

Wisconsin Establishment Migration: 2000-2011

Tessa Conroy and Steven Deller

University of Wisconsin-Madison/Extension Department of Agricultural and Applied Economics Center for Community and Economic Development

Patterns of Economic Growth and Development Study Series No. 1





Table of Contents

Key Points	1
Introduction	2
Establishment Migration: Wisconsin	3
Quantity	
Employment	
Distance	
Profile: Establishments Moving to Wisconsin	
Profile: Establishments Moving from Wisconsin	7

Sector Analysis

Accommodation and Food Services	8
Administrative, Support, and Waste Management	
Agriculture, Fishing, Forestry, and Hunting	10
Arts, Entertainment, and Recreation	11
Construction	12
Educational Services	13
Finance and Insurance	14
Information	15
Healthcare and Social Assistance	16
Manufacturing	17
Other Services	18
Professional, Scientific, and Technical Services	19
Retail Trade	
Real Estate, Rental and Leasing	21
Transportation and Warehousing	22
Wholesale Trade	23
Conclusion	24
References	25
Data Description	25
Acknowledgements	

Key Points

- The number of establishments that move or relocate in Wisconsin is quite small. Over the period 2000 to 2011 only about one percent of establishments moved in any given year. An even smaller share (0.4%) either moved in or out of Wisconsin.
- Most establishments that do relocate move only a short distance: 10 miles or less.
- The typical establishment that moves is a service-related firm with four or fewer employees and under \$250,000 in annual sales.
- The net change in state-level employment from establishment relocation is less than 0.05% of total state employment.
- Migration of establishments into and out of Wisconsin track very closely resulting in small net changes in the number of establishments from relocation each year.
- The limited number of establishments that move to or from Wisconsin tend to be linked to Illinois and/or Minnesota.
 Florida may be the one exception and that movement is likely tied to retirement migration.

<u>Bottom-line Policy Implication</u>: Devoting limited resources to recruiting establishments to Wisconsin may be an inefficient use of those resources.

Introduction

For state and local organizations that incorporate business recruitment and retention into their economic development strategies understanding business migration is important. Regions often compete to have businesses relocate in their community with the goal to increase job and income growth. Economic development resources are devoted to incentive packages that can include tax abatement, subsidies, public services, or land development. Under some circumstances, the incentive packages can effectively reduce costs, increase profitability, and ultimately sway the location decision of a business. Hence, understanding the trends and patterns of business migration is critical for choosing effective development strategies.

Spending on incentive packages suggests that business recruitment is perceived as a particularly effective economic development strategy. Nationally, spending on economic incentives by state and local entities is estimated at roughly \$50 billion annually (Peters and Fisher, 2004). As an example of state-level spending, Michigan spent \$530 million, three-quarters of its annual economic development resources, on location subsidies and another \$50 million on business retention and recruitment in 2003 (Bartik, 2003). Anecdotally too, the state-level competition for new business is evident. Former Governor Schwarzenegger encouraged businesses to relocate to California with billboards placed in major cities such as Chicago, Las Vegas, and Boston reading, "California wants your business" (Tamaki, 2004). Both Nevada and Massachusetts responded with billboard campaigns of their own throughout major California cities, with messages such as "Smaller muscles, but lower taxes! Massachusetts means business," and

"Will your business be terminated?" (Ibid.). More recently Nevada provided \$1.25 billion in tax incentives to attract a battery manufacturing facility for the maker of Tesla automobiles.

The resources devoted to business relocation warrant a better understanding of establishment migration. Certainly, future business recruitment and retention efforts can benefit from insights into establishment relocation patterns. The following analysis details the annual relocation of Wisconsin businesses that moved between 2000 and 2011. Relocations can be one of three types: (1) an *intrastate* relocation from one place within Wisconsin to another place within the state, or (2) an interstate relocation from Wisconsin to a different state, or (3) an interstate relocation from elsewhere to Wisconsin. The first section of this study describes the establishments that moved by relocation type. For each type of relocation, the establishments are characterized based on the distance moved, as well as their employment, sales, and sector. Then for each sector, the analysis shows the annual establishment migration, the destination of establishments relocating outside of Wisconsin, as well as the origin of businesses coming from outside the state.

The sectors analyzed are based on two-digit North American Industry Classification System (NAICS) codes. Unclassified establishments were excluded, as were certain industries with little migration activity such as Utilities and Public Administration. For ease, the 16 sectors included in the analysis are organized alphabetically. We use establishments, businesses operating from a single physical location, as the unit of analysis. An establishment may be owned by a firm or operate as a single independent business.

