, and the broader business environment. That makes the border especially informative: firms on either side can serve similar markets and draw on regional labor pools while facing different state tax systems (Holmes, 1998).

The Manufacturing and Agriculture Credit is structured to affect that location decision. Legislated in 2011 and phased in from tax year 2013 to 2016, the MAC provides a credit equal to 7.5% of eligible qualified production activities income; actual exposure varies across firms. Unlike a negotiated incentive for a particular company or project, the MAC applies under a general statutory rule. Wisconsin's economic-development agency describes it as a tool for encouraging manufacturers to maximize production in the state (Wisconsin Economic Development Corporation, 2026b).

This design differs from a general reduction in Wisconsin's corporate income-tax rate. A general rate cut lowers the tax on Wisconsin-taxable corporate income broadly. The MAC is tied more directly to production in Wisconsin because the credit depends on qualifying production income and Wisconsin manufacturing property (Wisconsin Department of Revenue, 2025). In that sense, a general rate cut lowers the tax on corporate income; the MAC lowers the tax on qualifying production in Wisconsin.

Our question is narrower: did Wisconsin's position as a place to manufacture improve relative to its neighbors after the MAC was adopted?

The statutory 7.5% credit is not the effective incentive faced by every firm. Eligibility depends on Wisconsin manufacturing property, and multistate corporations can be limited by the income they apportion to Wisconsin. The credit is not limited to corporations. Partnerships, LLCs, and tax-option corporations can pass the credit through to their owners. In tax year 2021, individual filers accounted for about **nine in ten claimants** and roughly **seven in ten dollars actually used**. Appendix G explains why the effective benefit can differ across corporate and pass-through firms.

The border is not a controlled experiment: policies changed on both sides over more than a decade. But comparing the two sides is more informative than asking whether Wisconsin manufacturing rose or fell in isolation. Earlier work found a Wisconsin border advantage in the first years of the credit (Williams, 2017). With final 2025 data, we ask whether that advantage endured.

2 Border Manufacturing Employment

The border design contains 19 Wisconsin counties and 19 comparison counties immediately across the state line in Illinois, Michigan, and Minnesota. Iowa is excluded from the principal long-run comparison because it later cut its own corporate tax burden (Iowa Legislative Service Agency, 2024) and because its border manufacturing base is tiny and highly concentrated (Appendix F). Employment throughout comes from the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW). BLS suppresses 2025 manufacturing employment for two very small Wisconsin border counties, so the endpoint comparison uses the 17 Wisconsin counties with published values in both 2012 and 2025. Together, the omitted counties accounted for only about 0.4% of Wisconsin border manufacturing employment in 2024. Appendix A gives the details.

For every 100 manufacturing jobs Wisconsin's border counties had in 2012, they had about 117 in 2025, while across the state line 100 had become 96. Had Wisconsin's border counties merely followed the neighboring trajectory, they would have had roughly **11,900 fewer manufacturing jobs** in 2025. That number gives the scale of the divergence; it is not a causal estimate of jobs created by the MAC.

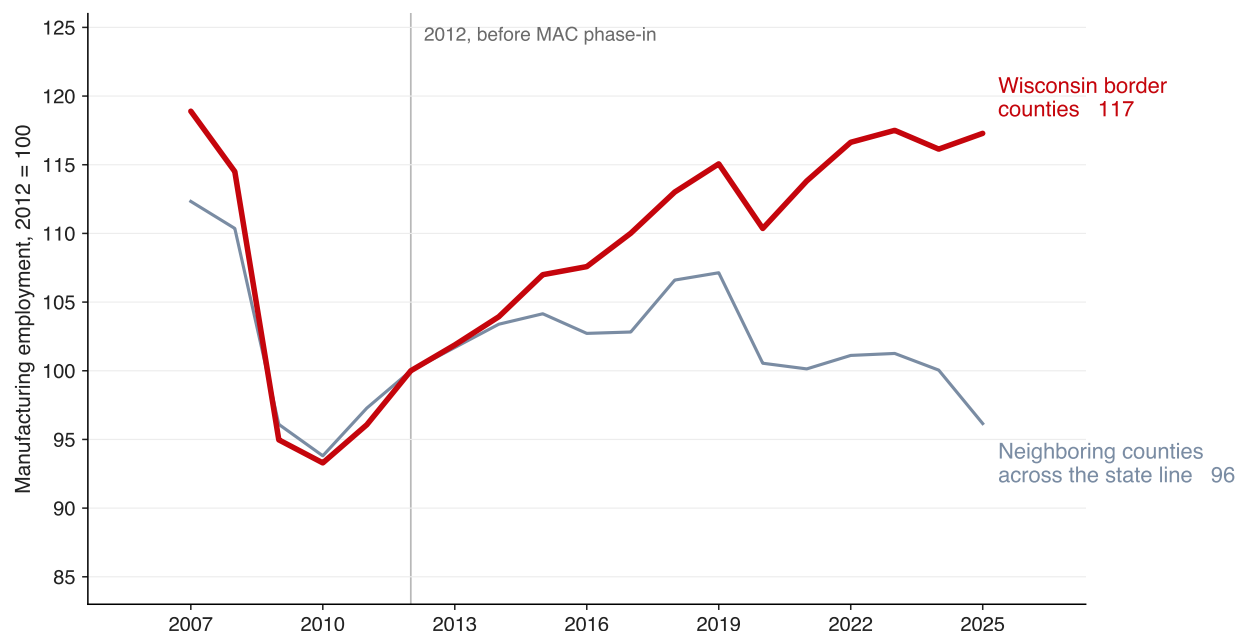


Figure 1. Manufacturing Employment in Wisconsin Border and Comparison Counties

Source: BLS QCEW, private manufacturing (NAICS 31–33), annual-average employment, 2012 = 100; counties published in both endpoint years. Sample details in Appendix A.

Wisconsin was not already pulling away. It lost relative ground from 2007 to 2012. By 2019, before the pandemic, the post-2012 advantage was already 7.9 points.

On the same annual-average series, Wisconsin outperforms its matched neighbor in 12 of the 17 computable border groups. Every single-county and single-border-group deletion leaves the pooled advantage positive.

3 Manufacturing and the Local Economy

Wisconsin's border economy improved broadly after 2012: total private and nonmanufacturing employment also rose faster on the Wisconsin side. But "all nonmanufacturing" is a poor benchmark for a manufacturing policy. It includes trucking, warehousing, staffing, construction, wholesale trade, and other industries that may grow with manufacturing. We instead compare manufacturing with industries tied more closely to local households: health care, retail, restaurants, recreation, other services, and private education.

From 2012 to 2025, manufacturing employment grew **21.1 percentage points** more on the Wisconsin side than across the state line, while household-serving employment grew **5.5 points** more. The manufacturing gap was nearly four times as large.

