The Economic Development Impact of Annexation

January 2005

Prepared by:
Wisconsin Economic Development Institute, Inc.
This Landsat-7 satellite image shows the cities of Neenah, Menasha, Appleton, and Kaukauna, located at the northern end of Lake Winnebago and along the Lower Fox River. The portion of the Fox River between Lake Winnebago and Green Bay has 12 dams, and is home to the world's highest concentration of pulp and paper mills. This image was acquired by Landsat-7 on July 27, 1999. (Image and description courtesy University of Wisconsin-Madison Remote Sensing Center and WisconsinView.)
January 2005

The Economic Development Impact of Annexation

A report prepared for the ad hoc Committee on Annexation working With the Joint Legislative Council Special Committee on Municipal Annexation

Prepared by:

Roger M. Nacker, Ph.D., President Wisconsin Economic Development institute, Inc.

Sponsored by:
The Economic Development Impact of Annexation

Introduction

Discussions of municipal boundaries are usually arcane and of little interest to anyone. Changes to these boundaries, however, are often highly controversial and emotional because they can have direct “pocket-book” impacts on individuals, especially through taxes. Annexations are the most common form of boundary changes. For such an often-controversial process, relatively little is known about its economic development impacts. This report will provide a summary of such impacts in Wisconsin.

Annexation

The incorporation of land into an existing community that results in a change in the community’s boundary, annexation generally refers to the inclusion of newly incorporated land but can also involve the transfer of land from one municipality to another. Or, more simply and most often, annexation is the process that transfers territory from towns to incorporated cities and villages.

Other Boundary Changes

Boundary changes due to incorporations and detachments also occur. Although annexation continues to be the most prevalent method for boundary adjustment, boundary agreements, as an alternative form of border change, are being used more often. They may or may not result in future annexations but usually preclude litigation.

State Annexation Review

A public interest review by the Wisconsin Department of Administration (DOA) is conducted if the proposed annexation is in a county with a population of 50,000 or more persons. Since 1959, in the state’s public interest review, DOA has examined the shape of the territory to be annexed, the legal description and scale map, the relationship of the territory proposed for annexation with the annexing jurisdiction, and the governmental services to be supplied. The Department’s finding is only advisory on the annexing city or village, but must be considered in any decision. Currently, this review applies to 28 counties, which contain 80.2% of the total population (over the last four years), almost mirroring the number of annexations subject to review out of the total in the state (80.1% over the last 13 years). As population growth rates have increased in less populated counties, these percentage has been decreasing. A map showing, which counties are under DOA review, is in the Appendix.
Over the last 13 years, the number of annexations has averaged 411 per year (Figure 1) (WI DOA).

**Agency of Record**

Upon adopting an annexation ordinance, a city or village must immediately file a certified copy with the **Office of the Secretary of State**, which then communicates the change in boundaries to state and federal agencies. DOA uses this information for population estimation, which is an integral part of Wisconsin’s revenue sharing programs. While crafted initially to support the distribution of state revenues, the population estimates are now used in at least 19 official state functions and many other state processes.

**Economic Development**

Economic development (ED) is a term commonly heard these days but it is an important concept that is often misunderstood.

**What is Economic Development?**

Economic development is the **process** by which a community **organizes** and then applies its energies to the **tasks** of improving the **economic well-being and quality of life** for the community. Economic development is an **investment** in the community.

**Why Should You Be Concerned About Economic Development?**

The reasons are quite basic. Economic development helps **pay the bills**. Economic development is about **working together to maintain a strong economy** by creating and retaining **desirable jobs**, which provide a **good standard of living** for individuals, thereby **increasing the tax base**, so a community, county or state can provide the **level of services** residents expect.
Does Economic Development Really Matter?
A community needs ED in order to help pay for growing citizen wants, to retain and grow existing businesses, to attract new business and investment, to nurture local entrepreneurs (start-ups) and to replenish income lost by dollar “leakage” out of the community through the purchase of goods made elsewhere. Job growth and maintenance in local basic industries (which produce goods and services sold outside the area) brings new dollars into the community. New dollars invested or spent in a community generate more economic activity, creating a “multiplier” effect. The higher the multiplier, the greater is the effect on the local economy. The same applies for new jobs in the community. Multiplier total impacts commonly fall in the range between 1.5 and 3. Subsequently, the total community impact of new dollars or jobs can be up to triple the amount of the original amount.

Property Tax Revenues from Economic Development
Similarly, new capital investment in real property generates a continuous revenue stream through property taxes. At the average rate for Wisconsin cities, one million dollars in new business or residential property produces annual property tax revenue of $22,650 (statewide average effective full-value rate). Vacant and underutilized property can generate the opposite result through unpaid or underpaid taxes.

Due to these dynamic circumstances, if there is no mechanism to foster growth and positive change, the alternative is community economic stagnation and decay.