Establishment Migration: Wisconsin

Ouantity: How many establishments move?

Very few establishments in Wisconsin move each year. Shown in Figure 1, the share of establishments that move fluctuates around 1% annually. Relocation slowed in the years just before the recession, but has generally trended upward since 2008. Most businesses that move stay within Wisconsin and they drive the trends observed for all movers, as we see in the top two lines of Figure 1. Both in-migration to and outmigration from Wisconsin have been remarkably stable, hovering between 0.1% and 0.2%. Each year, in- and out-migration are nearly equal, showing that the margin of net gained or lost establishments is typically very small.

In Figure 2, we show the share of establishments that moved in 2011. Wisconsin was home to 421,000 establishments and just 1.2% relocated in 2011. Of the share that moved, equal to 5200 establishments, approximately 4000 stayed within the state and less than 1200 establishments moved between states. Inmigration from other states represented



Figure 1: Establishments that Relocated as a Share of Total



represented 11.6%, resulting in a net loss for 2011 of 29 establishments.

In Figure 3, we show the composition of relocations by the type of move. Migration between states, shown by the red and gray portions combined, increased from just over 10% of all relocations in 2000 to just over 20% in 2011. In 2008 at the beginning of the recession, interstate relocations were noticeably higher but reverted to the general trend in the following years.



Employment: How many workers do migrating establishments employ?

When establishments move they take jobs with them. Looking only at the number of establishments can be misleading for drawing conclusions about employment because establishments vary so dramatically in size. It could be that the employment gained from one large business is equivalent to the employment gained from many small firms. The following figures show the job gain from establishments moving to Wisconsin and the job loss from establishments moving out of Wisconsin in levels (Figure 4) and as a share of total employment (Figure 5).

In Figure 4, we show that jobs lost to establishments moving out of Wisconsin generally exceeded jobs gained from establishments moving in during the period from 2000-2011. The jobs lost in 2008 were especially high and jobs gained were low, resulting in an unusually high net loss in the first year of the recession. Only in 2007 and 2010 were the jobs gained from

Figure 4: Job Loss/Gain From Migration

Jobs Lost to Establishments Moving Out



establishments moving to Wisconsin greater than those lost to other states.

Jobs associated with migration represent less than 0.25% (Figure 5) of total employment. The net gain/loss from migration is negligible, well below 0.1% in any given year. In 2008, the net job loss from establishment migration reached its lowest point, but was still just 0.13% of total employment. At the highest, in 2007, net jobs gained from migration was just 0.05%.



Figure 5: Job/Loss Gain from Migration As a Share of Total Employment

Distance: How far do establishments move?

The majority of establishments that move do not move very far. Many establishments choose new locations in the same city, county, or region in Wisconsin. Of over 4,000 relocations within the state, 2,400 establishments moved less than 10 miles from their original location (Figure 6). These establishments are likely staying within their city but have outgrown their facilities or prefer a different property. Of that small share of establishments that move 36% move between 10 and 100 miles and only 4% make a long distance move of more than 100 miles.

In Figure 7, we show how far establishments traveled to relocate to Wisconsin. Close to 600 establishments moved in from other states in 2011. Given that these are interstate moves, it is still true that most establishments that moved to Wisconsin go a relatively short distance and stay within the same region of the country. Nearly half of all establishments moved 250 miles or less and of those 3% moved less than 10 miles. Just over one-third of establishments moved between 250 and 1000 miles and nearly 20% moved a very long distance of more than 1000 miles.

Compared to establishments moving to Wisconsin, establishments moving out of Wisconsin moved a further distance (Figure 8). Two-thirds of establishments leaving the state moved more than 250 miles. Just 30% moved between 10 and 250 miles. The share of establishments moving 10 miles or less from their original location is just 3% of total out-migration.

Figure 6: Establishments Moving Within WI, 2011



Figure 7: Establishments Moving to WI, 2011



Figure 8: Establishments Moving out of WI, 2011



Profile: Establishments Moving to Wisconsin



Figure 10: Establishments Moving to WI by Sales, 2011



The employment, sales, and sector of establishments that moved to Wisconsin in 2011 are documented in Figures 9-11. Most establishments that chose Wisconsin for their new location are small businesses in a service-related industry. The majority of them had fewer than four employees and less than \$250,000 in sales. The largest establishments with 500 or more employees or more than \$1 million in sales move to Wisconsin only rarely.