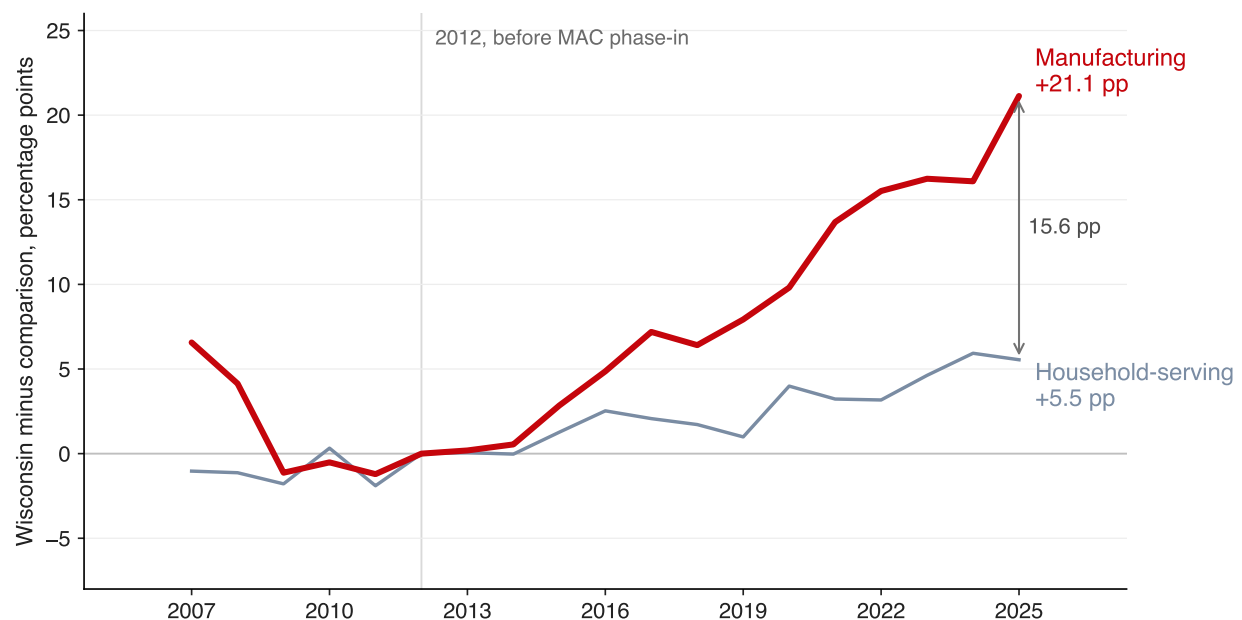


Figure 2. Manufacturing and Household-Serving Employment Relative to Comparison Counties

Source: BLS QCEW, private annual-average employment by 2-digit NAICS sector; Wisconsin minus comparison counties, 2012 = 0. Every year is computed on one fixed set of county-sector cells, those published in both 2012 and 2025. Household-serving industries listed above.

Some household-serving growth may itself follow manufacturing growth; a larger wage bill supports more clinics, stores, and restaurants. We therefore do not treat the 15.6-point difference as a causal estimate of the MAC's effect. It does suggest that Wisconsin's manufacturing advantage was not simply part of broader local employment growth.

4 Expansion at Continuing Plants

Census business-dynamics data show how the employment gap opened (U.S. Census Bureau, 2026a). These run through 2023 rather than 2025, so they describe the mechanism over the first decade of the credit rather than the full window. From 2013 through 2023, cumulative job creation at continuing manufacturing establishments equaled **101.5% of 2012 manufacturing employment** on the Wisconsin side, compared with **74.8%** across the state line, while job creation from establishment births was nearly identical at 21.9% against 22.7% (Figure 3). Even after excluding Boone, Kenosha, and Rock, the continuing-establishment advantage remains substantial, at 89.3% against 73.5% (Appendix C).

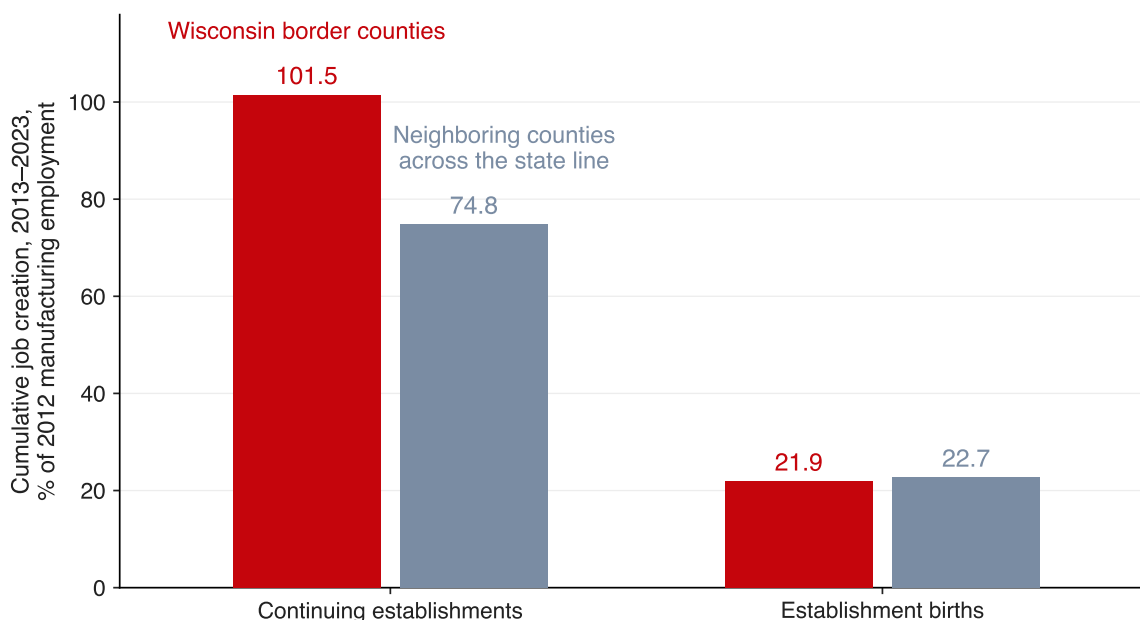


Figure 3. Job Creation at Continuing and New Manufacturing Establishments

Cumulative job creation, 2013–2023, as a percent of 2012 manufacturing employment; these are flows against a common base, not shares of a common total. Source: Census Business Dynamics Statistics, county by sector, published continuers series, the convention used throughout this report.

Most manufacturing location decisions do not arrive with a ribbon cutting. They are decisions about the next shift, the next production line, a building addition, a contraction, or where the next increment of production goes. The MAC applies to those recurring decisions, not only to the opening of a new plant.

Establishment counts are less conclusive. QCEW shows Wisconsin border manufacturing establishments rising 2.2% from 2012 to 2025 while comparison establishments fell 9.2%. County Business Patterns, which ends in 2023, shows declines on both sides, but a smaller decline in Wisconsin, –2.7% against –6.4% (U.S. Census Bureau, 2026b). Appendix C reports both.

4.1 Manufacturing Property

Since 2012, Wisconsin's border counties have also gained share of the state's manufacturing property base. The 19 border counties accounted for 15.1% of statewide Class 3 manufacturing real-estate value in 2007 (Wisconsin Department of Revenue, 2026). Their share fell to 14.5% by 2012, then rose to 17.5% in 2024. The Illinois-border counties show the same reversal, moving from 9.8% in 2007 to 8.9% in 2012 and 11.2% in 2024 (Figure 4).

