



Image Credit: Minnesota Department of Transportation

Community and Economic Impacts of the St. Croix River Crossing

Executive Summary

A St. Croix County Perspective

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The scheduled opening of the St. Croix River Crossing in 2016 creates uncertainty for St. Croix County. A number of studies have considered the project's environmental and traffic impacts. However, more limited information is available on how the Crossing may affect future population growth and economic development along the Highway 64 Corridor and within greater St. Croix County. To better understand potential impacts stemming from the River Crossing, this study is conducted to: 1) explore how the improved crossing could influence the region's population growth and economic development opportunities; 2) provide communities with information and tools to plan for the economic and fiscal impacts of the River Crossing; and 3) suggest opportunities for shaping future growth.

Importantly, precise future impacts from the St. Croix River Crossing are difficult to predict in small geographic areas. Consequently, this analysis does not pinpoint or specify impacts in individual communities. Communities also have an opportunity to shape local impacts somewhat. Therefore, the study does not attempt to forecast or dictate future land use patterns in communities along the Highway 64 Corridor. Finally, this study is not a substitute for a comprehensive economic development strategy. While this analysis identifies potential economic development prospects arising from the River Crossing, communities and economic development organizations will need to craft formal strategies and initiatives around these opportunities.

Key findings from the impact study are summarized below. These findings primarily consider the impacts on two geographic areas: 1) the entirety of St. Croix County; and 2) the combined cities, villages and towns most likely to be impacted by the new River Crossing. The cities, villages and towns facing the largest impacts are primarily located along Highway 64 and are referred to as "the Corridor" throughout this analysis. These Corridor communities are depicted in Figure 1 and include:

- Town of St. Joseph;
- Village of Somerset;
- Town of Somerset;
- Village of North Hudson;
- City of New Richmond;
- Town of Richmond;
- Village of Star Prairie;
- Town of Star Prairie.

Figure 1 – St. Croix River Crossing Corridor Communities



Key Finding #1 - Infrastructure improvements can be seen as a catalyst for change, but are neither necessary nor sufficient to guarantee economic and population growth rates in surrounding areas.

It is difficult to isolate the causal effects of infrastructure improvements on population change and economic growth. Existing research on the factors inducing population growth and economic development strongly suggests that growth is influenced by many conditions, none of which can individually spur change. A region’s demographic structure affects its birth rates and household mobility. Factors such as labor force quality, industry structure, availability of developable land, business climate, and community amenities influence economic growth rates. Macroeconomic events, such as the recent recessionary period, also shape local and national growth. Consequently, infrastructure quality is important, but is just one of many potential factors that drive a region’s development.

Several insights on population and economic growth stemming from infrastructure improvements are available from other communities who have undergone bridge expansion projects.

Comparison projects include those that: 1) involve the replacement and expansion of a secondary river crossing; and 2) connect peripheral counties in a metropolitan statistical area (MSA). Similar bridge improvements completed in the last two decades are somewhat limited, but several comparable projects do exist. These include:

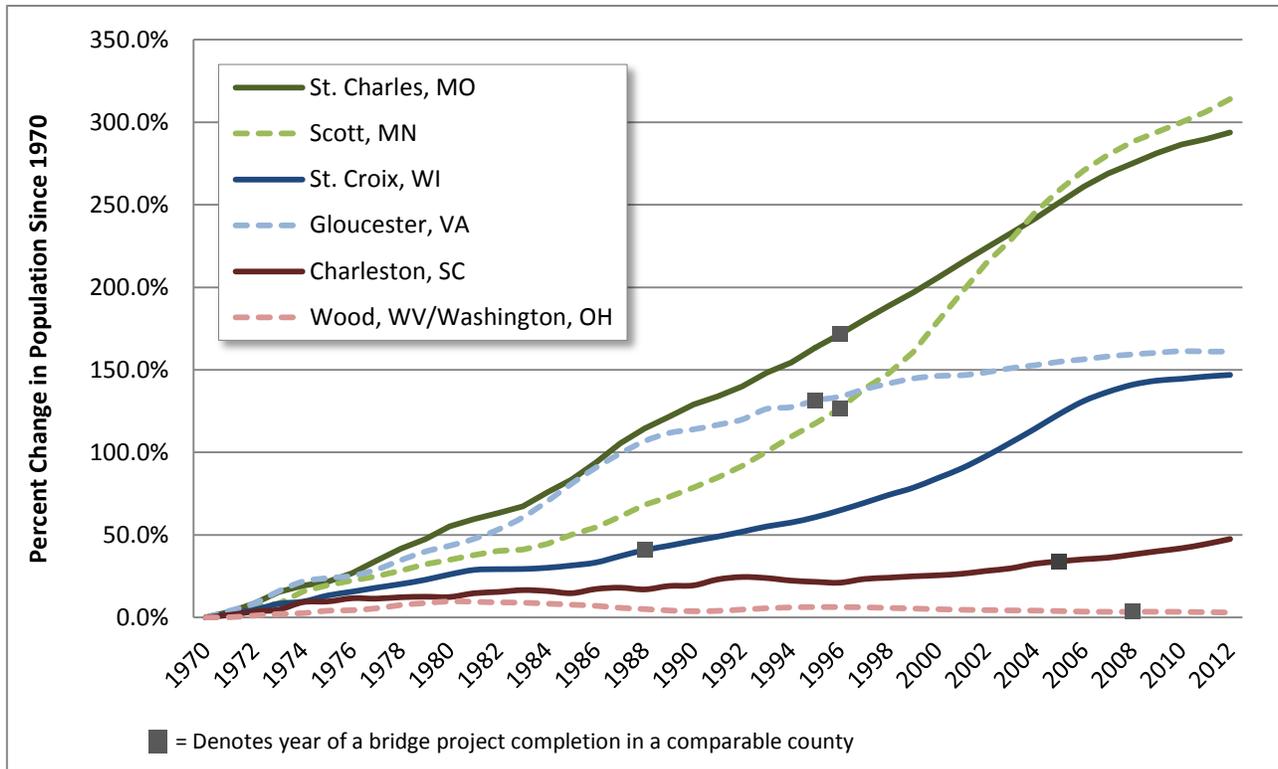
- The Highway 370 Corridor in St. Charles County, Missouri - Completed in 1996 and located within the St. Louis, MO-IL MSA;
- The Bloomington Ferry Bridge in Scott County, Minnesota – Also finished in 1996 and part of the Minneapolis-St. Paul-Bloomington, MN-WI MSA;
- The George P. Coleman Memorial Bridge in Gloucester County, Virginia – Completed in 1995 and sited in the Virginia Beach-Norfolk-Newport News, VA-NC MSA;
- The Arthur Ravenel Jr. Bridge in Charleston County, South Carolina - Construction finished in 2005 and located in the Charleston-North Charleston-Summerville, SC MSA;
- The Blennerhasset Bridge spanning the Ohio River between Wood County, WV and Washington County, OH - Completed in 2008 and situated in the Parkersburg-Marietta-Vienna, WV-OH MSA.