The large majority of establishments (475 firms) that moved to Wisconsin in 2011 were in the smallest employment category (Figure 9). Less than 110 establishments fall into the remaining combined categories. Just fewer than ten establishments had more than 100 employees.

As a second measures of size, the sales revenue of incoming establishments indicates that close to 40% earned \$100,000 or less in sales in 2011 (Figure 10). Slightly fewer earned between \$100,000 and \$250,000. Taken together establishments earning less than \$250,000 in sales make up more than three-quarters of all business than moved into Wisconsin. Just 74 businesses had sales between \$250,000 and \$1 million and less than 60 had sales over \$1 million.

Administrative, Support, and Waste Management was the most common sector for businesses moving into Wisconsin followed by Professional, Scientific and Technical Services. Between 30 and 45 establishments in Manufacturing, Construction, and Retail Trade moved to Wisconsin in 2011.



Figure 11: Establishments Moving to WI by Industry, 2011

Profile: Establishments Moving Out of Wisconsin

The establishments that leave Wisconsin are in many similar ways to the establishments moving in. They are mostly small businesses, as measured by employment (Figure 12) and sales (Figure 13), and

concentrated in a few sectors (Figure 14).

In 2011, 588 (96%) establishments that left the state had fewer than 20 employees (Figure 12). Most of those establishments were "microenterprises" that employ less than five people. Just one employer

with more than 500 employees relocated to a new state.

The typical business that leaves is relatively small in terms of sales revenue (Figure 13). Most businesses earn less than \$100,000 in sales, and combined with businesses earning less than \$250,000, represent most (80%) establishments leaving the state. Just over 100 businesses fell into the three largest sales categories and only four had sales of greater than \$100 million in 2011.

Similar to the sector concentration of establishments moving into Wisconsin, the majority of establishments moving out were in the Administrative, Support, and Waste Management sector. In fact, the top five industries of establishments moving out of the state exactly parallel the top five industries moving into the state. In total, in- and outmigration flows are roughly equal, and even

Figure 12: Establishments Moving Out of WI by Employment Size Class, 2011







7



Figure 14: Establishments Moving Out of WI by Industry, 2011

Accommodation and Food Services

Figure 15: Establishments Moving In and Out of WI 2000-2011



Figure 16: Origin of Establishments Moving To WI Total 2000-2011



Figure 17: Destination of Establishments Moving Out of WI Total 2000-2011



The flow of establishments in the Accommodation and Food Services sector moving into Wisconsin and their state of origin, as well as those moving out of the state and their destinations are documented in Figures 15-17. Outmigration of establishments exceeded in-migration in every year from 2000 to 2011. The number leaving Wisconsin stayed above 10 establishments every year, peaking at 44 in 2004. Inmigration was consistently below 10 establishments per year. As a result of net migration, Wisconsin lost over 170 establishments between 2000 and 2011.

Over 75 establishments in the Accommodation and Food Services sector moved to Wisconsin between 2000 and 2011. Most establishments arrived from neighboring states, as we show in Figure 16. More than 20 establishments came from Minnesota, 16 from Illinois, just over 10 from Michigan, and 5 from Iowa.

In Figure 17, we show the destination of establishments in the Accommodation and Food Services sector that left Wisconsin between 2000 and 2011. 70 establishments left for Illinois and nearly 40 for Minnesota. Florida was also a common destination at close to 30 establishments arriving there from Wisconsin.

Administrative, Support, and Waste

In Figure 18, we show the annual number of establishments in the Administrative, Support, and Waste Management sector moving in and moving out of Wisconsin. Establishments in this sector generally perform routine services essential for the operations of other businesses such as office administration, maintenance, security, and human resource activities. For this sector, both in- and out-migration increased dramatically following the beginning of the recession, reaching their height in 2010. Since 2008 the number of establishments moving out has consistently been higher than the number moving in. The net decrease resulting from migration for the whole period was roughly 180 establishments. Further analysis would be required to better understand the reasons for the jump in movement post 2008.

Most establishments that came to Wisconsin left either Illinois or Minnesota, with close to 180 establishments coming from each (Figure 19). At 75 establishments, Florida was the next most common state of origin. In addition, just over 40 establishments arrived from each of Michigan and Iowa.