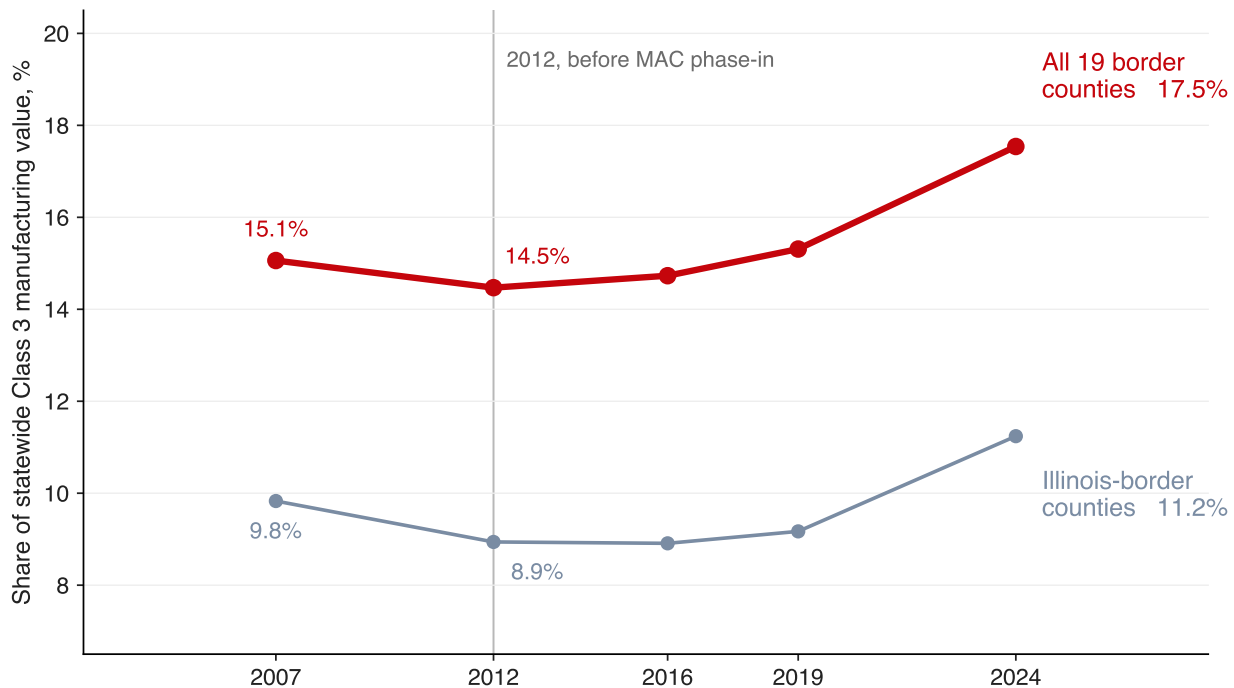


Figure 4. Border Share of Wisconsin Manufacturing Real Estate

Source: Wisconsin Department of Revenue, Statements of Equalized Values (Wisconsin Department of Revenue, 2026), real-estate Class 3 (manufacturing), assessed values, nominal; shares of the statewide total.

In levels, manufacturing real-estate value rose 105.2% in the 19 border counties from 2012 to 2024, compared with 63.3% elsewhere in Wisconsin. The Illinois-border counties rose 113.0%; excluding Kenosha and Rock still leaves 109.4%.

These are assessed real-estate values, not square footage or capital expenditures. They can change because of both the amount of manufacturing property and its assessed value, so we use them as a measure of the manufacturing property base rather than as a measure of investment. No identical series exists across the state line.

5 Timing and Robustness

A 2012 baseline is favorable to Wisconsin because several border counties entered that year from deep post-recession troughs, after the Janesville and Kenosha plant closures of 2008 and 2010.

Boone County, Illinois, also contains the Belvidere assembly plant, whose later decline pulls down Illinois employment.

A harder test moves the starting point back to 2007 and drops Boone, Kenosha, and Rock at the same time. Manufacturing employment in the remaining Wisconsin counties rises 1.8% through 2025 while the neighboring counties fall 11.8%. Wisconsin still leads by **13.6 points**.

The pre-2012 paths were not identical. From a 2007 base, those Wisconsin counties were already about 4.5 points ahead by 2012. But starting the comparison again in 2012 still leaves a **9.5-point** Wisconsin advantage through 2025.

The harder test reduces the headline gap but does not erase it; the same is true when the endpoint is moved before the pandemic or any one county or border group is removed. Appendix B reports the full set of alternative baselines, endpoints, aggregation conventions, and leave-one-out checks.

6 The Individual Borders

6.1 Illinois

From 2012 to 2025, manufacturing employment in Wisconsin counties bordering Illinois rose 29.8% while employment in neighboring Illinois counties fell 11.5%. That is a **41.4-point** divergence (Figure 5). Before the MAC, Wisconsin had been moving the other way, losing 12.1 points of manufacturing ground from 2007 to 2012.

Northern Illinois and southeastern Wisconsin are one regional labor market. Illinois residents working in Wisconsin's Illinois-border counties rose from roughly 14,800 in 2011–2015 to 19,600 in 2016–2020 (U.S. Census Bureau, 2023). Production can cross the state line without requiring workers to move their homes. The labor market is regional. The tax system is not.

All five matched Wisconsin–Illinois comparisons favor Wisconsin, including rural Green and Lafayette. Remove Boone, Kenosha, and Rock and exclude transportation equipment and food manufacturing, and Wisconsin still leads by 14.9 points.

Differences in starting industry mix do not explain the divergence. Holding 2012 industry shares fixed and applying national growth in the same industries, the Wisconsin side grew 26.1 points more than its mix predicts while the Illinois side grew 16.1 points less.

Continuing Wisconsin establishments created jobs equal to 118.1% of their 2012 employment base, compared with 70.0% on the Illinois side, while job destruction at continuing plants was much closer, 82.2% against 78.2%. The difference came mainly from expansion rather than destruction: job destruction was similar on the two sides, but continuing Illinois plants added far fewer jobs.

