APPLETON ECONOMIC DEVELOPMENT STRATEGIC PLAN

Prepared for the City of Appleton Community and Economic Development Office in partnership with Manheim Solutions, Inc. and Hopkins Solutions, LLC

April 9, 2015

Appleton: Meeting community needs…enhancing quality of life.

April 9, 2015

Ms. Karen Harkness
Director of Community and Economic Development
100 N. Appleton Street
Appleton, Wisconsin 54911-4700

Dear Ms. Harkness:

On behalf of the entire Manheim Solutions team, we are pleased to present the enclosed Appleton Economic Development Strategic Plan.

Thank you for the opportunity to experience Appleton firsthand and meet with its dedicated and valuable community members.

Best wishes on your community economic development work.

Sincerely,

Chris J. Manheim, CEcD, MA
President, Manheim Solutions, Inc.

Roger Hopkins
Hopkins Solutions, LLC

1 Introduction

Appleton has recovered admirably from the "Great Recession" as evidenced by a number of objective measures discussed in this report, such as an increase in building activity, a recovery of overall jobs, and a housing recovery and expansion. Appleton is also well positioned for future success in a new, different and emerging economic cycle referenced herein as the "New Normal". As new economic drivers reshape the global economy in the 21st Century, the competitive landscape at the local and regional level is tilting towards a new balance and creating opportunities for economies willing and able to embrace the change.

Appleton exists in such an economy, with a robust mix of both qualitative and quantitative strengths that will work together to drive local and regional competitiveness forward. Appleton's strategic location, density and quality of place, talented workforce, natural amenities, pedestrian areas, family-friendly neighborhoods, good schools, solid leadership from the public, private and not-for-profit sectors, and its overall clean, green and active lifestyle are each clear strengths for Appleton, and together they combine to give Appleton a compelling profile over many competing geographies at present. Going forward, these Appleton advantages also happen to be increasingly valuable as the economy, consumer preferences and lifestyle choices all experience concurrent adjustments into the New Normal. In other words, Appleton's portfolio of hard and soft assets is becoming more valuable as the 21st Century takes shape.

As a result, Appleton can lead from strength. Already Appleton consistently ranks high in surveys of best places to live—evidence of the present value of Appleton's physical assets and a testament to the public and private sector leaders who have managed the City well through the ups, downs, booms, bubbles and busts of the last several decades. Appleton's soft assets, such as its people, are considerable and equally as valuable as its well-built and richly resourced environment. For example, Appleton has a very strong education ethic in evidence throughout all the academic institutions and measures of elementary, secondary, career, continuing and higher education.

From here, Appleton's greatest opportunity in the New Normal is to build on its diversity of strengths and lengthen its lead. The City is young, educated, skilled, urban and relatively dense—but also with plentiful greenspace and blue water infrastructure in and around the City (including recreational opportunities downtown). Appleton combines both urban density and natural amenity in a substantial and effective way. The area's bounty of natural resources and outdoor activities will give added meaning to the term 'Paper Valley' long used to describe the area's robust economy (discussed in Sec. 6). And not only are these increasingly desirable features in today's environment, but difficult or impossible to replicate by Appleton's would-be competitors. Combining such a portfolio of characteristics in one place affords Appleton a significant competitive edge.

One of Appleton's greatest assets is a walkable downtown area. It is alive and a draw, with several anchors and assets successfully blended in close proximity along with a mix of uses including residential, retail, office, civic, social, education and cultural (including performing arts) as well as many great public and pedestrian spaces. As a result, Appleton is blessed with a diverse and lively mix of both daytime and nighttime activities. While many communities struggle to jump start their downtowns to lean into the New Normal's demand for greater convenience offered by denser, more bike and pedestrian friendly environs (for both residential and office), Appleton's downtown has graduated to advanced stages of development. And while the challenges of success are generally more available and manageable, they are no less consequential and often more sophisticated and nuanced requiring greater due diligence and effort—particularly in an evolving economy. After all, advanced dilemmas require advanced strategies.

Critically, the continued growth and sustained success of downtown Appleton is paramount not only for the City itself but its entire geography. The downtown heart of Appleton is also the heart of the entire region, as it lays at the geographic center of the population and economic cluster along U.S. 41 from Green Bay south around Lake Winnebago to Fond du Lac. Within this corridor of urban areas Appleton is not only centrally located but also home to the densest areas, indeed some of the densest population in the state. A wonder to some football analysts how the

Green Bay Packers can thrive in a "small" market such as the Green Bay area, the region's economic geography gives the answer: the true economic strength of the area is the entire Highway 41 corridor.[1] The many communities of the region offer the best of both worlds: small town charm but big market economics.

Relevant at many points in the analysis below, Appleton's regional centrality is a supreme geographic advantage for Appleton greatly benefitting its economy and businesses. Ideally placed in the heart of the retail market, for example, the Fox River Mall in the Appleton area is still a dominant regional player— even as the 'New Normal's' rebalance challenges many malls—thriving as the second largest mall in Wisconsin.[2] Though located in Grand Chute, it is most commonly associated with Appleton. Discussed in the Location Analysis below (Sec. 3) Appleton has the best strategic shopping location in the region, particularly along the U. S. 41 Corridor. The City's strongest retail segments include general merchandise, groceries and motor vehicles. Although with a 9 percent leakage rate, the City seems to have an opportunity to capture $700 million in sales that occur outside the Appleton MSA (discussed in Sec. 7).

Another opportunity for Appleton is to close the GDP growth gap. While leading the area and the region by a number of measures discussed in this report, one objective measure that is exhibiting slight underperformance is GDP growth. Generally, Appleton's growth has paralleled the country's recovery,[3] with Appleton just a small step behind. Goods producing industries, wholesale trade, construction, and health services and education have led the way. Retail trade, long a leader of the area, has seen erosion due to internet sales and other factors. At the regional level Appleton's pace of recovery has been below that of the state, and comparatively below the neighboring Green Bay and Oshkosh-Neenah metropolitan areas (Sec. 5). Again mirroring the national trend, the private sector has lead the recovery over the government sector job growth. Nevertheless, Appleton enjoys a low unemployment rate and recovery of jobs in many sectors of the economy. Like most of Appleton's strategic considerations, Appleton's opportunity is to take the next step rather than the first step.

Much of the analysis that leads to these quantitative observations was further supported by qualitative elements of this study, including survey and SWOT materials gathered from Appleton's business and community leaders—including many one-on-one interviews—which identified repeated mention of Appleton's many strengths. Going forward, both of these objective and subjective analyses point toward one unifying theme: Appleton's opportunities to grow and prosper are tied to its ability to continue to lead the region in business, education, culture, community development and economic development. .

The City of Appleton has proven itself the regional leader, with name recognition, a growing population, and strong growth in several important sectors, including goods-producing industries, wholesale trade, financial services (insurance), construction and healthcare. Furthermore, Appleton's large talented and hard working population provides the Laborshed for neighboring municipalities. Most substantially, its revitalized downtown has been called a "jewel,", which is also surrounded by neighborhoods with a generally high quality of place as well as robust natural and man-made amenities– all in a safe, walkable city that's easy to get around. These are excellent attributes to succeed in the New Normal's pivot towards convenience and quality, giving Appleton's built-environment a major head start over many competing communities. Community development is certainly a strong suit of the City of Appleton, and the cumulative successes of the City's steady progress over many years now shows marvelously in a stroll through downtown, or a bike ride through Appleton's neighborhoods. This progression of success not only gives Appleton the physical infrastructure and utility to compete today, but also lays the foundation to build even greater achievements that will drive Appleton's continued success into the 21st Century.

Very well located, Appleton is also the beneficiary of a well-developed and maintained regional infrastructure and geography: deep-water ports, air access, Class I rail, interstate class highways and utilities. (See Location Analysis,

[1] Winning numerous championships never hurts.
[2] A Packers' type of 'over-performance', again demonstrating the economic strength of the region.
[3] Which is leading other developed economies, given the U.S. the best recovery from the Financial Crisis so far.

Sec. 3.3) The location analysis also points out that, under the New Normal, urban areas like Appleton are attractive to the next generation of consumers and workforce. Sec. 4 details Appleton's attractive population that is young, educated, and skilled. This profile, along with a high quality education system, makes the City a natural target for much retail, commercial and industrial sectors—particularly new firms being created in today's rapidly evolving and innovative economy. These factors contribute to the city's strong trade analysis location quotient scores. (See Sections 5 – 7.)

Section 8 is a focused analysis containing advanced strategies about greater Appleton's foodshed development, as another potential target cluster, part of an Economic Gardening Strategy. Part of the New Normal's adjustment is greater global demand for food, driving prices higher and creating real economic opportunity for local food production for those geographies proficient (or capable) of agricultural production. Appleton's foodshed is already robust and growing—one more natural competitive advantage for Appleton in a hot, flat, and crowded century—as predicted by Thomas Freidman and many others. Once again, Appleton can lead from strength.

Already many private and not-for-profit individuals and organizations are actively remaking the local food system, including significant urban agriculture projects—aided by the City, which has opened plots of land for production. Research revealed a substantial cluster of local agriculture activity, and clear evidence greater Appleton's foodshed is already evolving as macro conditions adjust to the New Normal, such as an increase in the number of farmers markets and evidence of growth in small-scale, more intensive operations including vegetable and fruit production. This diversification is providing new opportunities for local economic growth. Combined with the traditional dairy and livestock production, the food sector promises to be a substantial economic driver going forward. A complete foodshed location analysis, the possibility of a shared use kitchen, co-ops and incubators are discussed in-depth with recommendations in sections 8.3 through 8.4.

The State of Wisconsin has not provided the same business climate leadership as other Midwestern States, such as stronger incentives. Absent federal action, aggressive use of state incentive tools is important to enhancing business expansion, particularly the industrial segment (which is beginning to come on strong in North America once again). As the new cycle matures and gains momentum, new programs and tools are likely to emerge and will require continued vigilance and diligence to maintain awareness and efficacy of new opportunities as they emerge.

Appleton exhibits such diligence by sustaining a high level of effort and examination in its own sphere. The City regularly assesses current conditions and evaluates issues and opportunities, such as in this report, and takes action where able. For example the City of Appleton has made good use of its Tax Increment Financing tools to push both industrial and community development.

Where the City's multifaceted community development have been focused and clear strength, the SWOT and interviews uncovered a different story with respect to economic development effort (see Sections 10 and 11). For all the real, tangible economic development progress made from the depth of the financial crisis, the branding research revealed some elemental confusion with respect to the current economic conditions. To a large extent this seems to be the result of a misalignment of perception and reality symptomatic of the time,[4] but there are also real challenges present for Appleton and the region to manage going forward.

In some ways, the strength of the Highway 41 corridor's economic geography discussed above compounds the branding challenges at the local level—as a dynamic story, while ultimately more compelling, is simply harder to tell and therefore harder to understand. But as the next phase of globalization puts regional competition back into the driver's seat, as discussed in the Macro View attached in the appendix, telling a concise, coherent *and* compelling regional story is essential to successful competition. This is vital to realizing the region's true potential, as no

[4] Similar to the national disconnect whereby many people still believe the U.S. economy is in recession even though a world's-best economic expansion in North America enters its sixth year.

individual community can alone paint the 'big economics' picture of the region just mentioned and detailed throughout the first half of this report.

Again, thanks to its strategic location, Appleton stands the most to gain from such a regional pivot because it lays at the center of the region with slightly less GDP output within a 30 mile radius in either direction than many larger markets comprise on their own, such as Greensborough-High Point, NC, Madison, WI, and Albuquerque, NM, which were, respectively, the 64nd, 63st and 62th largest metro areas in the U.S. by GDP in 2011.[5]

To make external marketing more effective, the City and its regional partners should work more closely. More joint communications, efforts and coordinated activities, would help ameliorate the perception that the region's geography (and political boundaries) lends itself to intra-regional competition. Presenting a united front across the region is necessary to compete with other, less dynamic economies but a simpler, sharper story to tell.

The region has little economic development recognition outside of the area. National and international site selectors have little understanding of the area. This is another great opportunity for the region because it can be positively defined with a proactive image, identity and marketing program.

To do this, however, all the region's players must work together to deliver the region's concise message. This may require some coordinated rebranding. At present, a number of different terms are in use to refer to the region, Greater Appleton, the Fox Valley, Fox Cities, East Central Wisconsin, the Paper Valley. Fox Valley is a widely used term (used by businesses in Fond du Lac and Green Bay), followed by Fox Cities. But this term is confusing outside the region, because there are many "Fox" rivers, cities and valleys around the country.

The principal finding discussed in this report found that the City of Appleton has much greater name recognition than the Fox Cities. This is a perception among site selectors and others outside the region. It is recommended that the City engage in a cooperative, quantifiable regional marketing program in collaboration with the Fox Cities Regional Partnership and/or such other regional entities. By doing so, the City will only improve its reputation among both the business community and external site selectors. The Appleton name should be used prominently in marketing the City and the region. Appleton should continue active participation and cooperation with regional efforts.

In Section 3.1, other existing economic development partners are identified, such as Northeast Wisconsin (NEW) Manufacturing Alliance, The New North and Wisconsin Economic Development Corporation (WEDC) that are available to promote Appleton both regionally and nationally. Appleton should continue active participation and cooperation with such efforts.

Overall, this report should be considered the basis for the City's economic development strategy. Annually, the City staff should develop implementation plans to implement the strategy. As with any good planning effort, the City should undertake a review of the success of the strategy and make periodic adjustment to elements of the strategy and the tactics to generate the desired results – more jobs, more investment, more tax base, better City and regional recognition, with the results reflected by increased regional employment and gross domestic product, higher business occupancy, retained and expanding business, and the other benefits that result from strong sustainable partnerships with business, education and government economic development partners.

Below, this report formulates additional recommendations. It begins with an examination of current conditions in the United States, building on the global macro framework given in the global macro view attached in the Appendices C-F.

[5] If you include the metro area GDP's for Green Bay, Appleton, Oshkosh-Neenah, as calculated and ranked by the 2013 Global Insight report prepared for the U.S. Conference of Mayors, entitled "U.S Metro Economies Outlook."

2 U.S. in Focus

In any economic planning effort, it is important to understand the current conditions of the economy itself. In Appleton's most recent year 2010 Comprehensive Plan (made a part of the report by reference – available on the City's web site: www.appleton.org link from the Community Development web site link), for example, Chapter 9's discussion of Economic Development begins with an analysis of many larger macroeconomic themes relevant to Appleton's own economy. "Several emerging trends will help shape Appleton's future economy and the economic development programs and policies the City employ to ensure its vitality." Recognizing the importance of a long term view to such an effort, the Comprehensive Plan was meant to be included in order to "evaluate long-term trends rather than simply the current economic situation." Among these were the rise of the creative economy and "creative class", the balance of manufacturing vs. service jobs, as well as globalization, its impacts such as competition from low wage geographies and even an emerging trend "running counter to globalization" to buy local.

This section updates many of the then-current findings in the Comprehensive Plan of 2010 with its own assessment of current economic conditions in the United States and long-term trends impacting its many component economies, such as Appleton. This national section, U.S. in Focus, builds on an even larger view developed in Manheim Solution's 2014 Macro View—attached in Appendix E—which discusses many large, structural adjustments emerging concurrently in a global and historic context and promise to evolve, end and reverse many important global macroeconomic conditions. High intensity overseas low-wage competition, for example, may be subsiding thanks to rising wages in Asia and higher transportation costs. So, what Appleton's 2010 Comprehensive Plan highlighted as a notable but potentially passing shopping fad ("buy local") may no longer be a mere slogan but a real economic advantage to geographies with productive local economies.[6]

The sections that follow and make up the remainder of this report assess current market conditions in very specific terms—by examining the residential, commercial and industrial real estate segments in Appleton, for example, or the GDP and employment of specific segments of the economy—but this section begins with a larger view. Such a macro perspective is particularly useful in today's rapidly changing global economy, one that has delivered the internet, raised more than a billion people out of poverty, gone from dotcom boom to bust to real estate boom to bust again, to energy boom all in less than 20 years.

The following sections discuss significant developments and trends impacting the U.S. economy at the present time.

2.1 Shifting Structural Forces

During the last economic long cycle, the large trade and current account deficits the U.S. maintained since the early 1980s provided tremendous stimulus to the rest of the global economy by creating a massive source of demand in the U.S. to which other countries could export. Many developing nations seized this opportunity and grew large and powerful export industries, exploiting strategic advantages of lower labor costs, less regulations, etc., to attract capital and employ millions. This economic tailwind propelled economies, such as China, for several decades—without which it is doubtful the middle class in Asia would be quite as ascendant, as discussed in the core macro view attached in Appendix E.

Albeit slowly, the U.S. is shrinking its deficits in its trade and current accounts, which is yet another large structural adjustment currently underway and bodes for strong positive growth for the U.S. Smaller deficits in the world's largest economy are likely to reduce growth in many other nations—particularly exporters selling into U.S. markets. On the other hand, the U.S. will likely leak less growth to the rest of the world. This will lead to even greater import substitution as local and regional firms pursue opportunities to disrupt foreign competition that no longer have price advantage.

[6] The firmament of a trend from a fad to a consistent cyclical force in the economy is one example of the benefits of performing periodic economic assessments, such as this, one, to mark the change and plan appropriately.

If these trends continue to mature, U.S. firms will increase employment as they rescale domestic production to replace imports. Technology will continue to improve, disrupting or replacing many jobs and raising the productivity of remaining workers and new workers—so even if the U.S. re-shored every plant and process it lost during the last cycle, not every job still exists to be re-shored along with the factory when it comes back with because technology has made them obsolete. In general then, the jobs the U.S. is likely to add will be the same kind of highly skilled and highly productive labor that traditionally competes well in most labor markets, such as manufacturing and machinery; just more of them.

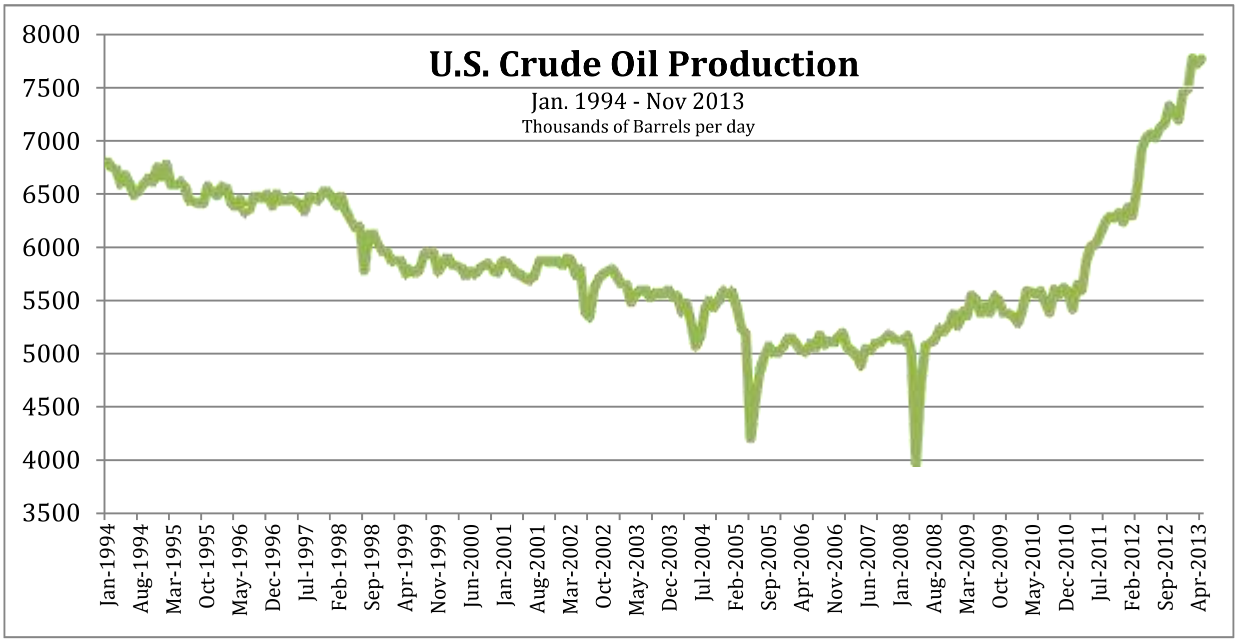
Discussed in greater detail in our core macro view in the Appendices C-F, as the new global middle class, led by the ascending middle class in Asia, continues to take shape it will demand more and more goods and services of all kinds. This will create greater and greater opportunities for U.S. firms to export. Indeed, U.S. exports are already beginning to increase.

2.2 Domestic Oil Boom, Increasing Exports

One recent development that is helping to shrink the U.S. trade deficit is a domestic oil boom. Horizontal drilling and hydraulic fracturing, known as "fracking," have transformed the U.S. energy landscape seemingly overnight. As discussed in our core macro view, U.S. domestic oil production peaked in November 1979 at roughly 10 million barrels per day and then experienced a long term structural decline to a trough low of 3.9 million barrels per day in September of 2008. In general, global conventional supplies have also deteriorated steadily—which caused a substantial upward price adjustment for all petroleum products, and their many derivative goods.

But fracking has arrested production declines in North America through innovation in drilling technology, which makes previously inaccessible reserves technically and physically recoverable. And—because global oil prices have

Figure1: US Crude Oil Production from January 1994 – November 2013 (in thousands of barrels per day) Source: EIA



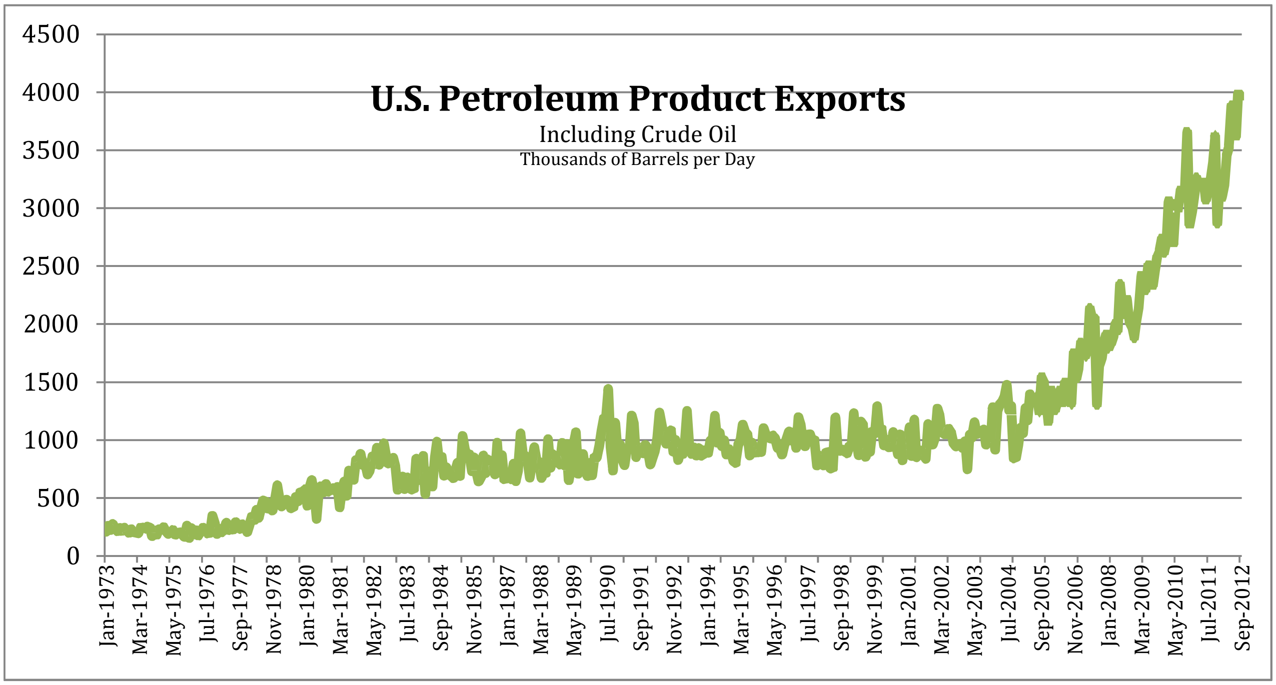
made a structural adjustment higher, as seen in our macro view—these non-conventional reserves of crude oil and natural gas are becoming feasible and profitable to produce (though late year 2014 prices are challenging these trends as footnoted).[7]

This has led to another great American oil and gas exploration boom, discovering many large reserves, such as the Bakken formation in the Dakotas and the Eagle Ford formation in Texas, and rekindling interest in many old, abandoned crude oil fields whose potential was thought to be exhausted (and sold by some oil majors for pennies on the dollar). As a result, U.S. crude oil began rising for the first time in decades, as shown below in Figure 1.

The timing of the fracking revolution was also ideal; coming as the economy was attempting to recover from the twin financial and commodity shocks of 2008. Because oil prices rebounded so quickly, the exploration boom translated into a production boom, which led to higher employment and demand for materials and machinery. Many idle steel facilities in the rust bust were restarted to supply the piping and fittings the fracking industry requires.

Areas with large reserves have become magnets for capital, equipment and people. The rush to the Bakken fields has been such that number of workers have periodically outstripped available housing, causing some workers to sleep in cars—"six-figure salaries, but homeless."[8] Labor shortages have driven up the price of all labor categories,

Figure 2: U.S. Petroleum Product Exports, Source: EIA



such as fast food workers. It reduced unemployment in North Dakota to 3.5 percent early in the recovery, 2011, the lowest in the U.S.[9]

Employment and wages lit up just like the lights at night. A special report from the Bureau of Labor Statistics into the local effects of the Bakken noted:

> The industry within these counties [impacted by Bakken production] with the largest percent increase in average annual pay was real estate and rental and leasing, where average annual pay

[7] In fact, much of these newly recoverable resources would not be profitable to produce below $65-$75 per barrel—and therefore would not be coming online now but for weakening supply fundamentals amongst conventional resources.
[8] See "Land a job in a North Dakota boomtown" by Blake Ellis, CNN October 30, 2011
[9] Available at: http://www.nasa.gov/mission_pages/NPP/news/earth-at-night.html

doubled, increasing from $35,940 in 2007 to $72,355 in 2011. Professional and technical Services experienced the second largest percent increase (85 percent), with average annual pay increasing from $34,950 in 2007 to $64,529 in 2011. Wholesale trade experienced the third-largest percent increase (70 percent), with average annual pay increasing from $42,144 in 2007 to $71,548 in 2011.[10]

But the economic impact extends well beyond a handful of counties and promises to continue growing for some time. By some estimates, fracking will add 0.5 percentage points a year to total U.S. GDP growth over the next 10 years. Official figures put US annual GDP at $17.1 trillion in the final quarter of 2013, meaning that if the shale boom were to add 0.5 percentage points to GDP in 2014, it would create an $85 billion of new economic activity.[11]

Already the impact is being felt in the current account deficit, as noted in the previous section, which is starting to shrink thanks to growing oil and petroleum exports—something analysts believed impossible just a few short years ago. The U.S. is exporting even more product than it did during its previous production peak, in the 1970's.

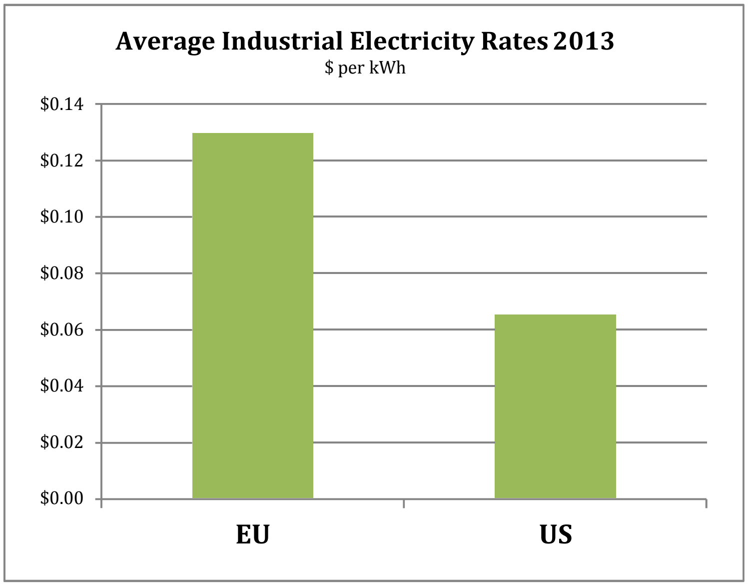
In fact, the U.S. has never exported more crude oil and petroleum product than it does today. This U.S. economic tailwind reverberating through the global economy, threatening economies and regions that export crude oil to the U.S., such as Venezuela or West Africa. It has also pressured industries in other developed economies, such as the EU; as Bloomberg recently reported "the U.S. oil boom has put European refineries out of business… fifteen in the last five years, with a 16th due to shut this year". (See Figure 2)

And with expectations for further growth in U.S. oil production, industry and government are ramping up to foment this growth.

2.3 Energy Advantage North America

Combined with advances in energy storage and innovations in alternative energy systems, fracking is also helping to hold energy costs down in the U.S. relative to the rest of the world.[12] At the turn of the millennium, the EU had very comparable electricity prices to the U.S.—but without new and cheap natural gas supplies coming online, and with a cap and trade system putting upward pressure on rates, [13] European electricity prices have more than doubled in many nations. By 2013, as shown in the graph to the right, prices for industrial consumers of electricity in the U.S. is now roughly half the price it is in Europe. U.S. industrial electricity prices are even more competitive compared to Asia, where industrial users can pay triple the price. This is a major economic tailwind that is radically

Figure 3: Average Industrial Electricity Rates, 2013 ($/kWh) Source: EIA, Eurostat



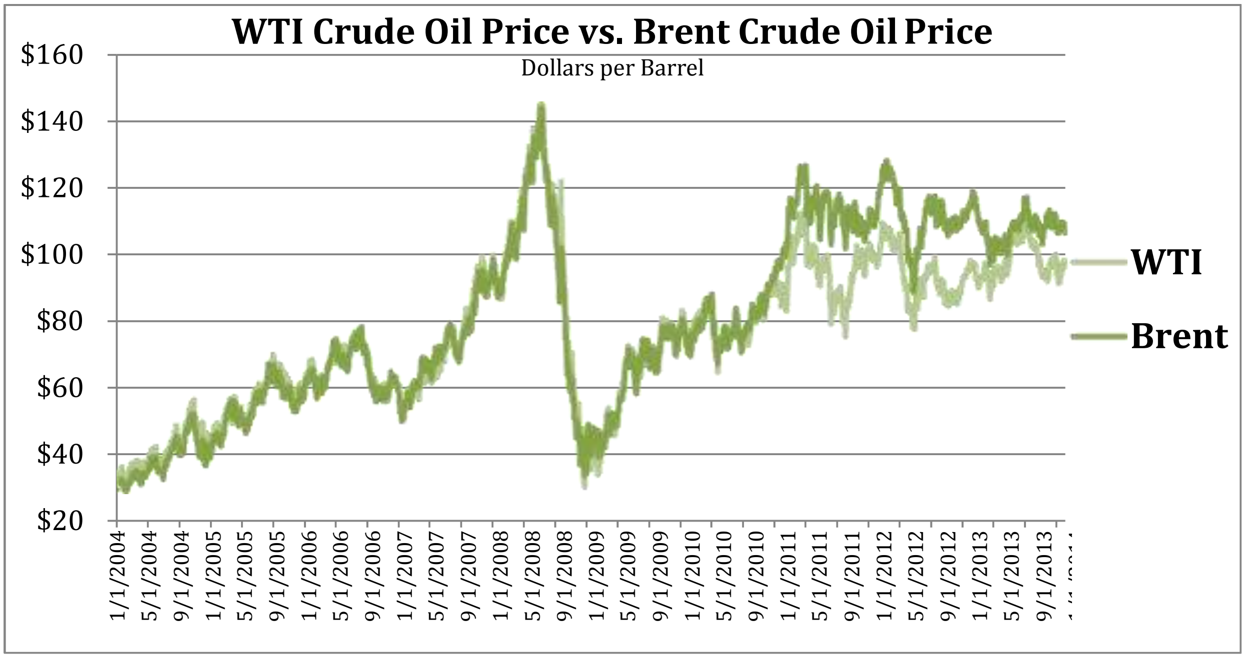
[10] "Employment and wage changes in oil-producing counties in the Bakken Formation, 2007–2011"
By Paul Ferree and Peter W. Smith, BLS Employment and Unemployment series April 2013 Vol. 2 / No. 11
[11] "How the US shale boom will be felt around the world" by Mark Haefele, Global Head of Investment at UBS Wealth Management, CNBC, 4 Feb 2014
[12] Not to mention carbon emissions, as natural gas turbines are replacing coal burners and substantially reducing U.S. carbon emissions.
[13] The EU emissions trading system (EU ETS), but this is not to imply EU ETS is the only reason; Europe's production profile has been historically weak, particularly now with North Sea production in decline. It relies on nuclear power (particularly in France), but Germany (a large manufacturer) began transitioning away from nuclear following the Fukishima disaster in 2012—and now German electricity is higher than the EU average. Alternative energy systems are coming online, but Europe relies heavily on energy (natural gas) imports—particularly from the east (Russia, via Ukraine and Poland).

shifting the competitive position of the U.S., as lower energy costs means manufacturing becomes cheaper and the U.S. again becomes more attractive as a destination for capital investment.

But this advantage is a relative one, as oil and energy prices are still rising on the whole. As just noted, demand is rising while at the same time conventional oil supplies are deteriorating. These new supplies of fracked product coming online is generally less dense, produced less efficiently and depletes faster than conventional oil sources—making these non-traditional sources more expensive than conventional supplies relied on in the past. And yet because conventional oil supplies are constrained around the world, the U.S. (and also Canada) is enjoying a strong relative advantage in the cost of energy. This is very important to U.S. as the world's largest economy, and largest consumer of oil and oil products.

The strength of the U.S. relative advantage can be seen in the spread between the price of the two most important oil benchmarks, West Texas Intermediate (WTI) Crude and Brent Crude.[14] WTI represents the price that U.S. consumers pay for a barrel of oil, whereas Brent is a benchmark for the price the rest world, or non-U.S., customers pay. WTI preferable as a blend of oil because it is cheaper to produce, as a result it has historically traded slightly higher than Brent oil—which contains slightly more sulfur than WTI and is more expensive to produce, and thus traditionally traded at a discount to WTI (roughly $1 to $3 cheaper). But because oil is truly a global market, while there was a slight discount for Brent oil, the pair tracked together very closely in the past, until very recently, as shown below in Figure 4.

Figure 4. WTI Crude Oil Price vs. Brent Crude Oil Price ($/barrel). Source: EIA, Eurostat



But due to the burgeoning North American oil revolution the traditional relationship between WTI and Brent has broken down. WTI has decoupled from the world price complex and begun trading at a discount to Brent prices even though it is cheaper to produce. This is because WTI is available only in the U.S., where there is resurgent production. The rest of the world must buy Brent crude, which comes from deteriorating conventional supplies—so they have no option but to buy at higher prices, even though it is more expensive to refine. This combination of supply glut in the U.S. and supply scarcity in the rest of the world is powerful enough to upend previous

[14] Although there are many other blends of crude oil sold around the world, such as Dubai Crude, Oman Crude, and the OPEC Reference Basket.

fundamentals: causing lower, more expensive grade crude oil (Brent) to trade consistently at a premium to better, less expensive grade crude oil (WTI) as shown clearly in Figure 4.[15]

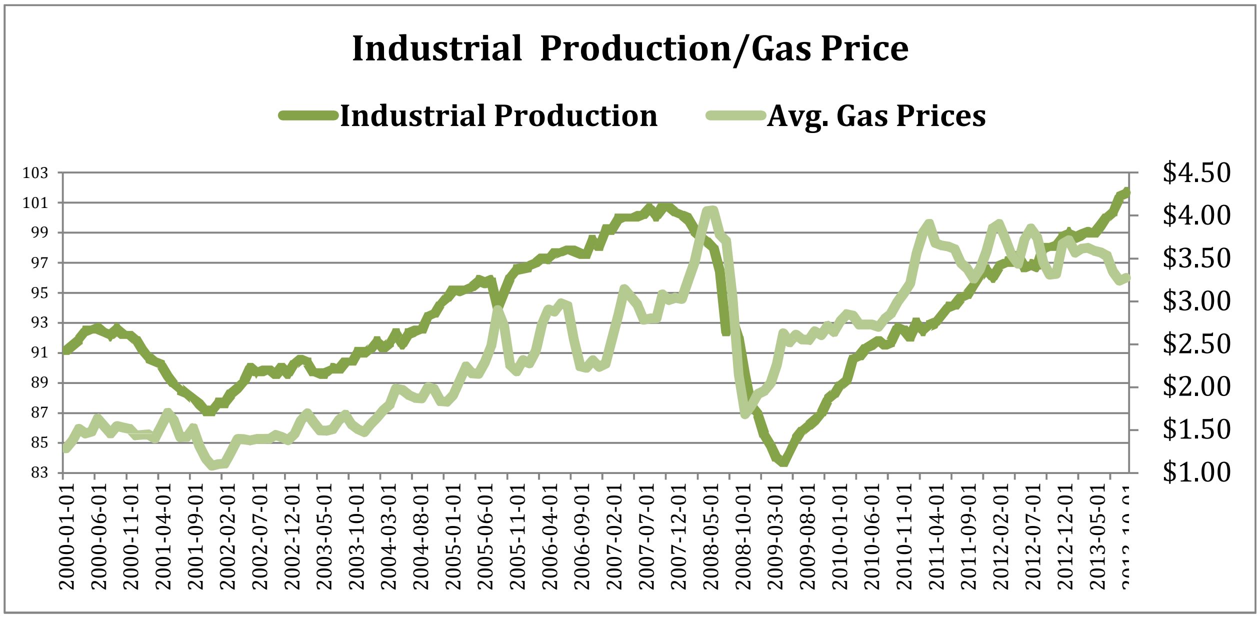
The relative advantage of North America is a relative disadvantage to geographies with oil scarcity, such as China and Japan, both of who have heavily relied on the export model during the last super cycle. Looking forward, relatively higher oil prices increase the direct cost to operate the Chinese or Japanese economy as well as the cost to export its economy's production through higher shipping costs. As the Intentional Energy Agency asked in its 2013 World Energy Outlook: "Who has the energy to compete?" Because the U.S. oil boom will continue, the impact of lower energy costs on U.S. growth will not operate as some temporary one-off that comes and goes. Nor will the impact be limited to $85 Billion in new economic activity the fracking industry creates—but it will ripple through the economy, creating a powerful multiplier effect that has the real potential to kick-start a virtuous economic circle.[16]

Possessing relatively low cost energy resources in a period of generally rising prices is a substantial and fundamental economic advantage, and is already attracting smart capital to new strategies. This will generate increasing labor demand and greater employment as projects pursuing these new strategies come online.[17] Higher employment will also mean higher consumption and thus even more employment—a virtuous circle.

2.4 Industrial Production has De-coupled from Gasoline Prices

The low energy cost advantage has major implications for industrial production in the U.S. Industry is a heavy energy user, with perhaps as much as 25% of costs coming from the electric bill. As such, industrial activity is very sensitive to energy prices. Below is another chart showing U.S. industrial production, this time compared against gasoline prices.

Figure 5. Industrial Production and Average Gas Prices. Source: EIA, Federal Reserve



Notice the strong correlation exhibited by the average gasoline price and industrial production for most of the time period shown. Part of the explanation they exhibit such a strong relationship to each other is that both industrial

---

15 This double whammy in large part explains the reason so many European refiners are shutting down, as seen in the previous section.

16 Discussed above, as well as in our macro view attached in the Appendix.

17 Such as the large LNG export terminals along the Gulf Coast, many of which have been permitted and are under construction. The first terminal will be completed become operational in the latter half of 2015, with many other terminals set to come online annually for many years thereafter.

production and gasoline prices are also both heavily determined by underlying economic activity—so when the economy falters, demand falls which reduces gas prices and industrial production.[18]

But now notice how the correlation has started to break down post the Great Recession's recovery, particularly from 2011 on. Gasoline prices rebounded rather quickly, but have leveled out and even begun drifting downward. Unlike in the past, industrial activity is not following gas prices down but rather continued to steadily increase—rising even beyond the peak of the last cycle. Whereas in the past, when industrials only experienced periods of high demand along with higher input costs (higher gasoline), the trend reversal shown in Figure 5 implies that U.S. industrials will experience a period of high activity without the burden of higher gasoline prices.

This, like many other structural adjustments underway, puts U.S. industrial users in a sweet spot relative to their global competition—and is a major driver helping to reverse economic and competitive landscape of the Old Normal.

2.5 Suburban Sprawl

Also cresting during this incredible period of transition were the suburbs, both as a physical element of our built environment—truly one of the greatest real estate developments and capital allocating events in human history—and as a cultural force of our society. The suburbs became not just the home of the mighty American middle class, but the home of the American psyche—the default background of popular culture, television shows and a symbol of the promise of America itself, e.g. 'come here, work hard and you can be rewarded with a nice house with a picket fence in the suburbs.'