Minnesota was the most common destination for establishments that left Wisconsin, with more than 200 businesses arriving there between 2000 and 2011 (Figure 20). Illinois and Florida were the next most common destinations with more than 110 establishments moving to each.

Figure 18: Establishments Moving In and Moving Out of WI 2000-2011



Figure 19: Origin of Establishments Moving To WI Total 2000-2011



Agriculture, Forestry, Fishing, and Hunting



Figure 21: Establishments Moving In and Out of Wisconsin

Figure 22: Origin of Establishments Moving to WI Total 2000-2011



Figure 23: Destination of Establishments Moving Out of WI Total 2000-2011



In Figures 21-23, we document the migration pattern of establishments in the Agriculture, Forestry, Fishing, and Hunting sector from 2000 to 2011. Both in-migration and out-migration peaked during the recession years (Figure 21). More than 35 establishments left the state in 2008 and just 25 moved in during the same year. In 2009, more than twice as many establishments moved to a new state than moved into Wisconsin.

From 2000-2011, roughly 130 establishments in the Agriculture, Forestry, Fishing, and Hunting sector relocated to Wisconsin. The majority of establishments that relocated to Wisconsin came from regional neighbors, Minnesota, Illinois, and Iowa, as we show in Figure 22. Combined together more than 70 establishments arrived from these three states.

Over 160 establishments moved out of the state during the same period for a net loss of 33 establishments. Most establishments that left went to near neighbors, Illinois, Iowa, and Michigan, or to sun-belt destinations, Florida, Arizona, and Texas.

Arts, Entertainment, and Recreation

In Figure 24 at right, we show the number of establishments in the Arts, Entertainment, and Recreation sector moving in and out of Wisconsin each year from 2000 to 2011. In addition to establishments involved with live performances, exhibits, and other events intended for a public audience, this sector includes businesses involved with preservation and leisure activities. The number of establishment moving out oscillated between 6 and 18 establishments from 2003 to 2011. Inmigration was closer to 10 establishments each year. In total, Wisconsin gained just six establishments from net migration during the period from 2000 to 2011.

Just over 100 establishments in the Arts, Entertainment, and Recreation sector moved to Wisconsin between 2000 and 20011. The largest shares came from Illinois and Minnesota. Together nearly 50 establishments, roughly half of the total, came from these neighboring states. Texas, Florida, and Michigan were the next most common states of origin with roughly five establishments arriving from each.

Slightly more establishments moved out of Wisconsin than moved in between 2000 and 2011. We show the destinations of the 107 establishments that moved out of the state in Figure 26. Nearly 25 moved to Illinois, over 15 to Minnesota, and exactly 10 went to Florida.

Figure 24: Establishments Moving In and Out of WI 2000-2011

Moving Out Moving In









Construction

Figure 27: Establishments Moving In and Out of WI 2000-2011



Figure 28: Origin of Establishments Moving to WI Total 2000-2011



Figure 29: Destination of Establishments Moving Out of WI Total 2000-2011



We show annual in- and out- migration for construction establishments in Figure 27. The number of establishments moving in exceeded those moving out in every year but 2002 and 2008. For the whole period from 2000 to 2011, Wisconsin gained 30 establishments from net migration.

A total of 437 construction establishments moved to Wisconsin between 2000 and 2011. We show their original state locations in Figure 28. Nearly 150 establishments moved from Minnesota, the most common origin state, and 115 establishments moved from Florida. Fewer than 30 establishments moved from any other state.

Between 2000 and 2011, 407 construction establishments moved out of Wisconsin. 50 or more establishments moved to each of Florida, Minnesota, and Illinois (Figure 29). Nearly 30 establishments moved to Arizona, and close to 20 moved to Michigan.

Educational Services

We show the annual in- and out-migration in the Education Services sector, which includes private and for-profit schools, colleges, and training centers, in Figure 30 at right. Both the number of establishments moving in and the number moving out have generally increased since 2000. Out-migration peaked in 2009 at nine establishments. In-migration also peaked at nine establishments but in 2010. Across the whole period Wisconsin gained just nine establishments in the Educational Services sector.

Compared to other sectors, relatively few establishments in educational services relocate. Just 49 establishments moved to Wisconsin between 2000 and 2011 and 40 moved out. Most that relocated to Wisconsin came from Illinois, but several came from California, Colorado, Minnesota, and Ohio (Figure 31). Florida was a popular destination for those that moved out (Figure 32). Several others went to Pennsylvania, Illinois, and North Carolina.