Between 1985 and 1995, St. Croix County also experienced several major improvements to the I-94 crossing at Hudson. The final ten miles of I-94 in Minnesota, extending from Woodbury, MN to the Wisconsin state line, were finished in 1985. Bridge improvements to the Hudson crossing were also completed circa 1989 and again in 1995.¹ Considering St. Croix county growth trends before and after this local infrastructure improvement provides an additional historical perspective for the county.

These comparison projects are by no means exact duplicates of the St. Croix River Crossing, but they do provide important insights on growth patterns before and after a bridge improvement. In fact, population trends for each of the counties affected by the comparable bridge projects suggest similar pathways both before and after the completion of a bridge improvement (Figure 2). If a county was growing at a rapid rate prior to a bridge improvement, then it tended to continue growing at a similar pace after its completion. Similarly, if a county experienced limited growth rates before the bridge project, it continued to have lower growth afterwards.

¹ A description of these improvements is available at: www.johnweeks.com/bridges/pages/sc02.html

Figure 2 – Population Growth Trends in Comparable Counties with Bridge Projects



Source: Bureau of Economic Analysis and Author’s Calculations

The population trends before and after a bridge improvement are somewhat confirmed by research on population growth impacts arising from highway expansions. Enhanced or new highways in suburban areas generally have a positive influence on population and economic growth, as they allow residents better access to urban job opportunities and amenities. However, population growth in a community located near a highway expansion is also influenced by its historical growth trend and by the growth rates in neighboring municipalities. That is, communities that have been growing from a historical perspective tend to keep growing. Furthermore, a community that is surrounded by other growing communities also tends to gain population. Expanded highways facilitate this growth by allowing residents to easily move among communities and respond to regional housing prices or quality of life factors.²

Population trends in communities experiencing an infrastructure improvement suggest two important conclusions for St. Croix County. First, the River Crossing will likely impact the county’s future growth path, but does not necessarily guarantee a faster future rate of growth. Both the county and Corridor communities are tied to historical trends and influences from surrounding areas that must be considered. Second, growth in the Corridor will likely be affected by decisions in neighboring communities. Because the River Crossing will facilitate better traffic flow, decisions