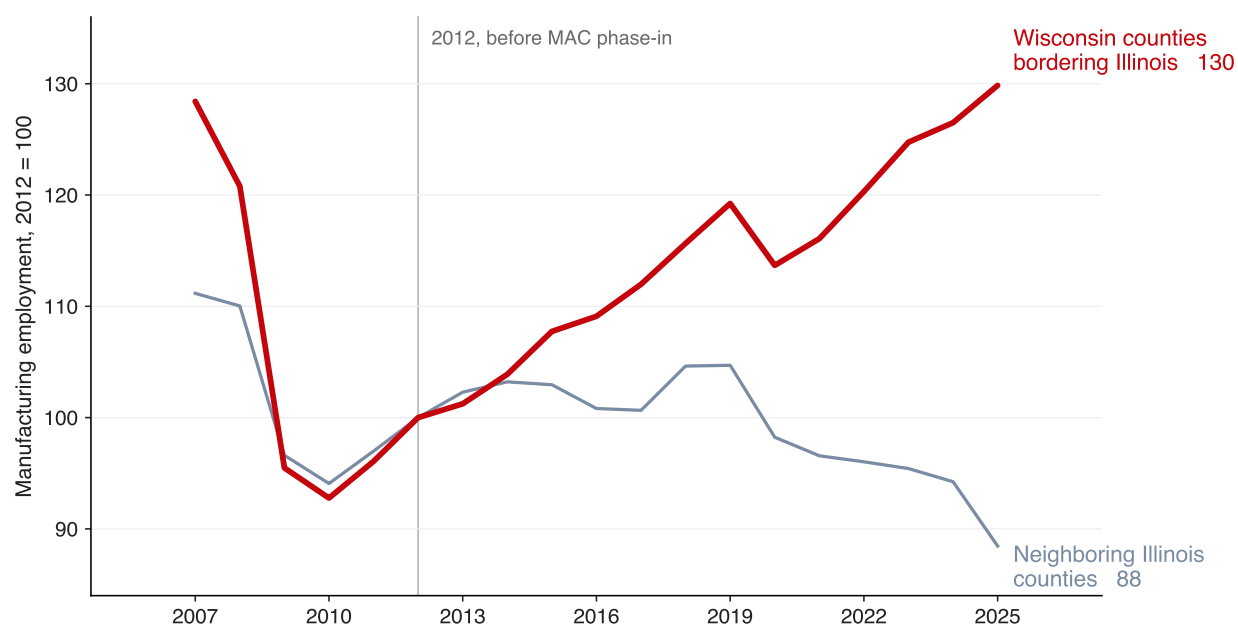


Figure 5. Manufacturing Employment Along the Wisconsin–Illinois Border

Source: BLS QCEW, private manufacturing (NAICS 31–33), annual-average employment, 2012 = 100. Wisconsin side: Kenosha, Walworth, Rock, Green and Lafayette. Illinois side: Boone, Jo Daviess, Lake, McHenry, Stephenson and Winnebago.

The manufacturing base immediately across the border also differed sharply. In industries already important on the Wisconsin side, neighboring Illinois counties contained 3.54 manufacturing jobs for every Wisconsin-side job, compared with 0.73 along Minnesota. Wisconsin’s largest gain occurred where the nearby manufacturing base was largest.

Household-serving employment also moved toward Wisconsin on this border, by 9.4 points. Manufacturing moved 41.4 points. The size and geographic breadth of the manufacturing-specific gap make a generic Kenosha-area boom an incomplete explanation.

Much of the additional widening in 2025 came from a sharp decline in reported manufacturing employment in Lake County, Illinois, concentrated in one plastics-products industry. But the Wisconsin advantage was already large in 2024 and visible well before the pandemic; removing Lake does not weaken the long-run result (Appendix B).

Wisconsin also adopted right-to-work in 2015 while the MAC was still phasing in (Wisconsin Legislative Fiscal Bureau, 2015). Illinois’s budget impasse, enterprise-zone incentives (Wisconsin Economic Development Corporation, 2026a), and its 2017 corporate-rate restoration (Illinois Department of Revenue, 2026) further complicate attribution. The border data cannot separate those effects cleanly. But the Wisconsin–Illinois gap had already reached 8.3 points by 2016, before Illinois restored its 9.5% corporate rate, and the result survives the major plant and industry exclusions.

6.2 Minnesota

Minnesota is not a single comparison. Rural Wisconsin outgrew rural Minnesota by about 7.0 points through 2019 and 11.3 points through 2025. The aggregate result is different along the Twin Cities stretch, and Washington County is central to that difference. Manufacturing employment there rose from 7,241 jobs in 2012 to 11,730 in 2025. Setting Washington County aside reverses the pooled Minnesota comparison and leaves the Wisconsin side ahead by about 5.8 percentage points.

Washington County is also an unusual border comparison. It lies on the eastern edge of the Twin Cities metropolitan economy, has a large established manufacturing base, and draws on a much larger regional labor pool than the rural counties farther north. Minnesota was also actively competing for mobile manufacturing investment. Wisconsin was therefore competing against an active metropolitan manufacturing cluster, not an otherwise similar rural border economy.

Comparing Minnesota-border Wisconsin with other Wisconsin counties does not resolve the question because both groups received the MAC. That leaves a clear geographic split: rural Wisconsin outperformed rural Minnesota, while the pooled Minnesota result is driven by the economically different Twin Cities stretch.

6.3 Michigan and Iowa

Michigan changed its own business-policy environment during the MAC phase-in: a new 6% corporate income tax in 2012, right-to-work in 2013, and later relief from manufacturing personal-property taxation (Michigan Department of Treasury, 2026). The raw Wisconsin–Michigan comparison is unfavorable and heavily influenced by Marinette; remove Marinette and the sign reverses, leaving a 15.9-point Wisconsin advantage. Either way, Michigan is a poor comparison for isolating a Wisconsin-only policy change, and the Wisconsin side is small enough that a single plant can move the aggregate.

The Iowa border is tiny and one plant deep. Crawford and Grant together had 3,853 manufacturing jobs in 2012; Dubuque holds about four-fifths of the Iowa-side base, with Deere dominating machinery. Dropping Dubuque changes the pre-reform result materially, and Iowa later cut its own corporate tax burden. Iowa therefore offers a weak test of the MAC. In such a small, plant-dominated border economy, the statutory tax-rate gap is a poor guide to the incentive actually facing firms.

7 The Border Advantage Was Distinctive

One possibility is that the border result simply reflects a broader Wisconsin manufacturing trend. The within-state comparison suggests otherwise. Among counties with published values in both 2012 and 2025, border manufacturing employment rose by roughly **9,700 jobs** while interior employment fell by about **5,000**, raising the border share from 12.4% to 14.4%.

A tighter comparison looks at the counties just inside the border and makes the same comparison across the state line. From 2012 to 2025, Wisconsin's border counties grew 16.9 percentage points more than their own next ring. Across the state line, border counties grew 4.8 points less than their own next ring. That leaves a **21.7-point difference** between the two border-versus-next-ring gaps after 2012. Before the MAC, the pattern ran the other way: Wisconsin's border trailed its next ring by 6.4 points while the comparison border was 0.6 point ahead.

Because interior Wisconsin also received the credit, this comparison cannot tell us how the MAC affected the interior. Nor can it rule out some within-state reallocation. It does show that the border advantage was not simply a statewide Wisconsin manufacturing trend.

8 Manufacturing Payroll

After inflation, manufacturing payroll in Wisconsin's border counties rose from \$3.71 billion in 2012 to \$4.61 billion in 2025, an increase of 24.3% in 2025 dollars. Across the state line, real manufacturing payroll rose 2.7%. Had Wisconsin's border payroll merely matched the neighboring growth rate, it would have been roughly **\$800 million lower** in 2025. The \$800 million is the gap relative to the neighboring trajectory, not payroll created by the MAC.

The payroll gap reflects employment, not faster wage growth. Average manufacturing pay did not rise faster on the Wisconsin side, which is unsurprising in an integrated border labor market where workers can commute across the state line. The MAC raises the after-tax return to Wisconsin production; it does not directly reduce the wage a plant must pay.

9 Why the Manufacturing Advantage Matters

Statewide manufacturing employment changed little from 2012 to 2025, rising 1.0% on the Wisconsin state QCEW total, from 453,819 to 458,245. Real manufacturing value added was 2.4% lower in 2025 than in 2012 (U.S. Bureau of Economic Analysis, 2026). Those statewide totals tell us what happened, not what would have happened without the MAC. The border comparison is more informative because firms can place production on either side of a state line while facing different state tax systems.