But the promise of the Suburbs hinged on an energy-intensive design that is fading as oil and energy prices adjust higher. Scaled for the effective range of the automobile, the suburbs were built without general regard for other potentially meaningful distances, such as walkable, bike-able or wheelchair-able/walk-assisted distances. In a practical sense, the suburban landscape sprawled beyond the effective range of other modes of transit. Because you essentially need a car to do anything in the suburbs, the cost of doing everything rises whenever oil prices rise. As a result, suburbia is highly sensitive to transportation costs.

Indeed, by stretching population across such a wide area[19] the suburbs themselves became another major driver increasing the demand for oil products—which would assist in eventually push oil prices upward in the structural adjustment we have seen in our core macro view. In effect, the creation of the suburbs sowed the seeds for its potential destruction through prohibitively high transportation prices—which herald the end of sprawl some analysts believe.[20]

The suburbs were not only inefficient in terms of land use and transportation energy, but many of the structures built within the suburbs were also inefficient. The size of the average home doubled in the latter half of the last century, the infamous "McMansions" stood tall like castles dotting the landscape but only provided shelter for a single family, or a single couple.[21] But more square feet in a home also means more cubic feet of air to heat and cool in the home also; and many developments in the suburbs were poorly constructed and/or insulated, either too quickly, or with cheap materials— even many McMansions. Overall, the suburbs greatly increased electricity demand but decreased per capita energy consumption in the U.S.

The cultural promise of the suburbs is also fading as suburban residential developments have matured into a dominant feature of the landscape; and raised millions of American children who have only known life in the suburbs. Capturing the zeitgeist of suburban angst, the rock band Arcade Fire won the Grammy for album of the year with its

[18] Independent of each other, in this hypothetical example, however industrial production and gasoline prices can have a direct relationship, e.g. as an industrial input, gasoline prices can rise high enough to prohibit industrial production.
[19] For example Cleveland, which today has the same population it did in 1970—but across 3 times as many square miles as the suburbs grew larger and the core depopulated. See also Detroit.
[20] Such as Leigh Gallagher in her book "The end of the Suburbs: Where the American Dream is Moving." A Google search for the "end of sprawl" returned nearly 9 million results.
[21] Or was one of multiple McMansions an individual may own.

melancholy and straightforwardly titled album, "The Suburbs." [22] As suburbs developed out further and further, commutes got longer, and longer, suburbanites grew less and less happy. Commute times increased and people began feeling more isolated. Suburban car dependency led to a more sedentary lifestyle for millions of Americans, which translated to greater obesity and health costs. Edge Cities had experienced tremendous growth, but only at the expense of activity downtown—pulling most or all retail from city centers to the city's edge while hollowing out the core.

Noting the increasing attention the sprawl issue was receiving, Appleton's 2010 Comprehensive Plan cautioned that sprawl was "dispersing economic activity and draining the vitality of downtown and neighborhood commercial districts." This same dynamic has created great stress on many traditional downtown areas, such as Appleton, which were landlocked by other (often much smaller) townships on the edges where the majority of suburban or Edge City growth occurred. As the Comprehensive Plan described:

> Within the Appleton metropolitan, the effects of sprawl can be seen along Highway 41, where much of the area's retail and industrial development has occurred in recent years. Appleton has been able to capture some of this growth to the north and east. To the west, development in the Town of Grand Chute has siphoned potential development from… [and on] College Avenue, which is a gateway to Appleton's downtown… [e]xtensive vacancies and poor aesthetics impact the viability of downtown, even though much of the street is not within the City's jurisdiction.

And while jurisdictional issues will persist, the general pressure to expand outward shows many signs of leveling off or even reversing in some areas—like so many of the other trends that defined the Old Normal, discussed at length in the core macro view in the Appendix.

2.5.1 Sprawl Peaked when Oil Bottomed

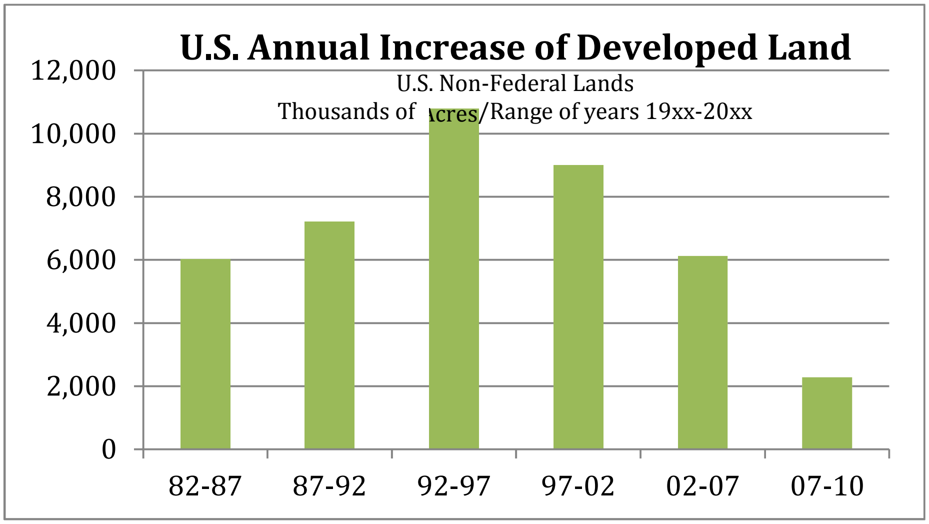
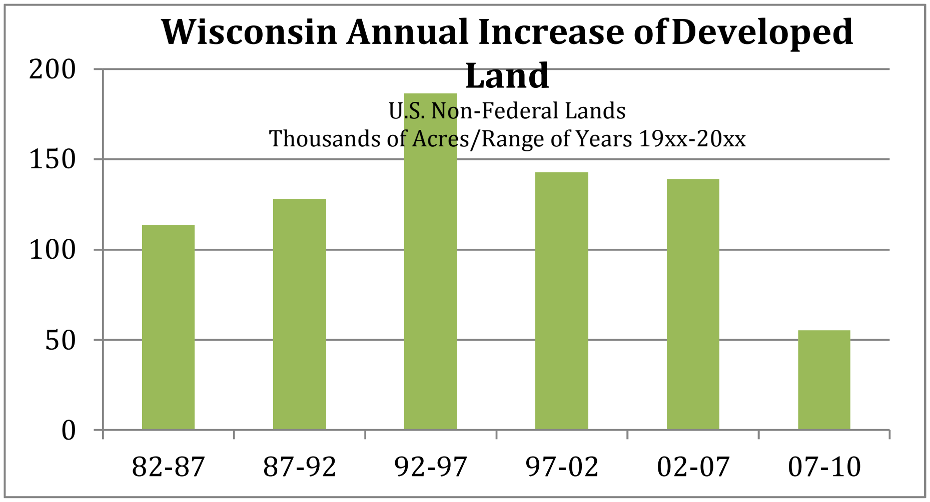


Figure 6. U.S. Annual Increase of Developed Non-Federal Lands (thousands of acres). Source: USDA

According to the USDA's 2010 National Resources Inventory the growth of suburban sprawl peaked in the 1990s, just as oil prices were making post-OPEC shock lows.

New land is still being developed, but the rate of growth has slowed steadily since peaking and taken a sharp turn down following the Great Recession as illustrated in Figure 6. Choked by higher transportation prices—and in the case of the far-flung exurbs extreme time and distance—edge. Edge Cities could only extend outward so far before it became prohibitively resource-intensive to dwell there. By-and-large attempts to build secondary Edge Cities in outer-ring suburbs have failed in nearly all U.S. geographies where attempted; and residential real estate prices in last-to-be-built exurbs suffered substantial declines when the housing bubble burst in 2008.

[22] With evocative lyrics such as the song "Wasted Hours" lyrics: "At first they built the road then they built the town. That's why we're still driving around and around. And all we see are kids in the buses longing to be free."

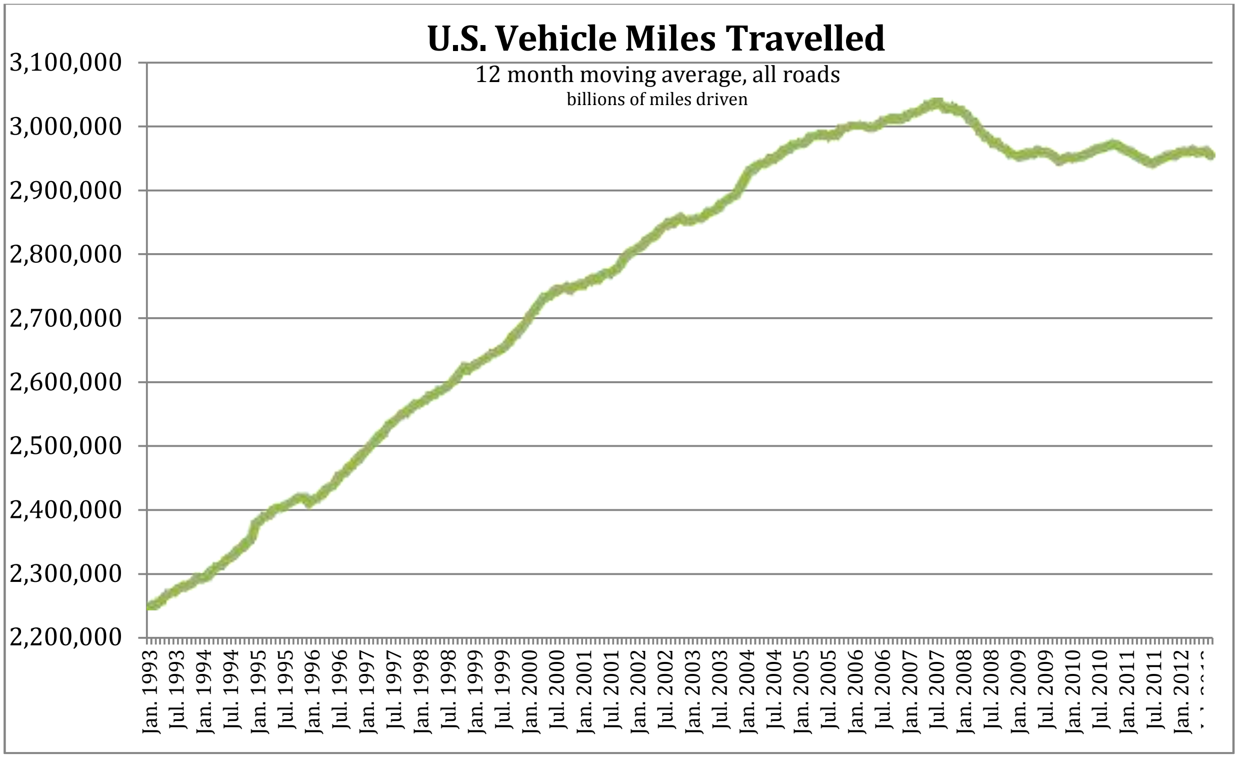


According to the same USDA inventory, Wisconsin's sprawl trend stayed stronger for longer than the national trend, before they both collapsed. As the chart in Figure 7 depicts, Wisconsin developed nearly as many acres in the 5 years leading into the recession as from 1997-2002—whereas the national trend shows a more gradual slowdown.

Figure 7. Wisconsin Annual Increase of Non-federal Developed Lands. Source: USDA

The peak growth of sprawl was preceded by the cessation of large-scale highway construction in the 1980's. As total miles driven exploded, congestion grew without the construction of new roads. Already stretched over such a large area, the outward growth pressure in many cities reached Marchetti's limit, whereby people are unwilling to travel more than an hour for a routine, daily trip (e.g. to work) no matter what the mode of transport or actual distance.[23]

In turn, the peak growth of sprawl preceded "peak car" in the U.S., when miles driven reached a maximum and began to decline. Vehicle miles travelled (VMT) in the U.S. peaked on July 3, 2007 (see Figure 8).



[23] Evidence exists that this has been an operative rule in humanity since Neolithic times.

Figure 8. 12-Month Moving Average of U.S. Vehicle Miles Travelled for All Roads (billions of miles driven). Source: Office of Highway Policy Information

And as sprawl growth peaked when oil prices made a post-OPEC shock low in the mid-1990's VMT peaked as oil prices were breaking out to new all-time, inflation adjusted highs in 2007 and 2008. And since peaking over July 4th weekend, VMT has undergone a steady decline as consumption is being inhibited by oil prices' structural adjustment higher. Even though fuel efficiency and average miles per gallon have made solid gains in recent years, and many alternative fuel autos are available (e.g. LNG, electric vehicles), these efficiency gains have not overcome the effects of higher fuel prices which is high enough to suppress consumption, as Figure 8 illustrates.

This price limit is working with Marchetti's limit to stem the outward expansion of the built environment. As a cost and time intensive environment, the suburbs and other less dense areas are losing their competitive advantage in favor other potential living environments, e.g. urban areas and village centers. Not wanting to absorb the cost or time required to live a car-intensive life in sprawl, many people are rejecting this lifestyle altogether, relocating to urban areas and going car-less.

Going forward, like many of the trend and structural adjustments discussed above, development pressure will continue to reverse. Rather than pushing outwards, infill pressure will manifest in downtown cores and corridors—and in relatively dense and centrally located sub-hubs. This has potentially negative implications for the suburbs and exurbs, but many positive implications for growth in denser and/or well-located areas—such as Appleton.

2.6 Retail Revolution

Along with many other underlying structural changes happening in today's economy, a retail revolution is also manifesting in the U.S. and the speed at which this shift is finally taking hold after many years of false promise is a testament of how powerful concurrent structural adjustments can be. Discussed in the core macro view in the Appendix D, U.S. consumer spending and retail sales are much stronger than generally understood and have rebounded to new all-time, inflation adjusted highs even as GDP and job growth have disappointed. As one might expect with this core view in mind, December 2013 retail sales gained 4.1% over December 2012—and the 2013 holiday shopping as a whole was the largest holiday season ever.[24]

But the 2013 holiday shopping season was not just larger than seasons past - it was different. Different enough, in fact, that United Parcel Service (UPS) was unable to make all deliveries on time— a mild market failure—causing many unhappy holiday customers and great deal of bad publicity. What was different this shopping season was that the promise of online shopping seems to have manifested after a long wait that began in the 1990's and the first internet boom. The tipping point coming this holiday season, when the trend broke so suddenly that it caught package shippers such as UPS by surprise and unable to service the demand.

In the past, the holiday shopping season in the U.S. has had a reliable cadence that planners in the retail sector have come to rely on. December 16 - 20 is traditionally known in the industry as "Peak Week" due to the huge surge in gift volume traditional experienced during that period. In its (very sophisticated) projections, UPS expected to pick up more than 34 million packages Monday, December 16, and deliver 29 million packages globally on Tuesday, December 17—a record for a single day at the world's largest package delivery company. To meet this record

24 http://www.census.gov/retail/marts/www/marts_current.pdf

demand, UPS planned to hire 55,000 seasonal employees for the holiday season, more than would fit into Yankee Stadium.[25]

But they would not be enough. UPS underestimated demand badly, and a late surge in package volume forced the company add even more emergency resources—and in some markets was unable to pull in all the labor necessary to process the resulting volume. On December 23 UPS delivered more than 31 million packages, the most ever—six days later than expected and 13% more packages than the peak day the year before.[26] As UPS explained in its release "Higher Costs Driven by Surge in Shipments and Weather," its U.S. holiday season was:

> …negatively impacted by the challenges of the compressed peak season coupled with an **unprecedented level of online shopping that included a surge of last-minute orders**. In an effort to maintain service standards and commitments, UPS took extraordinary measures deploying additional equipment and people. For example, the company utilized 85,000 temporary employees, 30,000 more than planned.[27]

Weather events in December also impacted operations according to UPS, and it has been an unusually harsh winter with a number of major traffic and logistics breakdowns.[28]

Weather, however, is not the primary driver responsible for UPS's logistics failure—a fundamental shift in demand occurred, "an unprecedented level of online shopping." The "surge of last minute orders" UPS experienced was powered, in part, by the introduction of Amazon Prime, which offers free two-day delivery to subscribers. Empowered by Amazon Prime, and other aggressive online retailers, shoppers could now wait longer than ever to lock in their purchases for the Christmas holiday—and they took full advantage of this as UPS's shipment data reflects.

As a category internet orders grew at a 10.3% annual rate, a substantial improvement over the prior year—especially compared to just 0.5% growth for general-merchandise stores.[29] After 1990's hype and false hope, online shopping seems to have finally arrived and is set to forever alter not only the rhythm of the holiday shopping season, but also the foundation of retail sales themselves. This shift caught UPS by surprise this season, and caused delivery failures, cost overruns and even a profit warning—causing an analyst at *MarketWatch* to quip: "…blaming (higher) demand for a (lower) profit warning, that's a new one, UPS"[30]—but the abrupt dynamic shift was real, and after causing such disruption and receiving widespread attention neither UPS nor other market actors are likely to be surprised again.

[25] UPS Kicks Off Peak Week, December 16, 2013, available at: http://pressroom.ups.com
[26] And 7.5% greater than UPS's expectations—which already planned for a recording-breaking shopping season.
[27] See http://www.investors.ups.com/phoenix.zhtml?c=62900&p=irol-newsArticle&ID=1891722
[28] The harsh winter is being cited as a major factor in slower growth and less overall economic activity most recently observed in economic data, e.g. brick and mortar and mall traffic, discussed below. As we have seen, however, a harsh winter did not prevent consumer spending and retail sales from making new high water marks.
[29] The implications of which are discussed further below.
[30] See "UPS's blaming demand isn't as far-fetched as it sounds" By Steve Goldstein, MarketWatch Jan. 17, 2014

Figure 9. U.S. Non-Store Monthly Retail Sale from January 1999 through December 2013 in millions of dollars seasonally adjusted. Source: Census Bureau

2.6.1 STARBUCK'S SCHULTZ SEA CHANGE

The false start of online retailing's dominance in the 1990's and the false dreams of the ensuing stock market bubble may finally becoming true: online shopping is becoming the norm. After overpromising (or at least overexciting) stock investors in the dotcom boom, causing a stock bust and producing wider negative economic shock, internet retailers and sales over the internet have continued to progress—coming around again little more than a decade to fulfill its destiny produce a positive shock in the holiday season of 2013, as seen in UPS delivery failure in the previous section.[31]

But this shock is not universally positive. Economic evolution through technology of comes with disruptive change, as firms successful in the previous cycle are unable to reinvent themselves, struggle to compete and ultimately fail. During the dotcom craze many analysts predicted that online shopping would soon displace the need for brick and mortar retail stores—and while this proved preliminary, it is finally proving somewhat prescient as well.

In the mind of retail maven and Starbucks CEO Howard Shultz this holiday season will be remembered as "the moment" it finally happened; motivated enough to begin Starbucks' fourth quarter investor conference call by declaring:

> That truth is that traditional brick and mortar retailing is at an inflection point. No longer are many retailers only required to compete with stores on the other side of the street. They are now required to compete with stores on the other side of the country. Navigating the seismic shift will continue to be very, very difficult. [32]

Schultz made news with his comments, which seemed to explain the holiday season's odd results by putting into focus how so many retailers could have disappointing fourth quarters while overall retail sales and consumer spending measures were making new record highs.[33] "We are navigating through what I believe to be a significant sea change," Schultz followed up saying to CNBC television. "We're going to be talking about this for quite some

[31] To the extent that record holiday sales and package volumes are economic positives.
[32] Transcript available at: http://seekingalpha.com/article/1964831-starbucks-ceo-discusses-f1q-2014-results-earnings-call-transcript?part=single
[33] Starbucks was not among those retailers with disappointing 4Q results.

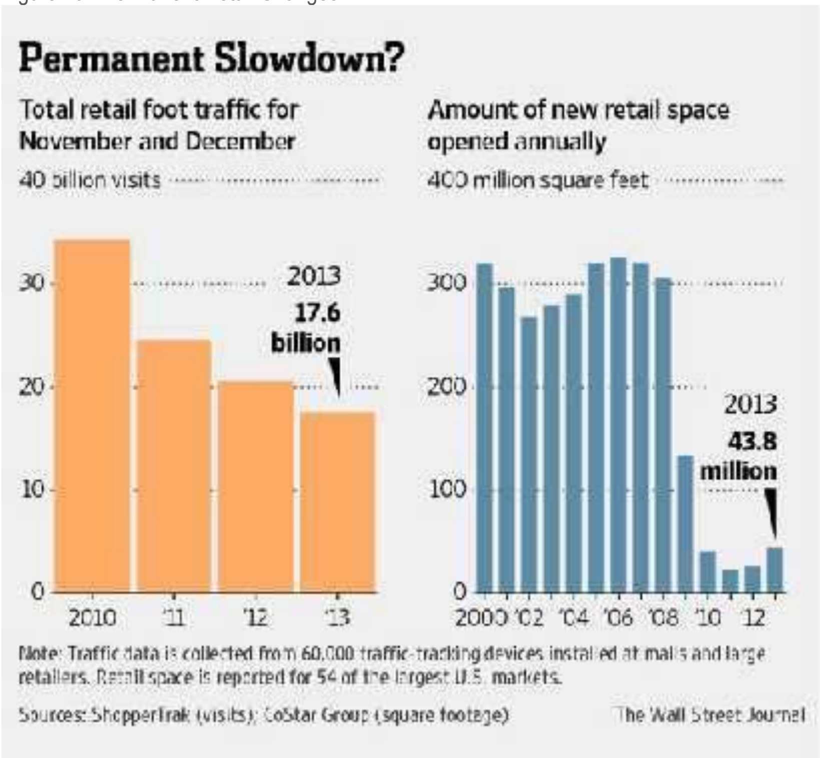
time. I would not want to be a traditional brick-and-mortar retailer that did not have mobile payments that did not have social and digital media. Those companies are going to find themselves significantly challenged in 2014 and beyond."[34]

2.6.2 Shopping's New Normal

Schultz's sea change demonstrates how online retailing has matured and consumer preferences and behavior have both evolved. It is not simply a change in where people shop, but how people shop. Smart phone in hand, shoppers in brick-and-mortar stores can instantly compare the price of the item in front of them with the same or similar items for sale at other retailers (physical and virtual) down the street and around the world. This is great for the consumer because this technology empowers them with unprecedented price information, but potentially bad for the physical retailer they are standing in because many of these "showroom shoppers" do not buy. Instead, they use their handheld device for instant comparison-shopping, and may even purchase the same item from another store and have it shipped to their home all while standing in the same spot. Meanwhile, the retailer still has to pay the same rent—many locked into long-term rates and lease structures more suitable to economic conditions of the Old Normal.

As technology has improved and become more ubiquitous, consumers are more comfortable with transacting online than 10 years ago. The smart consumer is more frugal, which is heightening competition amongst retailers. And the smart consumer is also driving innovation, such as Amazon Prime noted above, as firms respond to the needs smart consumer. As Barry Ritholtz wrote for Bloomberg View, these new dynamics have made price-matching virtually mandatory in most categories: "woe to the retailer who doesn't price match."[35]

Figure 10 - Permanent Retail Changes?



Again, this is good for the consumer because universal, real-time price comparison ability is deflationary and will hold down consumer prices. But this environment of increased completion will also have a deflationary effect on retailer margins, putting pressure on profits. Increased consumer pricing power comes at the expense of retailers, and it could also translate into cheaper store rents as more traditional brick-and-mortar retailers struggle in this new environment.

But even before Schultz's coined his "sea-change" this holiday season, consumers were steadily transitioning to e-commerce while brick-and-mortar retailers were struggling to get shoppers through the doors—as the Wall Street Journal (WSJ) reflected on the results of brick-and-mortar retailers in the 2013 holiday season: "across a number of retailers, their defensive strategies don't seem to be panning out." Foot traffic into U.S. retailers took a downturn

[34] Available at: http://www.cnbc.com/id/101359770
[35] "Best Buy, JC Penney and the Retail Jumble" Bloomberg Jan 17, 2014 Barry Ritholtz

during the Great Recession, but unlike many of the economic indicators highlighted above, foot traffic has not rebounded and to many analysts it "appears many of those shoppers may never be coming back." [36]

As the WSJ's illustration in Figure 10 depicts, retailers received roughly half the holiday traffic in 2013 as they did just three years before. ShopperTrak and its network of 60,000 shopper- counting devices that track visits at malls and large retailers across the country have monitored declines of 28.2% in 2011, 16.3% in 2012 and 14.6% in 2013. Fewer trips to the store or leisurely afternoons at the mall is also translating to fewer meals at casual-dining chains nearby which have experienced lower customer traffic for nine of the past 13 years. And just like the retail foot traffic just mentioned, casual dining traffic has not rebounded coming out of the Great Recession; and have instead reaccelerated downward in 2012 and 2013.

The amount of new retail space being developed has also declined substantially, though it is rebounding off the recession's bottom. In 2013, 44 million square feet of retail space opened in the 54 largest U.S. markets, down 87% from 2006. [37]

The new reality of the New Normal is altering the strategies of retailers everywhere and in every category, and putting many locations out of business. Blockbuster and Fashion Bug announced more than 400 store closures in each in 2013. GameStop announced 250, followed by Fresh and Easy, Barnes and Noble, the Gap, Abercrombie and Fitch, Caribou Coffee, Wendy's, Collective Brands (Payless, Strike Rite) and Sears/Kmart who all announced more than a hundred store closures each. Others, like Home Depot, have scaled back plans for new store openings in favor of shifting that investment toward online operations.

JC Penny's attempt to reinvent itself proved to be a disaster, nearly killing the company. In January 2014, JC Penney announced it would close 33 stores, including 5 in Wisconsin:[38]

- Fond du Lac— Forest Mall
- Janesville— Janesville Mall
- Rhinelander— Lincoln Plaza Center
- Rice Lake— Cedar Mall
- Wausau— Wausau Mall

Importantly, the WSJ points out these closings could accelerate because many leases for large retailers negotiated before e-commerce changed the paradigm have yet to expire.

2.6.3 Impact on Commercial Real Estate

Multiple structural adjustments are re-balancing the economic fundamentals underlying the commercial real estate market. Higher transportation costs, ever-sprawling suburban environment that stretched travel times to the max, and resurgent urban areas giving consumers a realistic urban choice have all combined to reverse the old trend and created an inward flowing development pressure—pushing people and capital in cores and hubs at the expense of poorly located space on the periphery and less-dense edge cities. Simultaneously, as discussed in the previous section, technology is empowering the consumer, which has profound implications for retail strategies dominant in the prior cycle. The collective result is a general condition of oversupply of commercial real estate.

Even before the Great Recession, the U.S. mall market was near the point of saturation. Mall development was delivering more than 375 million square feet a year of new space in the 1970's, ahead of the second oil shock—but had fallen by more than half to less than 144 million square feet per year in the new millennium. Overall, regional malls account for 16.9 percent of all retail space today, down from a share of 22.9 percent in 1982.[39]

[36] "Stores Confront New World of Reduced Shopper Traffic" by Shelly Banjo and Drew Fitzgerald, January 16, 2014. Wall St. Journal.
[37] Id.
[38] http://www.usatoday.com/story/money/business/2014/01/15/jc-penney/4495963/
[39] http://nreionline.com/development/return-mall

Malls are still performing better than other shopping-center categories that have experienced larger sales declines—particularly trophy properties and well located updated malls in primary markets. A wide disparity has emerged between top-tier, Class-A properties and lower grade assets—and seems poised to grow wider in the future. Many owners of lower quality assets are seeking to exit, but struggle in a buyer's market. Many lower grade asset classes are likely to fail or reposition unless they can somehow regain advantage as primary or dominant retail centers in their trade areas—but retail reinvention is very hard to achieve, as the lesson of JC Penney tells above.

And these conditions strongly imply little prospect for new enclosed regional mall development—in fact, there has not been a single new mall development anywhere in the U.S. since the financial crisis. Nor is there likely to be any time soon. For the second year in a row the Urban Land Institute's (ULI) annual real estate survey, "Emerging Trends 2013" ranked the prospect for the development of regional malls in 2014 last amongst its commercial/multifamily subsector.

Going forward, the retail landscape will become more sparsely populated. Many malls and underperforming retail properties will eventually have to be razed or redeveloped into other uses. For example, one emerging strategy being deployed is to add non-retail components, such as medical offices, institutional or government buildings in vacant space. Less practical and more imaginative concepts envision turning former retail malls into urban farming oases.

Value-chains and brands that are overexposed to weak markets will struggle against deteriorating conditions. Emblematic of this problem is Sbarro, the Italian Restaurant chain ubiquitous in the mall segment, which announced in January of 2014 it would shutter 150 locations only to follow less than 2 months later with a bankruptcy filing—its second bankruptcy filing in less than 3 years. Or Hot Dog on a Stick, another fixture in shopping mall food courts, who filed for bankruptcy in January 2014 after being trapped into high leases signed during a hot market in the 2000's only to see mall traffic abruptly collapse.

But neither brick-and-mortar retail nor malls are dinosaurs destined for extinction. Quite the contrary, the strong will survive and likely grow stronger. As weaker malls die off, survivors are freer to compete as centers of their respective geographies. However, the hyper competitive environment manifest today will continue to challenge managers of Class-A and Class-B properties who must refresh their properties to stay relevant to the consumer—and worth the trip. Like high transportation costs are causing decision makers to rebalance the geography of the global supply chain,[40] local and regional geographies are undergoing significant reevaluation and reconfiguration. Moreover, as we have just seen, innovations in mobile and payments technologies are also generating creative destruction in the retail segment and these trends can combine to work together in reshaping the competitive (and literal) landscape. Show room shopping, for example, alters the shopper's travel dynamic because the shopper need no longer actually travel to the retailer with lowest cost item. Instead, the *nearest* retailer will do—and so convenience is becoming the currency of the day.

And like many of the trend-changes disused throughout, this is a reversal of the prior trend. In the Old Normal, shoppers may have been willing to drive across town to the best-priced items, even if it was farther away. This dynamic helped grow the retail explosion in Edge Cities in the prior cycle.

But the new smart shopper is forgoing the old trip to the far-flung mega-store in favor of more proximate stores that win on convenience. A research note on Wal-Mart's 4th quarter 2013 results by Credit Suisse noted "High sustained transportation costs and broader consumables distribution appear to be reshaping consumer shopping behavior" and called on Wal-Mart to close 100 underperforming stores. Developed during the era of cheap transportation, Wal-Mart's locations are becoming obsolete as the economic geography of the U.S. reconfigures. Charles Fishman, author of "The Wal-Mart Effect," points out that Wal-Mart's expansion strategy under founder Sam Walton was to open stores on cheap land in locations that other retailers presumed could not support a large store. As a result of

[40] As discussed in our macro view in the Appendix.

these site selection criteria, many Wal-Mart's are situated beyond of immediate population centers—particularly historic downtown and urban areas.[41]

As globalization's rubber band snaps backwards and transportation costs adjust to a New Normal of higher prices, there is less need for a rational economic actor in travelling long distances for the lowest-cost item. As Credit Suisse notes: "It appears increasingly uneconomic for the customer to drive 20 to 30 miles round trip to a supercenter to save a marginal amount on consumable goods—particularly when consumables, including food, are becoming more broadly distributed."

But the emerging environment is not one bringing about the death of brick-and-mortar retail and malls. There may be too much retail square footage overall at the moment, and in the wrong places—but that does not mean there is enough of the right kind of retail in the right locations, particularly in urban clusters nearby dense residential populations. Target and Wal-Mart are already experimenting with smaller-footprint stores in denser areas. Wal-Mart has recently accelerated its neighborhood market strategy by opening 12 new stores in January, after opening roughly 12 per quarter in 2013.

Overall, retail is experiencing a massive momentum shift away from Edge Cities and towards more densely populated areas. This, along with similar shifts in residential—and more recently office—markets are further evidence of the larger geographic rebalance underway, where traditional geographic limitations reemerge to hamper the economic competiveness of many locations that thrived in the Old Normal of cheap transportation. Simultaneously, and somewhat ironically, the traditional geographic advantages of many older locations will again dominant the economic landscape in the New Normal.

The following section discusses economic geography in greater detail, particular as related to Appleton.

3 Appleton in Focus

It is commonly said today 'there are three things that matter in property: location, location, location.' But site selection is no more vitally important to economic success today as it has been throughout history. London's location at the deep-water outlet for southern England's large network of natural and manmade waterways created a large advantage for England in the very early industrial period. This network of blueways allowed for large scale shipping while also keeping transportation costs down long before the railroad came to be, which (eventually) drove transportation costs down for everyone. As railroads were laid, England's transportation advantage softened and areas in Germany, France, etc. were better able to compete. This is very similar to the more recent late industrial, post-WWII period, or Old Normal, in which cheap fossil fuels helped to flatten the global economy, as discussed in the core macro in the Appendix E. In a world of cheap transportation costs geography can be secondary to any number of other factors, such as cheap labor cost, low tax, or regulation. In some sense, basic physically geography can take backseat in the decision making process because cheap transit means geographic constraints can be overcome easily and with little resource and low cost.

But in a world of rising transportation costs, such the past decade, geography again comes into clear view. Discussed at length in our core macro view, no longer are the physical characteristics of a region hiding in the background. Quite the contrary, the geographic eccentricities and unique qualities of a place retake center stage in a rediscovery of meaningful geographic constraints. In short, the economic geography of a place—the primary driver of human site selection for millennia—stops getting wagged by the tail of transportation so cheap planners and decision makers could take it for granted.

Going forward, regional and metropolitan competition will intensify even as a rising North American tide lifts all boats. As regional competition increases, the conventional rules applicable to any other market, such as specialization and

[41] "Time to close Wal-Mart stores? Analysts think so" by Krystina Gustafson CNBC 31 Jan 2014

differentiation, will become increasing important in the success of local economies. Local leaders who recognize the positive differences in the real economy will transfer the differences into marketing and branding opportunities through their economic development efforts. Critically, this heightened competitive environment will be increasingly dynamic with regional and metropolitan competition working simultaneously at separate levels but also economically and physically intertwined—sometimes in cooperation or mutual benefit rather than pure competition.

Appleton, for example, may compete with Green Bay in the site selection process for a certain end-user—but they also work to complement the competiveness of each other as a regional cluster known for manufacturing, skilled labor and plentiful freshwater and other natural resources. So, Green Bay relies on Appleton's rail connection north to the Canadian National network for imports to the North American interior, just as Appleton relies on Green Bay's deep-water port for export. Most important to the success of both individual cities will be the success of the greater Highway 41 corridor against its competing regions elsewhere in the Great Lakes mega-region and beyond.

Within this competitive regional landscape the unique characteristics of each local geography and economy will determine its relative success going forward, whether hard assets like built or natural infrastructure (such as a highway or a river) or soft assets like an educated workforce. Geographic reality and physical assets and infrastructure have always been important—as we have seen, however, during the post-WWII industrial boom of the Old Normal, the once-rich uniqueness of many places, economies and even social and civic relationships gave way to uniform zoning and residential development plans recycled ad infinitum in thousands of communities across the county that became dwarfed by "superblock" development. The New Normal breaks from the monotony of superblock's expansive monoculture, re-elevating the importance of distinctiveness of place and experience, as well as the practical convenience of density.

The sections immediately below examine the individual features of Appleton's economic geography.

3.1 Regional Framework

Appleton lies in the heart of the East Central Wisconsin region. The East Central Regional Planning Commission is a regional planning group that focuses on this 10 county area, including each of the three counties the city of Appleton is situated in: Calumet, Outagamie and Winnebago counties. Nearby Green Bay and Brown County are located in the Bay Lake region—comprised of 8 counties east of the East Central region along Lake Michigan—which is overseen by the Bay Lake Regional Planning Commission, among others.[42]

[42] More information of Wisconsin's regional planning commissions is available of the Association of Wisconsin Regional Planning Commissions website: http://www.awrpc.org/index.html

Figure 11 Area Cities of at Least 40,000 Population

This study builds on the great efforts of the many groups working to develop the economy of the region, including:

- The Northeast Wisconsin (NEW) Economic Opportunity Study, a robust effort undertaken by a great many state and regional partners completed in October of 2004.[43]
- The Wisconsin Economic Development Corporation (WEDC), including the Wisconsin Economic Future Study report and related works, available on the WEDC's website: http://inwisconsin.com/economicfuturestudy
- The New North, Inc. which is a 501(c) 3 nonprofit, regional marketing and economic development organization promoting its region as well as collaboration amongst the private and public sector leaders throughout the 18 counties of Northeast Wisconsin, also known as the New North region. New North Inc. is a regional partner to the WEDC and the State of Wisconsin generally, as well as local municipal economic development partners and more than a hundred private investors. The New North brand unites its region both internally and externally around talent development, brand promotion and business development, signifying the collective strength of its 18 counties. The counties include Outagamie, Winnebago, Calumet, Waupaca, Brown, Shawano, Oconto, Marinette, Door, Kewaunee, Sheboygan, Manitowoc, Fond du Lac, Green Lake, Marquette, Florence, Menominee and Waushara. According to its website, New North, Inc.'s mission is to "harness and promote the region's resources, talents and creativity for the purposes of sustaining and growing our regional economy." More information can be found on its website: http://www.thenewnorth.com
- The East Central Wisconsin Regional Planning Commission (ECWRPC) and its many works, reports and newsletters, which are available on its website: http://www.ecwrpc.org
- Fox Cities Chamber of Commerce and Industry (the Chamber), specifically its commissioned report "Ignite Fox Cities: A Blueprint for Economic Prosperity" produced by Garner Economics, LLC in late June of 2011 to conduct an economic development strategy for the Appleton, WI region. The scope of services included

[43] A Microsoft Word version of this report is available at http://www.thenewnorth.com/media/54095/new%20strategy%20report%20sr%20breakouts.doc

analyzing the local and regional economies and conducting an assets and challenges assessment of the region. The report also compares the Fox Cities region to two benchmark regions; Chattanooga TN-GA, and Sioux Falls SD, which were selected as benchmarks by the Chamber because they are examples of areas with high concentrations of similar industry specialization to the Fox Cities area.

The map in Figure 11 depicts the populations of cities across a large area of Wisconsin with at least 40,000 residents (blue squares) and up— major roads are also shown (interstates are represented by the thickest yellow lines). Appleton is grouped with other cities with at least 60,000 residents (green squares). Milwaukee is the largest city in the area, with more than 500,000 people (red square). Madison is the closest city to Appleton with at least 200,000 residents (orange square). Meanwhile Green Bay is the third largest city shown with more than 100,000 people (yellow square).

Garner is right to assess Appleton-Neenah and Oshkosh together but Lambeau Field (in the Green Bay area municipality of Ashwaubanon just 30 miles away) is just as close to Appleton as Oshkosh. As such, Green Bay is just as important as Oshkosh. As we have just seen, the seaport there matters to the region a great deal. Yet, the Garner report selected the Appleton-Oshkosh-Neenah Combined Statistical Area (CSA) as the relevant geography for its analysis. This CSA consists of both the Appleton and Oshkosh-Neenah metropolitan statistical areas (MSAs), which includes the counties of Calumet, Outagamie, and Winnebago. The report noted its selection in part because:

> Due to worker flows and the need for measurement standardization, the Appleton-Oshkosh- Neenah CSA was selected as the best geographic unit to accurately capture the economic and demographic characteristics of Fox Cities. According to the U.S. Census Bureau, in 2009 47.3 percent of workers that lived in Fox Cities worked in the Appleton MSA, and 26.2 percent worked in the Oshkosh-Neenah MSA. At the county level, 40.4 percent of workers that lived in Fox Cities worked in the Outagamie County, 26.2 in Winnebago County and 6.9 percent in Calumet County.

At a combined 73.5%, the three counties that make up the CSA Garner selected were leaking 26.5% of the workers beyond their borders, and therefore beyond the selected study area in 2009. This data is emblematic of the relatively narrow geography of east-central Wisconsin generally and along Highway 41.

Indeed, Green Bay is just as close to Appleton as Oshkosh—even though the former was excluded from the Garner Report and the latter included. The Paper Valley Hotel, a Radisson property located in downtown Appleton advertises its proximity to Lambeau Field at just 30 miles: "Tour the stadium of one of football's most storied franchises when you visit the Radisson Paper Valley. If you're here during the fall, be sure to get tickets so you can cheer on the Green Bay Packers."[44] On the first floor, the Paper Valley Hotel also includes Vince Lombardi's Steak House.

And while it is beyond the scope of this study to properly assess the entire regional geography that may be relevant to such an effort, the sections that follow make reference to this essential regional context where appropriate.

3.2 Select Regional Infrastructure

Blessed by natural geographic advantages, Appleton and the entire Fox River corridor has functioned well as a transit hub long before trains and motor vehicles changed the landscape. Before Europeans settled the area, Native Americans could traverse Wisconsin from the Great Lakes to the Mississippi along the Fox River. To this day Appleton functions a major connection in the continental supply chain and distribution system—although principally by its connection to the intercontinental rail system. Indeed, many area firms are able to successfully access and compete in international markets against foreign competition from locations in Appleton and along the Highway 41 corridor.