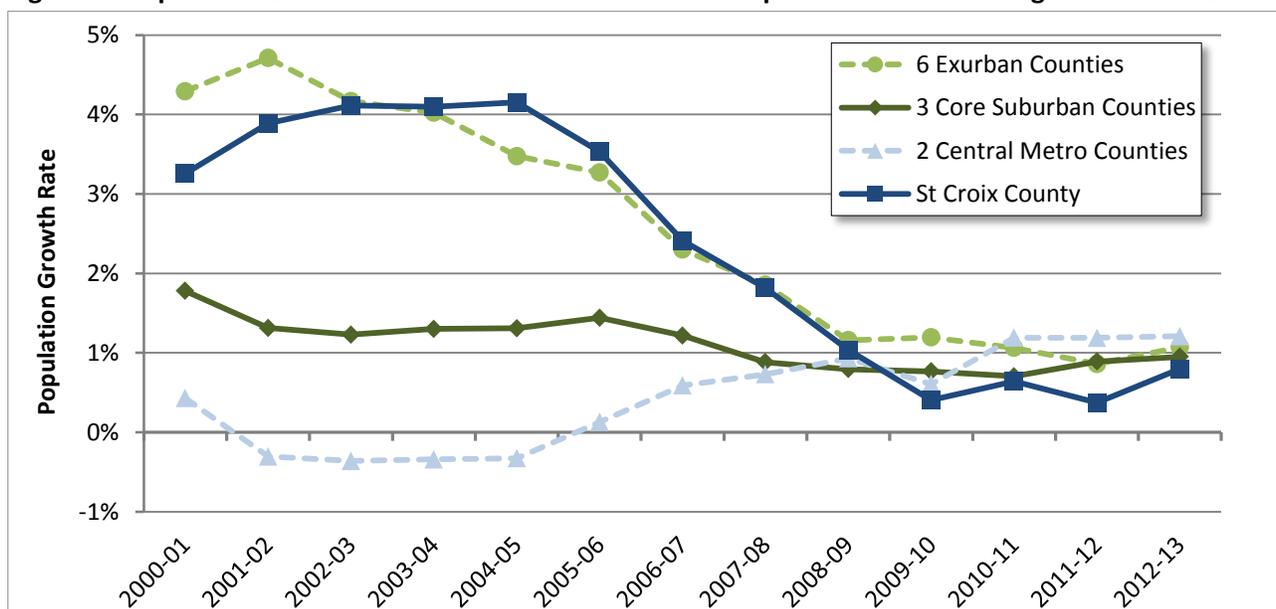
² See Chi 2010

that discourage development in one community may push growth into neighboring municipalities (and vice versa). Improved connections will also strengthen the social, economic and physical ties among these communities, on both sides of the St. Croix River. Corridor communities will need to communicate and collaborate with each other to understand how their decisions and actions may influence overall growth patterns in the Corridor.

Key Finding #2 - Population growth trends in the county and metro area are changing. These growth trends are influenced by several larger demographic and economic shifts. The trends suggest that it is less likely that St. Croix County will return to the growth rates experienced in the 1990s and 2000s, even with the improved crossing.

Several trends potentially affect future population growth rates in St. Croix County. As suggested earlier, a community’s population growth is partially tied to its historical trends and patterns in neighboring areas. Consequently, future population growth in St. Croix County should consider population change in the Minneapolis-St. Paul-Bloomington MSA. Overall, the metro area’s population growth rate is slowing. Growth patterns within the metro area are also changing. Suburban and exurban growth rates have seen notable declines since the early 2000s (Figure 3). Similarly, St. Croix County’s population growth rate started slowing in the mid-2000s. In contrast, core counties in the MSA are now growing at either faster or similar rates as exurban and suburban counties.

Figure 3 - Population Growth Rates for Counties in the Minneapolis-St. Paul-Bloomington Metro Area



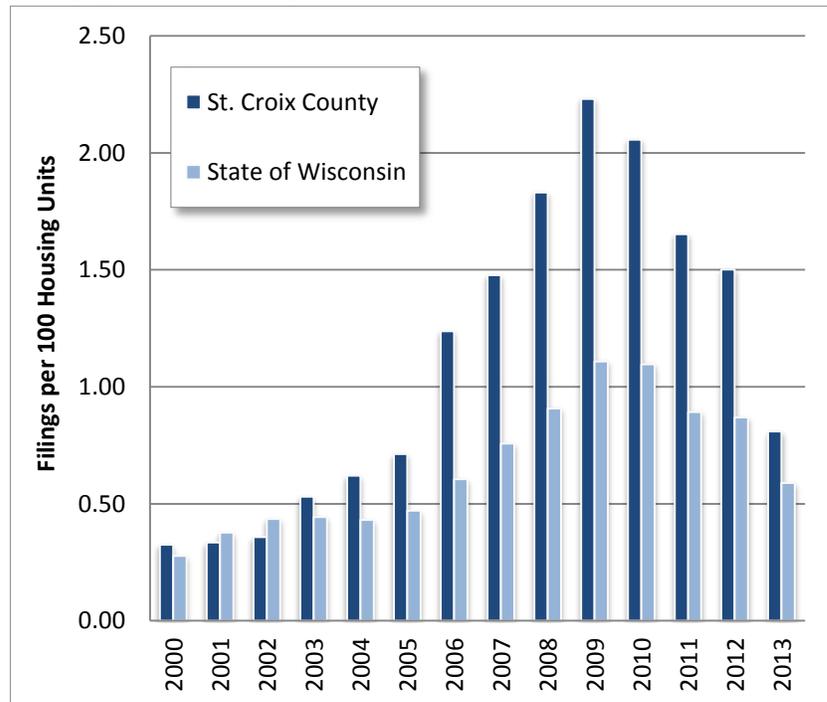
Source: Gillaspy Demographics

Several factors are driving these growth patterns. Certainly, residual effects from the Great Recession may be responsible for some of these changes. Employment in the sixteen-county metro area is just now reaching pre-recession levels. Uncertainty in the job market likely contributed to lower mobility rates among metro area residents over this period. The local housing market in St. Croix County is completing a recovery from some of the highest foreclosure rates in the State of Wisconsin (Figure 4). The Minnesota State Demographic Center also reports that birth rates in Minnesota peaked in 2007 and have yet to return to pre-recession levels. Furthermore, some research suggests that rising student debt levels are negatively impacting homeownership; although the exact impact of student loans is debatable.³

Some of these trends are likely temporary and could change as the economy continues to improve. However, metro area population growth slowed before the onset of the recession in December 2007. St. Croix County’s in-migration rate and overall population growth rate decelerated prior to the recession as well. Instead, these trends are partially due to larger structural changes in the metro area’s population that suggest slower population growth rates into the future. Of particular interest to St. Croix County is the future number of residents age 30 to 39 in the metro area.