That focus follows directly from how the MAC works. The credit changes the after-tax return to locating production in Wisconsin; it does not mechanically make a plant more productive. Employment, plant expansion, and location are therefore the most direct outcomes. Value added also moves with productivity, capital intensity, industry mix, and prices.

The MAC differs from both a broad corporate-rate cut and a negotiated incentive. It is tied specifically to qualifying production, but it applies under a general rule rather than a company-by-company deal. Wisconsin sets the rule in advance: qualifying production receives the same treatment under the statute.

Because the credit applies under a general rule, it also applies to qualifying production that would have remained in Wisconsin anyway. That does not mean the entire credit is simply a transfer to owners. The same rule can leave one firm's behavior unchanged and alter where another firm expands. That is the tradeoff in a general statutory incentive: some benefits go to activity that would have occurred anyway, while narrower programs require more government judgment about which firms or projects to support (Slattery and Zidar, 2020).

Who claims a tax credit is not the same question as what the tax credit changes.

Continuing Wisconsin manufacturers expanded much more than plants across the state line, while establishment births were nearly identical, and the manufacturing property base shifted toward the same border counties. Taken together, those patterns indicate that the border divergence arose primarily through expansion at continuing plants rather than through differences in establishment births. Establishment-level evidence elsewhere likewise finds that firms reallocate employment and activity across states when relative state tax burdens change (Giroud and Rauh, 2019; Suárez Serrato and Zidar, 2016).

Several states have cut corporate income-tax rates since the MAC was enacted (Mandal, 2026). Repealing the MAC would therefore raise the relative tax burden on qualifying Wisconsin production at a time when several competing states have been reducing theirs. The margin this report speaks to most directly is where firms locate and expand production.

10 After a Decade

More than a decade after the MAC began to phase in, the early border advantage remains large. Manufacturing employment in Wisconsin's border counties rose about 17% from 2012 to 2025 while employment across the state line fell about 3.8%. The observed divergence corresponds to roughly 11,900 manufacturing jobs and about \$800 million in 2025 manufacturing payroll. The advantage was already visible before the pandemic and survives the harder test that starts in 2007 and removes Boone, Kenosha, and Rock. The relative manufacturing gain was nearly four times the corresponding gain in household-serving employment.

The gap opened mainly through expansion at existing plants. Through 2023, continuing Wisconsin manufacturers expanded far more than their counterparts across the state line, while establishment births were almost identical. Wisconsin's manufacturing-property base shifted toward the same border counties through 2024. The largest divergence appeared along the Illinois border, where the nearby manufacturing base was largest.

The border advantage was also distinctive relative to nearby interior counties. Wisconsin's border counties gained 16.9 percentage points relative to their own next ring after 2012, while border counties across the state line lost 4.8 points relative to theirs.

Taken together, the evidence suggests that the MAC materially improved Wisconsin's position as a place to manufacture. The manufacturing advantage endured.

A Data and Sample

All employment, establishment, and payroll series are built from the official Quarterly Census of Employment and Wages (U.S. Bureau of Labor Statistics, 2026b), private ownership (ownership code 5), manufacturing aggregate 1013 (NAICS 31–33), county aggregation level 73. The vintage is the final 2025 annual data, published by BLS in August 2026. Annual files supply annual-average employment, annual-average establishments, and total annual wages. December employment is the third-month employment level of the fourth quarter, taken from the quarterly files. The two frequencies are reported separately throughout and never mixed within a single comparison.

Other datasets end earlier. Census Business Dynamics Statistics run through 2023, County Business Patterns through 2023, the Department of Revenue equalized-value series used here through 2024, the commuting flows through 2016–2020, and the county value-added series through 2024.

BLS withholds a county cell when publishing it would disclose an individual employer, and reports the withheld cell as zero. Those cells are treated as missing, never as zero. Through 2024 no county in the border sample was ever withheld. In 2025 BLS withholds manufacturing for Florence and Iron Counties on the Wisconsin side and for Bayfield County in interior Wisconsin, so every 2012-to-2025 comparison is computed on the counties published in both endpoint years: 17 of the 19 Wisconsin border counties, all 19 comparison counties, and 51 of the 53 interior counties. Two interior counties are missing rather than one. Bayfield is published in 2012 and withheld in 2025. Menominee County has no separately published manufacturing cell in any year of the panel, including 2012, so it never enters a two-year comparison. Florence and Iron together reported 292 manufacturing jobs in 2024, about 0.4% of the Wisconsin border base, so the exclusion moves the headline comparison by well under one percentage point. Two matched border groups, Iron against Gogebic and Florence against Dickinson and Iron in Michigan, cannot be computed on annual averages through 2025 for the same reason; on December employment, where only Iron is withheld, one group drops out.

Real payroll is total annual wages deflated to 2025 dollars with the CPI-U for all urban consumers, U.S. city average, annual average of monthly values (U.S. Bureau of Labor Statistics, 2026a).

QCEW establishment counts are sensitive to employer worksite-reporting practices, so we report Census County Business Patterns (U.S. Census Bureau, 2026b) and Business Dynamics Statistics (U.S. Census Bureau, 2026a) as independent checks. The sources need not agree exactly because they construct establishment counts differently. Business Dynamics Statistics are used only to decompose job creation and destruction; cumulative flows are expressed relative to 2012 manufacturing employment and can therefore exceed 100%.

The empirical work is confined to manufacturing because that is where the credit is used. In tax year 2021, \$883.0 million of MAC was claimed under the manufacturing credit against \$84.5 million under the agriculture credit (Gentry, 2025). Manufacturing therefore accounts for 91% of MAC dollars claimed.

The primary sample is 19 Wisconsin border counties (Buffalo, Burnett, Douglas, Florence, Forest, Green, Iron, Kenosha, La Crosse, Lafayette, Marinette, Pepin, Pierce, Polk, Rock, St. Croix, Vernon, Vilas, and Walworth) matched to 19 neighboring counties outside Wisconsin: 6 in Illinois (Boone, Jo Daviess, Lake, McHenry, Stephenson, and Winnebago), 4 in Michigan (Dickinson, Gogebic, Iron, and Menominee), and 9 in Minnesota (Carlton, Chisago, Goodhue, Houston, Pine, St. Louis, Wabasha, Washington, and Winona). The Wisconsin–Iowa border pairs (Crawford and Grant in Wisconsin; Allamakee, Clayton, and Dubuque in Iowa) are excluded from the primary comparison and reported separately below.

B Employment Robustness

Table B.1 reports growth from the stated base year to the stated endpoint for the Wisconsin border counties and their comparison counties, together with the difference in percentage points. Each row states its frequency; December and annual-average results are never combined.