[44] Available on the Paper Valley Hotel website at: http://www.radisson.com/appleton-hotel-wi-54911/wiapprad

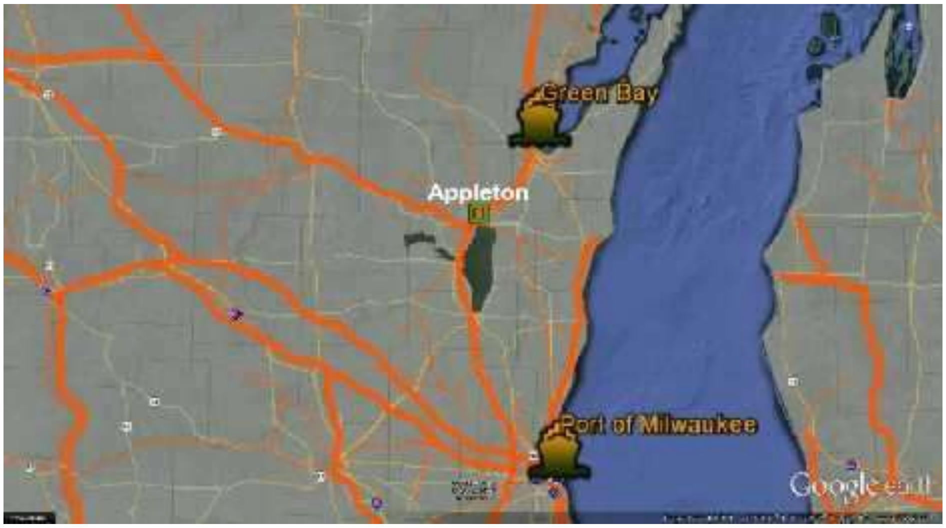


Figure 12. Wisconsin Ports & Railroads Map

North America's most interior deep-water ports are located near Appleton, in Green Bay and Milwaukee. With access to international markets through the St. Lawrence Seaway's link to the Atlantic Ocean, these two ports function as enormous catalysts for economic activity. Together with a robust regional rail network, including Class I lines managed by Canadian National Railway, Appleton lies along a power transit corridor that funnels economic activity to and from the entire continent. These deep-water ports and the rail network are depicted in the map in Figure 12 in orange. As implicated by our core macro view, we expect global trade to continue to grow – although not at the same pace in short term nor as uniformly as export growth in the Old Normal. Total exports may grow more slowly, but new sources of demand (in Asia), new technologies and new channels of trade will continue to create large opportunities for export growth in winning regions. Ports along the Gulf of Mexico and Atlantic coasts are already positioning themselves to compete with port upgrade and expansion projects intended to take advantage of the Panama Canal expansion, which will increase trade by tripling the size of the vessel capable of traversing the Isthmus of Panama—allowing the newest, largest and most advanced cargo ships to split the Americas without going around.

The Panama Canal expansion will not have as large an impact on the deep-water ports in Green Bay and Milwaukee as those along the Gulf Coast. Yet, these ports will still provide the local economy with vital links to the global economy. The Port of Green Bay is particularly vital to Appleton as the closet deep-water port, but also the entire Highway 41 corridor because it is physically connected to the corridor itself. This, in turn, connects the Highway 41 corridor to world markets. As the Director of the Brown County Port and Resource Recovery Department was recently quoted: "as the western-most post of Lake Michigan, the Port of Green Bay offers the shortest, most direct route for shipments between the Midwest and the world."[45] And while the Panama Canal expansion may not have much impact on the growth on the deep-water ports in the Great Lakes in the near term, our core macro view above expects increased regional and intra-Great Lakes trade—and area trade could benefit in the future from increased traffic through the once-fabled Northwest Passage which will offer new routes to Asian markets.

Already today the Highway 41 corridor competes successfully in the global export market thanks in no small measure to its access to a deep-water port. As the Garner report noted, Appleton-Oshkosh-Neenah has large exports both in nominal and adjusted terms, with per capita exports well above the state, nation and its two benchmark communities. The Garner report went on to note the importance of this, saying: "Exports in a global economy are playing a more

[45] U.S. Ports' Ripple Effect on Economic Development 13 Nov, 2013, Jennifer Alten Available at: http://www.tradeandindustrydev.com/industry/logistics-warehousing-distribution/us-ports%E2%80%99-ripple-effect-economic-development-8546#sthash.hbo6duxM.dpuf

critical role in local economic competitiveness. Exporting has proven to be a powerful means to generate wealth, and provides evidence of an area's capacity to compete with firms outside the U.S." This is consistent with our core view in light of our expectation that export growth will to continue to provide opportunities going forward—but with greater challenges—those regions already successful in global markets should focus their strategies on maintaining their export advantages, at a minimum. Opportunities to expand or enhance the global competiveness of local firms should be given serious consideration, but regional exports should not be neglected as these channels of trade may dominate growth in the short to medium term.

Appleton is a city in just such a region, and this report was commissioned in part for this purpose. The sections that follow below provide greater understanding of Appleton's specific conditions, which is essential to developing an economic development strategy that seeks to maintain or strengthen a component in any region's economy.

3.3 Location Analysis

This section discusses the economic geography most relevant to the City of Appleton. As noted above, there may be references to Appleton's region, cities bordering Appleton, or otherwise nearby, as appropriate; however, the primary subject of this analysis is the City of Appleton itself and the 72,623 residents living there in as recorded in the 2010 Census. Data specific to the City is utilized where available, as well as the Appleton MSA—which includes 225,666 people living in Outagamie and Calumet Counties (176,695 and 48,971 residents respectively). While the larger urban area is contiguous with nearby Menasha and Neenah in Winnebago County and beyond, the Winnebago County MSA includes Oshkosh and was excluded to focus on Appleton because Oshkosh, as we have just seen, is just as close as Green Bay.

As discussed above, Appleton benefits from a number of geographic advantages that powered its economy in the past and continue to fuel its modern economy today. As the 2010 Comprehensive Plan noted: "with its location at the crossroads of US Highway 41 and US Highway 10, Appleton is part of the fastest growing urban area in the State of Wisconsin… (just) 90 miles north of Milwaukee and 30 miles southwest of Green Bay."[46] The city itself is nearly enveloped by developed land.[47] Notwithstanding a number of parcels zoned for agriculture use, the Census Department classifies Appleton as 100% urban, 0% rural—one of the primary reasons we expect Appleton to outperform in the coming period.

The communities encircling Appleton include: Grand Chute, WI (1.5 miles away), Kimberly, WI (1.8 miles away), Menasha, WI (2.0 miles away), Combined Locks, WI (2.1 miles away), Little Chute, WI (2.1 miles away), Buchanan, WI (2.3 miles away), Harrison, WI (2.3 miles away)—and together they form a relatively large urban crown atop Lake Winnebago.

[46] Comprehensive Plan Chapter 2, page 9.
[47] Although the City has extraterritorial jurisdiction over undeveloped land to the north.

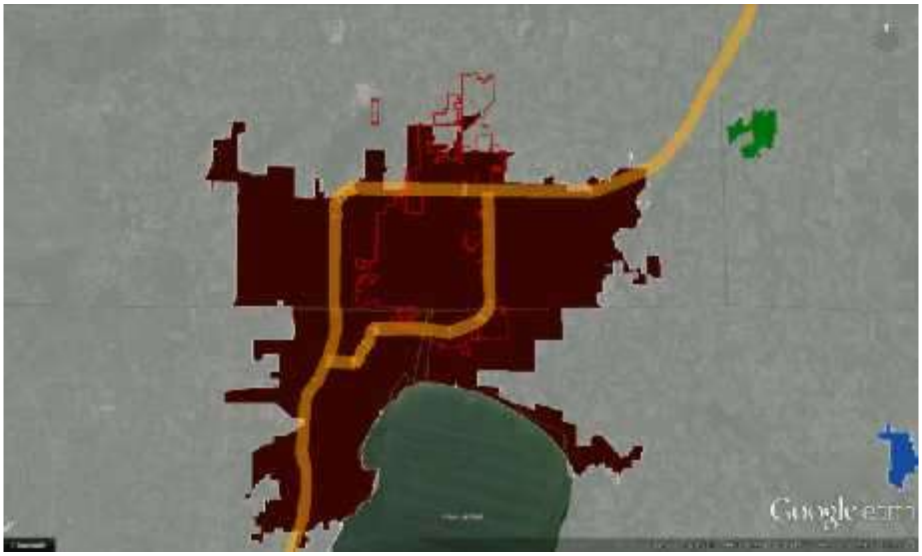


Figure 13. City of Appleton urban area and nearby urban areas with Highways 41 and 441 shown as lightly shaded lines

Road Access

Appleton is situated at the natural cross roads between Milwaukee, Canada and deep-water port Green Bay and north of the natural obstruction provided by Lake Winnebago. Appleton's primary motor vehicle route is U.S. Highway 41, which is highlighted in thick orange in Figure 13. Government officials have applied to have this highway designated as part of the interstate highway system. Other primary roads are U.S. Highways 10, and 45. Secondary roads are State Highways 47, 55, 76, 96, 114, 150, and 441. All of these combine to provide an important regional network that helps centralize area and regional traffic—in a naturally advantageous location north of Lake Winnebago's physical obstruction.

Currently, the nearest interstate highway, I-43, is east of the region extending from Milwaukee to Green Bay to the North. The lack of interstate highway access can be a negative factor because many companies require such access as a minimum threshold requirement in their site selection process, as noted in the Garner Report. And while this technicality has some impact in the minds of some site selectors and decision makers, U.S. Highway 41 is built to the same or higher technical specifications as the interstate system—and so there is no real difference in functional terms. Parts of the east west U.S. Highway 10 are also similarly built, connecting westerly to the Twin Cities and I-94 via I-39 and Wisconsin Highway 29.

Built just like an interstate, the economy along Highway 41 is uninhibited by the physical transportation system—which has clustered population and economic activity along the Highway 41 corridor from the deep-water port in Green Bay through Appleton and around Lake Winnebago to the west. The real effect of Highway 41 is evidenced by the concentration of population density, seen in the map below:

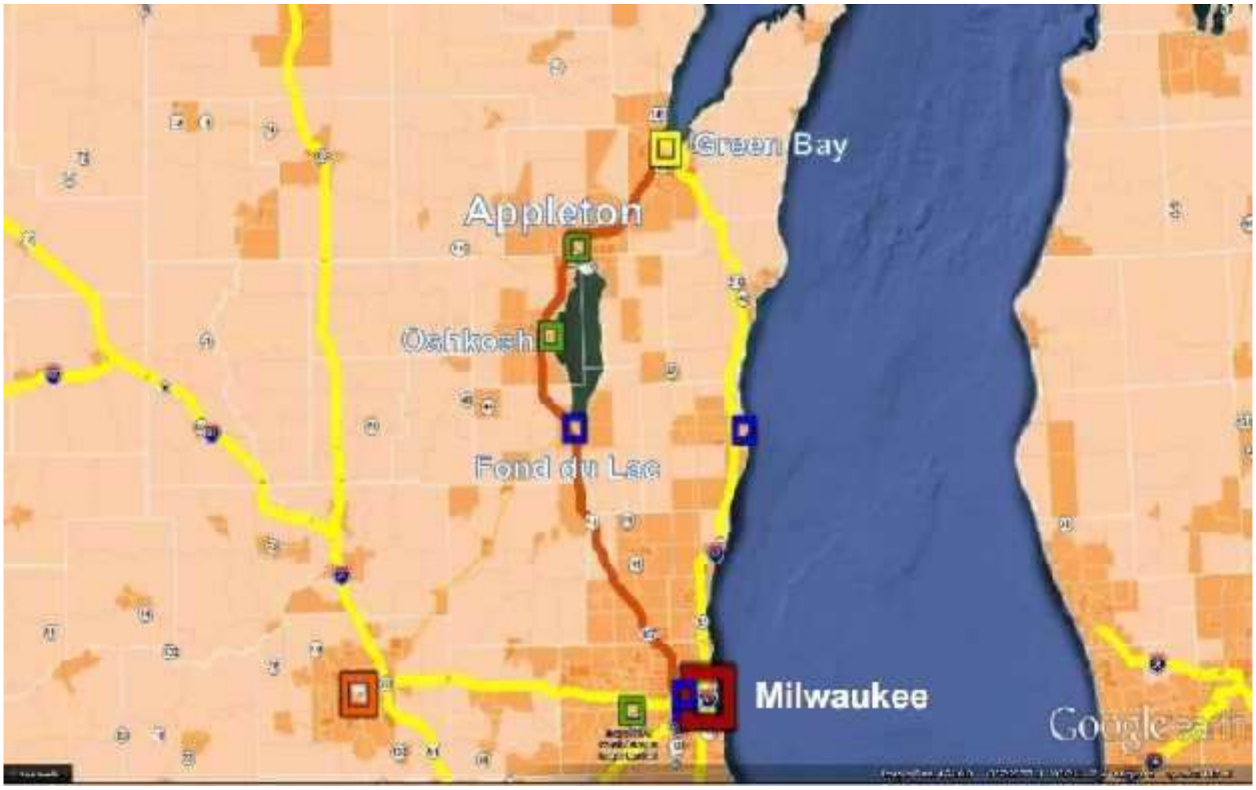


Figure 14. Regional Population Density Map. Source: ESRI

Notice population density shown in Figure 14 is much greater along Highway 41 compared to the interstates flanking it to the east and west, and thus also locates more cities with more than 40,000 residents as well.

US 10 is another major road that transects Appleton along an East-West axis and provides interstate equivalent road access through Appleton, helping to centralize traffic north of Lake Winnebago's natural boundary. U.S. 10 connects Appleton to I-94 and I-43 in the West and East, respectively. From Appleton Highway 41 provides excellent access to Milwaukee, which is less than 90 miles away with population of 596,974. Outside of Milwaukee, the Highway 41 corridor clusters more density and economic activity than any other corridor in the State of Wisconsin including Madison; which while larger as a single metro area and located at the crossroads of two interstates, does not equal the combined size of greater Green Bay-Appleton-Oshkosh-Fond du Lac Corridor.[48]

In real terms, then, it seems clear that the Highway 41 corridor can and is successfully competing notwithstanding the fact that it is not technically an Interstate Highway. There are currently efforts underway to designate Highway 41 as an interstate, which could help resolve this small, but substantial site selection criterion. Short of this, however, Appleton and the region as a whole should emphasize the robust physical reality that clusters so much density and economic activity, as just discussed. Clearly communicating these facts may help site selectors better understand the area, particularly national and international site selectors with little knowledge of Appleton's geography.[49]

[48] Even if Madison's areas were to include nearby Janesville, to the south (not shown in the map above).
[49] Indeed, in the qualitative analysis performed by Brand Acceleration, below, several site selectors remarked they has little working knowledge of the area.

Notwithstanding definitional technicalities, we expect the density and outperformance of the Highway 41 corridor to intensify as lifestyle changes in the New Normal for more convenience, lower cost and less time spent commuting readjusts preferences towards urban areas, or even small pockets of density within rural and suburban areas, consistent with our macro view. Not all urban areas will outperform, however, and many will continue to decline. On the other hand, many urban areas will be clear winners and far outperform others areas—indeed many are already experiencing explosive growth.[50]

As the New Normal continues to manifest, we expect Appleton to be a winning urban area—which is discussed further below in the section discussing Appleton's Specific Geography.

Air Access

Outagamie County Regional Airport (ATW) is two miles due west of Appleton. ATW services more than 250,000 passenger arrivals and 7,000 scheduled flights each year. ATW is a certified commercial service airport with two runways, the primary being 8,002 feet in length. ATW offers non-stop service to 7 destinations through Delta, United, and Allegiant Air. In 2015 the airport will re-brand as Appleton International Airport, opening a US Customs & Border Protection 'user fee' station to accept aircraft carrying up to 20 passengers, and air freight, directly from international airports.

The ATW campus covers 1,700 acres including Gulfstream Appleton MRO and Final Phase facilities, employing over 900 highly skilled employees; Fox Valley Technical College Training Center, a 78-acre multi-jurisdictional public safety training facility providing best-in-class training to agencies worldwide, and Platinum Flight Center, the airport owned Fixed Base Operator (FBO) which provides, aircraft services including fuel, maintenance, hangar and ramp services. Also present on the airfield is FedEx air cargo distribution center, which handles over 27 million pounds of freight and offers direct connection to Memphis daily. Air Wisconsin, the largest privately held regional airline in the US, is headquartered at ATW and completes the aviation cluster. ATW is currently marketing a 56-acre Aviation Business Park, shovel ready with utilities and broadband telecommunications access in place, minutes from US Interstate 41.

Figure 15 Regional Airports - larger airplanes representing larger capacity airports with Milwaukee's airport the largest

Air access is further indicated in Figure 15.

Green Bay's Austin Straubel Field is also just 30 minutes away, and Milwaukee's international airport is only 90 minutes away. The region has a number of smaller airports, including many private airstrips.

50 Chicago, for example, is emerging as an early winner with its population growth in portions of its downtown area, The Loop, more than doubling (nearly tripling) its permanent residents between the 2000 and 2010 census.

Passenger Rail Access

Appleton is not presently serviced by passenger rail. Although there were some serious plans to bring passenger rail to Appleton once again—these were scuttled. The nearest Amtrak station is 78 miles away, in Columbus, WI.[51] The lack of passenger rail service is apparent in Figure 16. Rail service planned for the Highway 41 corridor would achieve substantial geographic gains—particularly considering it is the densest corridor in central Wisconsin, as previously seen in Figure 14.

The City has already developed a well-considered plan for a passenger station downtown, and related development, in recognition of the many benefits such a hub of a major mode of transit would present to downtown Appleton. Consistent with the core macro view in the Appendix, we expect the benefits of passenger rail service to compound going forward—both in broad economic terms, but most specifically to those denser urban areas that locate a passenger rail station.

Figure 16. Passenger Rail Access Map – regional bus depots are shown with yellow bus icons. Regional passenger rail terminals are shown with orange terminals, and the Empire Builder line is highlighted in orange.

Bus Access

Greyhound provides bus service with daily trips to Milwaukee, Green Bay and Stevens Point. Lamers Bus Lines also offers one daily departure to the Amtrak station in Milwaukee. Traveling in the City by bus is made possible with service offered by Valley Transit, discussed further below.

3.4 Access to Inputs and Utilities

It is hard to overstate the value of Appleton's rich fresh water resources. The world is already water scarce today, with many countries turning to large-scale, energy-intensive and expensive desalination plants, *e.g*. Saudi Arabia,

[51] Along the Empire Builder line.

Australia. Thus, the natural resource values of Appleton's ample freshwater are hard to overestimate. Ample freshwater is an often minimum threshold requirement for many industrial and commercial activities. Industrial facilities are not merely electricity-intense operations, as discussed above in our core macro view, but many industrial uses have substantial water and wastewater requirements. Without water, as they say, plants will not grow and machines will not go.

And consistent with our core macro view, demand for water resources will only increase in the future—which will put these resources into even greater advantage. This dovetails perfectly with Appleton's position as a world class leader in industrial processing (particularly paper and food products) and manufacturing of all kinds, including advanced manufacturing which after decades of promise is emerging with an increasing number of companies and disruptive technologies nationally and internationally. Appleton's manufacturing specialty and prowess is discussed in greater detail in the Economy section below.

Appleton's proximity to other commodities and inputs is also a strategic advantage, many of which are themselves water-intense to produce, such as agricultural and wood products. Indeed, the combination Appleton's processing and manufacturing strength, its robust water and natural resources and access to domestic and international markets drives economic activity.

Electricity and natural gas for Appleton and most adjoining communities is provided by a combination of local and regional providers, including Wisconsin Electric Power Company (WE Energies). Wisconsin Public Service and Kaukauna Municipal Utilities provide service is some of the nearby communities..

Going forward, safe, reliable, sustainable and competitively priced utilities will be keys to durable economic success for every economy. Appleton, blessed by so many natural advantages, is well positioned to offer firms excellent access to inputs and utilities but should consistently work to maintain excellent infrastructure. This will require sustained investment.

Importantly, prudent planning at this moment in history likely requires expectations for increased future infrastructure investments, particularly electricity. Many new technologies are emerging from generation and distribution to storage and conservation. Industrial users, individual households and every user in between are also becoming more efficient. Smart meters and appliances, smart grid technology, low cost solar systems and a multitude of other advanced systems are deepening the energy advantage North America is gaining thanks to the production boom discussed above. Not only is more domestic energy being produced, but end-users demand less energy per unit than ever before. At the municipal level, cities which make investments in new energy infrastructure will outperform cities who neglect their infrastructure. And as important as reliable and low-cost utilities are today, they are likely to become even more valuable in the near future if the North American manufacturing renaissance continues. While they may use less energy per unit, many new industrial facilities require more energy than ever before, such as Tesla's new "Gigafactory."

Appleton can also encourage its overall energy resilience by encouraging denser, energy efficient construction—strategies it's uniquely suited to offer as the most dense urban area in the Highway 41 corridor and which it has already embraced along with many developers and consumers. Some cities have also developed aggressive programs to encourage energy infrastructure investment, often in residential solar panel programs, such as Berkeley California's Smart Solar program. Copenhagen implemented an ambitious waste-to-energy plan with a clean, no-emission incinerator cleverly designed as a ski-hill downtown.

Even advances in "green infrastructure" techniques are helping to mitigate Mother Nature's inevitable impacts, through better storm water and run-off management and flood control—issues Appleton will have to manage long as the Fox River keeps flowing.[52]

[52] A small price to pay for the many benefits its water resources afford the economy and the community.

4 Appleton Demographics

This section discusses various demographic measures relevant to Appleton, Wisconsin. Appleton's demography offers a number of insights into what makes Appleton consistently rank highly in surveys on the best places to live. While it has a mix of ages, there are a number of young people in Appleton. The City is young, educated, talented, urban and relatively dense—but with plentiful greenspace and bluewater infrastructure, and has that elusive "cool factor" with a lively roster of both daytime and nighttime activities packed in close proximity. These strengths are many of the best advantages to possess in the New Normal, and most are difficult or impossible to replicate by Appleton's would-be competitors.

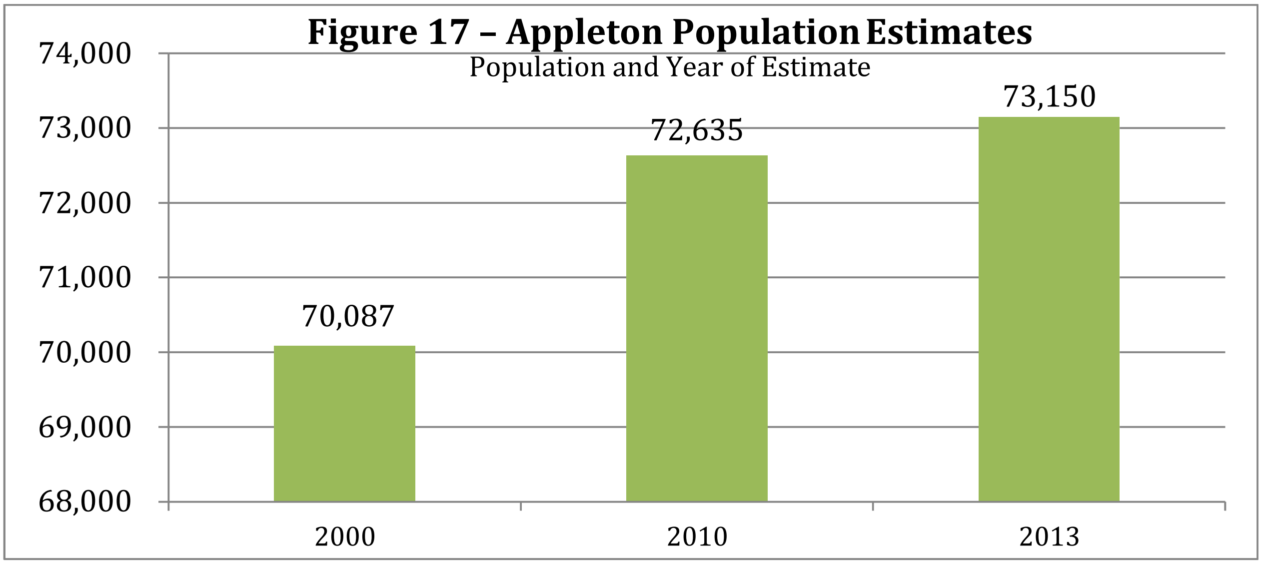
As such, Appleton is in a great position to lead growth in the New Normal from a position of strength by focusing on the many advantages it already possesses, such as its educated workforce and high quality education system. Many of these strengths were discussed were also by participants in our surveys, provided further in Appendices G & H.

4.1 Population

In the 2010 Census Appleton recorded 72,623 residents. Appleton MSA's includes many of the surrounding communities, including 225,666 people living in Outagamie and Calumet Counties. As the Garner report noted, the total population of Appleton-Oshkosh-Neenah was 392,660 in the 2010 census—which represented a 9.6 percent increase from the previous census a decade before.

As of the latest Wisconsin Department of Administration (DOA) estimates for 2013, Appleton's population is 73,150 residents. See Figure 17.

Figure 17. Appleton Population Estimates. Source: U.S. Census, Wisconsin DOA



4.2 Age Distribution

The following table provides two separate Census estimates for Appleton's population distribution (see Table 18).

Table 18. Appleton Population Distribution, Source: U.S. Census, 2010.

Age Distribution	2010 Census			2012 ACS	
	Number	Percent		Number	Percent
Total	72,623		Total	72,575	
Under 5 years	4,996	6.9%		5,104	7.0%
5 to 9 years	5,062	7.0%		4,975	6.9%
10 to 14 years	4,941	6.8%		5,207	7.2%
15 to 19 years	5,349	7.4%		5,666	7.8%
20 to 24 years	5,064	7.0%		4,728	6.5%
25 to 29 years	5,345	7.4%		9,283	12.8%
30 to 34 years	5,233	7.2%		10,171	14.0%
35 to 39 years	4,540	6.3%		10,845	14.9%
40 to 44 years	4,919	6.8%		4,479	6.2%
45 to 49 years	5,586	7.7%		3,788	5.2%
50 to 54 years	5,456	7.5%		3,998	5.5%
55 to 59 years	4,474	6.2%		2,893	4.0%
60 to 64 years	3,429	4.7%		1,438	2.0%
65 to 69 years	2,330	3.2%		5,104	7.0%
70 to 74 years	1,720	2.4%		4,975	6.9%
75 to 79 years	1,464	2.0%		5,207	7.2%
80 to 84 years	1,351	1.9%		5,666	7.8%
85 years and over	1,364	1.9%		4,728	6.5%

While the two government measures differ in the precise age distribution, they agree that Appleton is home to a high percentage of young adults, especially in the 20-34 year old age groups that comprise the core of the highly sought after representatives of the "millennial" and "generation Y" age groups that comprise the underpinnings of the creative class that is written about by author and social scientist Richard Florida.[53] In order to transfer the creative class designation to the millennial and generation Y, education in science, technology, mathematics, and the arts are necessary along with an environment that fosters innovation and creativity. The economic development strategic importance is discusses in Section 13 – Economic Development Strategic Plan.

[53] The definition of the creative class, millennials and generation Y are taken from Wikipedia, at the following web locations: http://en.wikipedia.org/wiki/Millennials; http://en.wikipedia.org/wiki/Creative_class

4.3 Median Age Comparison

The following table uses the official Census data to compare median age across the represented geographies (see Figure 19).

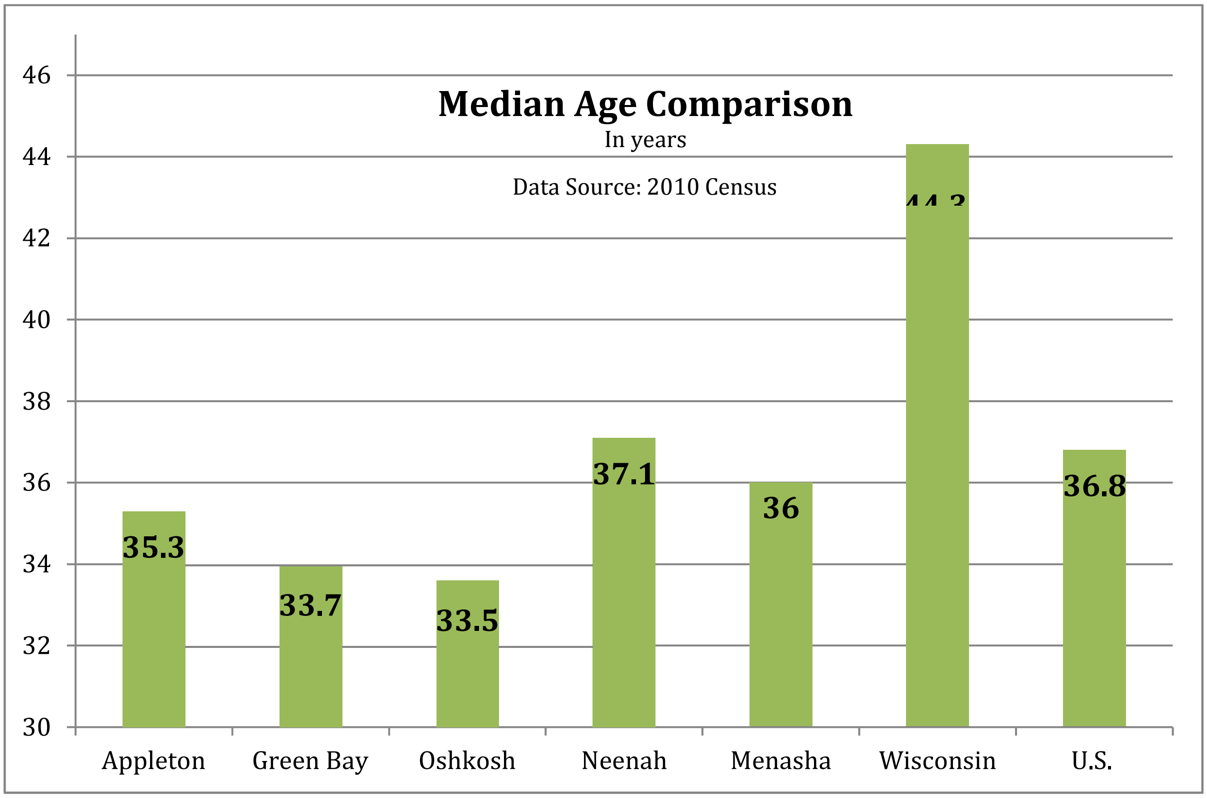


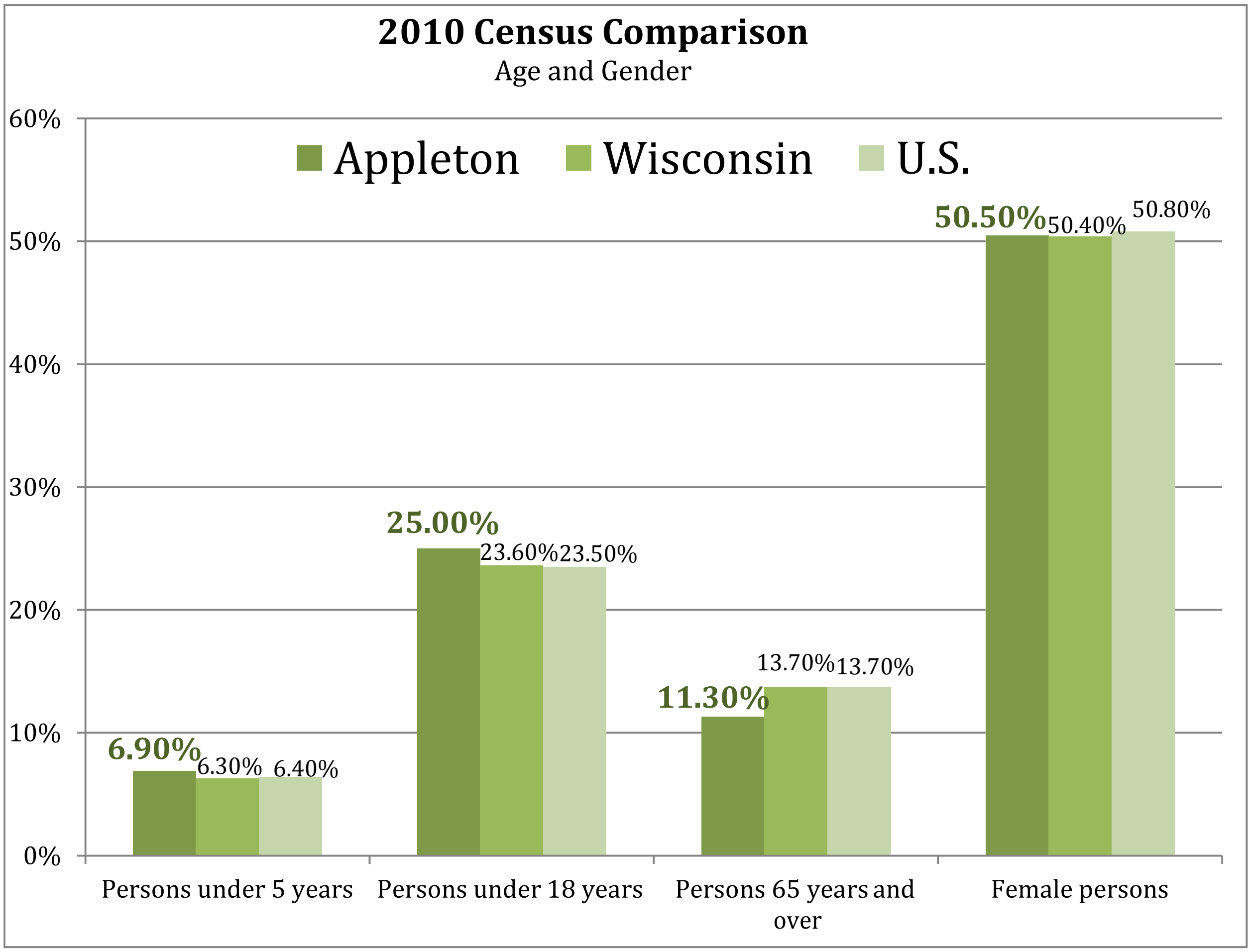
Figure 19. Appleton median-age comparison chart, Source: U.S. Census, 2010.

Appleton is much younger than the state average, and also below the national average. Only Green Bay and Oshkosh have lower median ages than Appleton (both with State universities). As a whole, the Appleton, Oshkosh and Green Bay CMSA (US 41) corridor is advantaged by large numbers of young educated adults that form a talent pool for prospective employers.

4.4 Other Age and Gender Comparisons

This table compares selection Appleton demographic components against their state and national counterparts (see Figure 20).

Figure 20. Age and gender comparison chart. Source: U.S. Census, 2010



Again the data makes clear Appleton has a large proportion of younger persons—both those under the age of 5 and the age of 18. Appleton also has a smaller proportion of persons over the age of 65.

Age composition is an important metric because it indicates the types of labor available in a given location. Appleton is lucky to be advantaged by relatively high concentrations of younger workers, as this is the demographic many high growth industries demand. Without a local supply of young, hip and tech-savvy workers, many new companies will not locate in a given location. Similarly, a high proportion of older, retiring and/or retired persons may imply a number of things, such as the need to attract replacement labor, potential growth in the local healthcare sector or even changes in local municipal budgets[54]— but Appleton's demographic does not presently raise these concerns.

And while its young demographic should act as a tailwind, Appleton should continue to make efforts to retain its own young people and attract talented young people to locate in the region, discussed further below.

[54] Seniors are typically are higher cost, but also higher net worth demographic.

4.5 Diversity

Figure 21, following, compares Appleton's demographic components across ethnic groups.

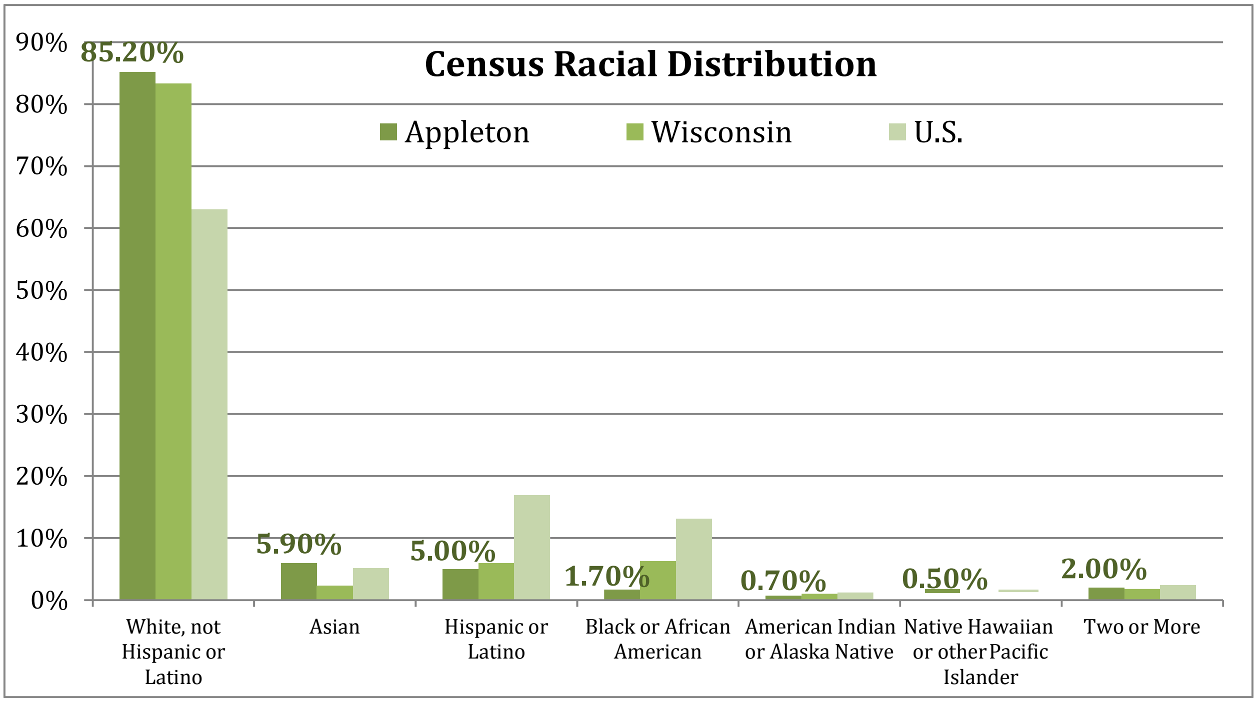


Figure 21. U.S. Census Diversity Chart, Source: U.S. Census, 2010

As the Garner Report also noted relative to the entire Appleton-Oshkosh-Neenah CSA, Appleton has a higher relative proportion of its population categorizing themselves as White-only compared to the benchmarks, state and nation and lower proportions of most other groups—except Asians. This can hurt local economic competitiveness because some location decisions are made by companies seeking to satisfy certain diversity requirements when building a facility above a certain size.

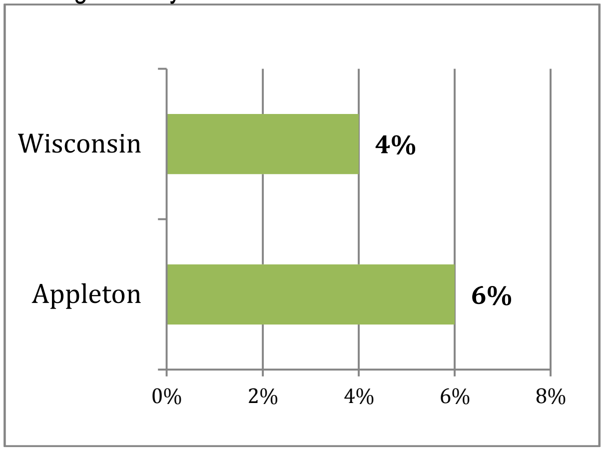


Figure 22. Foreign-born persons chart. Source: U.S. Census, 2010

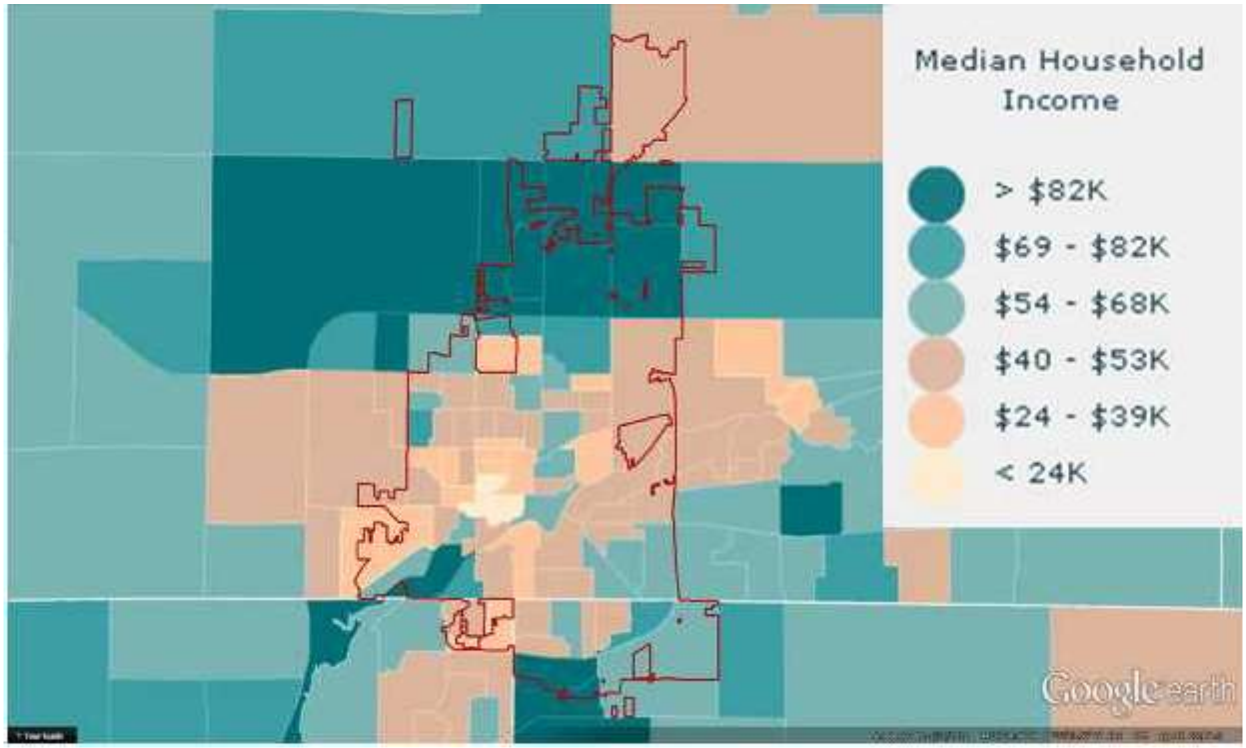
Or, as Garner noted, some cosmopolitan companies prefer higher rates of diversity to successfully attract and retain workers, such as a multinational firms looking to lure workers from oversees or a University seeking to attract accomplished intellectuals from abroad—either of which must compete in the global labor market where diversity can be a factor.