Over the past two decades, the 30 to 39 age group was responsible for high net in-migration rates to St. Croix County. Many of these individuals moved to St. Croix County from other communities in the metro area, reinforcing the population growth connections between the county and the broader metro area. The inflow of individuals in this age group likely reflects local housing availability and community attributes (school quality, open space, etc.) desired by individuals in this life stage. As Baby Boomers aged, the number of metro area residents between the ages of 30 and 39 grew dramatically between 1980 and 2000. However, this age group is currently smaller in

**Figure 4 – Foreclosure Filing Rates 2000 to 2013
(Filings per 100 Housing Units)**

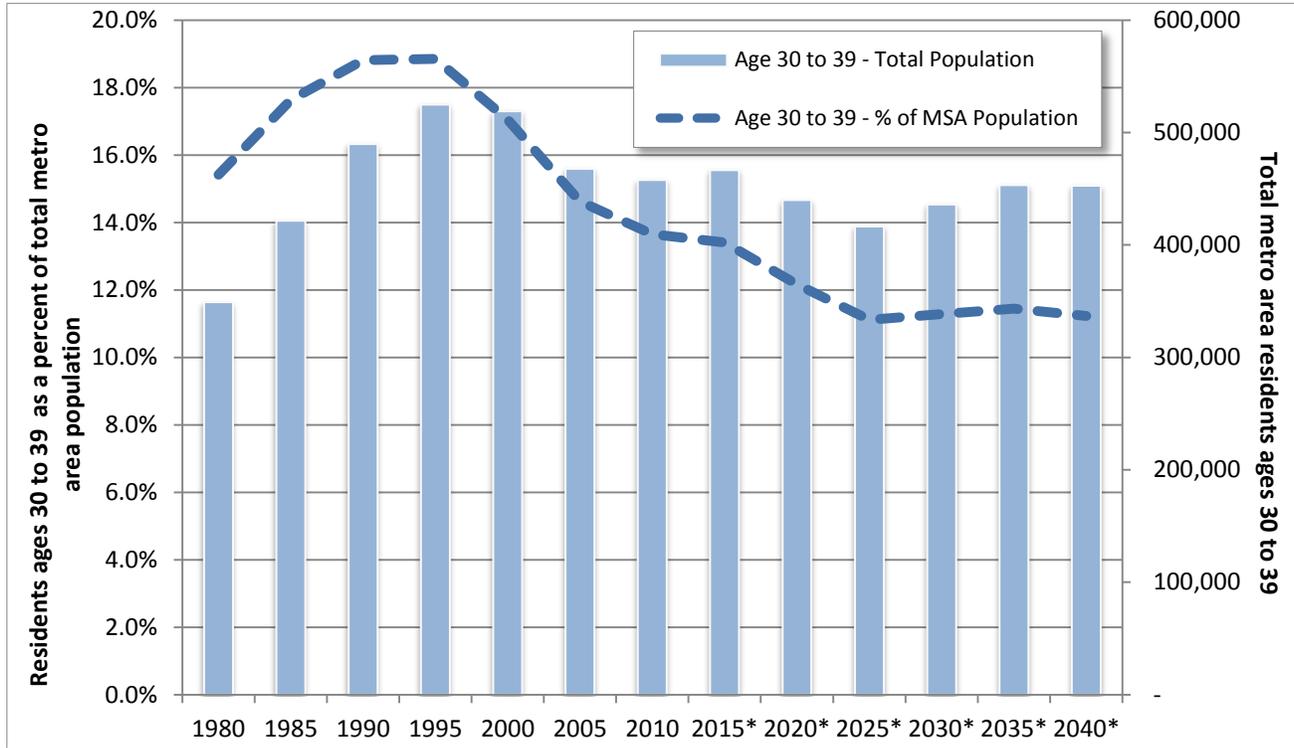


Source: UW-Whitewater Fiscal and Economic Research Center and UW-Extension Center for Community and Economic Development

³ For one summary of this debate see Brown et al 2014 and Akers 2014

the metro area than in decades prior, reducing the size of this key demographic segment. In fact, the number of residents in this age group is projected to reach a 40-year low by the year 2025 (Figure 5). Subsequently, consumer demand from these individuals will decline as well.

Figure 5 – Trends in the Minneapolis-St. Paul-Bloomington Metro Area Population Ages 30 to 39



*Denotes population projection. Sources: U.S. Census Bureau, Minnesota State Demographic Center, Wisconsin Department of Administration Demographic Services Center and Author’s Calculations

The numbers depicted in Figure 5 suggest that the 30 to 39 age group will grow again after 2025. Nonetheless, the size of this age group is not projected to reach the peak values found in the period between 1990 and 2000. Furthermore, there are questions about the housing and locational preferences of these future householders. The Millennials that will comprise this future age group currently show older ages of first child bearing and household formation than prior generations. They may prefer renting rather than homeownership. Millennials also may desire housing units located in more urban settings with access to public transportation. These preferences are somewhat debatable and may be subject to change, but should at least be considered by St. Croix County and Corridor communities.