Table B.1. Robustness of the Wisconsin border employment advantage

Specification	Measure and window	Wisconsin (%)	Comparison (%)	Gap (pp)
Baseline	Employment, December, 2012–2025	+16.5	–5.4	+21.9
Baseline	Employment, annual, 2012–2025	+17.3	–3.9	+21.1
Baseline	Employment, annual, 2012–2019	+15.1	+7.1	+7.9
2007 base	Employment, annual, 2007–2025	–1.4	–14.4	+13.0
Drop Boone, Kenosha, Rock	Employment, annual, 2007–2025	+1.8	–11.8	+13.6
Drop Boone, Kenosha, Rock	Employment, annual, 2012–2025	+9.4	–0.2	+9.5
Iowa added	Employment, December, 2012–2025	+14.8	–4.2	+18.9

Baseline rows use the counties published in both endpoint years: 17 of the 19 Wisconsin border counties and all 19 comparison counties. BLS withholds Florence and Iron Counties in 2025 on the annual-average series and Iron on the December series. The December and annual-average figures are separate series and are not mixed: the 2012–2025 gap is 21.9 points on December employment and 21.1 points on annual averages. Every gap is computed from unrounded growth rates, so a displayed gap can differ from the difference of the two displayed components by a tenth of a point.

Alternative weighting conventions also leave the border advantage positive and substantial. We use pooled county totals throughout because the question is aggregate manufacturing employment on each side of the border.

Moving the base year back lowers the gap without eliminating it. On the December series the 2012–2025 gap is 21.9 points and from a 2007 base it is 14.3 points. The 2012 base is favorable to Wisconsin because 2012 was a trough on the Wisconsin side, which is exactly why the main robustness test in Section 5 moves to 2007.

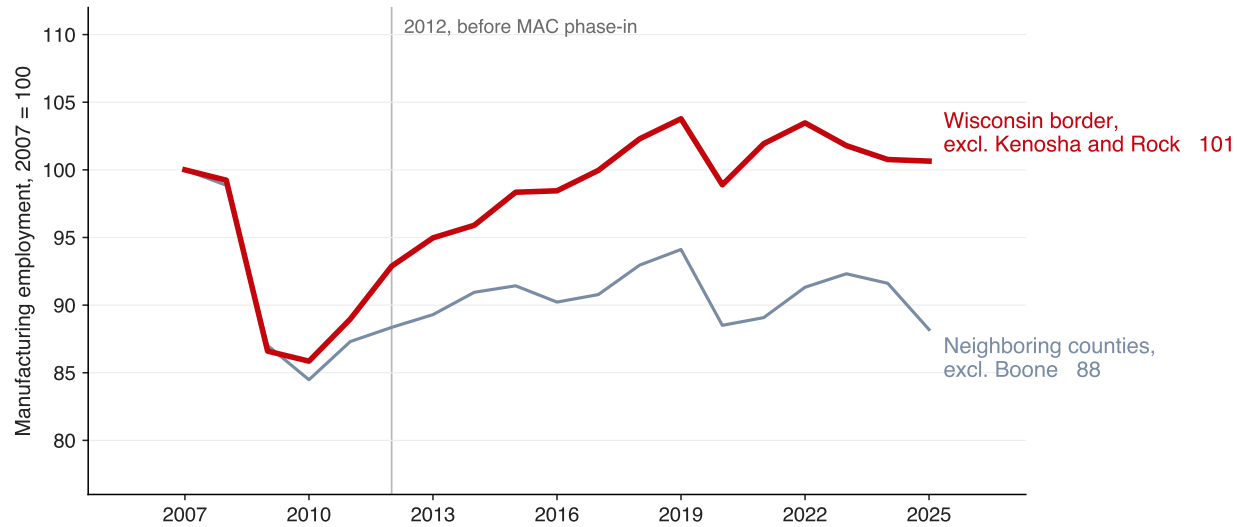


Figure B.1. Manufacturing Employment from a 2007 Base, Excluding Boone, Kenosha, and Rock

Source: BLS Quarterly Census of Employment and Wages, private manufacturing (NAICS 31–33), annual-average employment, indexed to 2007. Boone County, Illinois and Kenosha and Rock Counties, Wisconsin are excluded.

Deleting any one county or any one border group leaves the pooled advantage positive on both frequencies. Removing Lake County, Illinois, from the comparison group widens the 2012–2025 annual-average gap from 21.1 to 23.9 points, because Lake was among the stronger comparison counties over the full window even after its 2025 fall. Lake accounts for about half the widening between the 2024 and 2025 endpoints, and none of the level of the advantage.

C Establishments and Business Dynamics

Table C.1 reports manufacturing establishment counts from the three federal sources on a common index basis. The three sources move in the same direction, though they build establishment counts differently (Appendix A). On the longer 2007–2023 window, QCEW and County Business Patterns still favor Wisconsin, though by less than the 2012-based comparison: 4.7 points and 5.9 points, respectively.

Table C.1. Manufacturing establishments by source, index, 2012 = 100

Source	Window	WI 2012	WI end	WI index	Comparison index
BLS QCEW	2012–2025	1,476	1,509	102	91
Census CBP	2012–2023	1,471	1,431	97	94
Census BDS	2012–2023	1,422	1,355	95	93

Table C.2. Business Dynamics Statistics manufacturing job flows, 2013–2023

Cumulative flow, % of 2012 employment	Wisconsin	Across the line
Job creation, continuing establishments	101.5	74.8
Job creation, establishment births	21.9	22.7
Job destruction	100	96
Net job creation	25	2

Excluding Boone, Kenosha and Rock, continuing-establishment job creation is 89.3 against 73.5, and net job creation is 15 against 1. Continuing-establishment creation is the published BDS continuers series, the convention used throughout this report. Because the Census Bureau infuses noise into separately published cells, total creation less birth creation does not reproduce the published continuers series exactly. The Wisconsin advantage is essentially unchanged.

Table C.3 decomposes the Illinois border on the same published-continuers basis. The pattern there is not an unusual Illinois destruction rate; continuing Wisconsin plants simply expanded substantially more than their Illinois counterparts.

Table C.3. Business Dynamics Statistics, Illinois border, cumulative 2013–2023 as a percent of 2012 manufacturing employment

Flow	Wisconsin side (%)	Illinois side (%)
Employment change	40.3	-12.6
Job creation, continuing establishments	118.1	70.0
Job destruction, continuing establishments	82.2	78.2
Net, continuing establishments	+35.9	-8.2
Job creation from establishment births	26.4	23.2
Job destruction from establishment deaths	23.5	18.4
Net, births minus deaths	+2.9	+4.8

Source: Census Business Dynamics Statistics, county by sector. Suppressed cells are treated as missing, never as zero. One summation convention is used for every BDS figure in this report.

Manufacturing property, Class 3

Table C.4 reports equalized Class 3 manufacturing real-estate value by geography and Table C.5 the border shares of the statewide total (Wisconsin Department of Revenue, 2026).

Table C.4. Equalized Class 3 manufacturing real-estate value, \$ billions, nominal

Geography	2007	2012	2016	2019	2024	07–12	12–24	07–24
19 border counties	1.74	1.73	1.96	2.30	3.55	−0.5	+105.2	+104.2
Other Wisconsin counties	9.79	10.21	11.33	12.73	16.67	+4.2	+63.3	+70.2
Illinois-border counties	1.13	1.07	1.18	1.38	2.27	−5.9	+113.0	+100.5
Minnesota-border counties	0.48	0.54	0.63	0.77	1.08	+11.5	+100.8	+123.9
Michigan-border counties	0.12	0.12	0.14	0.15	0.19	+1.4	+56.8	+59.0
Border excluding Kenosha and Rock	0.93	0.98	1.14	1.35	1.93	+5.4	+98.1	+108.8
Illinois border excl. Kenosha and Rock	0.32	0.32	0.36	0.43	0.66	−2.3	+109.4	+104.6

Growth columns are percent. Equalized Class 3 manufacturing real-estate value, Wisconsin Department of Revenue Statements of Equalized Values (Wisconsin Department of Revenue, 2026). Nominal stock valuations, not capital expenditure. The comparison uses counties available in all benchmark years. Wisconsin's repeal of the personal-property tax makes the real-estate Class 3 series the consistent measure through 2024. No identical cross-state classification is available.