The Current Situation
Annexation deals with the relationships between local governmental units. All annexations are transfers of land from towns to either villages or cities (mostly cities, see Appendix). Other type of boundary changes such as detachments can result in land being transferred back to towns from cities. In 2002, there were a large number of detachments (32), most of which (24) were associated with land transfers from the City of La Crosse to the Town of Campbell. Otherwise, there are only a handful of detachments each year.

Relative Areas and Population
Wisconsin currently has a fairly large number of local governmental units, compared to other states. As of January 1, 2002, the state had 190 cities, 395 villages and 1,265 towns. Cities have over half of the state’s population but only 2.8% of the land area. Towns have most of the land area (96%) and roughly a third of the population (Figure 2.) (WI Bluebook).
Annual Annexation Size

Over the past 17 years, reviewed annexations to cities and villages have averaged just over 46 acres in size (Figure 3.). Since reviewed annexations are 80% of the total, expanding this number to all annexations yields approximately 18,943 acres per year. Is this a lot of land? It depends on your perspective.
**Land Use**

Total urban land use in Wisconsin is about 2% as shown in Figure 4.

Even if we consider villages as urban, the percentage increases to roughly 4%. Adding the newly annexed land is an annual increase of 0.08% in urban land use. At this rate of growth, it would take well over 100 years to double the amount of urban land.

**Wisconsin is Growing**

Over the last 10 years, Wisconsin’s population has increased annually by an average of 43,137 people. Statewide, Wisconsin has grown at about 2.0% per year, which is relatively slow among the states, as the national average has been 3.3% from 2000 to 2003.

The number of households in Wisconsin has increased by an annual average of 31,798 since the last census. The increase in households roughly corresponds to the estimated average growth in housing units over the same timeframe at 35,398. This growth in population is equivalent to adding a new City of Fond du Lac every year. However, between 2000 and 2025, the number of households in Wisconsin is expected to increase by nearly 508,000. In percentage terms, households will increase faster than the total population due to an increase in the number of persons living alone and an aging population in smaller sized households. *(Source: WI DOA Municipal Population Estimates).*

**What Happens With Annexation?**

Cities and villages annex additional land area to deal largely with the needs of population growth. More people means a need for more homes, more business investment, more jobs and more services. Hence, there is a
need for economic growth and development. And, this process has been used by growing cities for many years. The City of Madison grew by 28,796 people during the period between the 1990 and 2000 Censuses, as it continues its rapid growth. The city has also grown in geographic size from 36.3 square miles (not including water) in 1960 to 68.7 square miles in 2002. Population increased by 68% during those forty plus years (Source: U.S. Census Bureau and WI DOA).

Annexation of Uninhabited Land

Most of the land currently being annexed throughout the state is vacant, uninhabited land. Two-thirds of all annexations are of land with no inhabitants. Expanding that to one household properties (approximately 2-3 persons involved, an average household in the state is 2.5 people in size) increases the annexations involved to 92% (Source: DOA Boundary Change Data). Obviously, this is largely undeveloped land being acquired by cities and villages. This is confirmed by a survey of Wisconsin Economic Development Association (WEDA) members conducted for this study. Of lands reported being annexed for economic development purposes, the majority stated pre-annexation land-use was for farming or the land was idle.

Since 2000, only seven annexations have involved more than 50 persons each. The two largest of these were annexations to incorporations, which had occurred within the previous year.

All six of the incorporations in the last four years involved more than 4,000 people each. All of these resulted in the emergence of new villages.

Most detachments also do not involve more than a few people.

Accommodating Population Growth

If the increase in Wisconsin’s population every year uses only the land annexed, this would yield a population density of 1,047.55 persons per square mile. This is similar to the City of Oak Creek and is slightly lower than the average for all cities at 1,505.7 persons per mile (Figure 5.).
Relative Real Estate Values

Obviously this does not occur and people move to and live in cities, villages and towns throughout the state. This dispersion is uneven and the value of real estate (land and improvements) per capita, also varies by type of political structure. The Wisconsin Department of Revenue (DOR) annually summarizes and publishes the equalized value of land and improvements by type of political subdivision. Dividing these numbers by the population in each type of local government, produces average real estate per capita values (Figure 6.). Towns have the highest real estate values per capita because they have the most land per capita.

Similarly, using the acreage figures by governmental type provides a comparison on the basis of land area. Towns have the most land, so the per capita figure is high even though value per acre is low (Figure 7.).
Making An Investment

Figure 7 also demonstrates that land within cities and villages is land with a large amount of capital improvements added to it. Most of this investment is for the provision of services such as sewer and water and transportation. These services are required improvements for residential, commercial and industrial development.

The amount of new construction in Wisconsin is not tabulated separately for annexations or in-fill. The DOR records the value of all new construction annually. Over the past five years, the annual average value of new construction has been $8,280,441,660 and is distributed as shown in Figure 8.

By type of civil division, cities and villages account for 52% of the residential construction and 87% and 88% of the commercial and manufacturing construction, respectively. The remainder is in towns.

The DOR figures do
report separate values for land as improved and the value of improvements added to the land. For residential, improvements were 89% of the total new construction value, commercial was 89% and manufacturing was 99%.