Finally, the region is aging. Older residents tend to have lower mobility rates which could result in a relative reduction of household moves over the long term. These individuals may also have a growing desire to live closer to services and amenities that reduce their dependence on automobiles. Capitalizing on the needs of an aging population, as well as the housing preferences of Millennials, will likely require Corridor communities to cater to these age groups.

Key Finding #3 - Despite projected slower growth rates, the population in St. Croix County and Corridor communities likely will continue to grow pending a dramatic change in the regional or national economy.

An anticipated slower population growth rate does not mean that St. Croix County communities will not continue to grow. The River Crossing likely will facilitate continued growth, albeit at a lesser rate than experienced in the late 1990s and early 2000s. Under several different scenarios, population projections show growth for St. Croix County and the combined Corridor communities for the period between 2015 and 2040. Based on these projections, St. County is estimated to add between 19,000 and 31,000 residents over this 25-year period. Corridor communities are projected to add between 6,100 and 10,300 residents (Figure 6). Importantly, these figures are only projections based on current trends and anticipated changes to the region’s population structure. They are subject to future change and revision.

Figure 6 – Projected Corridor Community Populations

Year	Official State of Wisconsin		Alternative Growth Model	
	Total Corridor Population	Change from Prior Period	Total Corridor Population	Change from Prior Period
2010	29,993	N/A	29,993	N/A
2015	31,412	1,419	31,412	1,419
2020	34,215	2,802	32,403	990
2025	36,781	2,567	33,748	1,345
2030	39,225	2,444	34,993	1,245
2035	40,698	1,473	36,416	1,423
2040	41,747	1,049	37,547	1,131

Sources: Wisconsin Department of Administration Demographic Services Center and Gillaspay Demographics

Key Finding #4 - Population projections are not absolute, but should instead provide guidance for policy development.

While St. Croix County and the Highway 64 Corridor are likely to add residents, individual communities need to decide if they want to grow and how they want to grow. Communities have an opportunity to shape growth within their boundaries using tools to promote or discourage development. The individual tools used need to be prioritized within each community, but can include: zoning ordinances; marketing initiatives; financial incentives; lot size restrictions; and statutory language. As previously suggested, communities can also encourage residential and commercial developments that target specific demographic segments such as Millennials and Baby-Boomers who want to remain in a community as they age.

Individual communities have the opportunity to shape growth locally. However, communities along the Corridor will also be influenced by the actions and decisions of their neighbors. Again, local governments should carefully consider the influence of decisions and conditions in neighboring communities during their planning processes. School districts may be especially impacted by these decisions as their boundaries do not coincide with municipal borders. Consequently, communities in the Corridor should remain in communication and collaborate to some degree.

Population projections are subject to change. Therefore, communities should strongly consider benchmarking key local indicators. Tracking building permits, traffic counts, school enrollments, demand for government services, real estate transactions, emergency calls and other socio-economic data can help communities understand local change in a timely manner. Changes to one or many of these measures may indicate a need to revise projections or alter local policies.

Key Finding #5 - An improved river crossing will increase access to jobs in the region, but Corridor communities will also need to attract and retain residents on the basis of other local economic and quality-of-life characteristics.

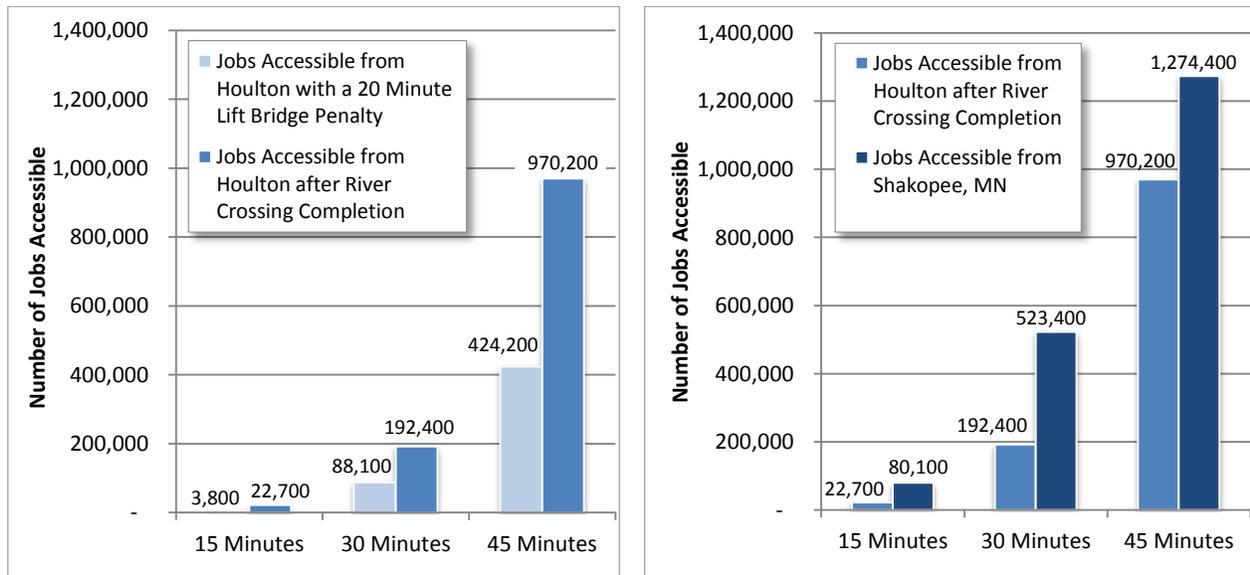
Commuting times and accessibility to jobs are commonly cited factors that influence where an individual or household decides to live. The importance of the River Crossing as a transportation link for commuters is well documented. Approximately 47 percent of the jobs held by residents of the Corridor are located in the State of Minnesota. A similar share of employed residents in all of St. Croix County also crosses the state line for employment. Not all of these workers use the River Crossing, but previous studies and anecdotal information suggest that current crossing conditions at the Stillwater Lift Bridge can increase travel time by 15 to 20 minutes during peak periods. Every commuter does not necessarily face this delay on a daily basis, but these longer trip times may have a larger impact on commuters' psyches than their average travel times. Consequently, reducing travel time by 20 minutes during these bottleneck periods could reduce peak-period commuting times; improve accessibility to jobs; and potentially create an additional incentive for workers who want to reside in Corridor communities.