As Figure 22 shows, Appleton does have a higher percentage of foreign born persons compared to the state average. Appleton recorded 4,181 foreign born residents in 2010, 6 percent of the total (comprised of 3% from Asia, 2% from Latin America and 1% from Europe).

4.6 Median Incomes

Median incomes in the city of Appleton are slightly below the national average. In the map in Figure 23 shows, the blue area represents median incomes, which are higher than the national average.

Figure 23. Appleton Median Household Income, Source: ESRI.



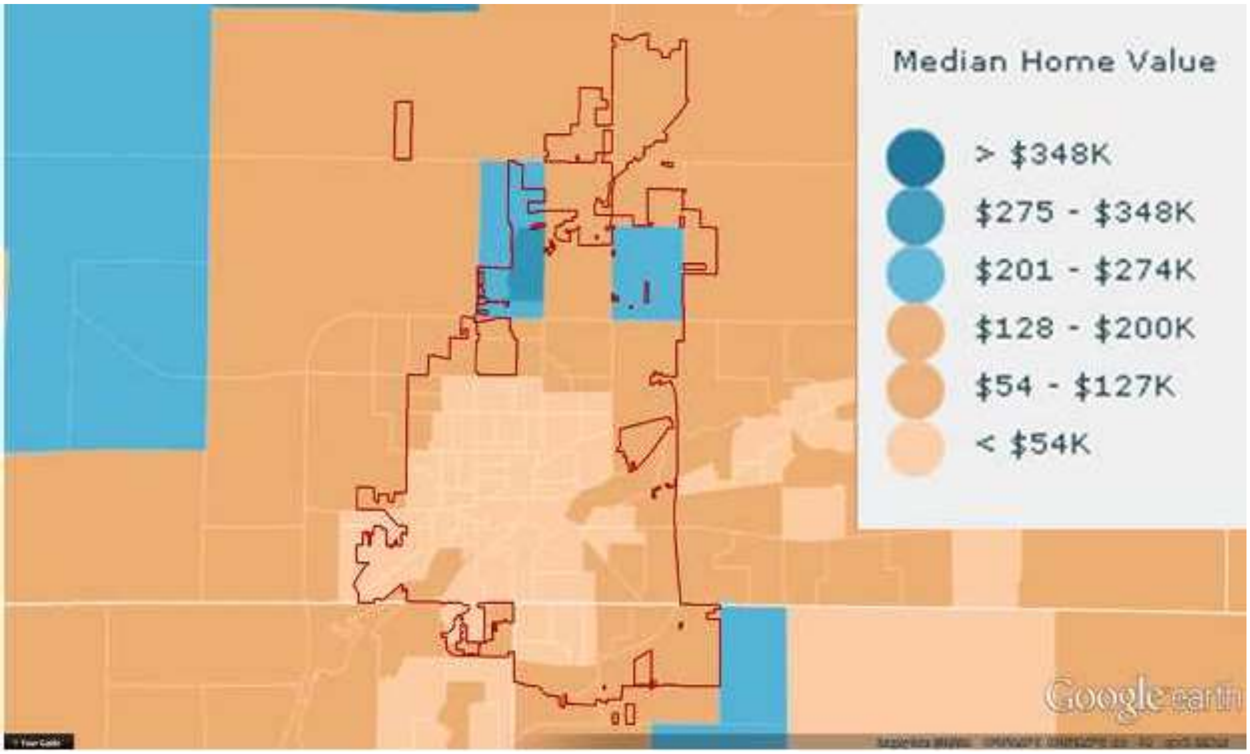
Incomes are generally higher in suburban and less-dense areas, although there are pockets of above-average income areas in central Appleton. Only a small area is estimated to have median household incomes below $24,000, and it is located downtown.

The largest concentration of high median incomes is to Appleton's north, but these are among Appleton's least dense areas. This also happens to be where Appleton enjoys what little extraterritorial jurisdiction it has, which raises some interesting possibilities for the future. Already building permit activity is clustering in this area, discussed further below.

4.7 Median Home Values

Median home values in the majority of Appleton household are slightly below the national average of $138,800, with a large cluster of below-average median home values centrally located in Appleton's densest areas.

Figure 24. Appleton Median Home Value, Source: ESRI



Whereas the 2010 Census recorded median household income in Appleton at $51,275, the Census Department estimates the median household income for 2012 was estimated at $51,253. This decline was an unexpected break from a long term uptrend. The 2013 Growth Report shows that median household income recovered from a decline in 2012, and is recovering in 2013. Median household income is very close to the State average for the 2013 comparison.

Figure 25 compares median home value vs. median household income with state and national benchmarks.

4.8 Median Home Value vs. Median Household Income

While Appleton's median household income declined in 2010, it sits just barely below the state and national averages (see Figure 25). Because the median home value in Appleton is substantially below both the state and national average, Appletonian households have a large advantage over their average state or national counterpart. The gap between median household income and median home value in Appleton is only $86,195 compared to a $116,373 difference in the state and a $128,354 difference nationally. This implies that median family in Appleton is $30,178 better off than those living elsewhere in Wisconsin, and $42,159 better off than those in the nation.

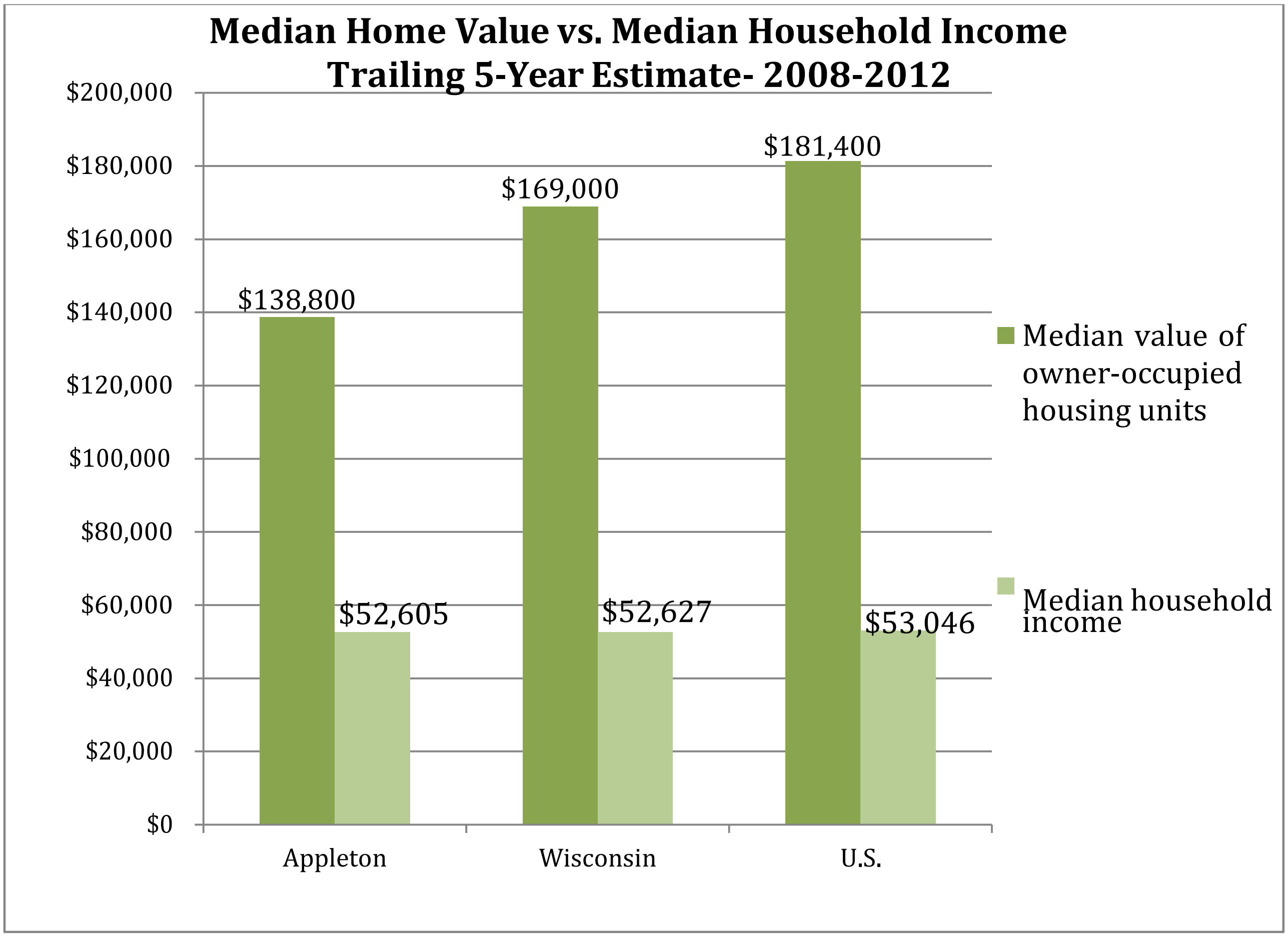


Figure 25. Appleton Median Home Value versus Median Household Income Chart, Source: U.S. Census estimates, 2008-2012

As the Appleton 2013 Growth Report points out, Appleton's overall cost of living compares very favorably to national and state averages, as well as regional cities and other comparable cities.

The relative advantage this provides households in Appleton can be observed in the data featured in the next section.

4.9 Household Comparison

Higher homeownership rates signal stability in the community. Strong neighborhoods and a balanced residential real estate market are high-value strategic advantages for areas competing to attract high-value workers from other geographies, and often the key to retaining talent within the same geography.

Appleton maintains higher rates of both home ownership and housing in multi-unit condominium structures than the state and national average as illustrated in Figure 26.

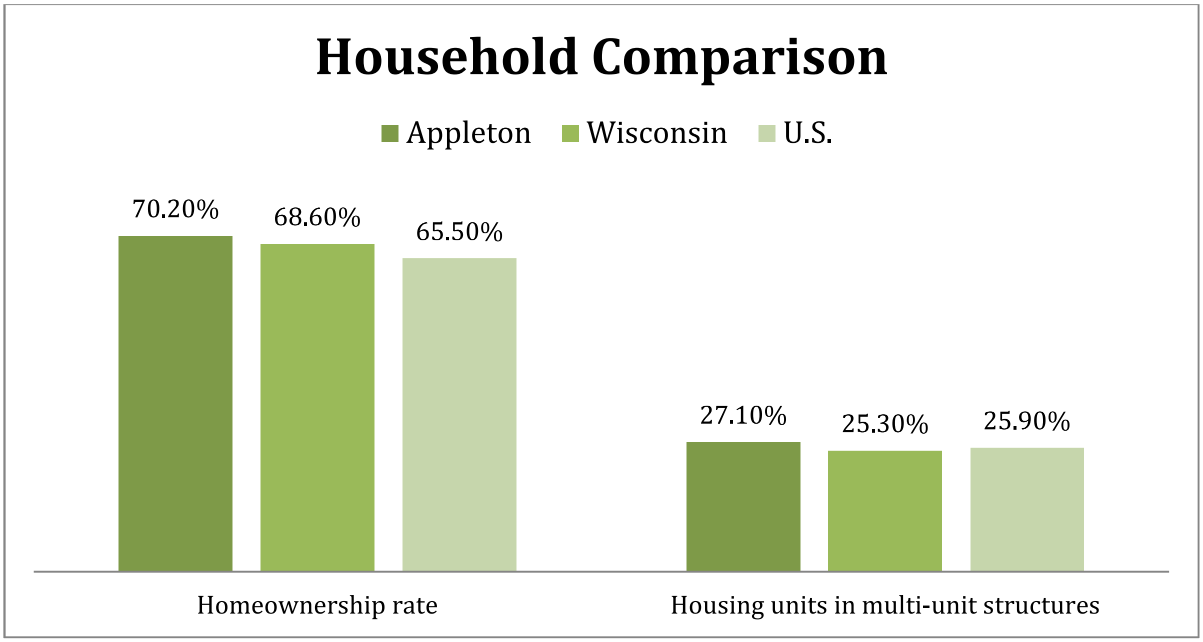


Figure 26. Household Comparison Chart, Source, U.S. Census, estimates.

The combined high rate of home ownership and relatively high density, discussed in the location analysis section above, give Appleton's urban-scape a competitive advantage over less dense areas with lower homeownership rates. Relative to Appleton, these areas will be constrained in greater degree by the many problems posed by sprawl and residential housing problems.

Consistent with our core view above, the strengths of these advantages are likely to grow as the New Normal matures. Appleton should continue to develop its hospitality, educational and cultural assets to fully benefit from these trends as they continue to emerge.

Regarding housing density, multi-family condominiums and apartments need to both blend in with neighboring lower density neighborhoods and offer sufficient amenities and open space for the residents and occupants. Density is not a desirable feature for housing unless it is appealing to the higher education levels of the people who would like to live close to other features of the downtown and educational and cultural institutions. These developments should be designed with walkable and bikeable destinations in mind for the residents.

Appleton's residential real estate market is discussed in more detail Section 6 and section 7.4.

4.10 Education

Education data provide a window into the human capital of geography. In today's fast-paced, challenging and changing world education is the bedrock of the economy. If knowledge is power, then education is the key to economic security and prosperity—certainly in today's knowledge economy. Highly educated, trained and specialized individuals are necessary to create growth in the economy of tomorrow. As discussed further below, highly skilled, high-knowledge workers are experiencing much better wage growth in an otherwise muted labor market.[55]

High levels of education in the population are a strong sign of the economic vitality and potential of an area. As a result, it is also useful in determine the economic competiveness of a local economy—as the vast majority of firms prefer to locate to areas with adequate labor forces more or less in place, rather having to resource their labor demands from a distance.

[55] Contrary to our core macro view, above, stagnant wage growth in the U.S. is a long term trend that has not shown signs of breaking—other than highly skilled workers.

Going forward, as technology continues to revolutionize industry; the competitive advantage of highly skilled, specialized labor is likely to continue to increase—along with overall productivity.

4.10.1.1 Primary System

The Appleton Area School District is one of Wisconsin's largest school district and also one of its fastest growing. The district encompasses more than 16,000 students in 2014 across Outagamie County including the city of Appleton, Grand Chute, Buchanan, Harrison, and part of Menasha, shown in blue in the map in Figure 27.

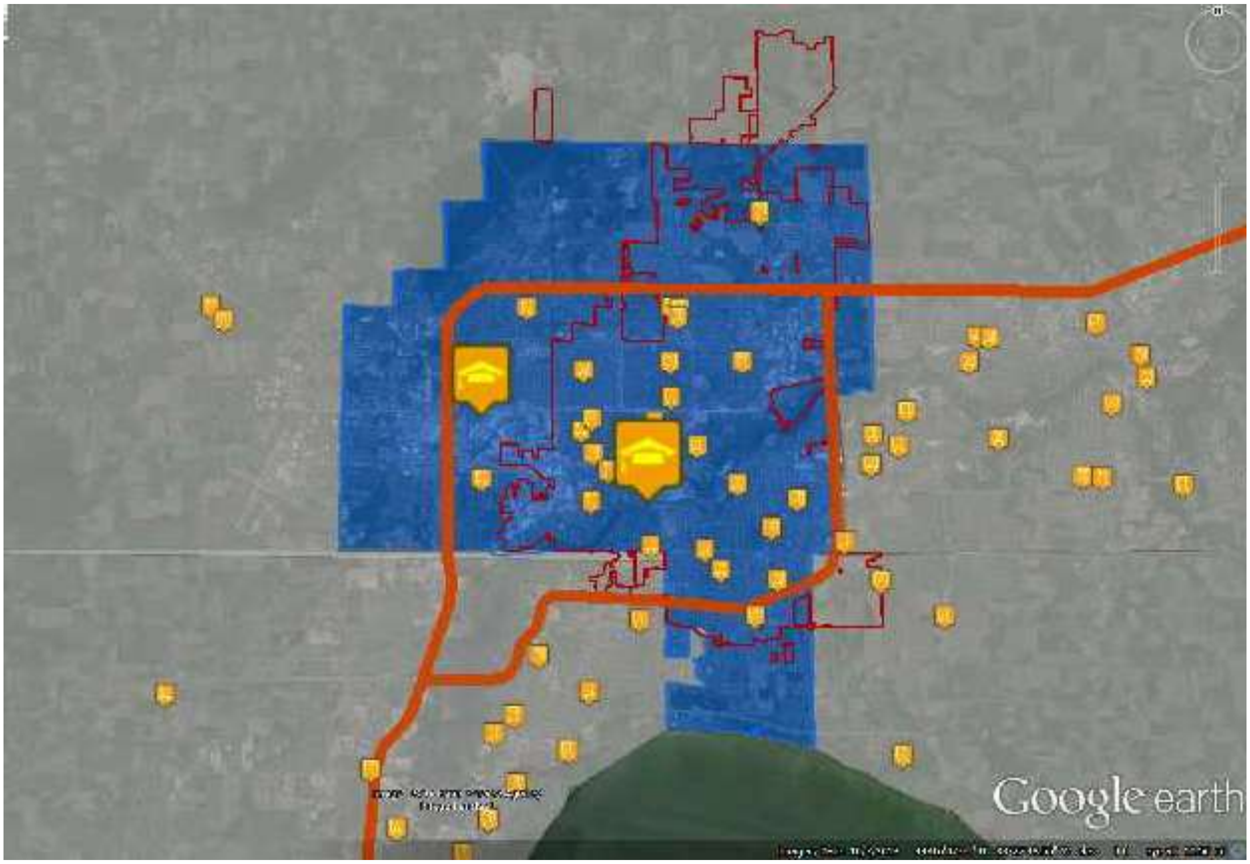


Figure 27. Appleton School District (blue), with area schools overlaid with orange cap and gown icon – larger icons representing colleges; the red line the Appleton City limits; and the orange lines representing Highways 41 and 441.

Appleton area students consistently exceed state and national test score averages, with the former consistently higher than the latter as well. Beyond solid public sector stewardship, Appleton's consistent scholastic outperformance is partly underwritten and supported by robust private sector involvement. Since 1997, for example, the Appleton Education Foundation (a local nonprofit group) has awarded grants to Appleton schools for many hundreds of thousands of dollars—including grants to more than 100 educators.[56]

The Fox Cities Alliance for Education, a partnership between the Fox Cities Chamber of Commerce and Industry, Inc. and Fox Valley Workforce Development Board, Inc., also supports the Appleton school district (and many other districts collaborate with area businesses on school-to-work initiatives). Its Career Connection program was founded helps area school districts and businesses collaborate on a wide variety of school-to-work initiatives, including a highly-recognized math-science-technology academy for teachers and job-shadowing programs. It also developed F.O.C.U.S program in 2010 with the aim of developing a shared resource and economic system for all things related

[56] More information about this great organization is available on its website: http://appletoneducationfoundation.org

to Science Technology Engineering Mathematics (STEM) in the Fox Cities. The goal was to “bridge the gap for ongoing support” to student in four key areas:

- become engaged in interesting, hands-on curriculum that strengthens their math, science and communication skills
- have access to positive role models and community resources
- identify opportunities that exist within STEM
- increase the number of female students enrolling in STEM

Table 28 Appleton Primary School Statistics

Number of Schools in This District:	38	Total Staff:	1,556
Student/Teacher ratio—Grades K-3 2014:	25:1	Fulltime Teachers:	948
Student/Teacher ratio—Grades 4-6 2014:	27:1	Pre K & Kindergarten Teachers:	73
Student/Teacher ratio—Grades 7-12 2014:	28.5:1	Elementary Teachers:	582
Total Students Pre-kindergarten - 12 Grade 2014:	16,212	Secondary Teachers:	294
Preschool students 2014	82	Elementary Guidance Counselors:	18
4K 2014	969	Secondary Guidance Counselors:	12
Kindergarten 2014	1,126	Total Guidance Counselors:	30
Elementary 1-6 2014	6,910	LEA Administrators:	7
Middle School 7-8 2014	2,376	School Administrators:	36
High School 9-12 2014	4,749	LEA Admin Support Staff:	24
Total Males:	7,921	School Admin Support Staff:	72
Total Females:	7,354	Student Support Services Staff:	90
American Indian Students:	135	Other Support Staff:	93
Asian/Pacific Islanders:	1,560	Library Media Support Staff:	14
African Americans:	359	Librarians Media Specialists:	21
Hispanic:	634	Instructional Aides - Total:	182
White:	12,587	Instructional Coordinators:	39

As one might expect from the demographic components comparisons provided in the table in Figure 28, Appleton’s primary education system is large for the City’s size, due to inclusion of adjoining incorporated areas.

4.10.2 Higher Education System

The Appleton area is home to several colleges and universities, including:

- Fox Valley Technical College

- Lawrence University
- University of Wisconsin-Fox Valley
- A branch of the Milwaukee School of Engineering
- A Globe University campus
- A Marian University campus
- A Rasmussen College campus

First, Fox Valley Technical College, located in neighboring Grand Chute, is the leading technical, vocational, occupational and adult education provider in the Fox Cities Region serving roughly 50,000 people in some capacity each year. Also known as Fox Valley Tech and FVTC, the college offers more than 200 associate degrees, technical diplomas and certificate programs, as well as instruction for 20 apprenticeship trades.

Second, Lawrence University was founded in 1847 and has a long and storied reputation—often ranking in top 50 liberal arts colleges in results published by U.S. News & World Report enrolls more than 1,500 full-time students. B.A. programs are offered in more than 30 areas. A 2013 study by the National Science Foundation ranked Lawrence 28th in the nation in the percentage of graduates who continues on to earn doctorate degrees.[57] Its urban campus is downtown and spans more than 80 acres, and contributes greatly to the culture and history of Appleton. Lawrence should be sought out as a partner for employer internships and for ideas to link town-gown development opportunities due to its relative location to downtown.

4.10.3 Adult Education

Appleton also enjoys a strong education profile amongst its adult population as illustrated in the Figure 29. Appleton's concentration of graduate and professional degrees (10.3%) is also higher than state and national averages.

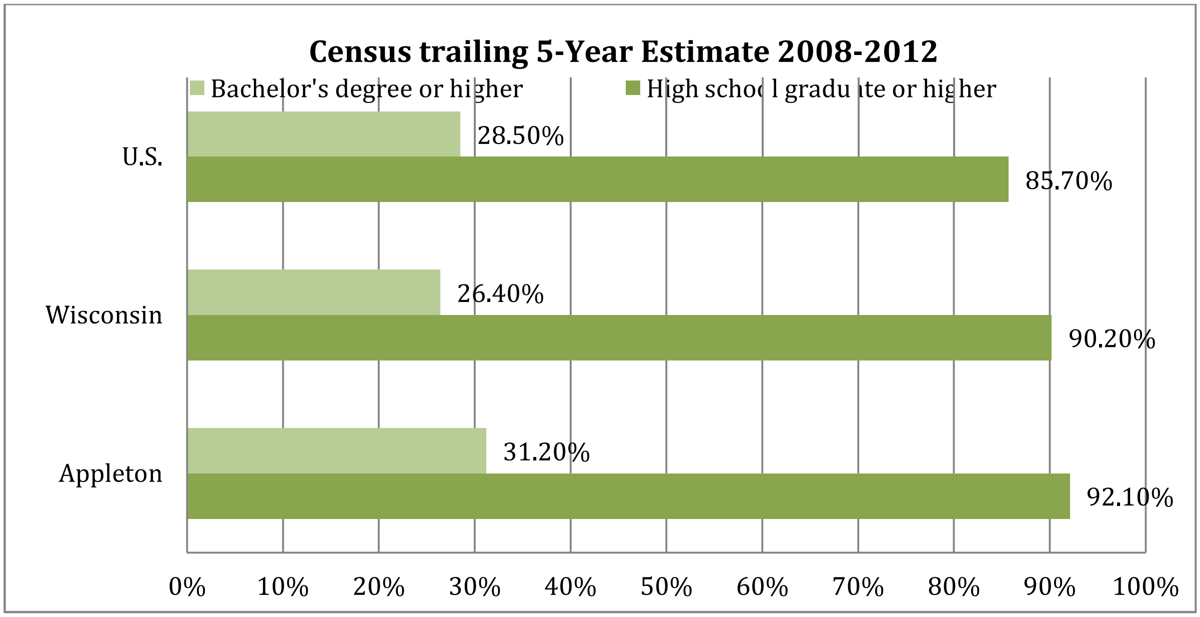


Figure 29. Appleton Educational Profile for Persons 25 and higher. Source: U.S. Census, 2008-2012, estimates.

4.10.4 Public Education Resources

The 85,000 square foot Appleton Public Library is a substantial community resource which features more than 300,000 volumes and 500 periodical subscriptions as well as an extensive multimedia library of CD, DVD's and other

[57] http://www.nsf.gov/statistics/infbrief/nsf13323/

audio-and video tapes and recordings. The library expanded in the 1990s to create space for children's programs and added shelf space. It receives roughly 1,500 physical visits per day and maintains a well-visited website.[58] Plans are underway for a new or remodeled library in the foreseeable future, which is believed to have a positive impact on downtown Appleton.

4.11 Poverty

While poverty exists everywhere, very high levels of poverty can be warning sign to companies looking to expand their operations. Poverty can also directly challenge the local economy, but lowering the aggregate demand of a geography below potential—often far below the area's economic potential.

Fortunately, Appleton suffers poverty in a lesser degree than both the state and the nation as indicated in Figure 30.

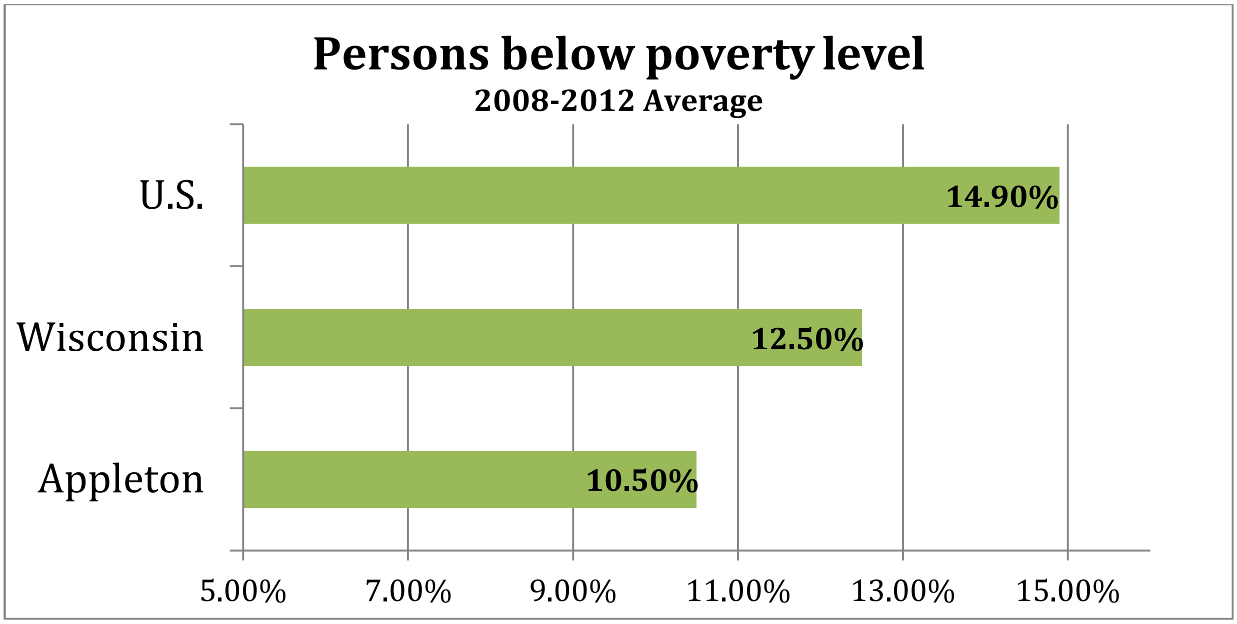


Figure 30. Persons living below poverty comparison chart, Source: U.S. Census, 2008-2012, estimates.

And while muted in the aggregate, this disguises a real poverty crisis impacting certain populations in Appleton. While every family unit in Appleton fares better than their average Wisconsin counterpart, poverty is disproportionately impacting very sensitive populations, i.e. children, as show in Table 31:

Table 31. ACSC Poverty Rate for all People. Source: U.S Census, 2008-2012, estimates.

Five year estimate (2008-12)	Appleton	Wisconsin
All people	10.5%	12.5%
Under 18 years	13.5%	17.2%
Related children under 18 years	13.4%	16.8%
Related children under 5 years	15.1%	20.7%
Related children 5 to 17 years	12.7%	15.3%
18 years and over	9.4%	11.0%
18 to 64 years	9.7%	11.8%
65 years and over	7.4%	7.6%
People in families	8.5%	9.5%
Unrelated individuals 15 and over	18.4%	24.2%

[58] The Appleton Public Library is located at 225 N. Oneida St., Appleton, WI 54911-4780; telephone (920)832-6170.

Examining the data available for family units in Appleton reveals a real poverty crisis in some segments of the population, particularly families with a female householder but no husband present as well as families living with related children. Family unit poverty data is given in the chart below as shown in Table 32.

Table 32. ACSC Poverty Rate by Family Unit, Source: U.S. Census, 2008-2012, estimates.

Five year estimate (08-12)	Appleton	Wisconsin
All families	8.0%	8.4%
With related children under 18 years	12.4%	14.3%
With related children under 5 years only	14.3%	16.8%
Married couple families	4.0%	3.4%
With related children under 18 years	5.2%	5.2%
With related children under 5 years only	4.2%	4.7%
Families with female householder, no husband present	26.0%	30.1%
With related children under 18 years	33.1%	38.5%
With related children under 5 years only	38.7%	49.6%

Notice that families fare better than the rate for all persons, illustrated by Appleton's overall poverty average of 10.5 percent compared the family rate of 8 percent.

Other economic indicators are discussed the next section, which includes a thorough examination of Appleton's local economy.

5 Appleton Economy

This section examines select measures of Appleton's economy to assess its current conditions, beginning with recent unemployment.

5.1 Unemployment

The unemployment rate is a key barometer of economic health. Since the recovery began the City of Appleton's unemployment rate has trended down. Between the start of 2012 and the end of 2013 Appleton's unemployment rate fell from 8.6% to little more than 5%—well below the national average (see the chart in Figure 33).

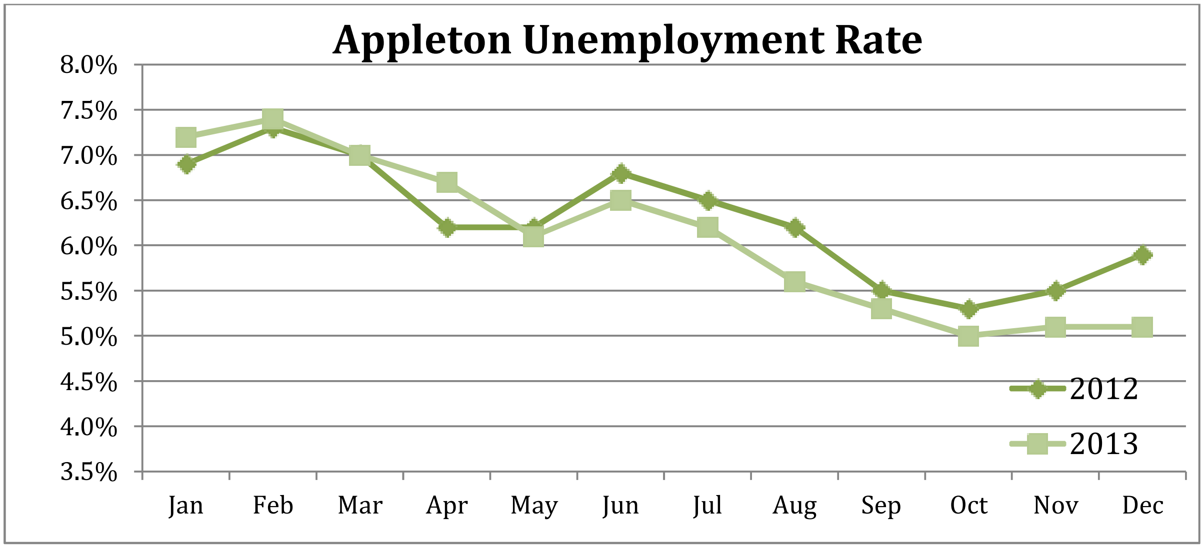


Figure 33. Appleton Unemployment Rates. Source: WI Dept. of Workforce Development

5.2 Total Nonfarm Jobs

The number of nonfarm jobs in Appleton MSA rose higher in 2013 than in 2012, although experienced the same seasonally decline as in 2012 (see Figure 34).

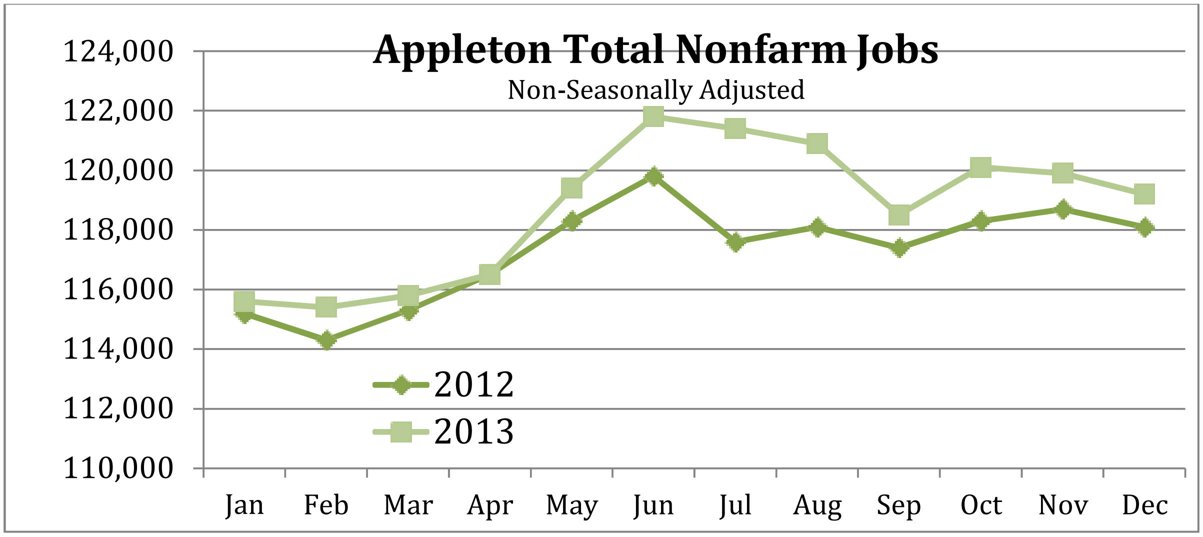


Figure 34. Appleton Total Non-farm Jobs, not seasonally adjusted. Source: WI Dept. of Workforce Development

5.3 GDP Metrics

Gross Domestic Product (GDP) is calculated by measuring a wide variety of economic activity. As the widest and most comprehensive measure of economic output, GDP is an important baseline metric used as strong indicator into the overall health of an economy. GDP is used a barometer for local economic strength by economists, politicians, comedians, business and corporations alike. Importantly, GDP is used by (typically larger) corporations exploring opportunities to expand operations into new geographies—as well as their site selectors.

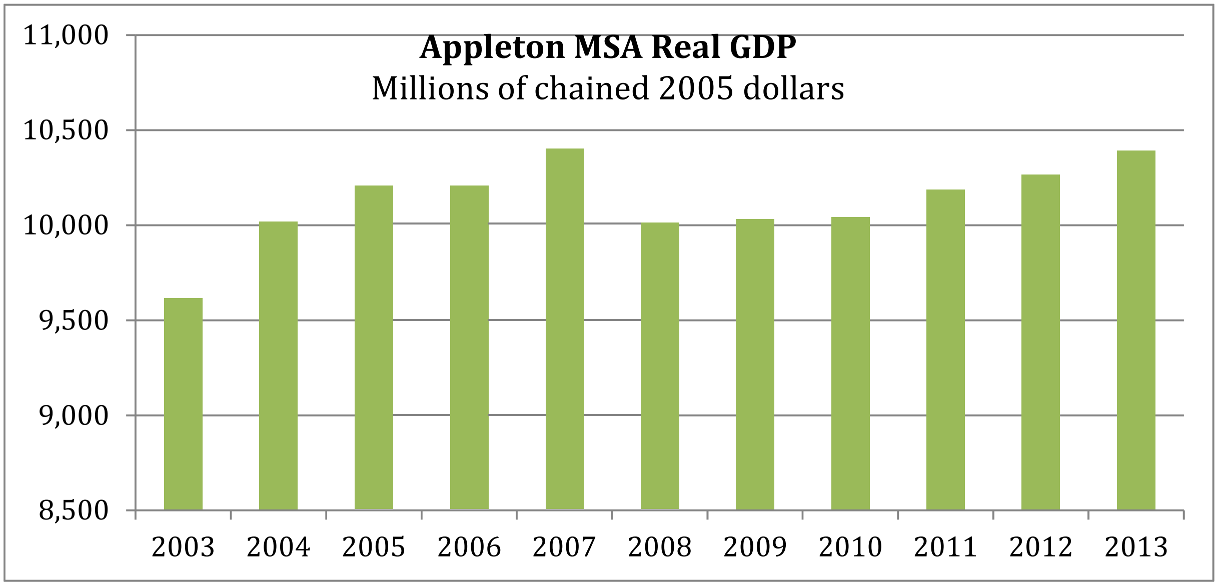


Figure 35. Appleton MSA Real GDP (Millions of chained 2005 dollars). Source: U.S. Bureau of Economic Analysis

Appleton's Real GDP bottomed in 2009 and has since climbed steadily, representing more than 8.8 billion dollars in 2012, as illustrated in Figure 35. While 2013 data is not yet available for Appleton, GDP gains likely continued consistent with overall U.S. growth, discussed above.