Table C.5. Border share of statewide Class 3 value, percent

Geography	2007	2012	2016	2019	2024
19 border counties	15.06	14.47	14.73	15.31	17.54
Illinois-border counties	9.83	8.94	8.91	9.17	11.24

D Illinois: Mechanism and Industry Checks

Table D.1 decomposes the border employment comparison by the state on the other side of the line, on annual-average employment.

The Wisconsin–Illinois annual-average manufacturing-employment gap was already 8.3 percentage points in 2016, before Illinois restored its 9.5% corporate rate in July 2017 (Illinois Department of Revenue, 2026). Michigan adopted a manufacturing-relevant personal-property exemption beginning in 2016 (Michigan Department of Treasury, 2026), which moves in the direction that would help explain the unfavorable Michigan comparison.

Table D.1. Manufacturing employment growth by state border, annual average, 2012–2025

Border	Wisconsin (%)	Across the line (%)
Illinois	+29.8	−11.5
Minnesota	+12.4	+21.1
Michigan	−19.8	+10.3

Annual-average employment, the basis used throughout the main text. QCEW establishment counts are not decomposed geographically: they are not sufficiently stable across state and county reporting regimes to carry a geographic breakdown on their own.

Table D.2 reports how many of the matched border groups favor Wisconsin, among those computable through 2025 on each frequency. The main text quotes the annual-average row. Two

groups drop out on annual averages because Florence and Iron are withheld in 2025; only Iron is withheld on the December series, so one group drops there.

Table D.2. Matched border groups favoring Wisconsin on employment

Measure	Window	Groups favoring Wisconsin
Employment, annual average	2012–2025	12 of 17
Employment, December	2012–2025	12 of 18

Industry-removal checks

Table D.3 reports the Wisconsin–Illinois annual-average manufacturing gap after removing an industry from *both* sides before recomputing. Each row therefore answers “what is the gap among everything else,” not “what would have happened without that industry.” There is no common industry break. Some smaller industries expand early, in 2013–2016, and a later cluster in food, metals, and autos appears over 2019–2025.

Table D.3. Wisconsin–Illinois manufacturing employment gap under industry and county removals, 2012–2025

Check	Wisconsin minus Illinois (pp)
Raw	41.4
Drop transportation equipment (NAICS 336)	36.7
Drop food manufacturing (NAICS 311)	36.0
Drop both	30.4
Drop Boone, Kenosha and Rock	26.7
Drop Boone, Kenosha, Rock and transportation equipment	22.8
Drop Boone, Kenosha, Rock, transportation equipment and food	14.9

Industry Mix and the Nearby Manufacturing Base

Holding each side’s 2012 3-digit industry composition fixed and applying national employment growth for those same industries, the Wisconsin side of the Illinois border grew 26.1 percentage points more than its own mix predicts and the Illinois side 16.1 points less than its. In industries accounting for at least 3% of Wisconsin-side manufacturing employment in 2012, the Illinois border held 3.54 neighboring manufacturing jobs per Wisconsin-side job, against 0.73 on the Minnesota border and 0.54 once Washington County is set aside. Neither statistic identifies a tax effect; both describe the size and composition of the production base immediately across each line.

E Minnesota: Rural and Twin Cities Segments

The pooled Minnesota comparison mixes two economies. Table E.1 separates them. The two stretches partition the border exactly: six Wisconsin counties against six in rural Minnesota, and three against three along the Twin Cities edge, with Washington County matched to St. Croix as the border design pairs them. Manufacturing is QCEW private annual-average employment; the

household-serving basket is the six sectors used in Section 3, on the same balanced county-sector panel.

Table E.1. Minnesota border segments: Wisconsin minus Minnesota, percentage points

Stretch	Window	Manufacturing	Household-serving	Difference
Rural	2012–2019	+7.0	–0.3	+7.4
Rural	2012–2021	+20.6	+0.2	+20.4
Rural	2012–2025	+11.3	+4.9	+6.4
Twin Cities exurban	2012–2019	–9.2	–7.1	–2.1
Twin Cities exurban	2012–2021	–10.3	–6.2	–4.1
Twin Cities exurban	2012–2025	–30.5	–3.1	–27.4

Every point uses the same fixed set of county-sector cells as Table H.3 and Figure 2: those published in both 2012 and 2025. Rural stretch: Burnett, Douglas, Buffalo, Pepin, La Crosse and Vernon against Pine, Carlton, St. Louis, Wabasha, Winona and Houston. Twin Cities exurban stretch: St. Croix, Pierce and Polk against Chisago, Goodhue and Washington, which is St. Croix’s matched comparison county in the border design.

The within-Wisconsin comparison tempers the rural result. The nine Minnesota-border Wisconsin counties grew much like the interior-Wisconsin comparison group. Because both groups received the MAC, this comparison cannot tell us whether the credit affected either one. It does show that part of Wisconsin’s rural advantage over Minnesota reflects weakness in several Minnesota counties after 2019.

Table E.2. Minnesota border decomposition, 2012–2025

Minnesota comparison	Wisconsin minus Minnesota (pp)
All Minnesota-border counties	–8.7
Rural counties only	+11.3
Twin Cities stretch	–30.5
Excluding Washington County	+5.8

Annual-average QCEW private manufacturing employment, counties published in both endpoint years. Rural: Burnett, Douglas, Buffalo, Pepin, La Crosse and Vernon against Pine, Carlton, St. Louis, Wabasha, Winona and Houston. Twin Cities stretch: St. Croix, Pierce and Polk against Chisago, Goodhue and Washington. Washington County remains in the baseline sample.

Washington County

The pooled Minnesota figure is dominated by one place. Washington County, Minnesota, had about 9,980 manufacturing jobs in 2007, fell to roughly 7,241 by 2012, and rebounded to about 11,730 by 2025, an increase of 62.0% from its trough; it contributes about 16.2 percentage points to the Minnesota side’s growth on its own. We keep Washington County in the baseline because it belongs in the comparison. But setting it aside shows how much it matters: the sign reverses, leaving Wisconsin’s Minnesota-border counties ahead by about 5.8 points. That is why the rural/Twin Cities split is more informative than the pooled Minnesota number.

F Iowa

Iowa is reported separately because the border is too small and concentrated to serve as a useful primary comparison. Crawford and Grant had only 3,853 manufacturing jobs in 2012, while Dubuque accounted for more than four-fifths of the Iowa-side base and machinery alone accounted for more than a quarter. Dropping Dubuque materially changes the comparison. Iowa also began reducing its corporate tax burden late in the sample (Iowa Legislative Service Agency, 2024).