While the exact impact of an expanded crossing will vary by worker and location, estimates of employment accessibility before and after the completion of the River Crossing do suggest broad improvements. When removing a 20-minute travel penalty for crossing the Stillwater Lift Bridge, the number of jobs available within a 15-minute drive of Houlton increases from almost 3,800 to 22,700 during a morning commute. Within a 30-minute drive time, the number of accessible jobs rises from 88,100 to 192,400. Furthermore, the number of jobs accessible within a 45-minute drive of Houlton increases from 424,200 to 970,200 (Figure 7). These increases result from workers having greater access to jobs in dense employment centers found in the interior of the metro area. Increases in job accessibility stemming from an improved crossing also arise in other communities along the Corridor. However, these increases occur at lesser rates for those communities further from the Crossing (such as New Richmond) due to their additional distance.

While increased accessibility will be an asset to commuters, the importance of commuting time in residential location decisions is just one of many factors weighed by prospective residents. A large amount of research suggests that community, household and socio-economic factors such as school quality, crime rates, income levels, presence of children, ethnicity, multiple worker households, and mode of commuting (by car, public transit, etc.) influence residential decisions as much as job accessibility (if not more). Subsequently, the increased job accessibility generated by an improved river crossing will be just one of several factors potential residents consider when making a joint residential-work location decision. Corridor communities will need to offer other characteristics and amenities desirable to the residents they are trying to attract and/or retain.

Furthermore, the increased accessibility created by the new crossing may still be less than that of other communities in the metro area. As an example, compare the number of jobs available within 15, 30 and 45-minute drive times from Houlton, WI and Shakopee, MN during a typical morning commute. Shakopee is compared here as it sits at the base of the Bloomington Ferry Bridge in Scott County, MN and is regularly offered as a potential comparable community for Corridor municipalities. Even after the completion of the River Crossing, the number of jobs accessible from Shakopee during a typical morning commute remains greater than the number of jobs accessible from Houlton (Figure 7). Again, increased accessibility stemming from the River Crossing will be beneficial, but Corridor communities will compete on other criteria as well.

Figure 7 – Job Accessibility Comparisons – 15, 30 and 45-Minute Drive Times



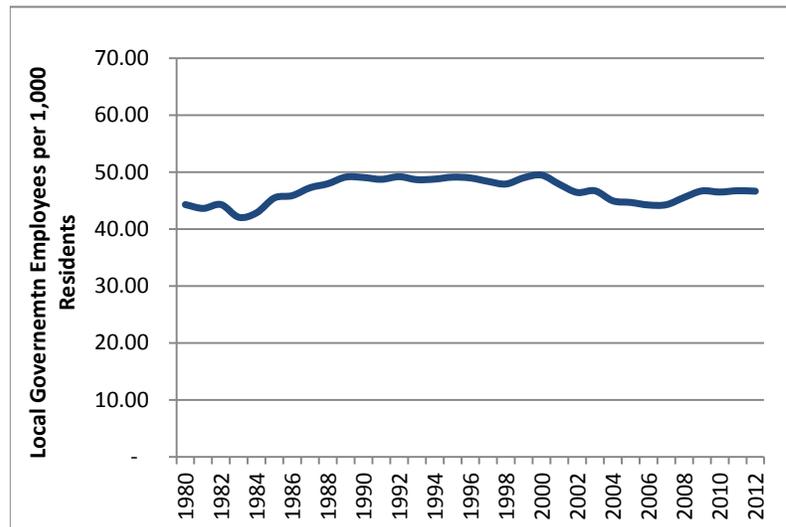
Source: U.S. Census Bureau LEHD and Author's Calculations

Key Finding #6 - Population growth will drive support for additional retail, hospitality, health care, construction, and real estate services. However, this growth will also create new demand for government services that must be considered.