<u>Note</u>: This sector does *not* include public education including public K-12, the UW System or the network of technical colleges.

Figure 30: Establishments Moving In and Out of WI 2000-2011









Finance and Insurance

Figure 33: Establishments Moving In and Out of WI 2000-2011



Figure 34: Origin of Establishments Moving In Total 2000-2011



Figure 35: Destination of Establishments Moving Out Total 2000-2011



In Figure 33, we show the annual number of establishments in the Finance and Insurance sector that moved to Wisconsin from another state and those that moved out. Both in- and out-migration reached low levels in 2006 at fewer than 10 establishments. In-migration reached its highest point in 2008 at 22 establishments. Out-migration reached its highest point in the following year at 18 establishments. Across the entire period, Wisconsin lost six businesses in finance and insurance from net migration.

The origin state for the 148 establishments in the Finance and Insurance sector that moved to Wisconsin between 2000 and 2011 is provided in Figure 34. Similar to most sectors, the largest share came to Wisconsin from either Minnesota or Illinois. Five to ten additional establishments arrived from each of Florida, Arizona, California, and Colorado.

From 2000 to 2011, 154 establishments left Wisconsin for other states (Figure 35). Over 25 went to Illinois and close to 20 went to Minnesota. Florida, Texas, and California were the next most popular destinations. 18 establishments left for Florida and five to ten establishments moved to each of Texas, California, and Tennessee.

Healthcare and Social Assistance

Migration of establishments in the Healthcare and Social Assistance sector generally increased from 2000 to 2011 with the exception of 2005 and 2006 when relocation slowed dramatically. In nearly every year the number of establishments moving into Wisconsin was slightly higher than the number moving out in nearly every year (Figure 36). Both in- and out-migration reached their highest level in the midst of the recession during 2008 and 2009. By 2011, net migration resulted in close to 40 additional businesses.

Between 2000 and 2011, 260 healthcare and social assistance businesses moved to Wisconsin. They relocated from over 40 different states, but most came from Minnesota and Illinois with close to 50 arriving from each, as we show in Figure 37. More than 20 arrived from Michigan, the third most common state of origin.

Close to 220 establishments in healthcare and social assistance left Wisconsin from 2000-2011. In total from 2000 to 2011, 32 establishments moved to both Illinois and Minnesota (Figure 38). Nearly 25 establishments moved to Florida and roughly 15 each to California and Arizona.

Figure 36: Establishments Moving In and Out of WI 2000-2011







Information

Figure 39: Establishments Moving In and Out of WI 2000-2011



Figure 40: Origin of Establishments Moving to WI Total 2000-2011



Figure 41: Destination of Establishments Moving Out of WI Total 2000-2011



In Figure 39, we track the number of information establishments moving into Wisconsin and those moving out for each year between 2000 and 2011. Establishments in the Information sector include those in the broadcasting, publishing, and telecommunication industries as well as the motion picture and recording industries. The number of establishments moving in peaked in 2003 at nearly 30, but generally fell between 10 and 15 establishments. In total, there were close to 50 additional information establishments from net migration by 2011.

A total of 174 establishments in the Information sector moved to Wisconsin between 2000 and 2011. In Figure 40 we show that most came from Illinois, Minnesota, and California. Between five and ten establishments originated in Florida, Colorado, Arizona, Iowa, and Texas.

During the same period from 2000 to 2011, 127 establishments in the Information sector moved to a different state. Similar to in-migration, most out-going establishments moved to either Illinois or Minnesota (Figure 41). Between five and ten additional establishment moved to each of Arizona, Colorado, California, Michigan, New York, and Texas.

Manufacturing

In-migration of manufacturing establishments was generally greater than out-migration in each year from 2000 to 2011. Both in- and out-migration slowed dramatically in 2007 just before the recession officially began and increased to relatively high levels in 2008, which was one of few years that Wisconsin had a net loss of manufacturing establishments. For the entire period between 2000 and 2011, Wisconsin net gained nearly 100 manufacturing businesses from migration.

A total of 503 manufacturing establishments came to Wisconsin from 2000 to 2011. The largest number of establishments came from Illinois and Minnesota; 230 establishments arrived from the two states combined. Fewer than 35 establishments arrived from any other state. Just 33 establishments arrived from California and 19 from Florida, the next most common origin states. Close to 15 establishments came from each of Michigan, Colorado, Indiana, and Texas.