To give a deeper understanding of Appleton's economy, Table 36 gives select figures for the components of Real GDP for the Appleton MSA (in millions of chained 2005 dollars, which means all subsequent years data is adjusted to year 2005 as the base year) according to the BEA:

Table 36 gives select figures for the components of Real GDP for the Appleton MSA (in millions of chained 2005 dollars): Continuing 3 pages

Ind. Code	Industry	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	All industry total	9,616	10,021	10,193	10,226	10,405	10,054	10,035	10,042	10,187	10,267	10,393
2	Private industries	8,761	9,150	9,296	9,321	9,470	9,093	9,057	9,057	9,212	9,291	9,429
3	Agriculture, forestry, fishing, and hunting	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
4	Farms	123	109	131	122	128	112	87	129	150	148	(NA)
5	Forestry, fishing, and related activities	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
6	Mining	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
7	Oil and gas extraction	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(NA)
8	Mining, except oil and gas	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
9	Support activities for mining	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(D)	(D)	(NA)
10	Utilities	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
11	Construction	917	915	891	785	759	683	593	590	610	652	549
12	Manufacturing	2,429	2,525	2,505	2,628	2,633	2,369	2,431	2,260	2,338	2,361	2,460
13	Durable goods manufacturing	(D)	(D)	834	869	861	884	(D)	828	963	982	1,026
14	Wood products manufacturing	17	16	25	26	33	28	27	26	28	33	(NA)
15	Nonmetallic mineral products manufacturing	(D)	31	34	32	26	26	(D)	(D)	(D)	(D)	(NA)
16	Primary metals manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
17	Fabricated metal products	173	186	173	196	202	204	165	189	185	192	(NA)
18	Machinery manufacturing	329	344	349	377	349	346	290	343	426	434	(NA)
19	Computer and electronic products manufacturing	8	(D)	(D)	(D)	(D)	29	29	33	24	(D)	(NA)
20	Electrical equipment, appliance, and components manufacturing	17	15	14	17	18	21	17	16	17	15	(NA)
21	Motor vehicles, bodies and trailers, and parts manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)

Ind. Code	Industry	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
22	Other transportation equipment manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
23	Furniture and related products manufacturing	31	32	27	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
24	Miscellaneous manufacturing	(D)	(D)	9	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
25	Nondurable goods manufacturing	(D)	(D)	1,674	1,764	1,777	1,482	(D)	1,433	1,377	1,381	1,436
26	Food and beverage and tobacco products manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
27	Textile mills and textile product mills	(D)	46	38	61	51	46	55	61	49	49	(NA)
28	Apparel and leather and allied products manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
29	Paper products manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
30	Printing and related support activities	86	91	87	95	108	116	118	125	156	166	(NA)
31	Petroleum and coal products manufacturing	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(D)	(D)	(NA)
32	Chemical products manufacturing	36	56	(D)	(D)	(D)	(D)	68	61	62	70	(NA)
33	Plastics and rubber products manufacturing	68	157	159	146	(D)	144	146	(D)	(D)	(D)	(NA)
34	Wholesale trade	614	625	619	624	635	748	661	688	680	683	722
35	Retail trade	752	751	745	739	726	678	665	673	670	641	649
36	Transportation and warehousing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
37	Air transportation	52	(D)	67	50	43	42	42	(D)	(D)	(D)	(NA)
38	Rail transportation	4	4	5	5	5	5	5	5	5	4	(NA)
39	Water transportation	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(L)	(NA)
40	Truck transportation	108	107	108	112	103	95	92	105	115	118	(NA)
41	Transit and ground passenger transportation	(D)	(D)	(D)	20	22	(D)	(D)	28	33	15	(NA)
42	Pipeline transportation	(L)	(L)	(D)	(D)	(D)	(D)	(D)	(L)	(L)	(L)	(NA)

Ind. Code	Industry	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
43	Other transportation and support activities	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
44	Warehousing and storage	34	41	42	43	40	29	60	55	56	76	(NA)
45	Information	263	286	304	299	319	358	346	394	402	390	394
46	Publishing industries, except Internet (includes software)	47	55	56	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
47	Motion picture and sound recording industries	5	5	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
48	Broadcasting and telecommunications	203	220	(D)	239	251	290	(D)	(D)	(D)	(D)	(NA)
49	Data processing, internet publishing, and other information services	7	8	8	(D)	6	(D)	(D)	(D)	(D)	(D)	(NA)
50	Finance, insurance, real estate, rental, and leasing	1,339	1,462	1,580	1,570	1,710	1,578	1,766	1,747	1,730	1,692	1,717
51	Finance and insurance	798	913	979	953	968	786	880	830	829	859	856
52	Federal Reserve banks, credit intermediation, and related services	188	181	205	185	190	218	244	183	187	193	(NA)
53	Securities, commodity contracts, and investments	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
54	Insurance carriers and related activities	535	655	679	647	674	529	559	(D)	583	610	(NA)
55	Funds, trusts, and other financial vehicles	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
56	Real estate and rental and leasing	531	534	585	603	734	791	887	918	902	831	860
57	Real estate	470	474	535	550	677	727	(D)	(D)	(D)	(D)	(NA)
58	Rental and leasing services and lessors of intangible assets	62	60	50	54	57	65	(D)	(D)	(D)	(D)	(NA)
59	Professional and business services	655	692	752	770	796	828	772	801	848	862	885
60	Professional, scientific, and technical services	(D)	(D)	(D)	(D)	368	388	358	369	376	400	(D)
64	Management of companies and enterprises	(D)	(D)	(D)	(D)	121	117	(D)	(D)	(D)	(D)	(D)
65	Administrative and waste management services	222	240	272	279	307	324	(D)	(D)	(D)	(D)	384
66	Administrative and support services	(D)	(D)	(D)	(D)	295	311	302	318	352	349	(NA)

Ind. Code	Industry	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
67	Waste management and remediation services	(D)	(D)	(D)	(D)	12	13	(D)	(D)	(D)	(D)	(NA)
68	Educational services, health care, and social assistance	678	742	726	747	777	830	843	822	845	917	895
69	Educational services	(D)	69	(D)	(D)	(D)	(D)	(D)	(D)	(D)	68	(D)
70	Health care and social assistance	(D)	674	(D)	(D)	(D)	(D)	(D)	(D)	(D)	849	(D)
71	Ambulatory health care services	351	388	385	402	423	454	440	415	444	488	(NA)
72	Hospitals and nursing and residential care facilities	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
73	Social assistance	34	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
74	Arts, entertainment, recreation, accommodation, and food services	268	285	279	284	280	270	259	267	287	294	294
75	Arts, entertainment, and recreation	44	42	44	42	42	42	38	41	46	47	46
76	Performing arts, spectator sports, museums, and related activities	(D)	(D)	(D)	15	16	17	16	16	17	18	(NA)
77	Amusements, gambling, and recreation industries	(D)	(D)	(D)	26	26	25	22	25	29	30	(NA)
78	Accommodation and food services	224	242	235	242	239	228	221	226	241	247	248
79	Accommodation	39	43	42	43	40	39	35	(D)	40	37	(NA)
80	Food services and drinking places	185	199	193	199	199	189	186	(D)	201	210	(NA)
81	Other services, except government	264	266	268	273	256	257	243	240	237	242	253
82	Government	855	869	897	904	936	961	978	984	975	977	965
83	Federal civilian	57	58	57	58	58	77	74	76	75	77	(NA)
84	Federal military	31	31	32	31	29	32	35	33	33	33	(NA)
85	State and local	767	781	808	816	849	852	869	875	867	867	(NA)
86	Natural resources and mining	258	243	256	245	235	192	157	219	205	209	247
87	Trade	1,372	1,382	1,369	1,368	1,365	1,425	1,326	1,362	1,350	1,324	1,372
88	Transportation and utilities	359	378	373	362	337	303	321	351	358	349	346
89	Private goods-producing industries	3,616	3,699	3,668	3,672	3,638	3,250	3,181	3,075	3,154	3,221	3,272
90	Private services-providing industries	5,173	5,474	5,643	5,664	5,842	5,844	5,877	5,981	6,058	6,069	6,156

As the data from Figure 35 and Table 36 show, the primary drivers of the Appleton economy are five sectors: (1) private goods producing industries, (2) private services providing industries, (3) manufacturing, (4) financial activities, and (5) trade which are all billion dollar industries. Private services ($5.5 billion) and private goods ($2.6 billion) producers are the largest, but is followed by a very large industrial sector contributing nearly 2 billion dollars of GDP to Appleton's economy—22.3% of total GDP in 2012. The highlighting of the rows is further explained in Section 5.3.1.

Secondary drivers include education and health services, finance and insurance, professional and business services, government, real estate and rental and leasing, wholesale trade, retail trade and construction are each between 500 million and 1 billion dollar segments.

In total, the Appleton MSA generated 8.8 billion dollars of economic output in 2012 compared to 7.35 billion in its Oshkosh-Neenah MSA neighbor to the south. Combined, the Appleton-Oshkosh-Neenah CSA generated $16.22 billion in GDP in 2012—up from the $15.5 billion in 2010 highlighted in the Garner Report.[59] Appleton's share of the CSA's GDP was 55% in 2012.

Appleton's neighboring MSA to the North, Green Bay, recorded 13.38 billion dollars in economic output in 2012. The combined GDP of the east central Wisconsin region was 29.60 billion dollars, of which Appleton's share was 30%. (See the comparison in Figure 37.)

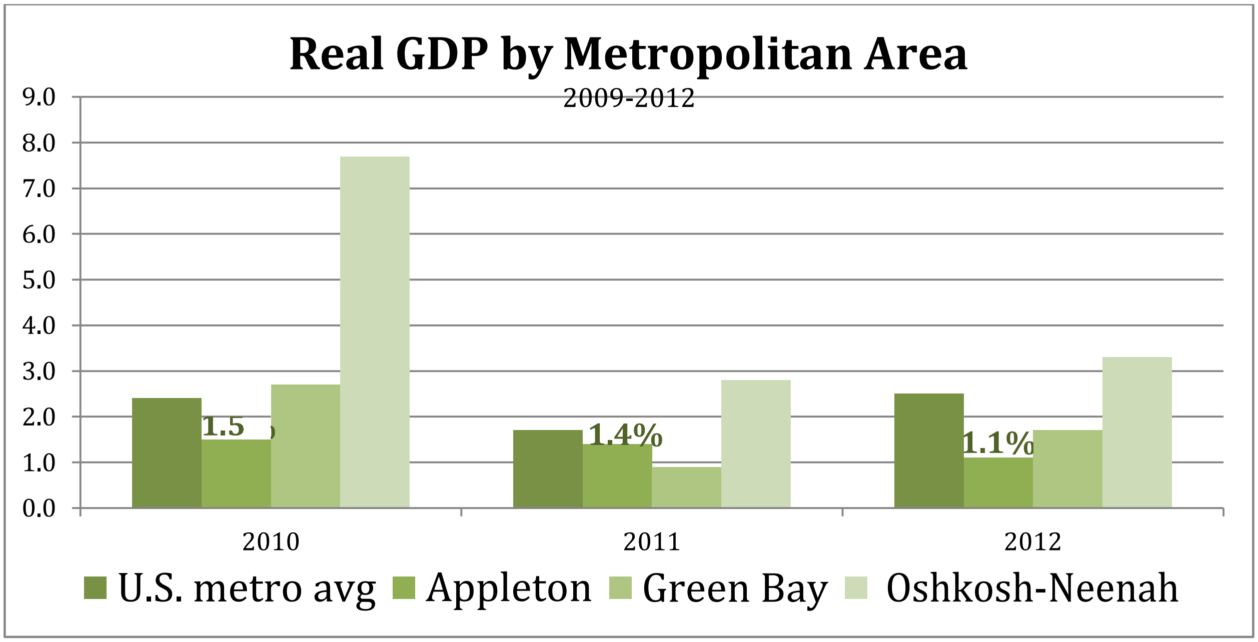


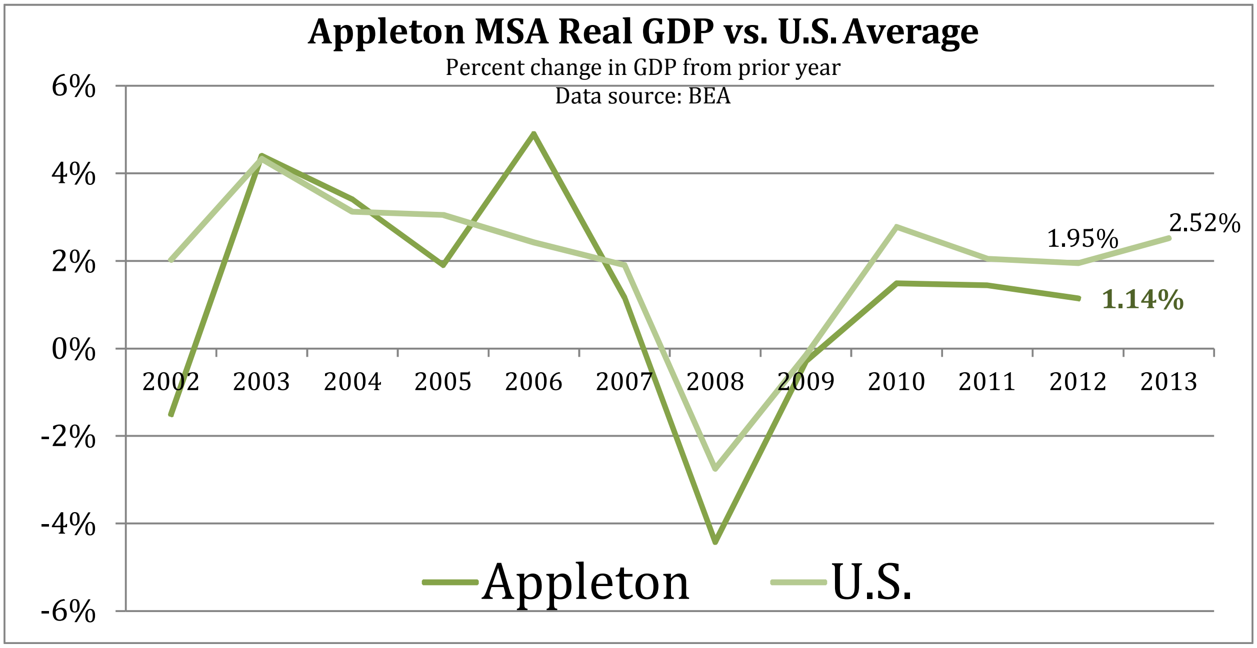
Figure 37. Real GDP by Metropolitan Area for 2009-2012, U.S. BEA

During the recovery Appleton GDP has trended below the national average. Appleton recorded better GDP growth than Green Bay in 2011, but Green Bay grew faster than Appleton in 2010 and 2012. But neither Green Bay nor Appleton can match the recovery growth of the Oshkosh-Neenah MSA, which was nearly 8 percent in 2010. In 2012, Oshkosh-Neenah was recoding the 74th best GDP growth in the country.[60]

As shown in the chart in Figure 38, GDP increased by 1.14 percent in Appleton in 2013, compared to 1.95 percent in the greater U.S.

[59] The Garner Report actually cites 15.9 billion of Real GDP, but this report uses revised BEA data.
[60] The Appleton and Green Bay MSA's were 237th and 179th best in 2012.

Figure 38. Appleton MSA Real GDP vs. U.S. Average, Source: U.S. BEA



After trending higher than the U.S. average heading into the Great Recession, Appleton's GDP growth crashed harder. It rebounded very well, but has not recovered to pre-recession levels, and grown below the national average. Data for 2013 is not available for the metro areas, however, Appleton's GDP growth likely accelerated along with broader U.S. growth (which jumped to 2.52% in 2013, as shown in Figure 38)— consistent with the macro data and our core view described in the section above.

Also consistent with our core view, the makeup of Appleton's GDP also increased the likelihood that growth accelerated in 2013 because many of its components were among those seeing growth nationally, e.g. construction, manufacturing, etc.

Construction in Appleton began to slow down prior to the peak of the national trend 2006-07, as early as 2004. Since bottom in 2009 along with the rest of the economy, construction activity in Appleton has picked up to levels not seen since 2003, as depicted in Figure 39.

Construction in Appleton began to slow down prior to the peak of the national trend 2006-07, as early as 2004. Since bottom in 2009 along with the rest of the economy, construction activity in Appleton has picked up to levels not seen since 2003, as depicted in Figure 39.

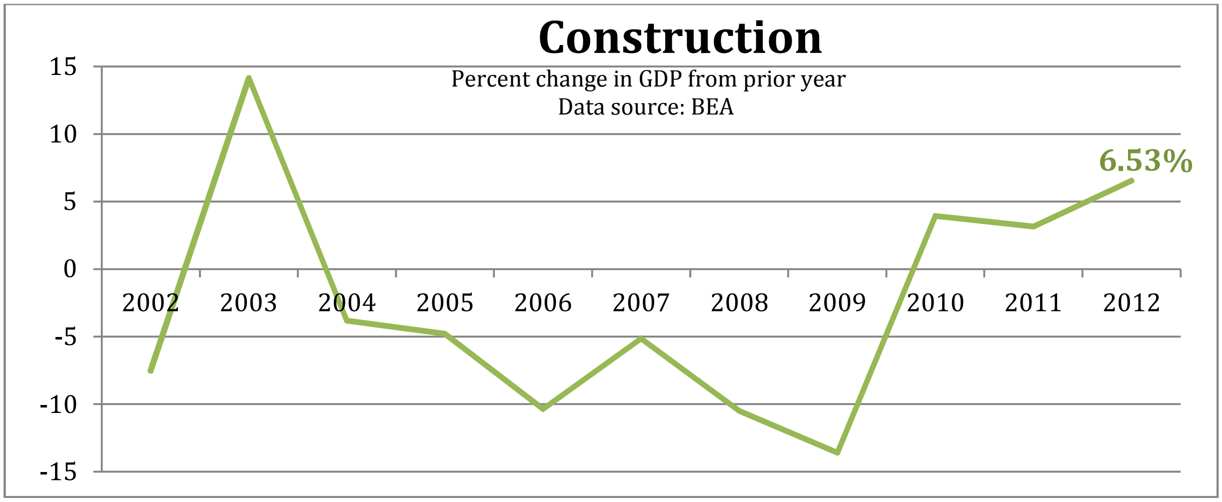


Figure 39. Construction based on percent change in GDP from prior year. Source: U.S. BEA

After experiencing a minor double dip in 2010, manufacturing in Appleton has also rebounded beyond the high of the previous cycle of 4.72% to more than 5.3% as illustrated in Figure 40.

The manufacturing segment was led by its component durable goods (not shown), which recorded more than 15.12% growth in 2011 followed by 8.33 percent growth in 2012.

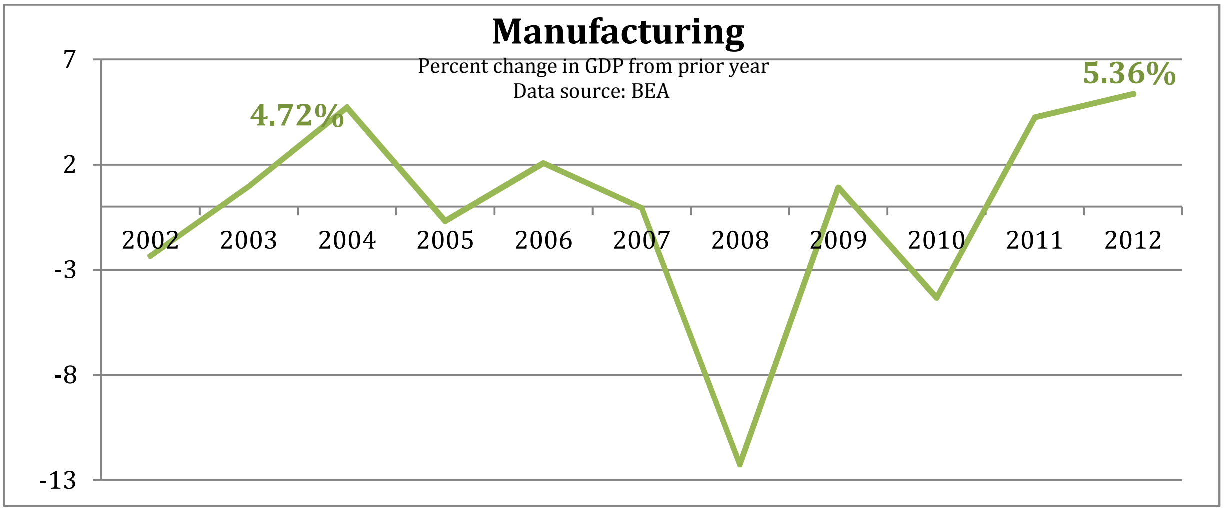


Figure 40. Appleton Manufacturing, percent change in GDP from prior year. Source: U.S. BEA

Leisure and hospitality seems to have broken its downtrend, although the robust growth in 2011 was unable to overtake the previous cyclical high in 2003, as shown in Figure 41.

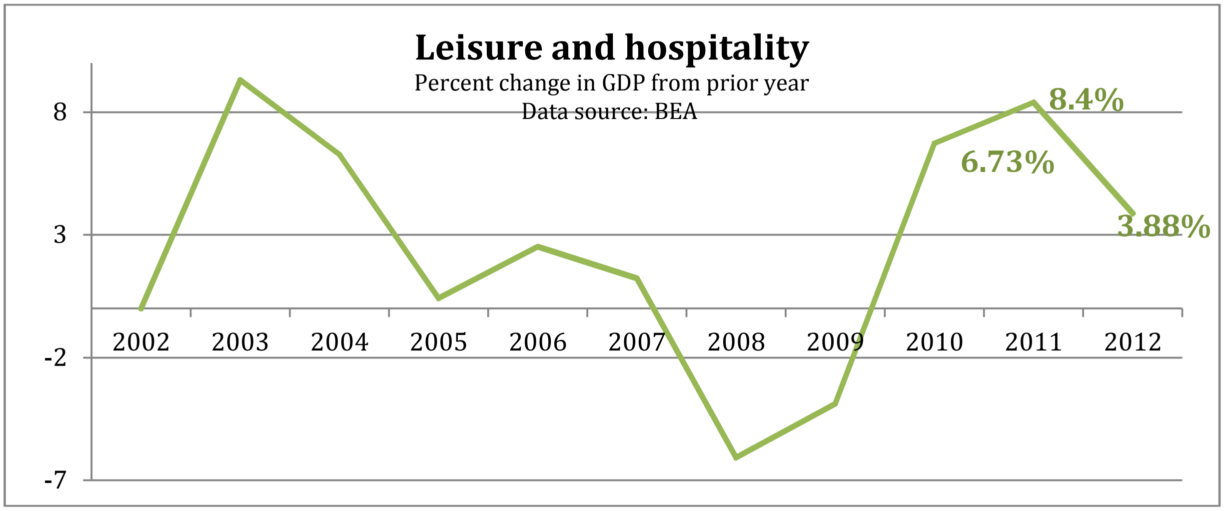


Figure 41. Appleton leisure and hospitality, percent change in GDP from prior year. Source: U.S. BEA

Perhaps not surprisingly, the accommodation and food services segment experienced a very similar growth trend (see Figure 42).

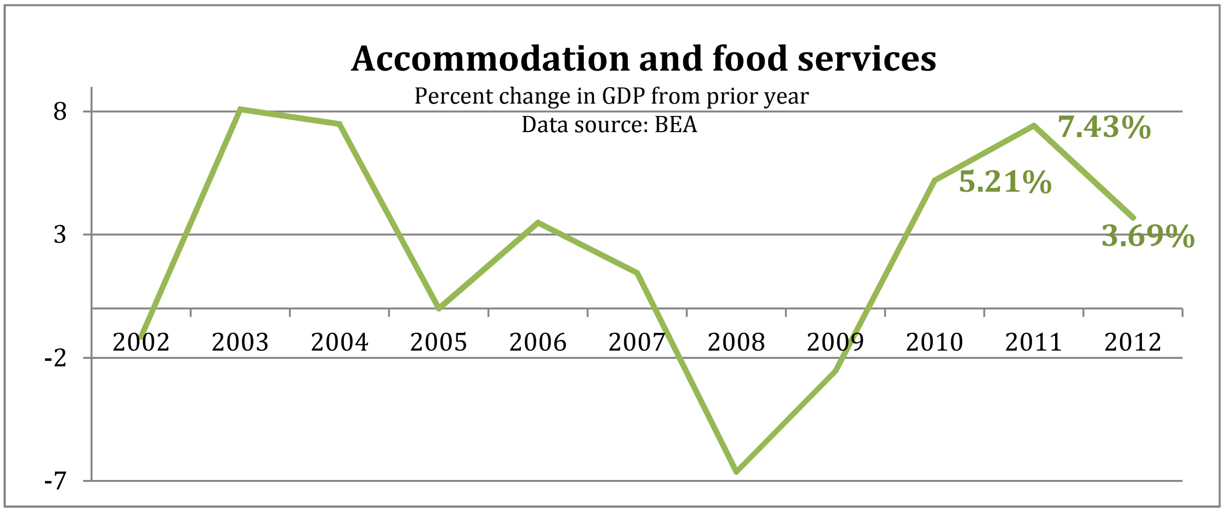


Figure 42. Appleton Accommodation and food services, percent change in GDP from prior year. Source: U.S. BEA

Also related to the prior two GDP segments measured—and the largest trend reversal overall—was measured in arts, entertainment and recreation, which measured an impressive 17.4 percent growth rate after experiencing a multiyear decline, which can be examined in Figure 43.

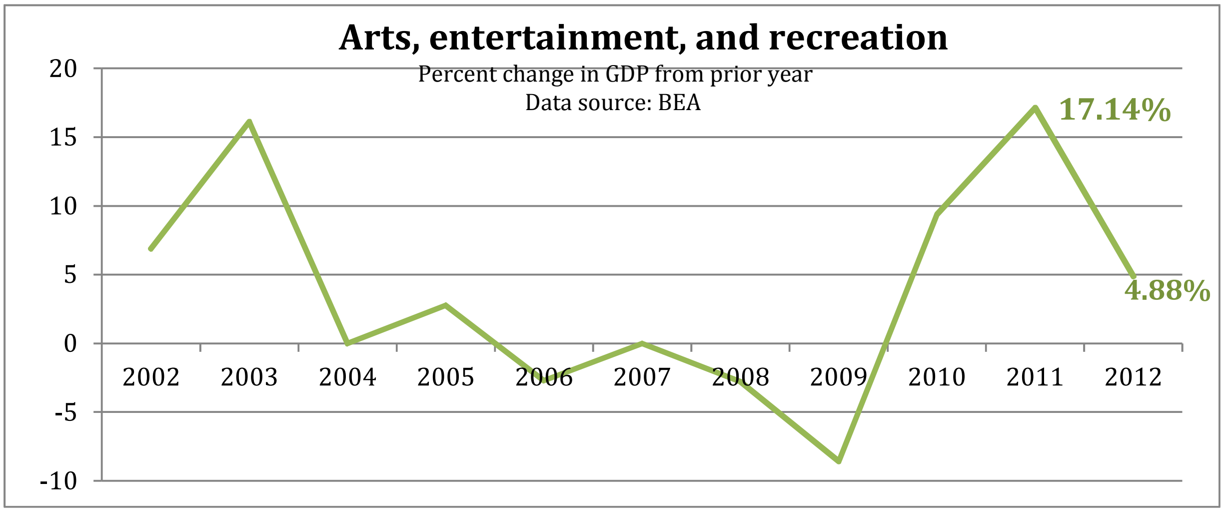


Figure 43. Appleton Arts, entertainment, and recreation; percent change in GDP from prior year. Source: U.S. BEA

Education and health services activity has also rebounded to the high water mark of the previous, as shown in Figure 44.

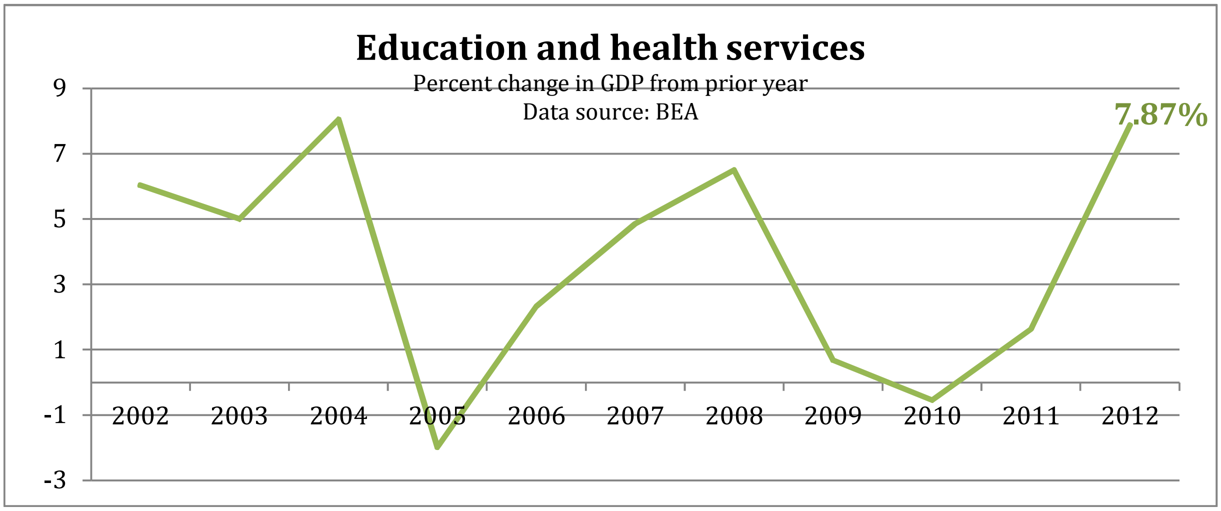


Figure 44. Appleton Education and health services, percent change in GDP from prior year. Source: U.S. BEA

Note also this segment has exhibited very stable growth over the last decade, hardly dipping negative during any downtown in the period.

Critically, after correlating strongly through the middle of the decade, wholesale and retail trade diverged strongly in the Great Recession—with wholesale trade briefly spiking in the commodity spike of 2008, only to catch up to retail trade, which bottomed a year earlier, with wholesale trade and retail trade in Figure 45.

Figure 45. Appleton Wholesale trade vs. Retail trade, percent change in GDP from prior year, Source: U.S. BEA

Notice in Figure 45 that after rebounding in 2010 retail trade has deteriorated to negative growth while wholesale trade has continued with positive growth. This negative retail trend is manifest even though consumer spending and retail sales have rebounded to new all-time, inflation adjusted high levels nationally, as discussed above. Consistent with our core view, this could be an indication that brick-and-mortar retail in Appleton is struggling to adapt to retail's New Normal—and that there has not been a growth in non-store/electronic retailing in Appleton to make up the difference.[61]

Another correlation that has broken down can be seen in the growth in private good producing sector compared to the private services, as compared in Figure 46.

[61] Retail sales are discussed further below, see Retail Leakage section.

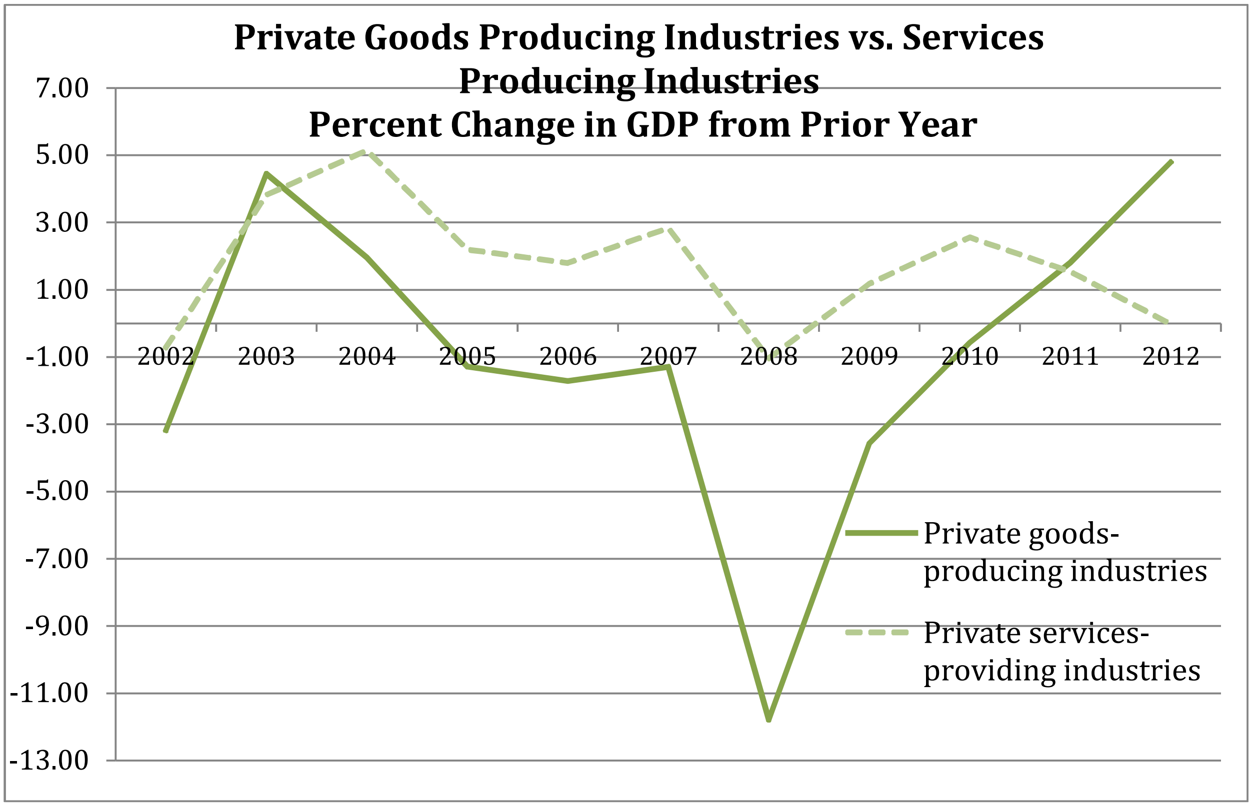


Figure 46. Appleton private goods producing industries vs. services producing industries, percent change in GDP from prior year. Source: U.S. BEA

Over the last decade in the Appleton economy, the private services sector has grown at a higher rate compared to the private goods producing sector—although they were strongly correlated as well.

As the recovery from the great recession has gained steam, however, the service sector has surrendered its lead to the good producers. In fact, the rebound in the private goods producing sector in Appleton has been so strong it has nearly retaken the high water mark for either metric, which was set by the service sector in 2004.

This is a positive sign consistent with our core view that local production will be increasingly competitive against foreign rivals, which will lead to greater input substitution. The data in Figure 46 seems to indicate this trend may already be taking shape in the Appleton economy.

The private goods producing sector, however, is roughly half the size of the private services producing sector, so the impact on GPD is proportionally smaller.

Less constructive is the trend in the finance and insurance segment, which is one of Appleton's secondary economic drivers, as discussed above.

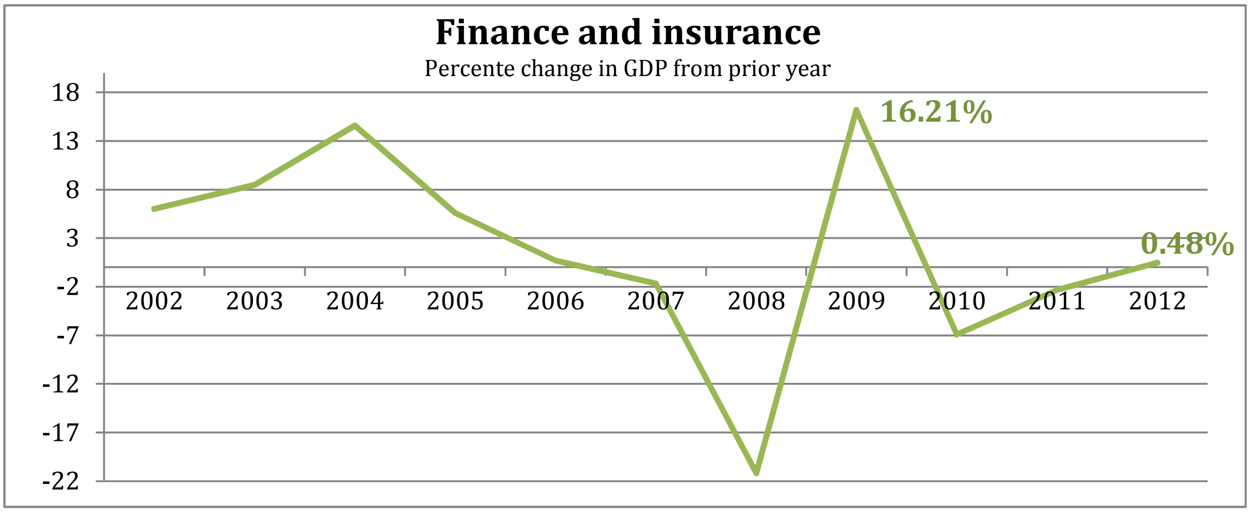


Figure 47. Appleton Finance and Insurance, percent change in GDP from prior year. Source: U.S. BEA

Examination of Figure 47 shows the finance and insurance segment's trend was weak heading into the Great Recession, sitting out of the over-heated economy of 2006, 2007 and 2008. After rebounding strongly—with 16.21% growth in 2009—the finance and insurance segment's growth was negative again. In 2012, it recovered again to positive growth at a less than one half of one percent (0.48%).

Also deteriorating during the recovery was the Information segment, and is shown in the chart in Figure 48.

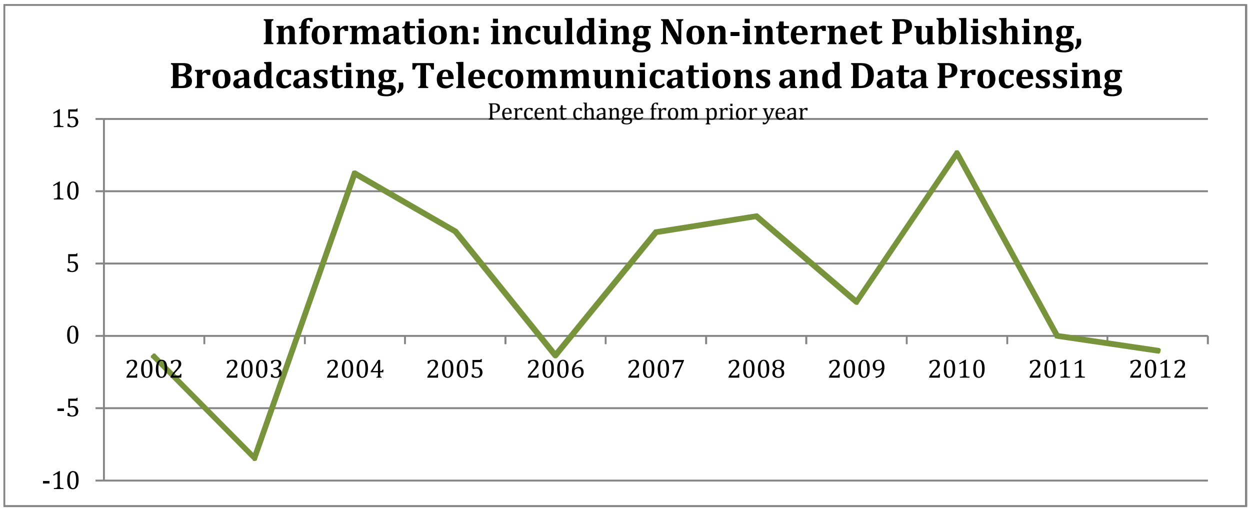


Figure 48. Appleton information (including non-internet publishing, broadcasting, telecommunications and data processing; percent change in GDP from prior year. Source: U.S. BEA

After resilient growth through following the recovery from the dot.com bubble, spending in the Information segment flat-lined in 2011 and turned negative in 2012.

Figure 49, moves back towards a broader measure, showing Appleton's GDP In real per capita terms peaked in 2004 before trending slightly down.

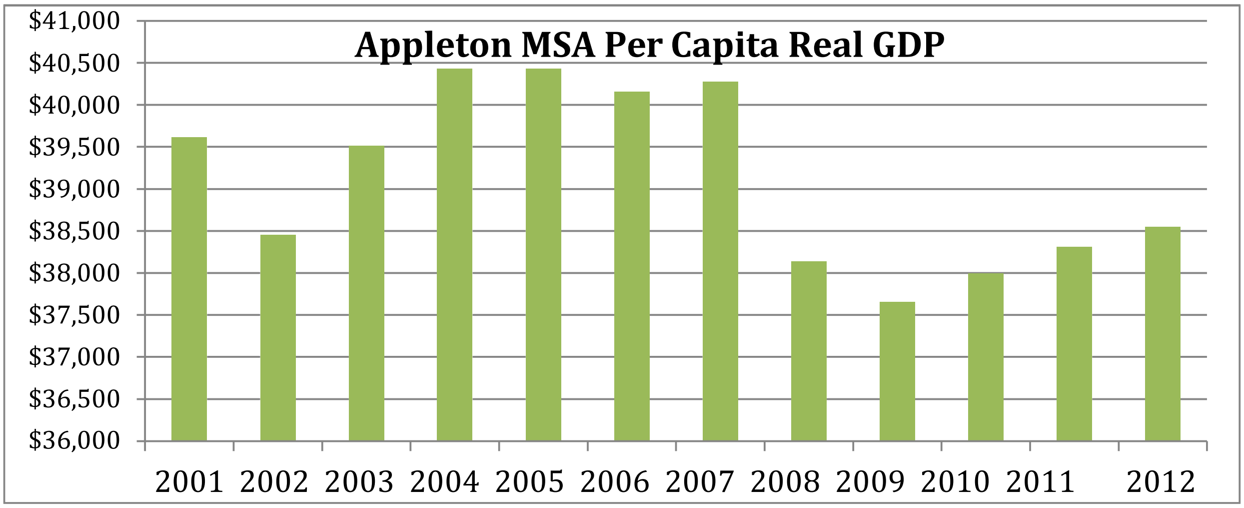


Figure 49. Appleton MSA per capital real GDP; chained 2005 dollars, Source: U.S. BEA

Per capita GDP has failed to return to pre-crisis levels. Since the bottoming in the recession, however, GDP per person has made steady gains—establishing a new upward trend in the illustration in Figure 49.