New residents to St. Croix County will bring additional demand for a variety of goods and services. Depending on the specific population projection used, new resident income in the Corridor could support 750 to 850 private sector jobs in these aforementioned industries over the next decade. Furthermore, new residential construction may support 120 jobs for every \$10 million in construction value. Importantly, the potential impacts from these new residents are based on current spending patterns among households in the Corridor. If the household incomes and spending tendencies of future residents differ from current distributions, these figures are subject to change. Furthermore, sales tax receipts from St. Croix County currently suggest large levels of spending leakage in many retail categories. Retaining the spending impact generated by new households will require offering the goods and services desired by these individuals. Otherwise, spending may occur elsewhere in the region.

Additional residents to corridor communities and St. Croix County will generate new revenues for local governments. However, these additional revenues must be considered in the context of additional costs that come with these residents. New residents or businesses may place additional demand on protective services, school districts, or physical infrastructure. Over the past two decades, St. Croix County has supported 45 to 50 local government employees for every 1,000 residents (Figure 8). *Importantly, these figures include local government employees across all municipalities in St. Croix County, not just county government itself.* Accordingly, the figures include employees of school districts, protective service units, public works departments, and general public administration. As the population of the county increases, it is likely that the need for additional local government employees and expenditures will rise as well.

Figure 8 - Number of Local Government Employees per 1,000 Residents (All Local Government Units in St. Croix County - 1980 to 2012)



Sources: Bureau of Economic Analysis and Author's Calculations

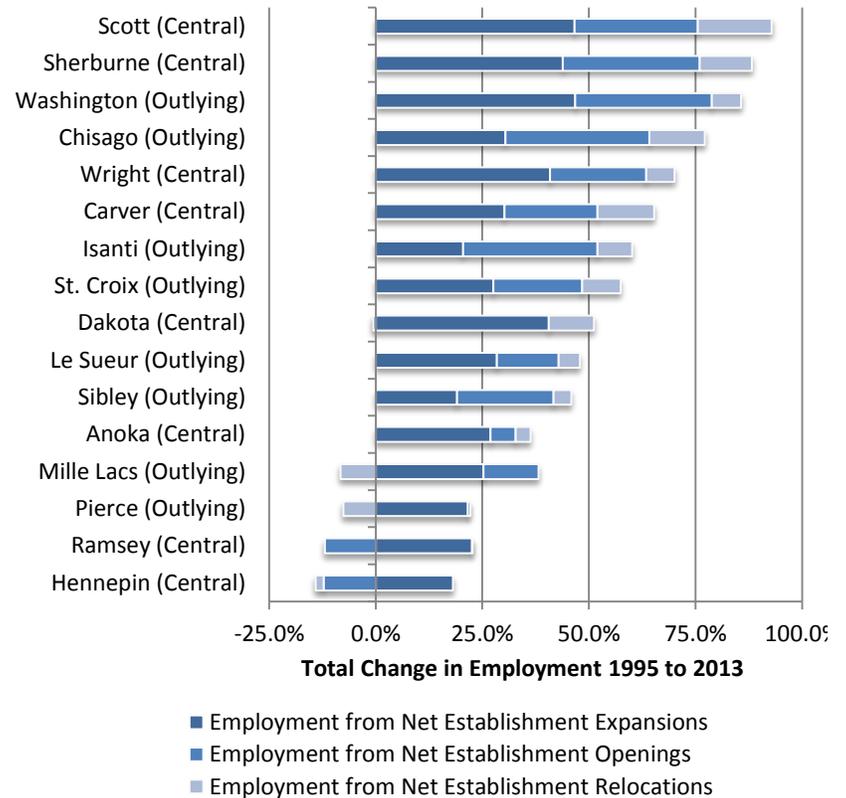
Key Finding #7 – New economic development and activity likely will occur in an incremental manner. The relocations of large firms to the Corridor based solely on the bridge are less probable.

Infrastructure improvements contribute to economic growth by reducing the costs of transporting goods; by allowing companies to maintain smaller inventories and improve just-in-time delivery operations; and by enabling businesses to more efficiently draw supplies and labor from a wider area. Along with access to skilled labor and state/local financial incentives, highway access also is often among the top site selection criteria for establishments seeking new locations. Regional companies, workers and communities will likely realize many of these potential benefits from the St. Croix River Crossing. However, these benefits are more likely to be incremental in nature, rather than those arising from large scale firm relocations to Corridor communities.

Incremental growth in Corridor communities is expected for several reasons. First, most employment growth in the region (and nationally) is driven by net employment gains generated by new startups and through the expansions of existing companies (Figure 9). While job growth from firms relocating to a county or community do occur, they tend to contribute a much smaller share of employment growth than the net new jobs created by establishment expansions or new establishment openings (i.e. start-ups).

Furthermore, most firm relocations are executed by smaller firms, rather than those employing 100 or more employees. Consequently, Corridor communities seeking to attract relocating firms might better benefit from providing commercial space to smaller businesses and entrepreneurs. Economic development agencies and organizations should also connect these smaller firms to the resources they likely need including broadband services, technical assistance, workforce development, and access to capital.