Many of the 406 establishments that left Wisconsin between 2000 and 2011 went to regional neighbors. Together over 160 establishments moved to Illinois, Minnesota, or Michigan. After near states, warm states were common destinations for manufacturing. Between 15 and 30 establishments went to each of Florida, Arizona and California.

Figure 42: Establishments Moving In and Out of WI 2000-20011

Moving In Moving Out





Establishments Moving out of WI Total 2000-2011



Other Services

Figure 45: Establishments Moving In and Out of WI 2000-2011



Figure 46: Origin of Establishments Moving To WI Total 2000-2011



Figure 47: Destination of Establishments Moving Out of WI Total 2000-2011



In Figures 45-47, we show the migration patterns of establishments in service industries not otherwise classified by the North American Industry Classification System (NAICS). Establishments in this sector include those in equipment and machinery repairing, laundry services, various personal services, and those promoting or administering religious activities

We show the number of establishments moving in out of Wisconsin from 2000 to 2011 in Figure 45. The number of establishments moving in peaked in 2003 at 48 establishments and those moving out peaked in the same year at 36 establishments. The largest single-year net increase of 12 establishments also occurred in 2003. On net for the whole period, Wisconsin gained just under ten establishments from migration.

Close to 350 establishments arrived from more than 40 different states. 80 or more establishments arrived from both Illinois and Minnesota (Figure 46). Over 20 establishments arrived from Michigan, the third most common origin state.

Nearly 340 establishments moved out of Wisconsin to a new state between 2000 and 2011. We show their destinations in Figure 47. More than 50 went to both Minnesota and Illinois. Florida, Texas, and Arizona were the next most common destinations. 33 establishments went to Florida and close to 20 each went to Texas and Arizona.

Professional, Scientific and Technical Services

In Figure 48, we show the annual migration of establishments in the Professional, Scientific, and Technical Services sector from 2000 to 2011. These businesses include those providing legal, accounting, engineering, and research services among others. In-migration exceeded out-migration by close to 20 establishments in every year between 2001 and 2005. The largest single-year net increase occurred in 2004, at the peak of in-migration. Since 2005, the net effect of migration has generally been small or negative. For the whole period, net migration resulted in a total of 90 more professional, scientific, and technical establishments.

Between 2000 and 2011, just over 810 establishments in professional, scientific, and technical services moved to Wisconsin, coming from nearly all 50 states. In Figure 50, we show that businesses from all but Alaska, Delaware, New Mexico, and West Virginia relocated to Wisconsin, but most establishments arrived from regional neighbors.

Just over 720 establishments left Wisconsin for 46 different states (Figure 50). Wisconsin businesses moved to every state outside Wisconsin but Alaska, Maine, and West Virginia. Most moved to Illinois, Florida, and Minnesota, each gaining well over 80 establishments from Wisconsin.





Real Estate, Rental, and Leasing

Figure 51: Establishments Moving In and Out of WI 2000-2011



Figure 52: Origin of Establishments Moving to WI Total 2000-2011



Figure 53: Destination of Establishments Moving Out of WI Total 2000-2011



In Figure 51, we show that establishments in the Real Estate, Rental, and Leasing sector leaving Wisconsin outnumbered those moving in by close to five establishments in every year from 2000 to 2011. Out-migration peaked in 2003, as did in-migration. The largest single-year net decrease occurred in 2011. For the whole period from 2000 to 2011, the state lost 75 establishments total as a result of relocation.

Just over 120 real estate, rental, and leasing establishments relocated to Wisconsin between 2000 and 2011. We show their original state locations in Figure 52. Most establishments originated in near-neighbor states. More than 30 came from Illinois, more than 20 from Minnesota, and close to 10 from lowa.

Nearly 200 establishments relocated outside the state during the same period (Figure 53). At 37 establishments, the largest share went to Florida. Minnesota, Illinois, and Arizona were the next most common destinations.

35

Retail Trade

The number of retail trade establishments leaving Wisconsin each year was generally larger than the number arriving, as we show in Figure 54. After 2002, outmigration was greater in every year but 2007 and 2011. Consequently, there was a net loss of 30 establishments during the period shown. Out-migration peaked in 2004 at almost 70 establishments and reached relatively high levels again in 2008 and 2009.