Looking back at the recovery period as a whole, the following table details Appleton's compound annual growth rate from 2009-2012 by selected industry, as shown in the Table 50.

Table 50 Appleton's Compound GDP Growth: Years 2009-2012

Industry Sector	Compound Annual Growth Rate 2009-2012
All industry total	2.73%
Private industries	2.87%
Construction	4.96%
Manufacturing	1.41%
Wholesale trade	5.71%
Retail trade	1.21%
Information	3.46%
Finance and insurance	1.1%
Real estate and rental and leasing	-2.14%
Professional, scientific, and technical services	4.46%
Arts, entertainment, and recreation	11.1%
Accommodation and food services	6.63%
Other services, except government	3.6%
Government	1.09%
Natural resources and mining	14.98%
Trade	3.47%
Transportation and utilities	4.5%
Financial activities	-0.37%
Professional and business services	4.28%
Education and health services	4.86%
Leisure and hospitality	7.25%
Private goods-producing industries	2.87%
Private services-providing industries	2.88%

Overall, Appleton's growth measured 2.73% from the depths of the recovery. Growth in the private sector has far exceeded growth in the public sector, at 2.73% growth vs. 1.09% (in the Government sector in Figure 50).

5.3.1 GDP by Location Quotient

This section provides Appleton's location quotient (LQ) for GDP by Metro Area.[62] LQ is an analytical statistic that measures a region's industrial specialization relative to a larger geographic reference unit, usually a country or trade area. An LQ is computed as an industry's share of a regional total for some economic statistic, such as earnings, GDP, employment, etc., divided by the industry's share of the national total for the same statistic. For example, an LQ of 100 in Agriculture means that the region and the nation are equally specialized in mining; while an LQ of 200 means that the region has a higher concentration in Agriculture than the country—in fact, double the concentration.

The Table 51provides the LQ for GDP in the Appleton Metro Area for the last decade:

Table 51. Appleton MSA location quotients for GDP. Source: U.S. BEA

Ind. Code	Industry	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1	All industry total	1	1	1	1	1	1	1	1	1	1	1
2	Private industries	1.05	1.05	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.03	1.03
3	Agriculture, forestry, fishing, and hunting	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
4	Farms	3.58	2.96	3.38	3.11	3.96	3.54	2.16	3.34	4.29	4.41	(NA)
5	Forestry, fishing, and related activities	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
6	Mining	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
7	Oil and gas extraction	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NA)
8	Mining, except oil and gas	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
9	Support activities for mining	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(D)	(D)	(NA)
10	Utilities	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
11	Construction	1.74	1.67	1.65	1.53	1.53	1.55	1.48	1.6	1.66	1.73	1.43
12	Manufacturing	2	1.95	1.9	1.98	1.93	1.91	2.11	1.86	1.86	1.87	1.94
13	Durable goods manufacturing	(D)	(D)	1.21	1.25	1.21	1.33	(D)	1.28	1.43	1.44	1.5
14	Wood products manufacturing	1.56	1.52	2.15	2.33	2.87	2.77	3.02	2.88	3.02	3.57	(NA)
15	Nonmetallic mineral products manufacturing	(D)	0.9	0.98	1.03	0.83	0.96	(D)	(D)	(D)	(D)	(NA)
16	Primary metals manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
17	Fabricated metal products	1.83	1.89	1.75	1.96	1.94	2.14	2.14	2.3	2.17	2.23	(NA)
18	Machinery manufacturing	4.65	4.37	4.25	4.36	3.84	3.92	3.91	4.33	4.74	4.79	(NA)
19	Computer and electronic products manufacturing	0.09	(D)	(D)	(D)	(D)	0.18	0.17	0.18	0.12	(D)	(NA)
20	Electrical equipment, appliance, and components manufacturing	0.48	0.44	0.41	0.44	0.52	0.57	0.53	0.47	0.5	0.46	(NA)

[62] The BEA refers to LQ as the Industry Specialization Index. Note-- NAICS Industry detail is based on the 2007 North American Industry Classification System (NAICS). (D) Not shown in order to avoid the disclosure of confidential information; estimates are included in higher level totals. (NA) Not available. (NM) Not meaningful. Note-- Per capita real GDP statistics for 2001-2013 reflect Census Bureau mid-year population estimates available as of March 2014. Last updated: September 16, 2014

Ind. Code	Industry	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
21	Motor vehicles, bodies and trailers, and parts manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
22	Other transportation equipment manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
23	Furniture and related products manufacturing	1.49	1.45	1.16	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
24	Miscellaneous manufacturing	(D)	(D)	0.2	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
25	Nondurable goods manufacturing	(D)	(D)	2.8	2.9	2.83	2.62	(D)	2.52	2.35	2.35	2.44
26	Food and beverage and tobacco products manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
27	Textile mills and textile product mills	(D)	3.2	2.94	5.26	4.38	4.41	6.27	7.01	6.36	5.99	(NA)
28	Apparel and leather and allied products manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
29	Paper products manufacturing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
30	Printing and related support activities	2.8	2.87	2.79	3.04	3.38	3.81	4.31	4.65	5.52	6.21	(NA)
31	Petroleum and coal products manufacturing	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(D)	(D)	(NA)
32	Chemical products manufacturing	0.18	0.25	(D)	(D)	(D)	(D)	0.32	0.27	0.29	0.32	(NA)
33	Plastics and rubber products manufacturing	1.5	3.29	3.5	3.56	(D)	4.03	3.91	(D)	(D)	(D)	(NA)
34	Wholesale trade	1.04	1	0.96	0.96	0.94	1.15	1.11	1.16	1.13	1.12	1.17
35	Retail trade	1.23	1.21	1.18	1.19	1.2	1.2	1.16	1.18	1.16	1.11	1.1
36	Transportation and warehousing	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
37	Air transportation	1.29	(D)	1.34	0.98	0.78	0.86	0.86	(D)	(D)	(D)	(NA)
38	Rail transportation	0.22	0.2	0.25	0.22	0.28	0.25	0.26	0.26	0.29	0.23	(NA)
39	Water transportation	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NM)	(NA)
40	Truck transportation	1.45	1.35	1.34	1.35	1.27	1.26	1.32	1.41	1.49	1.52	(NA)
41	Transit and ground passenger transportation	(D)	(D)	(D)	0.93	1.02	(D)	(D)	1.47	1.69	0.76	(NA)
42	Pipeline transportation	(NM)	(NM)	(D)	(D)	(D)	(D)	(D)	(NM)	(NM)	(NM)	(NA)
43	Other transportation and support activities	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
44	Warehousing and storage	1.52	1.59	1.43	1.4	1.38	0.98	1.92	1.73	1.69	2.13	(NA)
45	Information	0.69	0.68	0.68	0.66	0.64	0.69	0.66	0.74	0.75	0.71	0.69
46	Publishing industries, except internet (includes software)	0.41	0.42	0.41	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
47	Motion picture and sound recording industries	0.1	0.09	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
48	Broadcasting and Telecomm.	1.1	1.08	(D)	1.03	0.96	1.06	(D)	(D)	(D)	(D)	(NA)

Ind. Code	Industry	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
49	Data processing, internet publishing, and other information services	0.17	0.14	0.15	(D)	0.12	(D)	(D)	(D)	(D)	(D)	(NA)
50	Finance, insurance, real estate, rental, and leasing	0.72	0.77	0.8	0.79	0.83	0.81	0.84	0.84	0.82	0.8	0.79
51	Finance and insurance	1.21	1.38	1.39	1.31	1.35	1.29	1.23	1.19	1.2	1.22	1.19
52	Federal Reserve banks, credit intermediation, and related services	0.68	0.71	0.76	0.7	0.76	0.9	0.85	0.68	0.69	0.72	(NA)
53	Securities, commodity contracts, and investments	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
54	Insurance carriers and related activities	2.4	2.65	2.68	2.45	2.36	2.15	2.11	(D)	2.23	2.21	(NA)
55	Funds, trusts, and other financial vehicles	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
56	Real estate and rental and leasing	0.43	0.42	0.45	0.46	0.54	0.59	0.63	0.66	0.63	0.58	0.59
57	Real estate	0.42	0.41	0.45	0.47	0.54	0.59	(D)	(D)	(D)	(D)	(NA)
58	Rental and leasing services and lessors of intangible assets	0.52	0.53	0.45	0.43	0.48	0.54	(D)	(D)	(D)	(D)	(NA)
59	Professional and business services	0.57	0.59	0.63	0.64	0.65	0.66	0.63	0.65	0.66	0.65	0.66
60	Professional, scientific, and technical services	(D)	(D)	(D)	(D)	0.51	0.51	0.48	0.5	0.49	0.51	(D)
64	Management of companies and enterprises	(D)	(D)	(D)	(D)	0.61	0.61	(D)	(D)	(D)	(D)	(D)
65	Administrative and waste management services	0.81	0.84	0.9	0.93	0.98	1.06	(D)	(D)	(D)	(D)	1.17
66	Administrative and support services	(D)	(D)	(D)	(D)	1.02	1.1	1.09	1.16	1.21	1.17	(NA)
67	Waste management and remediation services	(D)	(D)	(D)	(D)	0.5	0.5	(D)	(D)	(D)	(D)	(NA)
68	Educational services, health care, and social assistance	0.95	0.99	0.97	0.98	1	1.04	0.98	0.98	1	1.07	1.02
69	Educational services	(D)	0.65	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0.59	(D)
70	Health care and social assistance	(D)	1.04	(D)	(D)	(D)	(D)	(D)	(D)	(D)	1.15	(D)
71	Ambulatory health care services	1.2	1.26	1.24	1.25	1.31	1.37	1.24	1.19	1.24	1.33	(NA)
72	Hospitals and nursing and residential care facilities	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
73	Social assistance	0.61	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(NA)
74	Arts, entertainment, recreation, accommodation, and food services	0.7	0.71	0.7	0.71	0.7	0.71	0.71	0.72	0.74	0.75	0.74
75	Arts, entertainment, and recreation	0.45	0.43	0.44	0.43	0.41	0.43	0.38	0.41	0.44	0.44	0.43
76	Performing arts, spectator sports, museums, and related activities	(D)	(D)	(D)	0.26	0.27	0.29	0.27	0.28	0.3	0.29	(NA)

Ind. Code	Industry	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
77	Amusements, gambling, and recreation industries	(D)	(D)	(D)	0.65	0.59	0.59	0.53	0.57	0.64	0.64	(NA)
78	Accommodation and food services	0.79	0.81	0.8	0.82	0.81	0.82	0.83	0.84	0.86	0.87	0.85
79	Accommodation	0.51	0.52	0.51	0.52	0.47	0.5	0.48	(D)	0.51	0.47	(NA)
80	Food services and drinking places	0.9	0.93	0.92	0.94	0.95	0.96	0.96	(D)	1.01	1.02	(NA)
81	Other services, except government	1.06	1.04	1.07	1.12	1.06	1.14	1.08	1.12	1.11	1.12	1.18
82	Government	0.66	0.67	0.7	0.71	0.73	0.76	0.73	0.75	0.75	0.77	0.76
83	Federal civilian	0.23	0.24	0.24	0.24	0.24	0.32	0.29	0.3	0.3	0.31	(NA)
84	Federal military	0.23	0.23	0.24	0.23	0.22	0.24	0.23	0.22	0.22	0.23	(NA)
85	State and local	0.85	0.85	0.89	0.92	0.94	0.95	0.93	0.97	0.97	0.98	(NA)
86	Natural resources and mining	1.49	1.37	1.18	1.04	1.1	0.78	0.71	1.03	0.99	0.99	1.2
87	Trade	1.14	1.11	1.08	1.08	1.07	1.18	1.14	1.17	1.15	1.12	1.14
88	Transportation and utilities	0.89	0.86	0.85	0.78	0.74	0.67	0.73	0.76	0.75	0.74	0.72
89	Private goods-producing industries	1.89	1.82	1.76	1.76	1.73	1.65	1.8	1.7	1.69	1.71	1.72
90	Private services-providing industries	0.82	0.83	0.84	0.83	0.84	0.86	0.85	0.87	0.86	0.85	0.85

In Table 51, the LQ is highlighted with the color of light green for business sectors that are performing above the national average. For basic industries in manufacturing, financial and insurance services, those business sectors that are 1.20 or higher are the "rainmakers" for employment and produce a surplus of income and wealth that benefits the region.

Some sectors have ebbed above and below the LQ of 100 that should be watched for the region are the air transit and education and health care sectors. These sectors are a reflection of the health of the underlying economy as they service the other sectors that bring new money into the economy as noted above.

Opportunities for some key sectors shown in pink are in the arts entertainment and accommodation and food services. A local and regional strategy to develop convention and meeting facilities and resources that would expand these sectors could make them net importers of economic activity, leading to jobs and investment in the hospitality industry for the benefit of the entire region.

5.4 County Location Quotients

As discussed in the previous section, Location Quotients (LQs) can also be used to determine a given area's distribution of employment by industry to be compared to a reference area's distribution. Instead of 100, a benchmark of 1 is used is typically used to calculate an LQ for employment. So if an LQ is equal to 1 then the industry has the same share of its area employment as it does in the reference area. An LQ greater than 1 indicates an industry with a greater share of the local area employment than in the reference area. For example, Orlando will have an LQ greater than 1 in the Leisure and Hospitality industry because this industry makes up a larger share of the Orlando employment total than it does for the country as a whole, in part because of Disney's role in the local economy as a primary driver.

LQs are calculated by first dividing local industry employment by the all industry total of local employment. Second, reference area industry employment is divided by the all industry total for the reference area. Finally, the local ratio is divided by the reference area ratio. The following table summarizes the LQ's for the three counties nearby Appleton by large industry group (see Table 52).

Table 52. Appleton tri-county region location quotients by major industry group, Source: U.S. Bureau of Labor Statistics

Industry	Outagamie	Calumet	Winnebago
Natural resources and mining	0.33	3.19	0.27
Construction	1.25	0.97	1.01
Manufacturing	1.98	2.92	2.73
Trade, transportation, and utilities	0.95	0.95	0.80
Information	0.68	0.14	0.85
Financial activities	0.99	0.87	0.71
Professional and business services	0.78	0.24	0.84
Education and health services	0.79	0.60	0.75
Leisure and hospitality	0.87	1.08	0.71
Other services	1.14	0.69	1.17

Using this method, the region's manufacturing strength becomes evident, measuring an LQ roughly 2 or greater in each county—led by Calumet county with an LQ greater than 3 in both Manufacturing and Natural Resources and Mining.

The 2002 version of the North American Industry Classification System (NAICS) is the industry coding system used to calculate the LQ's in the following tables, which provides the LQ's for Outagamie, Calumet and Winnebago counties using Quarterly Census of Employment and Wages data.

5.5 Local Employment Dynamics in Appleton

This section provides detailed information related to the recent employment environment in Appleton. Table 53 estimates the number of employees, quarterly and annual payrolls as well as total establishments by industry code that exist in the Appleton MSA:

Table 53. Appleton local employment dynamics. Source: U.S. Census

Industry Code	Appleton Industries by paid employees as of 3/2012	Paid employees	Q1 payroll ($1,000)	Yr. payroll ($1,000)	Total establishments
	'Total'	104,778	$969,836	$4,128,389	5,838
11	'Forestry, fishing, hunting, and agriculture support'	-	$165	$811	9
21	'Mining'	121	$906	$5,731	13
23	'Construction'	5,812	$77,935	$364,652	697
31	'Manufacturing'	20,522	$248,799	$1,028,042	404
42	'Wholesale trade'	5,864	$64,553	$296,515	375
44	'Retail trade'	14,265	$75,116	$324,834	858
48	'Transportation & warehousing'	4,214	$44,877	$184,980	177
51	'Information'	2,238	$23,581	$87,840	80
52	'Finance & insurance'	6,318	$103,433	$347,932	436
53	'Real estate & rental & leasing'	750	$7,015	$28,770	142
54	'Professional, scientific & technical services'	4,057	$45,630	$206,064	433
55	'Management of companies & enterprises'	2,523	$35,044	$140,800	55
56	'Admin, support, waste mgmt., remediation services'	6,744	$50,395	$224,004	279
61	'Educational services'	2,029	$9,845	$41,710	59
62	'Health care and social assistance'	12,599	$122,540	$584,648	543
71	'Arts, entertainment & recreation'	2,103	$4,946	$23,730	113
72	'Accommodation & food services'	9,710	$27,442	$118,059	558
81	'Other services (except public administration)'	4,713	$24,272	$104,911	598

The next series of tables ranks industry subsectors by a number of different criteria, using Census' local dynamics data. First, the table in Figure 54 examines the top 20 employment sectors in Appleton listed to provide some idea of what are the big economic components of the local economy:

Table 54 Appleton's top 20 employment sectors. Source: U.S. BLS

Industry	Outagamie	Calumet	Winnebago
Natural resources and mining	0.38	3.09	0.3
Construction	1.49	0.99	0.85
Manufacturing	1.91	3.13	2.93
Trade, transportation, and utilities	0.96	0.81	0.79
Information	0.68	0.42	0.85
Financial activities	1.04	0.42	0.7
Professional and business services	0.77	0.36	0.78
Education and health services	0.74	0.64	0.75
Leisure and hospitality	0.88	1.06	0.7
Other services	1.02	0.76	1.07

Notice that among the top 20 employment segments, only General Merchandise Stores experienced a greater than 5% decline from 2011-2012. Hospitals, the 10th largest segment, grew employment the largest—with more than 27% growth over the same period. General Merchandise stores range from Walmart, Kmart, Sears, Penney's, to such new categories as TJ Maxx, Ross and "dollar stores." This segment has been struggling to compete given the recovery and competition from internet sales.

Table 55 provides the top 10 highest paying sectors, by average monthly earnings:

Industry	Outagamie	Calumet	Winnebago
Natural resources and mining	0.38	3.09	0.3
Construction	1.49	0.99	0.85
Manufacturing	1.91	3.13	2.93
Trade, transportation, and utilities	0.96	0.81	0.79
Information	0.68	0.42	0.85
Financial activities	1.04	0.42	0.7
Professional and business services	0.77	0.36	0.78
Education and health services	0.74	0.64	0.75
Leisure and hospitality	0.88	1.06	0.7
Other services	1.02	0.76	1.07

While many of the top paying sectors are small relative to the overall employment landscape, there are several top 20 segments shown in the previous table that are also high paying, such as Ambulatory Health Care Services, Insurance Carries and related activity, and Paper Manufacturing.

Table 56 provides the top 10 sectors that grew their employment the fastest year-over-year, from the fourth quarter of 2011 to the fourth quarter of 2012:

Table 56. Appleton's Growth in Local Employment. Source: U.S. Census Bureau.

	•Highest Average Earnings	Avg Monthly Earnings $	Avg Q uarterly Employment	Growth in Employment %	Hiring Growth #	Hiring Growth %	Total Hires	Avg Earning Growth %
	Top 10 NAICS subsectors	2012	2012	Q411-Q412	Q4 2012	Q411-Q412	Q411-Q412	Q411-Q412
	Appleton total ->	$3,498	105911	1.90%	-459	6.08%	7318	4.33%
1	523 Securities, Commodity Contracts, and Other Financial Investments and Related Activities	$6,939	1341	5.47%	-8	17.39%	42	12.53%
2	425 Wholesale Electronic Markets and Agents and Brokers	$6,685	366	5.93%	6	26.09%	26	3.12%
3	621 Ambulatory Health Care Services	$6,500	4237	2.77%	-34	-16.92%	184	10.74%
4	236 Construction of Buildings	$5,499	1465	11.16%	35	35.18%	117	9.94%
5	325 Chemical Manufacturing	$5,487	185	3.79%	8	72.73%	15	4.86%
6	524 Insurance Carriers and Related Activities	$5,193	3934	-4.79%	-48	46.60%	79	-0.34%
7	518 Data Processing, Hosting and Related Services	$5,172	264	37.14%	9	105.90%	13	-5.22%
8	336 Transportation Equipment Manufacturing	$5,166	734	1.89%	-5	37.04%	11	9.01%
9	322 Paper Manufacturing	$5,125	3694	-1.34%	24	33.33%	84	-0.87%
10	313 Textile Mills	$5,030	488	-3.52%	-5	76.92%	4	2.38%

Data Processing, Hosting and Related Services led all categories with more than 37% growth, in defiance of Appleton's decline in GDP output for the Information segment noted in the previous section.

Once again Hospitals was the largest segment to experience substantial growth rate in its employment, followed by Management of Companies and Enterprise. The third and fourth largest sectors on in the top ten, Warehousing and Storage and Miscellaneous Store Retailers, which recorded better than 30 and 18 percent growth in employment in 2012, respectively. These numbers are not unexpected and consistent with our core view, discussed above, and the New Normal's in supply chain and retail segments are already taking firm root in Appleton's economy.

Two smaller subsectors of manufacturing made the top ten, each with better than 10 percent growth. Non-store Retailers, a very small segment, also made the top ten with 11.43% growth in 2012.

Table 57. Top 10 employment subsectors by largest number of new hires in 2012. Source: U.S. Census, Local Employment Dynamics

	Largest # of New *Hires*	Avg. Quarterly New Hires	Growth in Employ-ment %	Hiring Growth #	Hiring Growth %	Avg. Monthly Earnings	Earnings Growth %	New Hire Avg. Monthly Earnings $
	Top 10 NAICS subsectors	2012Q4	Q411-Q412	Q411-Q412	Q411-Q412	2012	Q411-Q412	2012
	Appleton total ->	6584	1.90%	-459	-6.08%	$3498	4.33%	$1932
1	722 Food Services and Drinking Places	981	1.46%	66	5.23%	$1073	5.01%	$754
2	561 Administrative and Support Services	815	-1.05%	-107	-12.21%	$2416	3.89%	$1838
3	541 Professional, Scientific, and Technical Services	311	8.95%	29	8.62%	$4669	1.42%	$3204
4	623 Nursing and Residential Care Facilities	302	2.91%	1	0.35%	$1920	6.49%	$1459
5	238 Specialty Trade Contractors	250	0.72%	-11	-3.91%	$4125	6.39%	$3001
6	452 General Merchandise Stores	205	-5.34%	-34	-12.32%	$1663	-1.16%	$926
7	621 Ambulatory Health Care Services	189	2.77%	-34	-16.92%	$6500	10.74%	$2555
8	445 Food and Beverage Stores	184	9.47%	19	8.03%	$1556	2.45%	$902
9	311 Food Manufacturing	175	-0.40%	18	9.78%	$3667	3.51%	$2706
10	423 Merchant Wholesalers, Durable Goods	168	1.80%	-3	-1.70%	$4523	0.39%	$3292

(Continued on the next page)

Table 58. Top ten growth sectors by earnings. Source: U.S. Census, Local Employment Dynamics

	Earnings Growth	Avg Monthly Earnings Growth	Avg Earning Growth %	Avg Monthly Earnings	Avg Quarterly Employ-ment	Growth in Employ-ment %	Hiring Growth #	Hiring Growth %
	Top 10 NAICS subsectors	Q411-Q412	Q411-Q412	2012	2012	Q411-Q412	Q4 2012	Q411-Q412
	Appleton total ->	$158	4.33%	$3498	105,911	1.90%	7318	-6.08%
1	511 Publishing Industries (except internet)	$1123	27.85%	$4185	312	-37.50%	9	-80%
2	517 Telecomm.	$954	19.86%	$4829	955	-81.57%	35	-58.58%
3	523 Securities, Commodity Contracts, & Other Financial Investments & Related Activities	$925	12.53%	$6939	1341	5.47%	42	-17.39%
4	621 Ambulatory Health Care Services	$914	10.74%	$6500	4237	2.77%	184	-16.91%
5	236 Construction of Buildings	$559	9.94%	$5499	1465	11.16%	117	35.17%
6	327 Nonmetallic Mineral Product Manufacturing	$545	15.35%	$3083	175	11.89%	16	46.15%
7	336 Transportation Equipment Manufacturing	$449	9.01%	$5166	734	1.89%	11	-37.03%
8	339 Miscellaneous Manufacturing	$354	9.76%	$3159	187	-1.63%	10	66.67%
9	332 Fabricated Metal Product Manufacturing	$326	7.31%	$4215	2266	6.05%	144	3.53%
10	237 Heavy and Civil Engineering Construction	$322	5.57%	$4847	325	0.00%	18	-20%

Food Services and Drinking and Places Administrative and Support Services with more than 800 new hires in 2012, even though total employment for the latter fell by 1.05 percent. Professional, Scientific, and Technical Services was the third highest on the list with the second highest growth in employment in the top ten—nearly 9%.

Nursing and Residential Care Facilities and Ambulatory Health Care Services also made the top 10 and measured nearly 3 percent growth in the year—which evidences strong growth across the health care sector, along with the growth in the Hospital segment discussed above.

Finally, the table in Figure 59 gives the top 10 subsectors by earnings growth, towards better understanding what labor segments are experiencing healthy growth and/or may be potentially supply-constrained:

Publishing led all sectors with nearly 30% growth in 2012, however manufacturing subsectors represented most in the top 10—with 4 subsectors making the list nonmetallic mineral product manufacturing, transportation equipment manufacturing, miscellaneous manufacturing and fabricated metal product manufacturing.

6 Appleton's Specific Geography

This section discusses the economic geography most specific to Appleton. It builds on the discussion above, which featured the greater state and region's economic geography.

But unlike the discussion above, the analysis below provides a narrower, intra-regional perspective. It begins by defining just what such an intra-regional perspective might be, as drawn from the city of Appleton's perspective.

6.1 Appleton's Marchetti Constant

Marchetti's constant is the name given to a theory developed by Venetian physicist Cesare Marchetti which posits that while our built environment and mode of transportation change over time, humans adjust their mode of living to their geographic conditions such that their average daily travel time stays approximately constant at one hour. Marchetti found this to be true throughout human history, as far back as Neolithic times humans have organized their settlements to keep the time at which they travel per day to essential resource and/or utility within the norm, even though distances increase as transit technology improved. But even before Marchetti drew his constant backwards through human history, modern site selectors have used 30-miles as a benchmark distance in their analysis, *i.e.* as a distance often representing a retail location's tertiary trade area in selection analysis, which is generally a 1-hour round trip during our modern age of motor vehicle traffic.[63] Marchetti's constant is drawn for Appleton in the map found in Figure 60.

Figure 60: 30-mile Radius around Appleton (Green circle)

This is the area in which we might expect the average rational regional shopper, empowered by the automobile, to shop. Notice that the majority of population density along the vital Highway 41 corridor, highlighted above, is within Appleton's 30-mile orbit. This centrality is a powerful strategic advantage for the Appleton area and exploited by numerous firms there such as the Fox River Mall, which survives as the second largest mall in the state.

6.2 Select Regional Green and Blue Infrastructure

The greater Appleton region is well known for a rich portfolio of green and blue resources, including the Great Lakes, Lake Winnebago, the Fox River, numerous parks and reserves, greenways, and campgrounds, that are well illustrated in Figure 61.

Figure 61: Regional Campground, Camp site & Board Launch Locations with the Appleton City limits in red; rivers in blue and lakes in dark grey.

The Lower Fox River flows north from the outlet of Lake Winnebago a total length of 39 miles. Freshwater flows from the Upper Fox River, Wolf River and into Lake Winnebago which empties into the Lower Fox River at the outlet of Lake Winnebago, just south of Appleton. Lake Winnebago is the largest inland lake in Wisconsin, with an area of approximately 212 square miles, and from there the Lower Fox River makes its way to Green Bay—which is the largest bay of Lake Michigan and the largest freshwater estuary in the world.

[63] Without traffic, of course. Tertiary trade areas are also commonly drawn as narrow as 15 miles or less. And in some geographies trade areas can be drawn larger than 30 miles to account for the real drawing power of a particular retail store or segment, which some portion of consumers/workers may be drawn to by scarce or high value opportunities. Discussed further below in the section on Retail Analysis.

From Lake Winnebago's outlet the Lower Fox River runs through the heart of downtown Appleton. The Lower Fox River is impounded by 12 dams and navigable through 17 locks, and located a dense hub of pulp and paper mills in the world—said to be the densest in the world with as many as 24 mills along the Lower Fox River's 39 mile waterway. Its elevation drop is a steep 167.32 feet in less than 40 miles and the river traversed several rapids prior to dam construction. Today the river is calm enough to offer recreational opportunities in many sections, particularly those closest to Appleton—including nearby waterfalls.

The Fox River has helped drive Appleton's history and continues to contribute to Appleton's distinct character. It provides quiet and recreational enjoyment to its residents and visitors, and unlocking the river's full potential is essential to Appleton's future.

While these resources greatly contribute to the quality of life enjoyed by area residents today, these green and blue assets may become even greater strategic advantages for Appleton going forward. Reconnecting with nature, green and clean living are powerful trends emerging in the New Normal. Consumers are developing a greater eco-conscience that is already driving changes not only what people buy, but how they make their purchases, where they want to live, where they want to go on vacation and how they spend their time. Not discussed in our core macro view, above, is also the growing trend towards "staycations." Driven by prohibitively high transportation costs, a growing number of vacationers are choosing local, more convenient and more affordable destinations. Blessed by abundant ecological assets Appleton, specifically, and the Fox River corridor more generally could benefit substantially from this trend in the future.

6.3 Select Mines, Quarries and Mineral Operations

The greater Appleton area's natural resources do not just provide recreational enjoyment to its residents, but a number of raw inputs to its firms—particularly wood products. The area is renowned for both high quality and voluminous forest products. Historically, this abundance—combined with the ease of conveyance—attracted the many paper mills the region became well known for. The Appleton area is often known as the "Paper Valley."

But the area around Appleton offers close proximity to more than just wood product inputs. The map displayed in Figure 62 shows many of the larger, permitted mining operations in the area, as well as the network of roads (in yellow) and rails (in orange) that connect them.

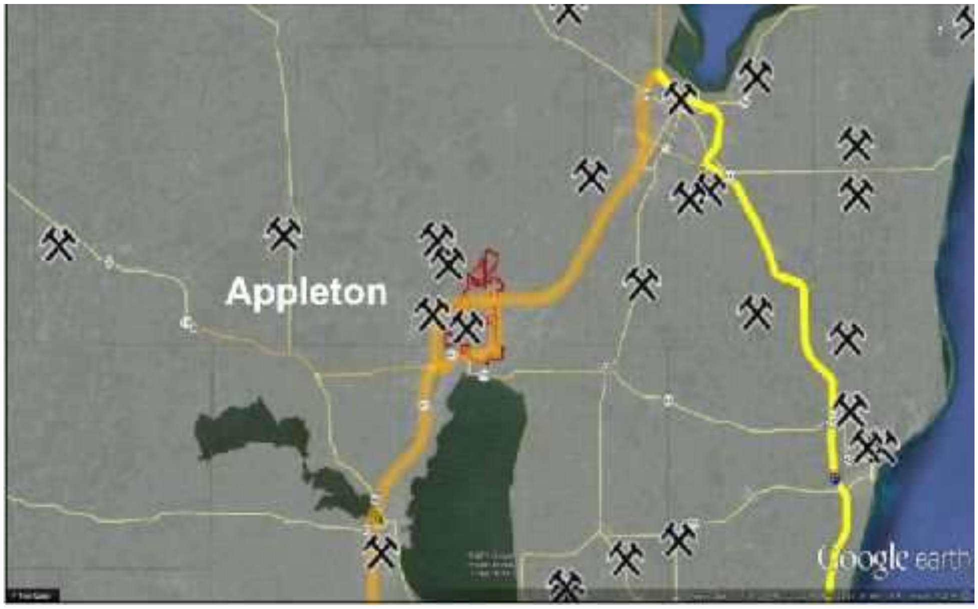


Figure 62. Select permitted mining and quarry operations.

6.4 Density in Appleton's 30-Mile Orbit

At the center of Highway 41's population corridor is the city of Appleton—with a 30-mile radius trade area outlined in green in the map shown in Figure 60, previously in this report.

Not only is the city of Appleton located in the middle of the Highway 41 corridor's population density, but the City's borders are flanked on both sides by pockets of density in nearby communities, such as Menasha, Neenah, Kimberly, Little Chute and Kaukauna.

Appleton is also the densest city in its orbit, as shown in the chart in Figure 64—and as such, City Center Plaza in downtown Appleton truly is the center of the sub-region's population.

As discussed in our core macro view, we expect this density to intensify as urban infill pressure continues to build in the New Normal.

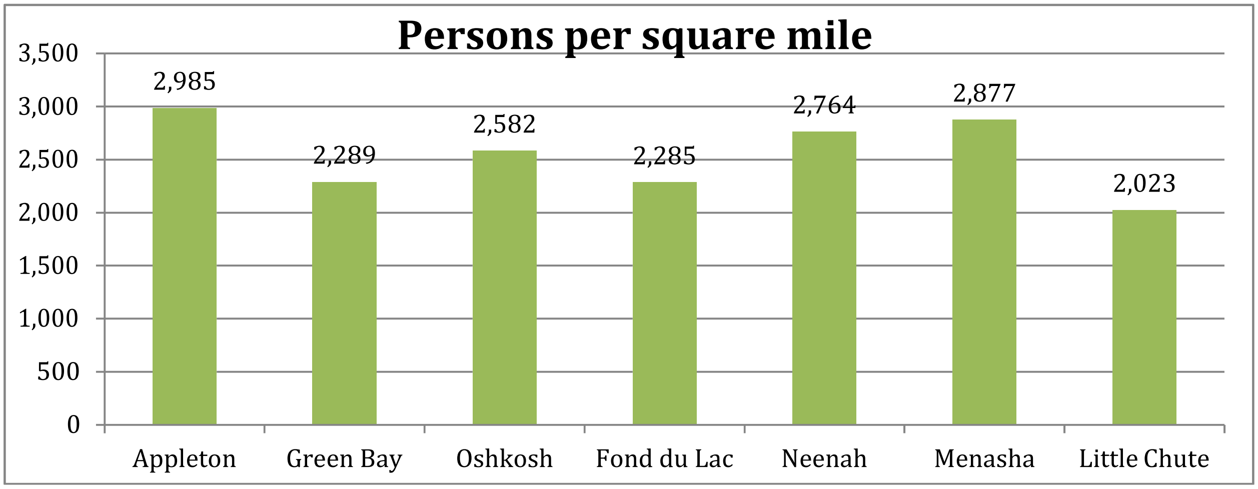


Table 64. Persons per square mile. Source: U.S. Census, 2010

6.5 Median Home Values in Appleton's 30-Mile Orbit

Median home values are generally higher in suburban areas along the Highway 41corridor compared to urban areas—consistent with national trends, and shown in the map in Figure 65. The rural areas are mixed, with some census tracts recording high values, but others struggling with low value.

Like density, Appleton also clusters more suburban areas with above-average median home values compared to other urban areas along the Highway 41 corridor. Some of these pockets of high home values even exist within Appleton's borders, north of Highway 41.

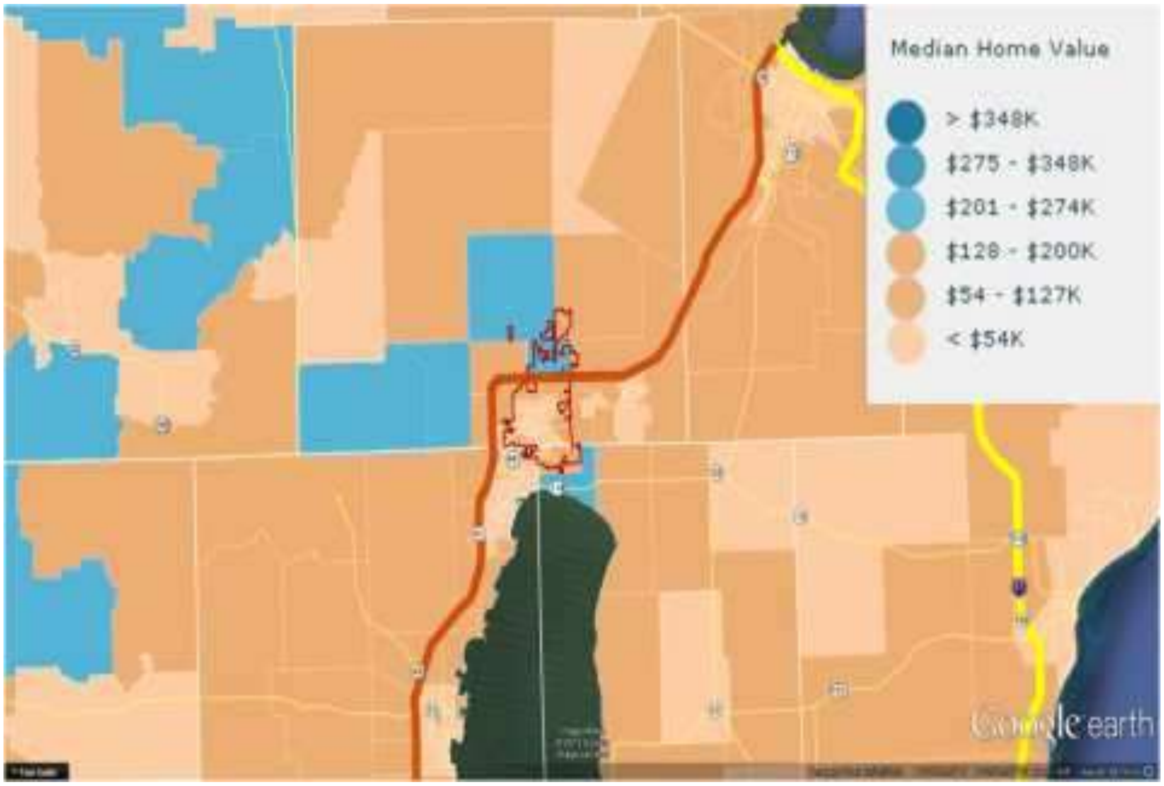


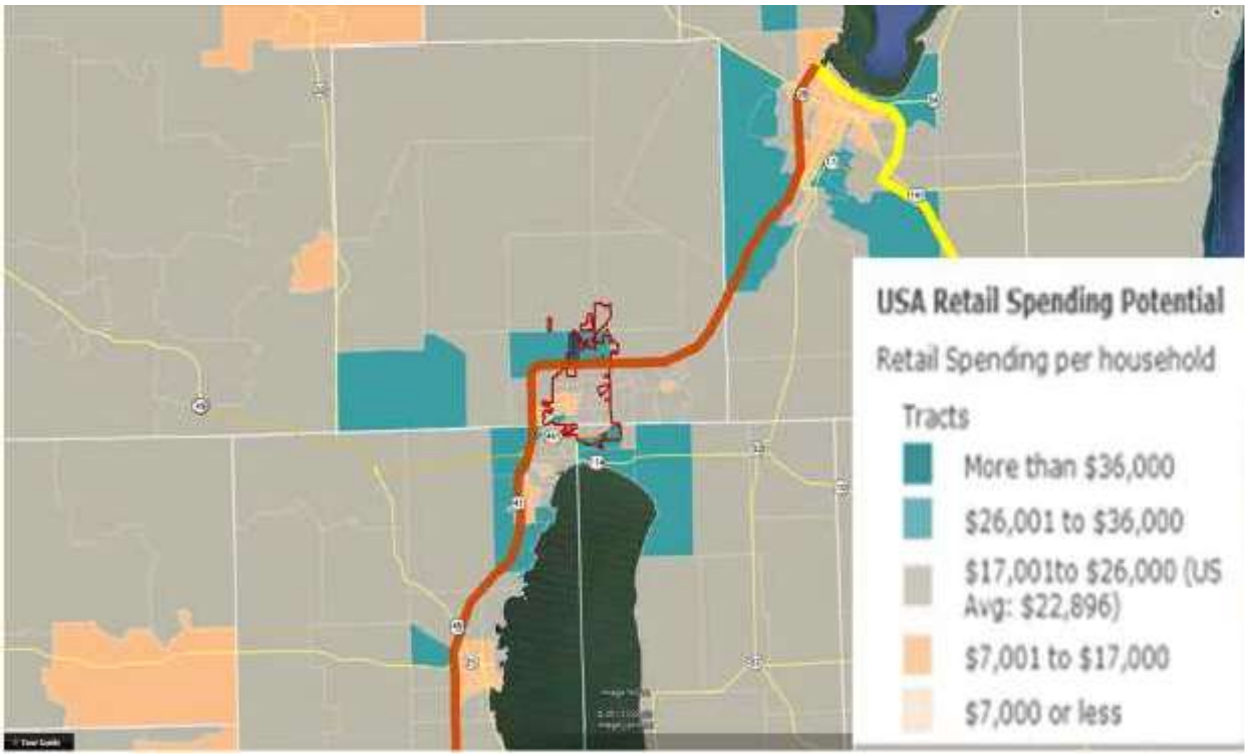
Figure 65. Median home value for the 30-mile radius around Appleton. Highway 41 is shown by the orange line and Interstate 43 by the yellow line. Source: ESRI (density data)

Most of the areas within the City of Appleton, however, have home values well below the national average, discussed above.