That annexed land has a substantial amount of improvements is confirmed by the WEDA survey. Because responses were concentrated in the SE portion of the state, the figure of economic development improvements for manufacturing and business/office use is almost $315,000 per acre.

Tax incremental financing is often used to finance commercial and industrial projects on land being annexed, especially in Wisconsin’s small to medium-sized cities. The “growth index” measuring the increase in equalized value of property within the financing district has averaged over 500% in all completed TIF projects and averages over 300% in TIF financed projects being developed (Wisconsin Dept. of Commerce).

Looking at residential development, the 2003 median sales value of new homes in the Midwest is $184,300 (U.S Census Bureau). At an average of 3 to 4 units per acre, the total value is approximately $645,000 per acre. Four units per acre is also a planning standard used by the Southeastern Wisconsin Regional Planning Commission (SEWRPC) for medium density housing. SEWRPC has been publishing land-use standards studies for several decades

Extrapolating these results according to the proportions of manufacturing/commercial and residential new construction and applying these proportions to the annual, total annexation areas means that ultimately these acres would amount to over $10.3 billion in new development, when complete.

Creating Jobs and Income

Initially, the capital expended through such construction has a “multiplier” effect (described earlier) in the range of 2.8 jobs per $ million of output. That is, 1.8 construction-related jobs are created in addition to each construction job. This is the average construction employment multiplier for Wisconsin from Implan®, an input/output econometric model often used to analyze economies. This is the average number of jobs created for all types of construction.

These numbers are similar to the national averages used by the National Association of Home Builders (NAHB) “The construction of 1,000 single-family homes generates: 2,448 jobs in construction and construction-related industries, approximately $79.4 million in wages, and more than $42.5 million in federal, state and local tax revenues and fees. Construction of 1,000 multifamily homes generates: 1,030 jobs in construction and related industries, approximately $33.5 million in wages, and more than $17.8 million in federal, state and local tax revenues and fees.”
Interestingly, the permanent **jobs created** number (after land sale, development and business location/expansion) from the WEDA survey **averages 11 per acre** which is surprisingly close to the SEWRPC land-use planning standard of a minimum of 9 jobs per acre. This figure is for jobs created as a result of investment in commercial and industrial facilities.

Again, using the total amount of annexed land per year, the capital investment per acre by type and tabulating only directly created jobs, **over 10,300 jobs** are generated on-site. Using the multiplier for direct and indirect (off-site) jobs, the total is **28,960 Wisconsin jobs** directly related to the development of the annexed acres.

Additionally, upon completion, the commercial and industrial development could be expected to provide **62,500 permanent jobs**, on average. This number seems to be inordinately large on an annual annexation basis. However, for just one firm, MLG, according to its Chairman J. Michael Mooney, “a conservative estimate is $644,000,000 in current tax base producing $16,000,000 annually in property taxes and 22,000 jobs producing $900,000,000 annually in payrolls has been created so far in land annexed and developed as business parks by our organization. … Upon completion of existing MLG projects those numbers will nearly triple.”

**Summary**

While annexation disputes are often characterized as **turf battles** for property tax revenues, more economic issues are involved. Annexations are often loosely lumped in with other boundary changes such as new incorporations. Turf battles are most often involved with inhabited, developed property in the formation of **new incorporations** in order to prevent annexation. As we have seen this is a much lesser number of occurrences, even though the amount of land and number of people involved are usually large. In **most annexations**, the transition from **undeveloped to developed land** involves the application of capital investment and labor to the land. Thus, **jobs and income are produced** while value-added is created to accommodate **population growth**.

It is through the dynamics of this economic process that jobs are created, income is generated and life styles are supported. Using an econometric model, a quantitative analysis was conducted in the only study found in a library search for analyses of the ED impact of annexation. A 2003 study done in Texas found that **overly restrictive annexation policy** would **constrain economic development** to the extent that the entire statewide economy would suffer (The Perryman Group, 2003). The study concluded: “The capacity to annex emerging areas of development into a central city is often critical to the ongoing sustainability of a metropolitan area.”

Annexation is, obviously, about the ability of populated areas to accommodate, assimilate and service population growth. Disputing division of an existing economic pie is a much different process than baking a larger pie.
APPENDIX
Annexation Review in Wisconsin

Annexations by Type of Governmental Unit

- Villages
- Cities

*Annexations in counties with 50,000 persons or more must be reviewed by the Wisconsin Department of Administration. See section 66.021(6) of the Wisconsin Statutes.

**County population is based on 2003 estimates by the Wisconsin Department of Administration.
The Wisconsin Economic Development Institute, Inc. (WEDI) is a not-for-profit, non-partisan foundation formed to conduct research and education designed to increase the effectiveness of economic development efforts.

Wisconsin Economic Development Institute, Inc.
10 East Doty Street, Suite 500
Madison, WI 53703-3397
608/661-4626
Fax: 608/283-2589
www.wi-edi.org