Just fewer than 450 retail trade establishments relocated to Wisconsin between 2000 and 2011. As we show in Figure 55, most establishments arrived from regional neighbors. Combined together, more than half moved from Illinois, Minnesota, and Michigan. Many establishments moved from warm states to the south including Florida, California, Texas, and Arizona.

From 2000 to 2011, a total of 479 retail trade establishments left the state, as we show in Figure 56. Most moved to Illinois and Minnesota, but retail trade establishments dispersed to over 40 different states upon leaving Wisconsin. More than 20 establishments moved to each of Florida, Arizona, and Michigan. Roughly 15 establishments moved to Colorado, Iowa, Texas, and California.

Figure 54: Establishments Moving In and Out of WI 2000-2011











Transportation and Warehousing

Figure 57: Establishments Moving In and Out of WI 2000-2011



Figure 58: Origin of Establishments Moving to WI Total 2000-2011



Figure 59: Destination of Establishments Moving Out of WI Total 2000-2011



In-migration of transportation and warehousing establishments exceeded out-migration in the early 2000s, as we show in Figure 57. After 2003, the number of establishments moving out consistently increased reaching 16 establishments in 2010. Conversely, only 8 establishments moved in during the same year. Net migration resulted in just one additional establishment by 2011.

A total of 120 establishments in the Transportation and Warehousing sector moved to Wisconsin from 2000 to 2011. In Figure 58, we show that most establishments came from neighboring states, consistent with several other sectors. Nearly 40 establishments came from Minnesota and more than 25 from Illinois. Between five and ten establishments came from Florida, Colorado, and Michigan, the next most common origin states.

From 2000 to 2011, 119 establishments in the Transportation and Warehousing sector left Wisconsin. As we show in Figure 59, Illinois, Florida, and Minnesota were the most common destination with 14 or more moving to each. Between five and eight establishments moved to each of Texas, Michigan, and Arizona.

Wholesale Trade

30

20 15

10

5

0 2000

2001

In Figure 60, we show the annual inand out-migration of wholesale trade establishments. Businesses in wholesale trade include those that transport passengers and cargo, provide scenic and sightseeing transportation, and those that warehouse and store goods. Outmigration peaked in 2003 with over 35 establishments moving elsewhere. Inmigration well exceeded out-migration in several years with the largest net increase of establishments in 2006. Across the 11-year period, Wisconsin gained more than 50 wholesale trade establishments from migration.

In total, 353 establishments in the Wholesale Trade sector relocated to Wisconsin between 2000 and 2011, arriving from over 40 different states. More than half of the wholesale trade establishments that moved to Wisconsin came from either Illinois or Minnesota. In addition, many establishments moved to Wisconsin from warmer states of California and Florida.

Nearly 300 wholesale trade establishments left Wisconsin across 2000 to 2011 and we show their destinations in Figure 62. After Illinois and Minnesota, warm states were also popular destinations for wholesale trade establishments. More than 60 establishments moved to Illinois and more than 40 moved to Minnesota. Over 30 establishments moved to Florida, 17 to Arizona, and 16 to California.

Figure 60: Establishments Moving In and Out of WI 2000-2011 ■ Moving In ■ Moving Out 45 40 35 25

2002 2003 2004 2005 2006 2007 2008

2009

2010 2011

Moving to WI Total 2000-2011 120 100 80 60 40 20 0

Figure 61: Origin of Establishments

Figure 62: Destination of **Establishments Moving Out of WI** Total 2000-2011



Conclusion

Significant energy and resources are devoted to the recruitment of businesses to Wisconsin. Wisconsin is not alone in recruitment efforts. Given the migration dynamics of establishment described in this study, Wisconsin likely competes with several other states for relatively few companies.

The number of Wisconsin establishments that relocate is very small. Of all the establishments in Wisconsin only 1% moved, on average, each year between 2000-2011 and only 0.4% of establishments moved across state lines. Perhaps more important, few of the businesses that move, either in or out of the state, are highrevenue, large-employers. Less than 25% of establishments moving to Wisconsin earn more than \$250,000 in sales and just 6% have more than 20 employees.

Indeed, the median number of jobs associated with a firm moving out of Wisconsin was only two in 2011 and the median number moving in is also two. The average size of an out migrating establishment was 8 and for in-migrating it was 6, again for 2011.

Sales or revenue for the median outmigrating firm was \$120,000. This is the same median size as an in-migrating firm. The average size of a firm moving out of Wisconsin had sales of \$938,000 while the average in-migrating firm had sales of \$826,000.