6.6 Retail Spending in Appleton's Greater Region

Retail spending is more uniform in the area, with much of the region in line with the national retail spending average, as displayed in the map in Figure 66.

Figure 66. Retail spending is shown for the 30 miles around Appleton. Highway 41 is shown by the orange line and Interstate 43 by the yellow line. Density data: ESRI

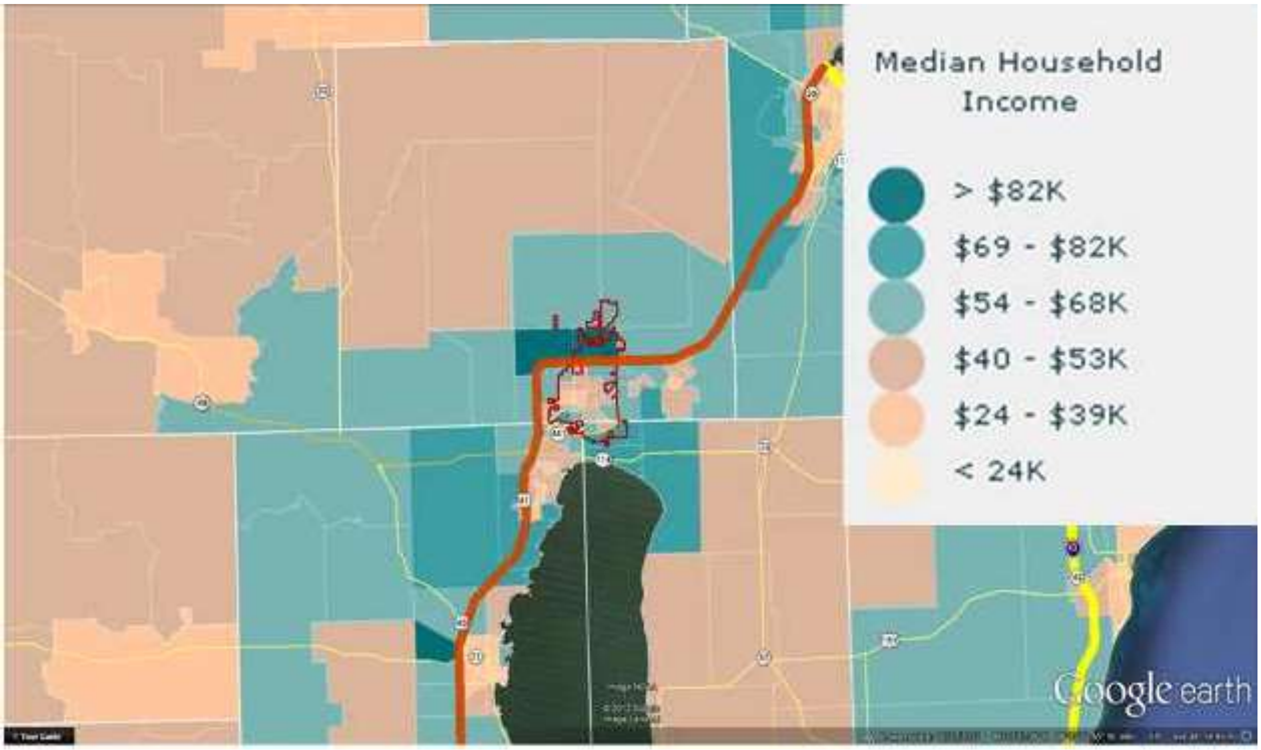


Suburban areas outperformed once again. Unlike Appleton's dominant cluster of home value, observed in the previous section, Green Bay's suburban areas also outperform the surrounding area. Oshkosh also recorded at least one census tract with above-average retail spending, to the immediate west of Highway 41.

6.7 Median Income In and Around Appleton

Median income displayed an even larger geographic disparity, with suburban areas faring much better than other areas. Urban and rural areas underperformed, with the densest census tracks experiencing the lowest median incomes, as illustrated in the map in Figure 67.

Figure 67. Median household income shown for the 30 miles around Appleton. Highway 41 is shown by the orange line, and Interstate 43 by the yellow line. Density data: ESRI



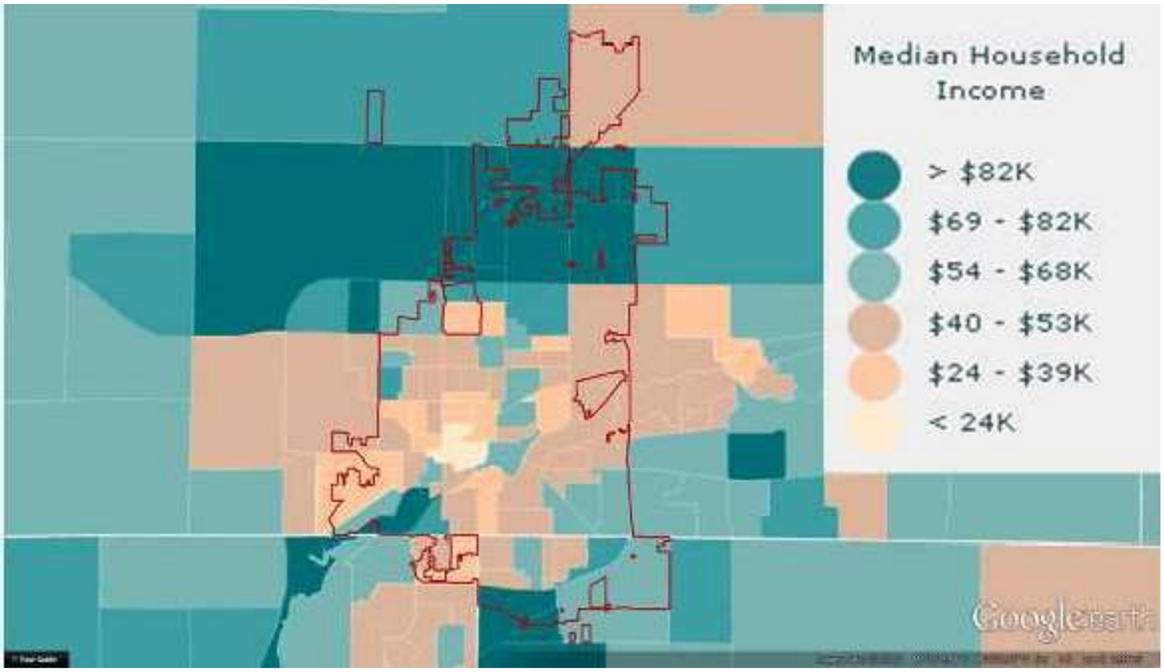
Consistent with our macro view, above, we expect this disparity to soften and potentially reverse as the New Normal matures—as less dense areas struggle with the higher costs (fuel, time, etc.) typical of those geographies compared to more dense areas, and a new generation of younger workers build their income from their preferred urban residences. Already, in 2013, more poor now live in suburban areas than in urban areas on average. But these global macro trends will translate uniquely to each specific geography, thus individual results will not be uniform even within the same types of geographies, e.g. not every downtown will win nor every suburb lose in the New Normal.

At present, the Old Normal of suburban outperformance seems firmly in place in and around Appleton based on available data. As we have seen above, however, peak sprawl lagged in Wisconsin and Appleton real estate markets relative to the national peak. So, because suburban expansion lasted longer in Appleton and Wisconsin before following the national trend down, Appleton could again experience a similar lag before catching on with the rest of the nation.

As discussed in the following section, however, it is also true that Appleton's commute times are below the national average. This is an indication that Appleton's suburbs may continue to outperform because infill pressure correlates with high commute times.

This does not mean, however, that Appleton's urban areas cannot also gain strength as the New Normal manifests and preferences towards urban environments develop; simply that Appleton may not experience additional infill pressure as a result of a stressed transportation system. In fact, a closer view of Appleton's median income, shown in the map in Figure 68, resembles more of a checkerboard—with many pockets of above average income interspersed with areas of below average income. This is a positive advantage the Appleton Urban Area possesses over many struggling urban areas which are large clusters or virtual monocultures of low-income areas. Such diversity of income is even an advantage over predominately high-income areas, which tend to price-out many low income workers and many demographic segments that are necessary to operate a thriving economy and often essentially in cultivating a vibrant community.

Figure 68. Appleton Median Household Income, repeated from Figure 23, Source: ESRI



6.8 Commuting In and Around Appleton

While our macro view expects vehicle miles travelled and average commute times in the U.S. to continue to decline and the number of pedestrian and public and shared-use trips to continue to increase, the City of Appleton is already well established as an area with an easy commute (see Figure 69), with numerous pedestrian friendly walksheds, bike paths/greenways and a public transit system which makes downtown Appleton accessible to the wider urban area beyond the City's borders. And many more planned.

The mean travel time to work in Appleton (17.9 minutes) is below the national and state averages.

While Appleton does provide a number of bus routes and a seasonal trolley, the percentage of total commutes taking place on public transportation (Figure 70) is below both the state and national average. Green Bay and Oshkosh also have slightly higher public transit trip percentages.

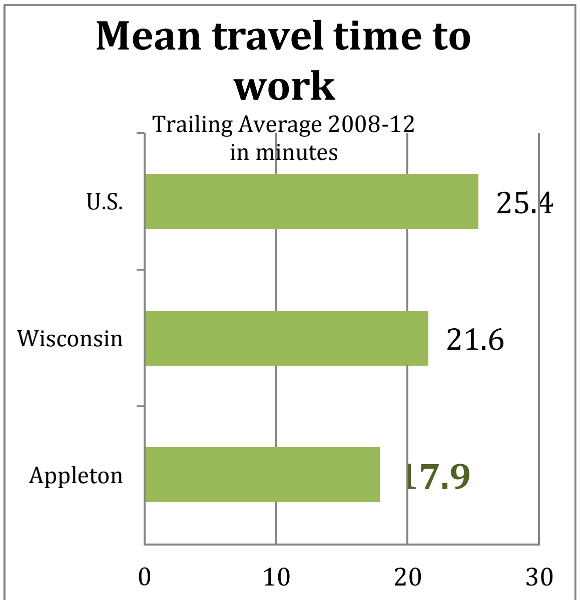


Figure 69. Mean travel time to work, in minutes, for 2008-2012, U.S. Census, estimates

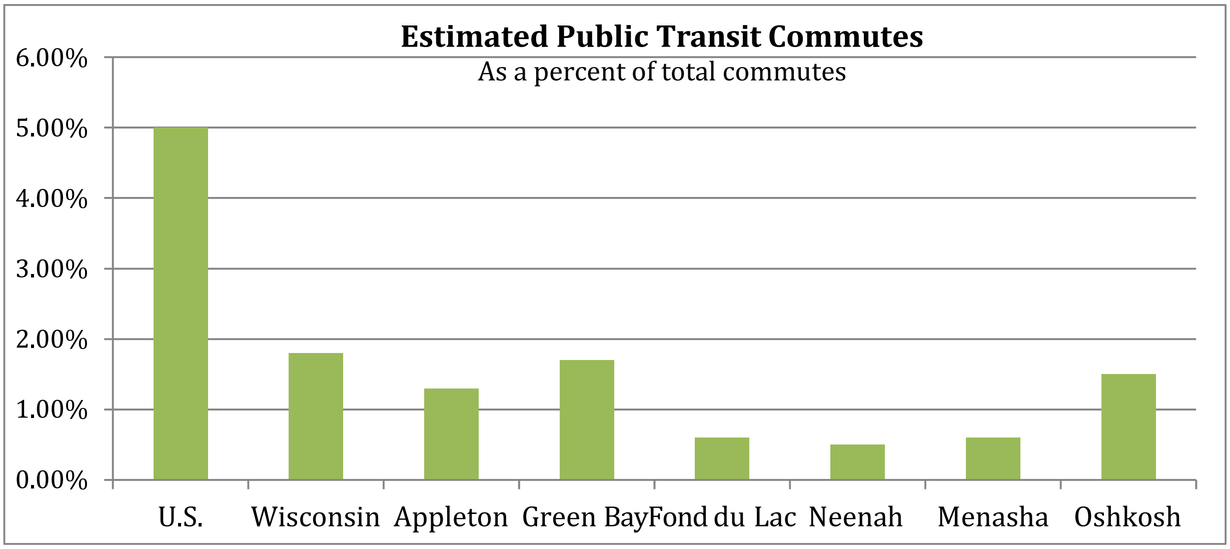


Figure 70. Estimated Public Transit Commutes, as a percent of total commutes. Source: U.S. Census

Given Appleton's strategic advantage in being the geographic center of the Highway 41 Corridor as well as possessing a large portfolio of anchor assets and attractions downtown, the city would seemingly benefit from increasing public transit trips that would circulate greater traffic through downtown. Importantly, increased use of public transportation would help alleviate the parking issues downtown—made worse precisely because downtown Appleton is a magnet for traffic. Increased transit investment may be necessary and should be weighed relative to increased parking investment. A robust transit system keeps the City and region competitive for economic development projects that tie into transit for access to employees and customers.

Similarly, Appleton would be well served by continuing and expanding its focus on walking commutes (Figure 71) and the general welfare of pedestrians, including sensitive pedestrians such the elderly, handicap, children and moms/dads-with-strollers. Appleton is fortunate to have maintained a number of walkable neighborhoods and has a higher percentage of walking commutes compared to both the state and the country as a whole. Only Oshkosh has a higher percentage of walking commutes than Appleton.

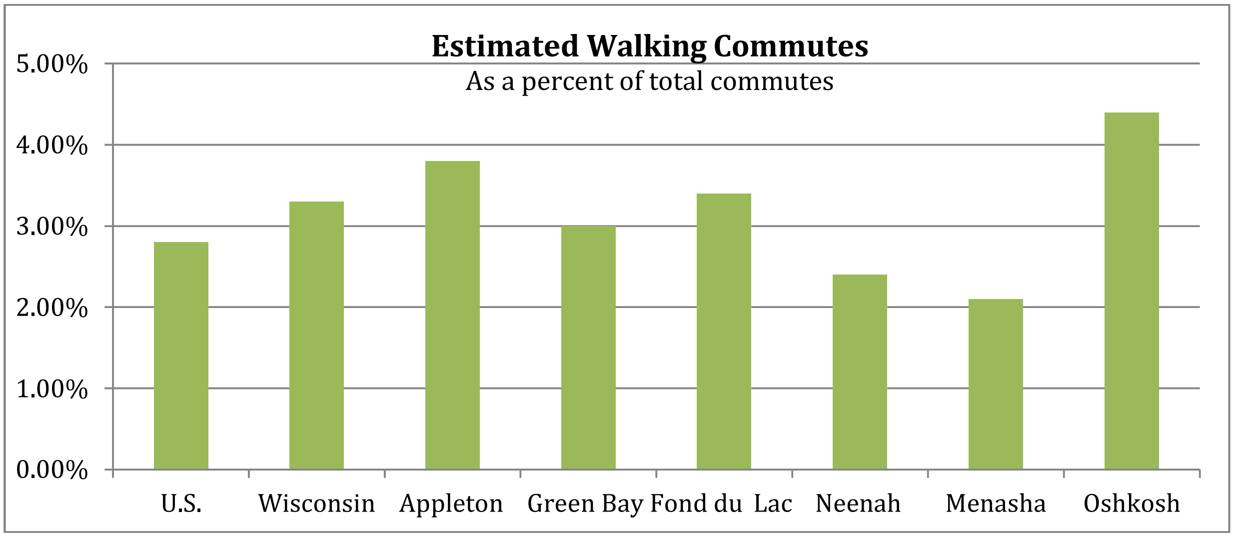


Figure 71. Estimated walking commutes, as a percent of total commutes. Source: U.S. Census.

Consistent with our core macro view, convenient, dense and walkable neighborhoods will outperform other environs in the New Normal—as both preferences and transportation costs make structural adjustments that challenge the economics of older developments and even the viability of some communities.

Not only does greater walkability improve the health, enjoyment and quality of life of its residents, but high pedestrian transport utility helps to insulate economies from price shocks—particular of oil and gasoline prices. Going forward, the very real advantages this type of resilient built-environment will continue to increase the desirability and durability of urban clusters such as Appleton, and should provide a strong tailwind behind its residential real estate market and generally.

Already a leader in many of these aspects, but with many plans still on the table, Appleton can continue build on the strength of its built-environment and prioritize community development. With such natural physical advantages and an early lead, Appleton is strongly positioned to outperform as the New Normal continues to manifest greater demand for convenient urban areas with high quality of place, plentiful public amenities and safe, clean and green living.

To this end, the City's most recent effort to strengthen its core is a downtown parking study, currently underway. The City commissioned the study to seek "proactive solutions to our parking needs based on the known replacement of the Blue Ramp, the library building project" and future needs. A similar effort also being undertaken by Lawrence University—a large land owner, key stakeholder and anchor asset—which will bolster the City's study and add to downtown Appleton's combined improvements.

The sustained efforts and regular progress in this and similar downtown improvements are essential not only for the long term success of the City itself, but for the whole region. As discussed above, Appleton is the geographic center of the urban corridor from Green Bay south, around Lake Winnebago to Fond du Lac boundaries. Like the strength of the human body, the economic and social health of a region depends on the heart.

7 Retail Trade Analysis

Business, physical and population characteristics have a bearing on the capability of the Appleton to host key retail and service businesses. The Appleton and regional economy is recovering well from the recent recession, and the area must continue to encourage retention, expansion and attraction of major employers, which supply the wages and spending capacity to support successful retailers and service businesses.

Following is a review of the retail and service business performance of both the City of Appleton and a three county area around Appleton that includes Outagamie, Winnebago and Calumet Counties. It begins by examining Appleton's retail trade area.

7.1 Appleton's Regional Trade Area

Appleton's retail trade area extends as far as downtown Green Bay to the North and Fond du Lac to the South. The map in Figure 72 depicts Appleton's retail trade area drawn at 30 miles, consistent with Marchetti's constant above:[64]

Figure 72. A thirty-mile radius is drawn around Appleton with the red circle. Malls and other shopping centers are represented with red stars—the largest being Fox River Mall in Appleton.

The largest red star on the map represents Fox River Mall (FRM), which is not only the largest mall in the area but also the second largest in the state. As noted above, FRM is well positioned to dominate its regional competitors because it is located at the center of the Highway 41 corridor's distribution of population density.

[64] While 30 miles is an oft-used benchmark, retail trade areas can also be drawn at 50 miles—which may be more suitable to a particular geography.

The location advantage of FRM can also be seen by comparing the relative advantage of its competitors. In the map in Figure 73 primary (5 mile) and secondary (10 mile) trade areas are drawn for each of the nearest regional mall locations competing with Fox River Mall—while FRM itself also has its tertiary trade area drawn with a 30 mile radius.

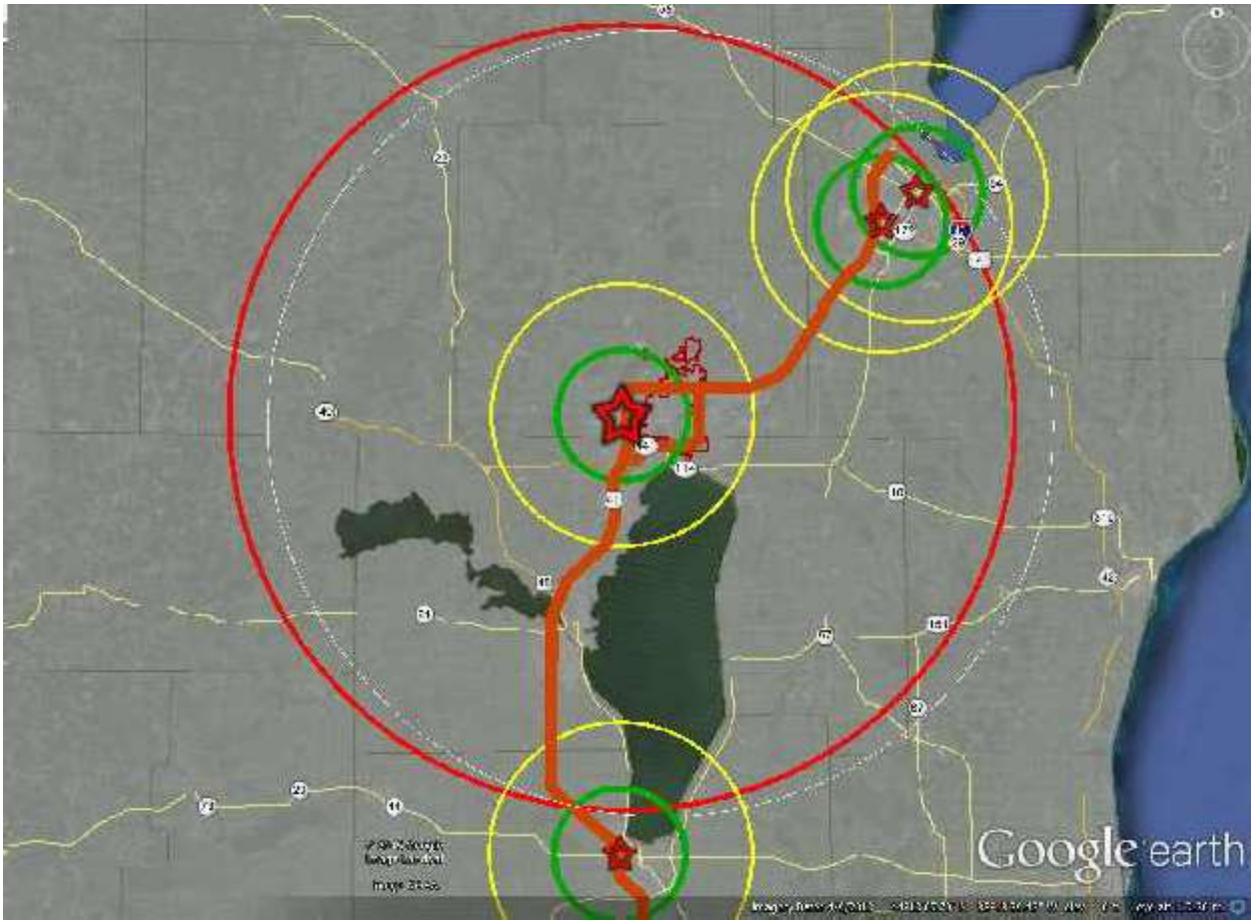


Figure 73. Primary, secondary and tertiary trade areas (at 5 (green), 10 (yellow), 30 miles (red & white)) are drawn for the major malls in the region and the 30 mile white circle from downtown Appleton; with orange lines representing the location of Highways 41 and 441.

Notice that while Green Bay's large malls compete with each other in their primary and secondary trade areas, FRM has no competition overlapping its primary and secondary trade area. Moreover, FRM's trade area is denser than other geographies in the corridor—making its singular dominance of the area even more beneficial.

Also notice the implication of its tertiary trade area drawn with the thin red circle: FRM mall is the only regional mall that competes with all other regional malls in the area, thanks to its central location. This might seem like a disadvantage because more competition tends to restrain pricing power by retailers (and rents by landlords), but there is also a relative advantage in being accessible to more consumers across a larger market. Because of its location, FRM mall is a rational choice for consumers up and down the Highway 41 corridor and thus is a draw for traffic from the entire region.

So, for example, a potential mall shopper in Fond du Lac has a rational choice between Forrest Mall in Fond du Lac and FRM in Appleton in terms of the time resources necessary to make a round trip in order to make a purchase. Similarly, potential mall shoppers in Green Bay have a rational choice between its two malls there and FRM. Mall shoppers in Appleton have a rational choice between all malls along the Highway 41 corridor—however, shoppers in Green Bay and Fond du Lac are challenged by distance such that Forrest Mall in Fond du Lac does not generally compete for mall shoppers in Green Bay, nor vice versa. And not only are their trade zones mutually exclusive on the map, but potential mall traffic in Green Bay and Fond du Lac must drive through Appleton, passing by options in FRM, to make a purchase—which implies that such shoppers must be extremely well motivated to make that trip.

Consistent with our macro view, above, the ability of Forrest Mall to successfully draw from potential retail consumers in Green Bay will continue to diminish—as all the geography of all brick and mortar retailers will be tested in the New Normal thanks to disruptive forces like higher oil prices and Amazon.com.[65] Already Forrest Mall shows signs of distressed: the JC Penny there is one of five recently announced to close in Wisconsin. This is to the disadvantage of customers in Fond du Lac whose closest geographic alternatives are Appleton and Milwaukee—with only the former close enough to make a round trip within 1 hour.

This geographic advantage not only benefits FRM, but the entire retail trade segment of the greater Appleton economy. The next section examines Appleton's retail segment in much greater detail.

7.2 Appleton Area Retail Trade Analysis

The strongest retailers in the City of Appleton are those in general merchandise, grocery and beverage stores, gasoline stations, restaurants and drinking places and motor vehicle and parts dealers. The City's businesses tend to be strong for community and neighborhood sales, but have potential for growth relative to regional trade area center cities like Green Bay and Madison. Appleton shares its centrality in the regional trade area with Oshkosh. Some of the regionally significant businesses along Highway 41 are also located within the other large communities along the Highways 41 and 441 highway corridors. Table 74 below shows that Madison and Green Bay areas do not have as much of a linear trade area, so Appleton does well comparatively.

Table 74. Regional Comparison of Retail Gap and Leakages. Source: ESRI

Regional Comparison of Retail Gap and Leakage						
Region	Retail Trade Gap	Leakage Factor	Food & Drink Trade Gap	Leakage Factor	Total Retail, Food & Drink Gap	Leakage Factor
Appleton (Outagamie, Winnebago, Calumet)	$627,517,694	8.9%	$64,625,149	8.5%	$692,142,843	8.9%
Green Bay (Brown, Oconto, Kewanee)	$32,988,444	0.6%	$41,278,567	7.0%	$74,267,011	1.1%
Madison (Dane, Iowa, Columbia)	$108,024,040	0.8%	$132,501,301	10.1%	$240,525,341	1.7%

The strongest retailers in the three County Appleton-Oshkosh regional trade area are those in general merchandise, motor vehicle and parts dealers, grocery and beverage stores, gasoline stations, and restaurants and drinking places. The ranking of the region's businesses tend to reflect strong regional destination orientation. The top five retail categories for Appleton and the region are the same, just a different order.

Regarding the regional trade area, there is approximately 9% leakage by comparison with 1% leakage in the Green Bay and Madison regions. That leakage of nearly $700 million offers the City opportunities to add both jobs and tax base from new retailers. Leakage findings and recommendations are more fully discussed in the following pages by examining each retail sector.

65 As discussed above, re Shultz's Sea Change.

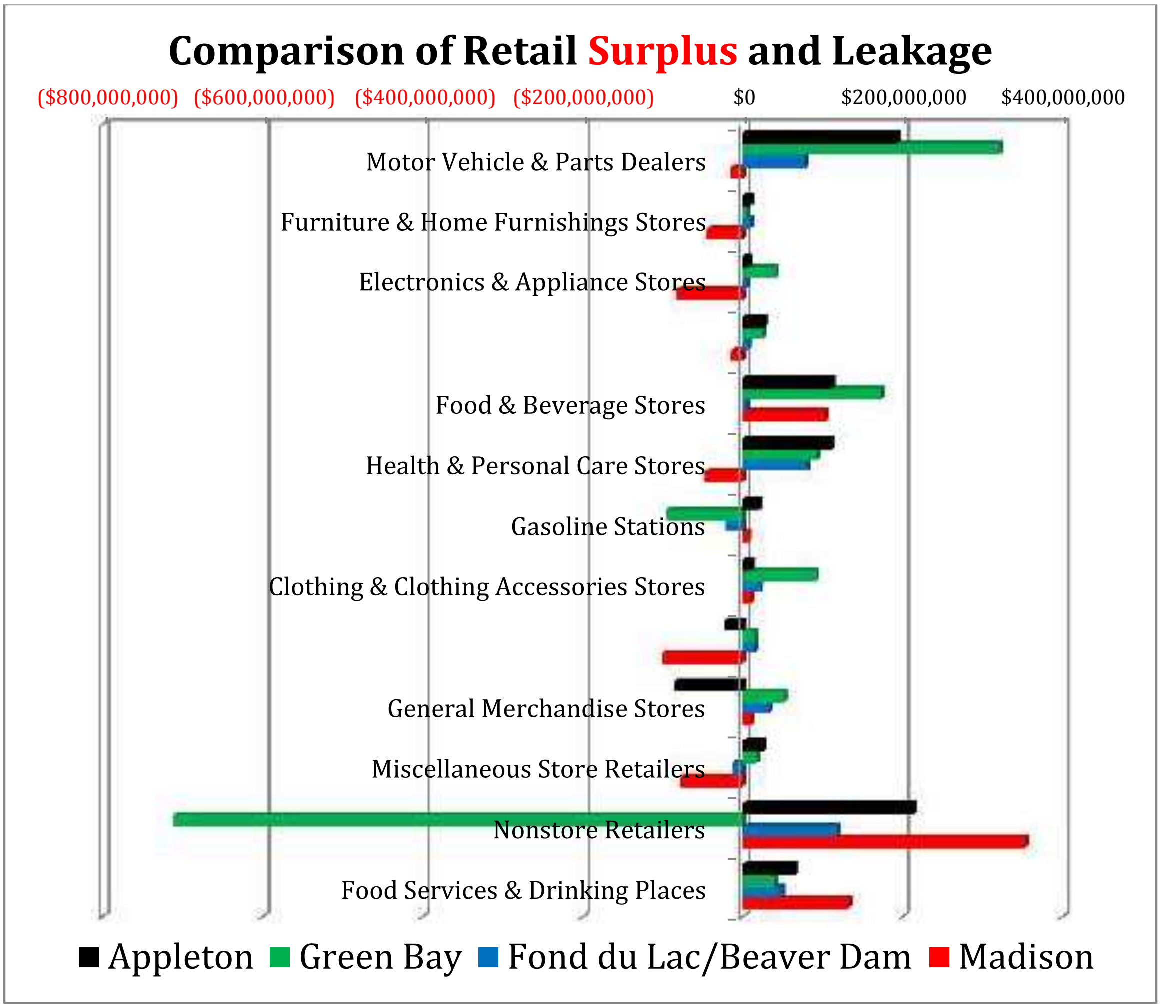


Figure 75. Comparison of Retail Surplus and Leakages, Source: ESRI

Assuming leakage of nearly $700 million, which exceed the Green Bay and Madison areas substantially, and assuming retail sales of $300 per square foot, the Appleton 3-County region would seem able to support up to nearly 2 million square feet of retail buildings, or that existing retailers should be able to attract as much as 5-10% greater sales. Since Appleton falls marginally below Madison and above Green Bay in per capita income, the income differentials don't fully explain the significant gap of the Appleton-Oshkosh region seen in Figure 75 and Table 76.

Table 76 Regional Comparison of Population and Income. Source: ESRI

Regional Comparison of Population and Income				
Region	2012 Population	Households	Median Income	Per Capita Income
Appleton (Outagamie, Winnebago, Calumet)	400,328	158,199	$41,493	$26,135
Green Bay (Brown, Oconto, Kewanee)	311,710	123,598	$40,529	$25,786
Madison (Dane, Iowa, Columbia)	579,684	240,409	$45,652	$30,917

General Merchandise Spending

The Appleton-Oshkosh area is dominated by the major anchor stores situated in an around the Fox River Mall, and is comparatively shown in Figure 77. Regionally, there is a 6.4% surplus of spending. Appleton does comparatively well, with a surplus of 20.4%, showing that the City has done well in attracting and retaining big box discount department stores relative to its nearby communities and neighborhoods. However, a trend that may be telling about the fabled “regional mall” attraction is that the region has leakage of 17.7% from traditional “department stores” that may be gravitating to large discount store chains outside the regional mall. General merchandise spending is the largest retail trade category in Appleton and the other comparable regions and center cities, representing nearly 20% of retail spending.

The Appleton-Oshkosh region’s 6.4% surplus is stronger than the general merchandise category for the Green Bay and Madison MSA trade areas, an indication of the prominence and magnitude of the Fox River Mall beyond the 3-county region. As such, the Fox River Mall is an asset to Appleton for attracting other extra-regional destination stores and shopping centers. This sector has been dominated by Macy’s, Sears, Penney’s, Walmart, Target and Kmart. The evolution of retailing is impacting this market as new stores such as TJ Maxx and Ross, and “dollar stores” enter this sector. This sector also loses its identity as the largest retailers such as Walmart, Meijer’s, Costco and Target add more grocery business, straddling regional and community retail sectors with groceries, that was principally a “community” oriented sector.

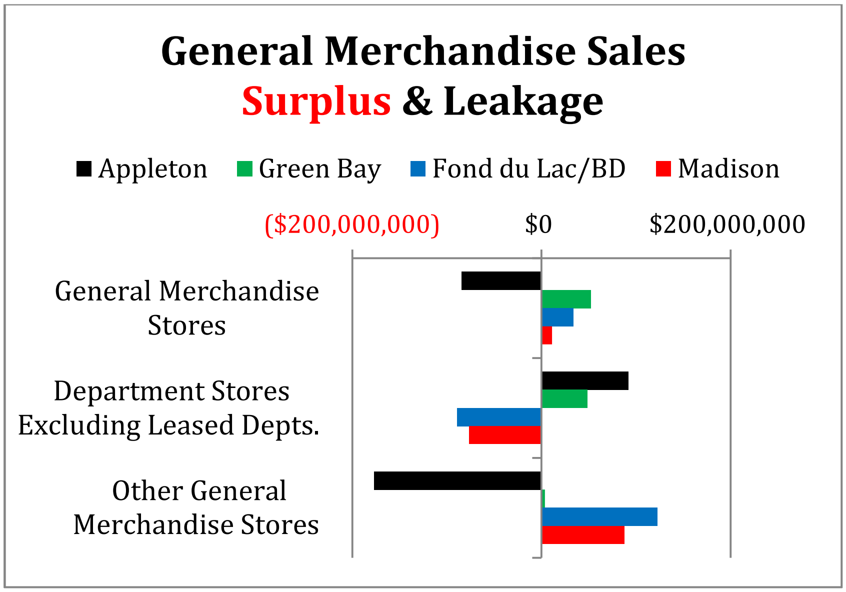


Figure77. General Merchandise Sales Surplus & Leakage, Source: ESRI

Motor Vehicle and Parts Spending

Motor vehicle retail spending, in Figure 78, is an anomaly in both the Appleton and Green Bay area, with leakage in the Appleton region of 15% and leakage of 39.5% in the Green Bay region. On the other hand, the Madison region has a 0.6% surplus.

In the City of Appleton, the leakage is greater than the region, with 26.7% leakage, meaning that the auto dealers outside of Appleton are more significant than the City based dealers.

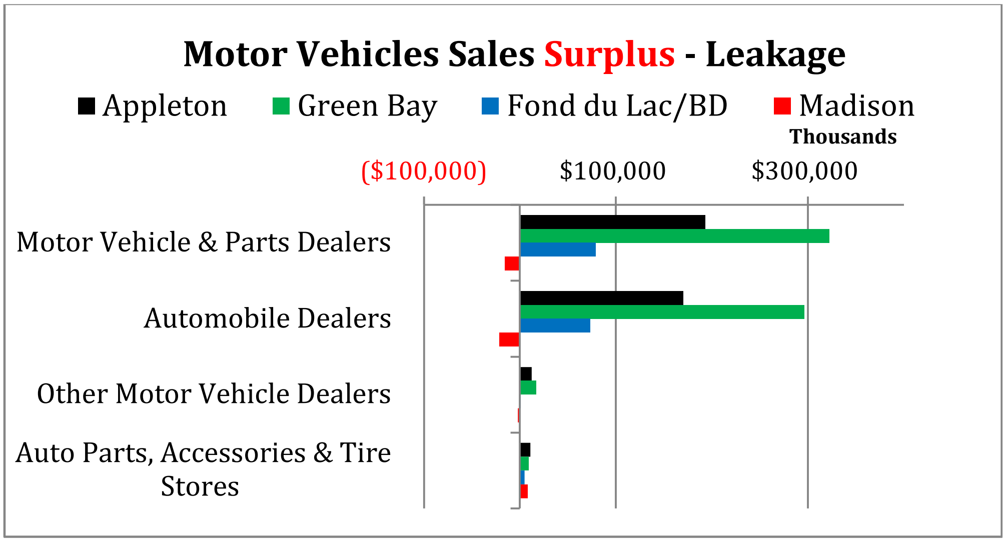


Figure 78. Motor Vehicle Sales Surplus and Leakage, Source: ESRI

The dealer category represents over 80% of the retail sales, and it is further surprising that other motor vehicle and auto parts and accessory stores also perform poorly in the region. The City's parts dealers show only 2.8% leakage, which illustrates that the City performs well in this much smaller sub category.

It is difficult to predict the exact nature of the leakage, and perhaps there are fleet sales that are occurring that are being credited to another region. The City should also examine automobile and recreational vehicle sales in the region to determine if certain new and popular makes and models should be recruited to the region. Since the effects also exist relative to the adjoining Green Bay region, there may be similar factors influencing both regions.

Food (Grocery) and Beverage Store Spending

This category is dominated by the traditional neighborhood grocery store, and the Appleton region shows a 9.8% leakage (see Figure 79). The City shows leakage of 14.8%. As the City plans for new and redeveloping neighborhoods, greater care should be taken to incorporate a grocery store anchor with each neighborhood plan.

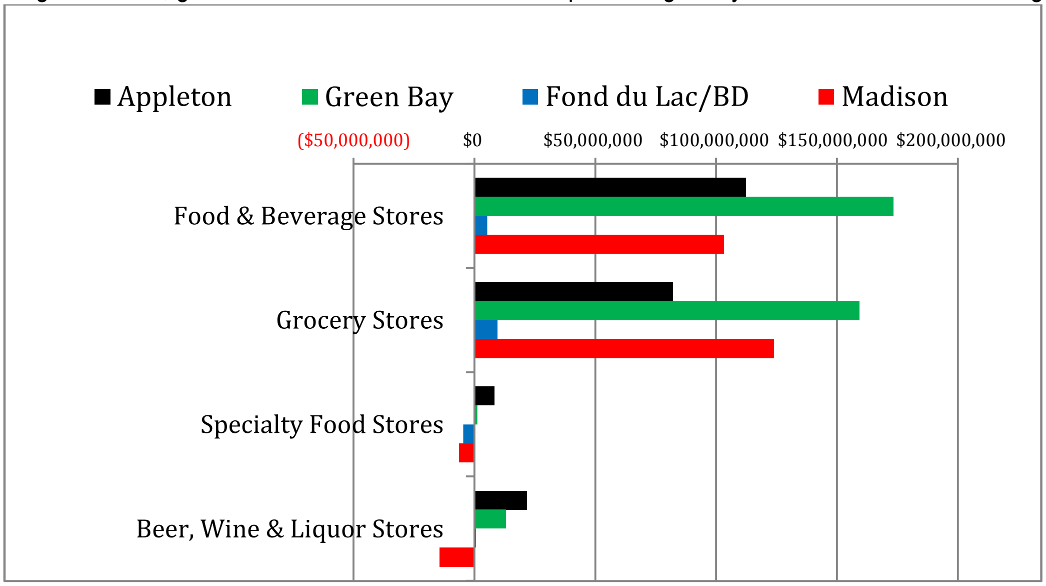


Figure 79. Food and Grocery Store Sales Surplus and Leakages. Source: ESRI

If the City has major commercial intersection in areas developing outside the City limits, provision should be made for adequate commercial space for grocery anchored shopping centers to serve new and developing neighborhoods.

The grocery shopping experience is also evolving outside the traditional neighborhood grocery. The advent of upscale community grocery businesses like Whole Foods in large scale stores, and Traders Joe's in smaller stores is changing the way the public shops for food. Other grocery concepts are re-packaging the neighborhood grocery to emulate the success of Whole Foods and Trade Joe's. In the Chicago region, Mariano's is a subsidiary of Roundy's and a sister to the Pick'n'Save chain in Wisconsin, and has taken over the expansion of neighborhood stores on a medium to large store scale – with stores in the range of 70,000 sq. ft. Whole Foods announced in December that it is increasing its store count goal to 1,200 stores, up from 1,000.[66]

Other specialty grocery concepts to watch is that Trader Joe's recently completed a Chicago area distribution center, and may be an expansion candidate. The company prefers to be well situated relative to higher income neighborhoods and in smaller strip shopping centers. The same is true with emerging grocers such as The Fresh Market and the Plum Market. On its way to the Midwest may be Earth Fare. Finally, in the grocery and general merchandise super store arena, Meijer's, based in Grand Rapids Michigan, is making a push into southern Wisconsin and Illinois. Northeast Wisconsin would be a next logical geographic opportunity, and there is a report that Meijer's will soon open in Grand Chute. Another traditional grocer that has excelled at segmentation of the fresh and ready to eat specialty foods is the Hy-Vee chain for Iowa. These 70-80,000 sq. ft. grocery stores feature robust meat, bakery, produce, liquor and wine, pharmacy, fully prepared carry out meals in a customer friendly store package. The addition of Costco in Grand Chute should help the Appleton region retain its tertiary trade area dominance.