The Iowa border is therefore better treated as a special case than as a clean test of the MAC. In a two-county, plant-dominated border economy, statutory tax rates are a poor guide to the incentive actually facing firms.

G Tax Mechanics and Claimants

The 7.5-percentage-point headline is the maximum rate effect, not the effective incentive received by every manufacturer. At full phase-in and full Wisconsin apportionment the credit takes the 7.9% corporate rate to 0.4%, which is the fully qualifying case rather than the average one. The mechanics differ across firms for four main reasons.

First, the credit is tied to Wisconsin production property. Qualified production activities income is multiplied by the claimant's Wisconsin manufacturing-property factor (State of Wisconsin, 2026). A firm with manufacturing property both inside and outside Wisconsin therefore receives the credit only on the qualifying Wisconsin share (Gentry, 2025).

Second, corporations can be limited by Wisconsin-apportioned income. Eligible income is capped at income apportioned to Wisconsin, so a national corporation selling broadly can face a substantially smaller effective incentive than the 7.5-point headline.

Third, pass-through businesses are treated differently. For partnerships, limited liability companies and tax-option corporations, the credit is computed from the entity's qualifying activity and can pass through to owners. The individual rules differ from the corporate rules, so the effective benefit can differ as well.

Fourth, the benefit can be partly offset for nonresident owners. Because other states often credit taxes paid to Wisconsin, a reduction in Wisconsin liability can increase liability elsewhere rather than reducing the owner's total state tax bill (Gentry, 2025).

Who claims the credit

Claims, use and estimated fiscal effect are three different series. In tax year 2021 the manufacturing credit *claimed* was \$883.0 million while the amount *used* was \$434.7 million across 6,535 claims, with \$511.3 million representing the stock of unused credit carried into tax year 2022, including

balances generated in earlier years. The estimated revenue reduction reached \$495.6 million in 2023–24, about 2.3% of general-fund tax revenues.

Table G.1 shows who used the manufacturing credit in tax year 2021.

Table G.1. Manufacturing MAC used, tax year 2021

Filer type	Claimants	Amount used (\$m)	Source
All filers	6,535	434.7	LFB Table 4
Corporations	596	125.3	LFB Table 7
Individuals (residual)	5,939	309.4	Tables 4 less 7

Source: Gentry (2025), Tables 4 and 7. Table 7 counts corporate returns using the manufacturing credit and suppresses corporations with net income below zero, so the individual residual is a slight upper bound; combined-group members are counted separately. As a cross-check, LFB Table 5 reports 5,960 individual claimants using \$310.3 million in tax year 2022, close to the tax year 2021 residual.

On that basis, individual filers accounted for about 91% of claimants and about 71% of the manufacturing credit actually used in tax year 2021. The Legislative Fiscal Bureau separately estimates that 71.3% of the credit’s twelve-year fiscal effect arises under the individual income tax, but that figure covers the manufacturing and agriculture components together and is an estimated fiscal effect rather than credit used; the two should not be quoted interchangeably.

H Payroll and Broader Outcomes

Real manufacturing payroll on the Wisconsin border rose from \$3.71 billion in 2012 to \$4.61 billion in 2025, up 24.3% against 2.7% across the state line, implying a 2025 level about \$801 million above the neighboring growth trajectory. From a 2007 base both sides are below where they started, Wisconsin by 1.3% and the comparison counties by 5.6%, so that comparison favors Wisconsin by 4.4 points and puts the 2025 level about \$205 million above the neighboring trajectory. Payroll is reported as scale rather than as an independent causal test, because the level depends on the base year and on employment composition as much as on pay.

Real average annual manufacturing pay grew 6.0% on the Wisconsin side against 6.8% across the state line, and the Wisconsin level remains far below the comparison level (\$69,940 against \$105,596 in 2025 dollars, reflecting the very different industry and county composition of the two groups). The payroll advantage therefore reflects more manufacturing activity, not faster wage growth.

Border, interior, and the next ring

Applying the 2007 border share of 13.35% to Wisconsin’s 2025 total across those same counties implies 61,112 border jobs against the 65,877 actually observed, a difference of about 4,800. Interior Wisconsin comprises the 53 counties outside the border sample; the non-county “Unknown or Undefined” area rows that BLS reports for each state are excluded.

A tighter comparison asks whether Wisconsin’s border counties outperformed the next ring of counties inside Wisconsin, and whether the same pattern appeared across the state line (Table H.2).

Table H.1. Wisconsin manufacturing: border counties and the rest of the state

Year	Border employment	Interior employment	Border share (%)
2007	66,783	433,436	13.35
2012	56,168	396,845	12.40
2019	64,629	417,699	13.40
2025	65,877	391,867	14.39

Annual-average manufacturing employment, on the counties published in all four years shown: 17 of the 19 border counties and 51 of the 53 interior counties.

Before the MAC, Wisconsin's border lagged its next ring. After 2012, that relationship reversed sharply, while the comparison-state borders did not develop the same premium.

Table H.2. Manufacturing employment: border counties minus the next ring, percentage points

Window	Wisconsin border minus next ring	Comparison border minus next ring	Relative difference
2007–2012	–6.4	+0.6	–7.0
2012–2024	+13.9	–3.1	+17.0
2012–2025	+16.9	–4.8	+21.7

Annual-average private manufacturing employment, percentage points. All rows use the same 2025-balanced county sample. Rings are defined mechanically by county adjacency; suppressed cells are treated as missing.

Manufacturing versus household-serving industries

The broad nonmanufacturing comparison mixes together very different sectors. Some are local and population-serving; others are mobile businesses or direct complements to manufacturing. This appendix therefore uses a narrower household-serving benchmark defined on economic grounds: retail trade, private educational services, health care and social assistance, arts, entertainment and recreation, accommodation and food services, and other services. These are not eligible for the credit, are tied primarily to local households, and are less likely than wholesale, trucking, warehousing, staffing, construction, headquarters, or professional services to expand mechanically when a manufacturing facility expands. Table H.3 reports the pooled result, on the same fixed set of county-sector cells used in Figure 2.

Table H.3. Manufacturing and Household-Serving Employment, Wisconsin Minus Comparison Counties

Window	Manufacturing, WI minus comparison	Household-serving, WI minus comparison	Difference
2007–2012	–6.6	+1.0	–7.6
2012–2019	+7.9	+1.0	+6.9
2012–2025	+21.1	+5.5	+15.6

Annual-average private employment, QCEW 2-digit NAICS sectors, percentage points. Every point is computed on one fixed set of county-sector cells, those published in both 2012 and 2025.

All nonmanufacturing employment is too broad a benchmark because some sectors—such as trucking, warehousing, staffing, construction, and headquarters services—can expand alongside manufacturing. The household-serving comparison asks whether Wisconsin’s manufacturing advantage was simply part of broader local employment growth. The evidence suggests it was not.

Manufacturing Value Added

For context, real manufacturing value added rose 13.6% on the Wisconsin side and 7.2% across the state line from 2012 to 2024 (U.S. Bureau of Economic Analysis, 2025). That comparison is sensitive to the starting year: from a 2007 base, Wisconsin’s border counties trail the comparison counties by about 7 percentage points. We therefore treat value added as context rather than core evidence.

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