The difference between the median and average values is the presence of a handful of large establishments that moved. Most establishments moving in and out of Wisconsin tend to be very small. Generally, migrating establishments flow between neighboring states in the Midwest. Most establishments that moved to, or from, Wisconsin tend to be located in Illinois and/or Minnesota. There does appear some movement of Wisconsin establishments to warmer climate states which is most likely linked to the retirement decisions of the business owners.

Further, in- and out-migration track closely over time, industry-by-industry, and in total. While the absolute number of establishments moving may be higher in some industries it appears that is a result of there simply being more establishments in that industry. In relative terms, there appears to be little differences across industries.

Based on the analysis reported in this study there are three broad generalizations that can be drawn:

- Very few Wisconsin establishments move and when they do relocate they move a very short distance.
- Given the size of the Wisconsin economy an almost trivial number of establishments move into or out of Wisconsin.
- The net change in establishments from in and out of Wisconsin migration is very small.

The policy implication is that focusing limited economic growth and development resources on firm recruitment may not be the best use of those resources.

References

- Bartik, Timothy J., Peter Eisinger, and George Erickeck. "Economic Development Policy in Michigan." *Michigan at the Millennium*. (2003): 279–297. Print.
- Peter, Alan, and Peter Fisher. "The Failures of Economic Development Incentives." *Journal of the American Planning Association* 70.1 (2004): 27–37. Print.
- Neumark, David, Junfu Zhang, and Brandon Wall. "Where the Jobs Are: Business Dynamics and Employment Growth." Academy of Management Perspectives 20.4 (2006): 79–94. Print.

Tamaki, Julie. "Battle of the State Billboards." Los Angeles Times October 11, 2004.

Data Description

The National Establishment Time Series (NETS) is a database of U.S. establishments continually updated by Dun & Bradstreet (D&B) in partnership with Walls & Associates. The University of Wisconsin Center for Cooperatives has access to data on U.S. business establishments and their parent firms from 1990 through 2011, the most recent year available. The NETS database is uniquely detailed providing an important advantage over other available data sources. Of particular interest for this descriptive analysis is the location information for each establishment. The data includes the location of each firm at its start, as well as the year and address of any relocation during the life of the business making in possible to track relocation decisions and migration patterns.

The database tracks relocation dynamics for each establishment through an ongoing process to update the data for all businesses. To get current information, D&B attempts to contact each establishment based on the most recent location information. A forwarding address, telephone number, or a continuing email address may indicate a new location. Alternatively, some establishments simply notify D&B of their move.

If an establishment cannot be reached at the most recently known location, it is classified as "out of business or inactive." To be sure that each establishment is successfully tracked over time, all new establishments are first checked against all establishments that are "out of business or inactive", to be that it did not previously exist at a different location. Ultimately, the longitudinal NETS files should correctly identify relocations of establishments and distinguish them from the opening of an entirely new establishment.

NETS tracks only *significant moves*. A significant move is one in which both the establishment's 5-digit ZIP code and their physical address change between years. If an establishment returns to the same address in a future year, then the address change is assumed not to be a significant move.

Given the unique nature of the data and that it is developed by a private company, as opposed to the U.S. Census for example, it is worthwhile to compare it with more accessible sources. Although some discrepancies exist, Neumark et al. (2006) find that checks against newspaper stories about business relocation, extracted from Lexis-Nexis, suggest that NETS successfully tracks relocations, especially inter-state relocations. They further compare the NETS employment data with the Quarterly Census of Employment and Wages (QCEW) and the Current Employment Statistics (CES) among others. They find that employment levels calculated from NETS are strongly correlated with alternative secondary data sources. The NETS data generally report higher employment levels, which is expected given that it includes small and non-employer establishments whereas Census datasets typically do not. Further, they find that the start dates of businesses from a small sample of establishments they contacted matched closely with the start dates identified by NETS.

Acknowledgments

This work was made possible with support from the Department of Agricultural and Applied Economics, University of Wisconsin-Madison, the Center for Community Economic Development and the Office of the Dean, University of Wisconsin-Extension, Cooperative Extension and the Division of Entrepreneurship and Economic Development, University of Wisconsin-Extension. Helpful comments were provided by Dr. Judith Stallmann, University of Missouri and Dr. Alexandra Tsvetkova, Ohio State University. All opinions expressed are those of the authors. Any errors are also the responsibility of the authors.

Published: December 2014