Figure 9 – Percent Employment Growth for Central and Outlying MSA Counties (Components of Growth from 1995 to 2013)

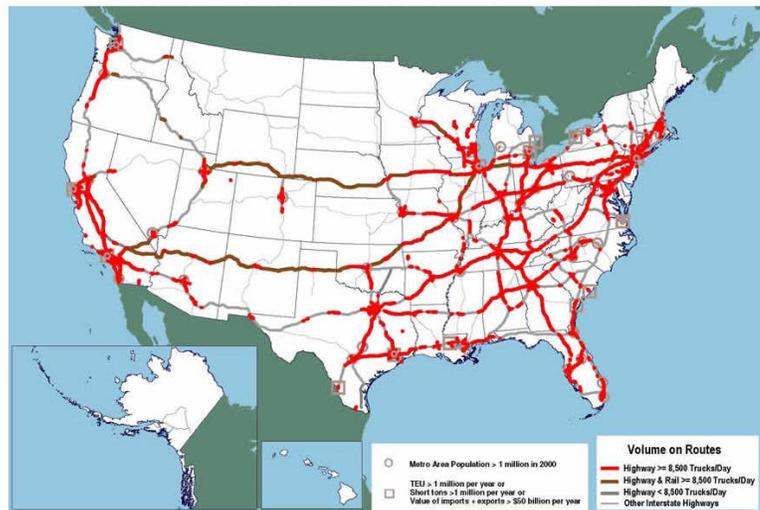


Sources: National Establishment Time Series Database and Author’s Calculations

Corridor communities should also anticipate incremental growth as the major freight corridor from the metro area travels southeast rather than west (Figure 10). Consequently, the River Crossing itself does not necessarily provide a comparative advantage for transporting freight out of the region in this direction. While the River Crossing may alleviate traffic congestion, firms looking to distribute goods to the southeast will either be in Minnesota and less directly benefit Corridor communities, or already will be in Wisconsin and not depend on use of the new crossing. Firms primarily exporting goods to western markets have locational options on the west portion of the metro region that do not require traversing the urbanized area.

Importantly, the River Crossing does provide better intra-metro access, for both commuters and products. Better access to communities and customers in the Minneapolis-St. Paul-Bloomington MSA could provide opportunities for a large number of wholesale categories that cater to customers in local trade areas. Manufacturing firms who depend on just-in-time delivery to customers, such as metal and plastic fabricators, may also benefit from the Crossing.

Figure 10 – Major Freight Corridors



Note: Highway & Rail is additional highway mileage with daily truck payload equivalents based on annual average daily truck traffic (2011) plus average daily intermodal service on parallel railroads. Average daily intermodal service is the annual tonnage moved by container-on-flatcar and trailer-on-flatcar service divided by 365 days per year and 16 tons per average truck payload.
Source: U.S. Department of Transportation, Federal Highway Administration, Office of Freight Management and Operations, 2013

Improved access for commuters also could provide better access to human capital and talent concentrations in the Twin Cities. It is important to remember that the River Crossing travels in both directions. As previously mentioned, approximately 47 percent of the jobs held by Corridor community residents are located in Minnesota. However, only 10 percent of jobs located in the Corridor are filled by Minnesota residents. The metro area has one of the highest levels of educational attainment among all large metro areas in the United States. The metro area also has concentrations and specializations in occupational clusters related to information technology; mathematics, statistics, data and accounting; managerial, sales, marketing and HR; engineering and related sciences; and other technology-based professions.

Many of these occupations are concentrated in industry sectors related to professional, technical scientific services, and financial services. Nonetheless, St. Croix County has a lower share of employment in these industries than the metro area as a whole. There are good reasons for these employment differences, but there may be an opportunity to build these industries locally

through improved access to talent, available land, and lower costs of doing business created by the River Crossing.

The 4.7 mile bike and pedestrian trail loop constructed as part of the River Crossing also has an opportunity to create economic benefits for local communities. Research suggests that trails are a desirable amenity for potential home buyers. Proximity to trails may add to home values, which in turn boosts local property tax revenues. Economic impact analyses also show that trails can generate spending in local businesses when leveraged properly.⁴

As with other economic impacts of the River Crossing, the benefits of the trail loop in St. Croix County also are likely to be incremental. Downtown Stillwater has many more existing businesses to benefit from trail user spending than are currently found in the Town of St. Joseph. Trail users who are local residents also tend to spend less on goods and services than users visiting from outside the region. Over time, better connections among the trail loop; regional trail systems; and trails identified in local outdoor plans may help to attract non-local users who are seeking a more extensive recreational experience.⁵ If appropriate and feasible, business development along the trail loop may also aid in capturing user spending. Creating a specific marketing and business development plan targeting trail users could further assist in leveraging this new amenity.

In conclusion, an expectation of incremental economic development does not mean that communities should be unprepared to accommodate large firms or other sorts of development not identified in this analysis. As with population growth, communities have an opportunity to influence economic development through specific strategies and leveraging local assets. If attracting large firms is a goal, then initiatives can be developed to do so. The information in this study is intended to be used in crafting economic development strategies that best fit the needs of individual communities, the county and the region.

⁴ For several summaries of trail impacts, see: Weigand 2008, Asabere and Huffman 2009, and Venegas 2009.

⁵ These plans include the *Town of St. Joseph Outdoor Recreational Plan* and the *St. Croix County Parks and Recreation Bicycle and Pedestrian Plan*