Food Service and Drinking Places (Restaurant and Bar) Spending

Figure 80. Restaurant & Bar Sales Surplus & Leakage, Source: ESRI

Restaurant spending represents a category that Appleton leads with a 2% surplus, while the region as approximately 8.5% leakage, as indicated in Figure 80.

The top performers in this group have been the premium restaurant and the limited service fast casual restaurants. The full service national brands have all seemed to struggle recently, with many of the national chains slowing the opening of new stores unless the markets are underserved and are well situated to high income population clusters.

The opportunities for fast casual dining seem to new and emerging specialty menu concepts with an ethnic and dietary appeal. While some of these restaurants are losing appeal, there are always other groups clamoring to expand. Concepts mentioned recently have been Freshi, Elevation Burger, Freebirds World Burrito, and Prey a Manger (sandwiches).[67]

The best recommendation is for local strip centers, downtown property managers to be constantly vigilant about the new cuisine trends gaining popularity and then embracing the national chains and franchises. Local restaurateurs that can emulate these emerging concepts can also do well. Initial entry may be lowered; because they smaller fast casual restaurants can be successful with a small store and a small investment.

[66] Whole Foods Sees 1,200 US stores: Analyst, Supermarket News website: http://www.supermarketnews.com, December 18, 2013.
[67] Fast Casual Sub-segments to Watch, National Restaurant Association news blog, http://www.restaruant.org/nra_news_blog/2012/10/, published October 2012.

The premium market however, with tastes ranging from Asian, Mediterranean, steaks, seafood, Italian, South American, etc. can be expensive to enter for national chains and local restauranteurs. Premium brands include the Capital Grill, Morton's, Season's 52, Ted Montana's Grill, and others.

Gasoline Station Spending

Gasoline station spending is simply a category that indicates the baseline of spending. The region has a 2.3% leakage, and the City has a 3.5% leakage, both negligible relative to local, community or regional shopping. Gasoline represents just over 10% of regional spending.

Health and Personal Care Spending

Stores in this category are probably more community or neighborhood oriented. This category represents only about 8% of local and regional retail spending. Appleton shows only 6.1% leakage of $7.2 million in spending -- perhaps the volume of several salons or a few stores. The regional leakage is higher at 19.6% and a significant value of over $111 million, as indicated in Figure 81. This category may offer opportunities if some strip centers or fashion shopping destinations were to attract a cluster of stores that would drive business to these stores.

Figure 81. Health and Personal Care Sales Surplus and Leakages, Source: ESRI

Clothing and Clothing Accessory Store Spending

Regional malls tend to be ground zero for national and regional chains in the clothing and accessories lines. More recently, "Lifestyle" malls that are dominated by clothing, shoes, accessories, and destination specialty stores are also gaining against the regional malls. Fashion oriented outlet malls are also giving regional malls considerable competition in this segment.

The Appleton region has only 3.1% leakage in this category, while the City of Appleton has 60.6% leakage, revealing the sheer power of the Fox River Mall as the "category" killer, as demonstrated in Figure 82.

Figure 82. Clothing and Accessories Store Sales Surplus and Leakages. Source: ESRI

For Appleton to claim a larger share of this segment, attraction of a "lifestyle" or fashion oriented outlet mall with a cluster of 30+ high end fashion retailers is necessary. Identification of a site is necessary, in the same linear regional travel patterns along Highway 41 to become attractive regionally and to visitors to the region from neighboring rural areas. This may be a regional initiative since the sites near the Fox River Mall or redevelopment of the mall itself may be candidates, with few sites in the City limits meeting outlet mall location criteria. However, with the advent of "show rooming" in the electronics business, more fashion oriented stores may begin to occur in the future.

Retailers that may not be present in the market that appeal to younger lifestyles and a fashion orientation that Appleton may wish to pursue include: Lululemon, Athleta, and Urban Outfitters.

Other merchants in these centers include restaurants, health and personal care merchants, specialty home stores and other premium goods in a variety of other businesses.

Electronics and Appliance Store Spending

Stores in this category have been serving as the basis for trends that are replacing fixed stores that serve as showrooms for large dollar purchases through lower prices internet and mail order shopping. Best Buy used to have the largest sales per square foot in the retail industry.

Appleton does well in this category with 20.3% surplus, compared to overall regional leakage of 3%. Appleton and other communities have a major retention challenge in this category due to the advent of internet and mail order type sales.

Sales in this category only represent 3% of total regional retail spending. Electronics ownership and purchases generally exceed the national averages with MPI ratings of 100 to 109, for spending on computers, cell phones, and televisions. However, buyers are less likely to own more expensive computers and Apple branded computers.

Other Retail Categories

The remaining six retail categories represent 12.8% of retail sales for the region, but represent nearly 20% of potential retail sales. That represents leakage of nearly $300 million, the size of three or four Super Wal-Mart stores. A full view summarizing a number of retail categories is shown in Figure 83.

The largest leakage is mentioned in earlier in this report and is the Non-store Retailers category, dominated by electronic shopping and mail order houses. The region loses nearly $213 million in this category, and the City loses nearly $55 million in this category. Retailers in this category tend to be large high volume merchants, and rely on proximity to both major transportation consolidation hubs and proximity to major population centers for next day delivery

Comparatively, the Green Bay region has a large, nearly 59% surplus, in this category while the Madison region has similar leakage to the Appleton region. Appleton should pursue non-store retailers, given the opportunity. Like many businesses, these retailers may be able to adapt to big box industrial or warehouse facilities that make the operations less expensive to start up. However, pick and pack wages can be at the lower end of the wage scale.

Jones Lang LaSalle mentioned in its February 2014 ShopTopic Retail Newsletter[68] that more online retailers are beginning to open real brick and mortar retail stores. The trend has a hitch – most of the new retail stores are in the fashion and high-end retail market. If the product has an element of commoditization, then those products will continue to grow online. That’s why we have seen some retailers shrink their footprint, such as appliances, electronics and office supplies.

Appleton’s third best category of retailers is in the Building Materials and Supply Stores, owing perhaps to the presence of many lumber yard, home improvement centers and stores, and specialty stores in the specialty elements of the commercial and residential construction business.

The Sporting Goods, Hobby, Book and Music Store category performs extremely well in the region, delivering a 11.1% surplus in regional sales. Undoubtedly, the presence of Scheels as an anchor at the Fox River Mall contributes heavily to this position. The FRM and the perimeter tend to be magnets for destination shopping in many of these categories, and the City has leakage of 27.4%. Some of the stores in this category may be attracted to the “Lifestyle” or high-end fashion outlet mall development that would help both the region and the City if a suitable site and developer can be identified.

[68] From Clicks to Bricks: why online retailers are opening stores, Jones Lang LaSalle, ShopTopic Retail Research, February 2014 newsletter.

Furniture and home furnishing stores show leakage of 6.6% or nearly $10 million from the region. The City of Appleton has greater leakage to its surrounding communities of over 40%, or nearly the same magnitude of sales of $8.7 million. With the recovery of the economy, some furniture stores are expanding once again, led in the Chicago region by Art Van and Darvin Furniture stores. These stores often seek to locate in destination retail corridors with other large malls, discount stores, home improvement centers, and auto dealers. Generally, they will seek to locate in second-generation big box retail in stores of the range of 40-50,000 sq. ft. to provide ample display areas for a variety of furnishing options. A smaller, upscale store may be West Elm, which requires 20,000 sq. ft. and looks for upscale, high-income neighborhood centers surrounded by other upscale retailers. There may be room for one more furniture store in the region, or a couple of home furnishing retailers.

	Appleton – Retail Potential	Appleton – Retail Sales	Appleton – Retail Surplus (-) Leakage (+)	3-County – Retail Potential	3-County – Retail Sales	3-County – Retail Surplus (-) Leakage (+)
General Merchandise	$115,310,355	$174,363,293	-$59,052,938	$614,427,676	$698,867,792	-$84,440,116
Motor Vehicle	$137,889,744	$79,716,337	$58,173,407	$739,531,567	$546,413,724	$193,117,843
Food Stores	$117,808,813	$87,427,383	$30,381,430	$628,652,813	$516,403,728	$112,249,085
Gasoline Stations	$87,429,355	$81,534,538	$5,894,817	$470,359,349	$448,839,134	$21,520,215
Food & Drinking	77,907,034	81,113,112	-3,206,078	$410,714,134	$346,088,985	$64,625,149
Health & Personal Care	$63,034,559	$55,817,030	$7,217,529	$341,084,809	$229,231,591	$111,853,218
Clothing & Accessory	$38,586,544	$9,467,275	$29,119,269	$202,646,856	$190,608,761	$12,038,095
Electronics & Appliances	$23,382,900	$35,283,966	-$11,901,066	$124,491,039	$117,155,722	$7,335,317
Sport, Hobby, Book, Music	$16,683,121	$9,514,527	$7,168,594	$88,952,073	$111,105,782	-$22,153,709
Nonstore Retailers	$59,857,011	$5,130,663	$54,726,348	$322,562,827	$109,833,726	$212,729,101
Bldg. Materials	$24,148,370	$25,466,866	-$1,318,496	$132,568,599	$105,586,992	$26,981,607
Furniture	$14,975,813	$6,293,459	$8,682,354	$79,441,080	$69,537,585	$9,903,495
Miscellaneous	$15,272,623	$8,548,171	$6,724,452	$82,305,957	$55,922,414	$26,383,543
Total	$792,286,242	$659,676,620	$132,609,622	$4,237,738,779	$3,545,595,936	$692,142,843

Table 83. Summary of Appleton and Regional Sales Surplus and Leakage, Source: ESRI.

Miscellaneous retailer sales also lag, representing leakage of 19.1% from the region. The sector has slightly less leakage of 28.2%. The lost opportunity in these categories represents $26 million in business regionally, and nearly $7 million of business in the City. These low numbers probably indicate that there may be room for a number of office supplies, gift, novelty and souvenir stores, art and art supply stores, manufactured home dealers, tobacco shops, etc. The category with significant growth nationally is that pet and pet supply stores are also included in this category. These stores offer some significant growth opportunity and may still offer local entrepreneurs to be somewhat competitive. The region's pet ownership is 7% above the national average, with an MPI rating of 107.

In the miscellaneous category, used merchandise stores are also included. Only a few national chains, such as Savers, exist. Pawnshops are classified with financial institutions.

7.3 Appleton's Retail Real Estate

Heading into the 2008 recession, Appleton's retail real estate market traded at a premium to county and metro markets but at a discount to the state average price per square foot. Coming out of the recession, however, Appleton's retail recovery strongly outpaced recoveries in all measures compared in the chart provided by Loopnet, displayed in the graph in Figure 84.

After bottoming in 2010, asking prices for retail property skyrocketed back to the previous high-water mark achieved in the top of the prior cycle.

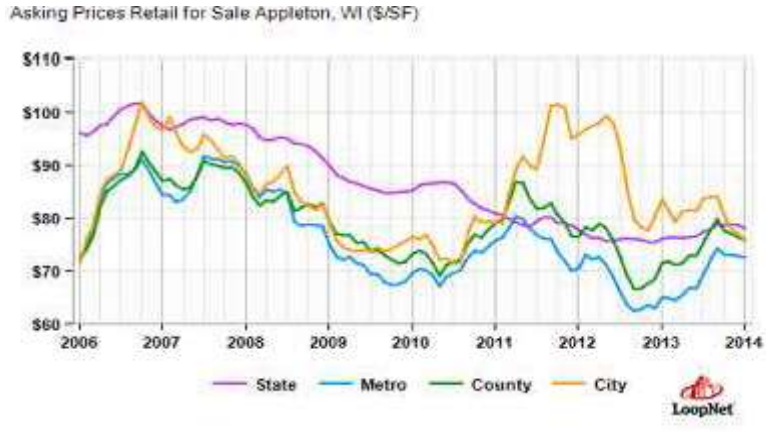


Figure 84. Appleton area real estate asking prices. Source: Loopnet.

Also notice that prices for retail space in Appleton over the last 18 months have softened after peaking in 2011, as have all other comparable markets shown. Most recently, the median asking price for retail space in Appleton declined by -5.9% compared to the prior 3 months and -9.3% compared to the year prior—falling below the state average once again; although still outperforming the rest of the metro area.

Asking rents for retail in Appleton exhibit a similar pre-crisis to post-crisis pivot. Rents for retail space rebounded much higher than metro and county-wide measures following the recession; after renting at a discount going into the recession. And although retail rent prices in the county, metro and city areas are all well below the average for Wisconsin—and the overall rental retail market is under substantial pressure[69]—rent in Appleton show strong signs of breaking higher than its county and metro counterparts.

Figure 85. Appleton asking price for retail rental space, Source: Loopnet

The chart in Figure 85 compares asking rents for retail space in Appleton to its state, metro and countywide counterparts.

The average asking rental rate per sq. ft./year for Retail Commercial properties in Appleton, WI as of Jan 14 was $9.70—a decrease of -1.3% year-over-year. Countywide, average rental rates in Appleton are -0.8% lower at $9.49 per sq. ft./year.

Consistent with our macro view, above, we expect Appleton's characteristically urban retail segment to continue to outperform its peers going forward. As the New Normal's urban infill pressure intensifies the strategic advantages of Appleton's economic geography should attract greater and greater concentrations of people and economic activity.

7.3.1 Appleton's Local Retail Trade Analysis

As we have seen above, Appleton lies at the heart of the Highway 41 corridor. No retail space is better placed to compete for regional consumers, which is one reason why Fox River Mall (FRM) survives as the second largest mall in Wisconsin because it is able to successfully draw consumers in from other areas. But this does not necessarily mean that FRM is best placed to compete for shoppers in the City itself.

[69] A sign of the structural weakness in the commercial real estate sector, an essential element of our core view in the Appendix.

The map in Figure 86 again depicts FRM with a red star (as in the analysis above) as well as City Center Plaza in the heart of the central business district with a purple star, but the primary, secondary and tertiary trade areas are redrawn for the rational pedestrian shopper rather than the rational regional automobile-driving shopper.

Figure 86. Primary, secondary and tertiary trade areas are drawn for pedestrians around Fox River Mall and City Center Plaza.

The trade areas are drawn at half-mile, 1-mile and 3 miles, to represent the primary, secondary and tertiary pedestrian trade areas. The automobile's 30-mile tertiary trade area becomes the pedestrian's 3-mil tertiary trade area, or the distance a rational pedestrian will travel by bicycle in a stop-and-go urban environment within Marchetti's constant. The primary and secondary trade areas, at half-mile and 1 mile respectively, can be thought of as the easy-walk and hard-walk areas. Most pedestrians will be able to travel within these areas unassisted by a bicycle, but leisure walkers, low-information walkers (tourists), handicap traffic, young mothers with strollers, the elderly and several other demographic segments will be limited to or strongly prefer options within the primary, half-mile pedestrian walkshed.[70] On the other hand, purposed, experienced, aggressive or long-legged walkers maintain a brisker pace, even in a dense urban environment, and manage the full mile in 20-30 minutes—allowing a round trip within Marchetti's constant.

By using the same principles as in the regional retail analysis above, but applied to a smaller geography, we can see in the map above that FRM's geographic strength at the regional scale has become its geographic weakness at the pedestrian scale. Appleton's CBD is much more centrally oriented to compete for pedestrians in the densest parts of Appleton—particularly those on foot and disadvantaged pedestrians. Even for those local shoppers on bicycle able to travel longer distances more easily, the CBD is more centrally located to the area's consumers compared to FRM. So, for example, a bicycle shopper in Kimberly to the east has a higher propensity to choose a retail shop in the CBD over FRM similar to the way a shopper Fond du Lac had a higher propensity to shop at FRM rather than driving past Appleton and the extra distance to a mall in Green Bay, above. Being located on the northwestern edges of a corridor of density that wraps to the southeast is less than ideal in FRM's competition against CBD and other retail areas in Appleton.

[70] So, for example, a nail salon within Pam the pedestrian's primary walkshed has a geographic advantage than a nail salon in her secondary walkshed or beyond because it offers greater convenience to Pam.

Ironically, FRM's geographic disadvantage at the pedestrian scale is made worse by the very secret of its success at the regional scale: Highway 41, depicted with the thick orange line above, which made it easy for a shopper in Green Bay to get to, but acts as impassable barrier to pedestrians in Appleton. So, not only is FRM on the periphery of the built-environment, but it lies beyond the cities modern day moat of motorway concrete.

Downtown Appleton's location advantage is enhanced even more by the design of the robust public transit system operating in the wider urban area, in which the CBD is central hub that circulates transit lines.

Moreover, the map in Figure 87 shows that the CBD contains at least one census tract with above-average retail spending within its secondary pedestrian trade area. By contrast FRM has no census tracks with above-average retail spending within its hard-walk zone.

Figure 87. Trade areas and retail spending in Appleton region, with FRM represented by the red star & rings and Downtown Appleton the purple star and rings, with US 41 in the heavy orange line, and the Appleton City Limits outlined. Source: ESRI

7.3.2 Means to Improve Retail

As discussed above with respect to capturing retail leakage, the City needs to identify strategic businesses for retention, expansion and attraction. To achieve this, the City needs to redevelop underperforming, obsolete parcels and properties. While no such greyfield inventory is known to exist at the time this report is being written, we believe some research exits in the 2010 Appleton Comprehensive Plan and that the City staff is preparing such a brownfield inventory and possible redevelopment strategies. The City needs to focus on development of vacant land. Periodic monitoring of the infrastructure in various retail corridors, discussed in the last section, needs to be undertaken to assure reasonable traffic flow and pedestrian access, and management of capacities for public and private utilities.

Appleton has a successful history managing its community and neighborhood shopping centers and retail corridors. Tax Increment Financing (TIF) has been used effectively to develop and redevelop a number of area, that include notably the downtown, the Valley Fair area, the interchanges on Highways 41 and 441 on the southeast and north sides, and those corridors such as Wisconsin Avenue and Northland Avenue. As reported in the 2013 Growth Report, the City closed Tax Increment District (TID) #2 in 2013 with net increment generated of $13.2M.

With TIF districts in place, shown in Figure 88, the tools for redevelopment exist, and the City needs to develop some targeted retail, service or mixed use development scenarios that will yield redevelopment opportunities. And Appleton continues to develop new tools, creating two new TIDs (#9 and #10).

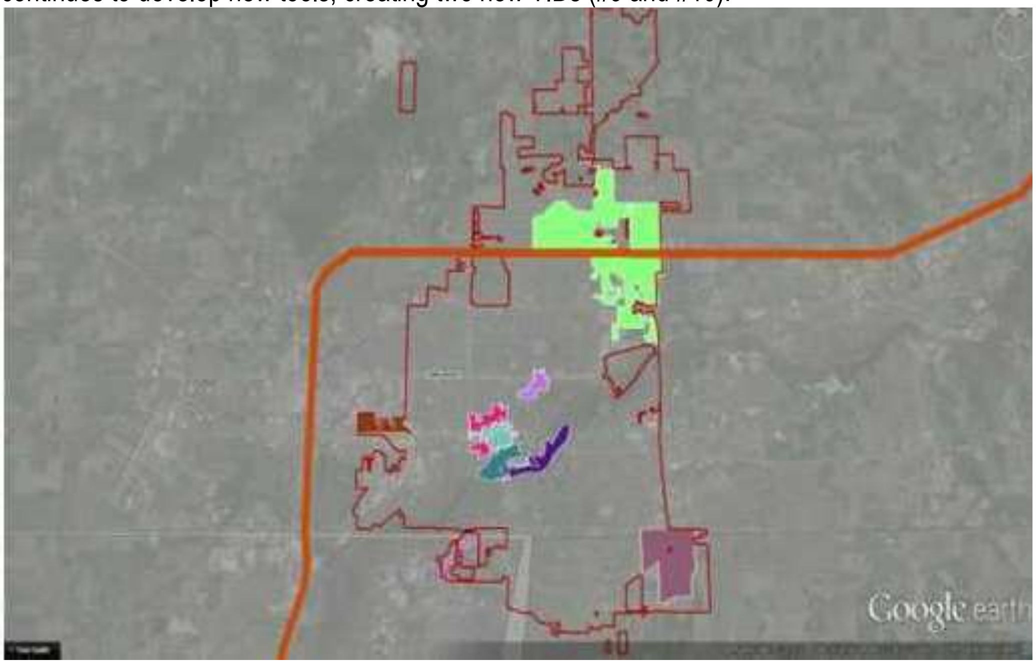


Figure 88. Appleton is highlighted with the thin red line and its TID districts are highlighted in several colors. *Source: ESRI*

Residential development patterns and trends also impact retail shopping patterns and retail interest in the trade area. Higher income household growth will help attract key national retailers, and will give locally owned businesses the confidence to open and expand. Growth of 2-3% additional residential units per year should be a target for the Appleton area, with an emphasis on units serving higher income households relative to attracting more upscale retail and service businesses. Residential real estate is discussed further in the following section.

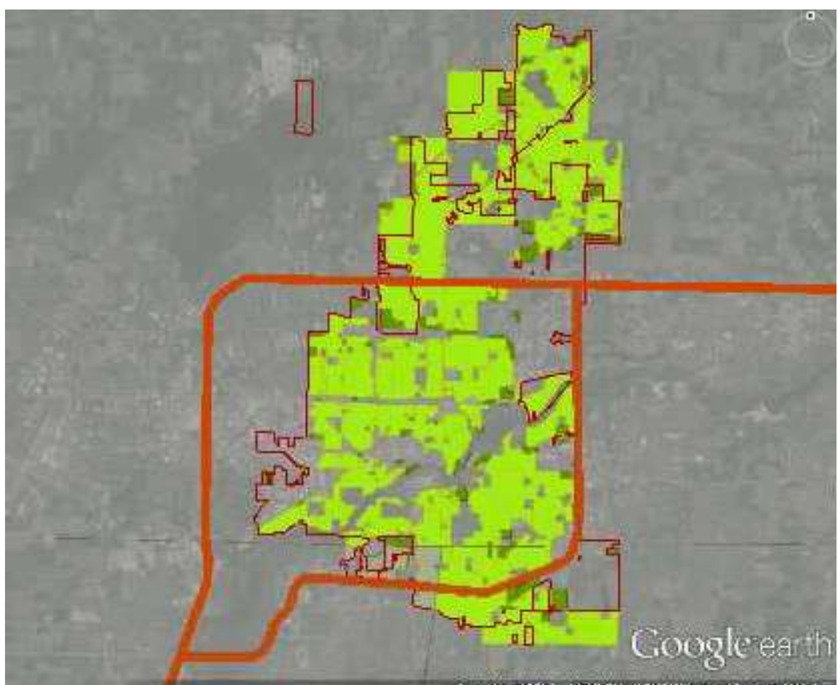


Figure 89 Appleton's residential housing areas are shaded bright green (single family) and dark green (multifamily) with Highways 41 & 441 in orange lines and the City limits in red lines. Source: ESRI.

7.4 Residential Real Estate

According to the 2010 Comprehensive Plan, residential was the largest land use within the city limits not including mixed-use areas (which contain additional residential housing units).[71]

Year	Appleton Home Value Median Price	Price Increase	# of Valid Sales
2003	$115,500	+4.6%	1,264
2004	$119,700	+3.6%	1,250
2005	$125,000	+4.4%	1,159
2006	$128,000	+2.4%	990
2007	$129,000	+1.2%	890
2008	$129,500	0%	709
2009	$123,000	-5.0%	717
2010	$127,900	+3.8%	554
2011	$124,200	-2.9%	488
2012	$124,000	+0%	619
2013	$128,000	+3.2%	766

Figure 90 Appleton Median Home Value Trend

The single family and multi-family areas in Appleton's future use planning are depicted below, with the former represented by lighter khaki-color and the latter represented by darker khaki-color, as illustrated in Figure 89.

Single and multi-family residential take up the majority of the City's land area, with more than 50% of Appleton's total area dedicated to exclusively residential use according to the 2010 Comprehensive Plan. According to Zillow, as of January 2014 the median home value in Appleton is $119,300. Home values have gone up 1.7% over the past year and Zillow predicts they will accelerate, rising 2.1% by the end 2014. The median price of homes currently listed on Zillow in Appleton is $118,000 while the median price of homes recently sold is $121,885, indicating many homes are receiving bids from multiple buyers after listing. The median rent price in Appleton is $800, which is higher than the Appleton Metro median of $780 according to Zillow.
In terms of negative indicators, foreclosures will be remain a condition in Appleton for the next several years with Zillow forecasting 3.4 homes per 10,000 will be foreclosed this year. This is much lower than Zillow's average national prediction of 5.0 foreclosures per 10,000 households. Mortgage delinquency— when a mortgage holder misses payment(s)—is another important (negative) leading indicator of a residential markets overall health, and according to Zillow the percent of delinquent mortgages in Appleton is only 3.6%, which is less than half the national average of 8.0%. Moreover, less than 1% of homes in the City of Appleton were deeded to lenders in a Sherriff's sale.

Year	Foreclosures
2013	185
2012	170
2011	208
2010	216
2009	164
2008	158
2007	138
2006	112

Table 92 Appleton Foreclosure Trends

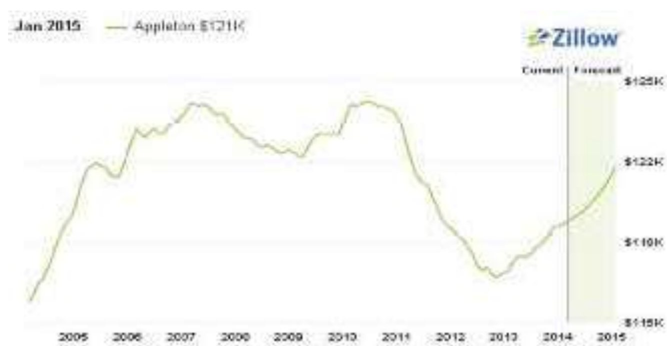


Figure 91 Forecasts of residential home values in Appleton from 2005 to 2015. Source: Zillow estimates.

Somewhat lagging the national bottom in residential real estate prices,[72] average home prices bottomed in the winter of 2012 and began to rebound in 2013, as illustrated in Figure 90. As shown in Figure 91, Zillow forecasts residential home values in Appleton to accelerate higher into 2015:

Nationally home prices fall by more than 20% from a peak in 2007 until their trough in late 2011. While home prices are recovering in generally—and some markets have fully recovered and then some—many homeowners are still

[71] See chapter 10, page 137

[72] Similar to several other real estate lags experienced in Appleton and Wisconsin generally, discussed above.

underwater on their mortgages).[73] In Appleton, the percent of Appleton homeowners underwater on their mortgage is 13.8% at the beginning of 2014, according to Zillow as shown in Figure 92.

Figure 93 provides a table of estimated home values in the cities that surround Appleton. Some of the suburban communities have much higher home values due the more exclusive nature of their residential neighborhoods. Appleton's home values compare favorably with the other more established communities. It also give evidence of the home affordability in the region.

Name	Median Zillow Home Value	City	Median Zillow Home Value	City	Median Zillow Home Value
Center	$186,500	Harrison	$183,700	Grand Chute	$164,200
Freedom	$160,500	Menasha	$133,000	Little Chute	$125,300
Combined Locks	$125,000	Kimberly	$115,500	Neenah	$112,300
Appleton	$128,000				

Table 93 Estimate home values of nearby cities. Source: Zillow.

Home Values in Appleton

A review of the more than 500 residential real estate listings currently available revealed a wide diversity of housing available in Appleton. Housing units are available across the spectrum available for low-income, entry level workers as well as senior and executive level workers. At the high end, there is also a variety of high-value homes—with a combination of historic and traditional units as well as some newer and more modern.

Figure 94 Commercial Office Sales and Rent per Sq. Ft. (LoopNet)

Like many other resilient markets, the number of rental units—many relatively affordable—have increased in recent years. Of Appleton's 29,615 households, 35% of 10,246 households are occupied by renters. This increases housing access and availability, and opens the market to important demographics, such as the young who may not have the credit or savings to yet purchase a home, or an otherwise good worker whose good credit was wiped out during the last real estate bubble and must rent.

As with the diversity of workers and incomes, noted above, diversity of housing is also a strategic advantage Appleton enjoys and should consider exploiting even more.

The Comprehensive Plan of 2010 make a number of important observations and recommendations with respect to the future development of Appleton's residential real estate housing stock. If Appleton can continue to execute on its

[73] That is to say, the value of their home is less than the value of the mortgage debt they owe.

balanced urban vision, then it should continue to outperform going forward. A "pedshed" of walkable commutes from homes to employers in shown in Figures 95 and 97.

7.5 Office in Appleton

Like many other real estate segments, sales of commercial office space are experiencing a structural decline—consistent with national trends—which is driving down prices, according to data collected by Loopnet.

Asking rents, however, have not experienced the same decline. Instead, rents have held steady during the recovery period and show signs of moving higher. The average asking rent in Appleton as of Jan 14 was $13.21 per sq. ft./year—which was essentially flat compared to the prior year. Rates in Appleton are +0.6% higher than $12.91 per sq. ft./year for office rentals in wider metro area. Prices and rents are shown in Figure 94. (All rents are reported as triple net)

Consistent with our macro view we expect Appleton's commercial office space to continue to outperform—particularly its office space proximate to downtown, as discussed in the following section.

7.5.1 Pedestrian Friendly Office Space

In addition to its very car-friendly office parks located along Highways 41 and 441, one of Appleton's great strengths is the ease and accessibly from much of its office space to Appleton's lively downtown, seen in the map in Figure 95.

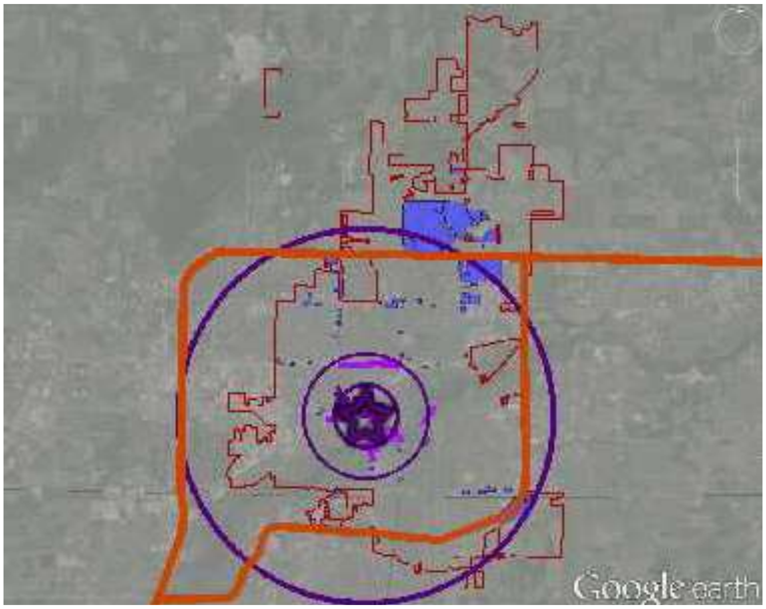


Figure 95. Appleton's office areas are shaded in blue and mixed-use areas in magenta. Primary, secondary and tertiary pedestrian-sheds are drawn from Appleton's lively downtown (the star). City limits are the red outline, and Highways 41 & 441 in organge. Source: ESRI.

This is part of the reason why tenants prefer space in the City, and why it demands higher rents. Tenants are happy to pay a premium so that they and their workers can enjoy close proximity to downtown—which helps to explain how Appleton is able to draw such a large daytime population.

A review of office listings currently available revealed a wide diversity of units available in Appleton, suitable for firms across the spectrum of cost and function, as well a range of styles from historic to modern. Appleton should continue to encourage development of a diversity of office space and maintaining a balanced portfolio attractive to the largest potential tenant base possible. Diversity of function, price and style have always been distinct competitive advantages—but as the modern economy continues to specialize and diversify, office stock must keep pace with the unique needs and tastes of today's highly-specialized firms. Meeting the needs of today's firms will have consequences on offices markets built to suit the firms of yesterday.

This may be particularly relevant for Appleton as it seeks to leverage the most out of the great advantage provided by its young, vibrant and skilled labor force and attracts firms seeking to hire them. And of course the companies' recruitment of millennials will demand physical space best suited to meet the unique cultures they seek to express in their working environments. From a planning perspective, the key to unlocking the massive potential of the cerebral, knowledge economy—which millennials will carry to even further heights—will be balance and diversity of space.

7.5.2 Incubators, Cooperatives and Shared-Use Offices

While Appleton features no business incubator per se, there is a growing infrastructure of startup assistance and general business development and support.

For example, the Fox Valley Workforce Development Board operates six "One-Stop Job and Career Centers." These six centers provide services to job seekers as well as employers, to help alleviate friction in the labor market. Several of these One Stop centers exist in in the greater Appleton area, such as Oshkosh, Menasha and Fond du Lac. More information is available on its website: http://www.foxvalleywork.org/ [74]

Most recently, an office with a shared-use model opened in Appleton: the Avenue HQ. This cooperative office space is offers shared professional workspace for independent workers, including telecommuters, startups, entrepreneurs, freelancers, and more. The Avenue HQ offers a variety of membership levels to meet the many different needs of its members, sometimes including 24-hour access. More information is available of its website: http://www.theavenuehq.com

The Avenue HQ was founded by a nonprofit IDEAco,[75] which is part of a national effort to establish these types of more efficient, laissez fare models for today's startups. CoCo, a "coworking and collaborative space," is another example with multiple locations in Minneapolis. CoCo has partnered with Google and become one of Google's tech hubs. More information is available on its website: http://cocomsp.com

Currently CoCo is exploring establishing a regional network of share-use and cooperative spaces. These types of efforts are providing critical assistance to today's young, nimble, often working at 1AM startups.

A shared workspace was also recently incorporated into one of Appleton's mixed use redevelopments, RiverHeath, in its new Evergreen building.

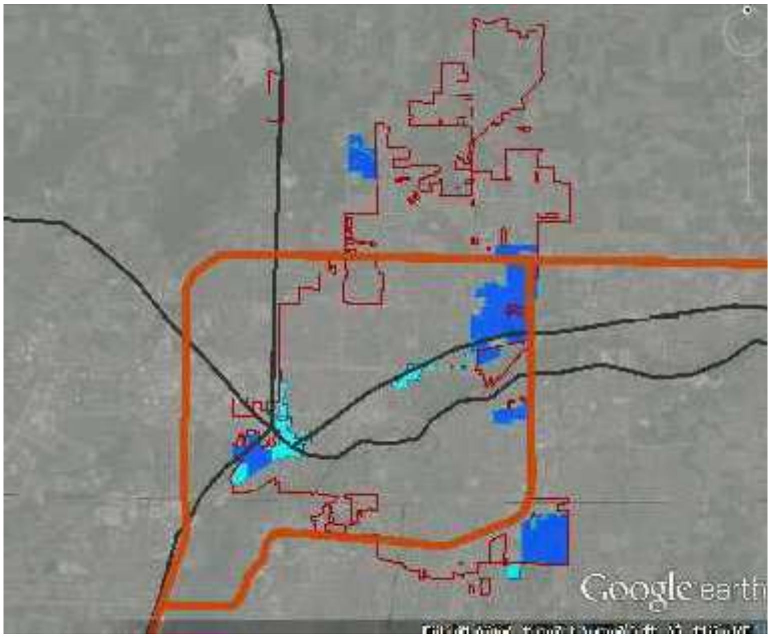


Figure 96 Appleton's industrial and business industrial areas are shaded dark blue and light blue, respectively. Highways 41 and 441 are drawn with thick orange lines. Operating rail lines are drawn with thin black lines. City limits are the red outline.

7.6 Industrial Areas

Appleton also enjoys a substantial number of well-located industrial and business-industrial zones. Like its many other natural and manmade modes of transportation, Appleton is located at the crossroads of rail traffic and this is a key factor to its economic competiveness now and in the future—particularly for the industrial sector.[76] Consistent with our core macro view, Appleton's transportation

[74] Or contact Dick Turner (920) 720-5600.
[75] Discover more information about IDEAco on its website: http://www.ideaco.org
[76] To maximize its rail advantage but minimize disruption to the City as a whole, Appleton will continue to be challenged to strike the right balance. Many improvements to various rail crossings have been completed and several more are planned, but continued effort and investment can be expected--- necessary to meet the future needs of such substantial a transportation hub as Appleton.

advantage is likely to grow stronger as the New Normal matures and transportation costs and other shifting macroeconomic factors put transit into ever clearer focus, once again driving site selection decisions.

Appleton's multiple intersecting access modes (see Figure 96) include natural throughways such as the Fox River which has connected the Great Lakes from the port of Green Bay southeast to the Mississippi River and on to the Gulf of Mexico from the time before humans settled the area, as well as artificial throughways such as a road network which centralizes all north central Wisconsin automobile and truck traffic. Appleton's road cluster functions as a collector by funneling auto traffic through its crisscrossing hub the regions all major roadways, which developed quite naturally around physical obstructions such as the Fox River, large Lake Winnebago, and other geographic features. Importantly, but independent of geologic obstacles, Appleton also enjoys access to the national air transit network via Outagamie County Regional Airport (ATW) as well as other area airports.

Perhaps Appleton's most important transit feature is its intersection of several major railways, crisscrossing near the downtown heart of Appleton. These large volume rail lines may compound traffic and congestion issues for the City as a whole, but they also satisfy a threshold criterion for many firms who cannot and will not locate to a geography without rail access. Moreover, while simple rail access opens up Appleton's market to a large, and re-emergent segments of the economy within Appleton, such as advanced manufacturing, Appleton's intersection of railways are also the crossroads of rail traffic between the deep-water port in Green Bay to the interior of the continent, or north to Canada, or south to Milwaukee or Chicago and beyond. Just as in the past, Appleton will function as a regional network hub and play a significant role in the growth emerging in the greater Great Lakes region—and funnel goods to and fro thriving sectors in interior regions such as those in Iowa.[77]

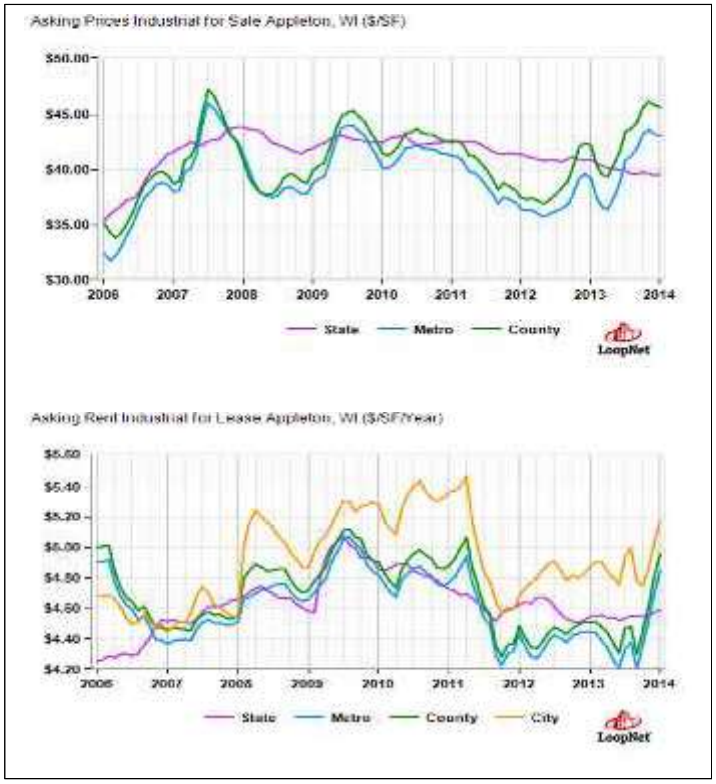


Figure 97 Industrial Sale and Lease Prices for Appleton

Like the roads and settlements before them, the rail lines follow the river corridor and including primary lines operated by Canadian National running down from Canada and southwest from Green Bay through Appleton around to Fond du Lac and beyond, and nearby the Wisconsin Southern Railroad Company operates a line running southwest from Oshkosh through Markesan.

Show in Figure 97 asking prices for industrial rents fell -3.3% in Wisconsin from the prior year, while prices gained 9.9% and 8.2% in the Appleton Metro and Outagamie Counties, respectively.

The average asking rental rate per sq. ft./year for Industrial properties in Appleton, WI as of Jan 14 was $5.18. This represents an increase of 9.1% compared to the prior 3 months, with an increase of +6.3% year-over-year. County-wide, average rental rates in Appleton are +11.5% higher at $4.96 per sq. ft./year for Industrial properties currently for lease. (See Figure 97)

[77] History does not always repeat, but it does Rhyme—Mark Twain.

7.6.1 Pedestrian Friendly Industrial Space

Like its office stock, Appleton benefits from industrial zones well located to both automobile routes as well as pedestrian zones, i.e. downtown. In fact, two of Appleton's industrial areas are situated in long-walking distance of the central business district as depicted in Figure 98.

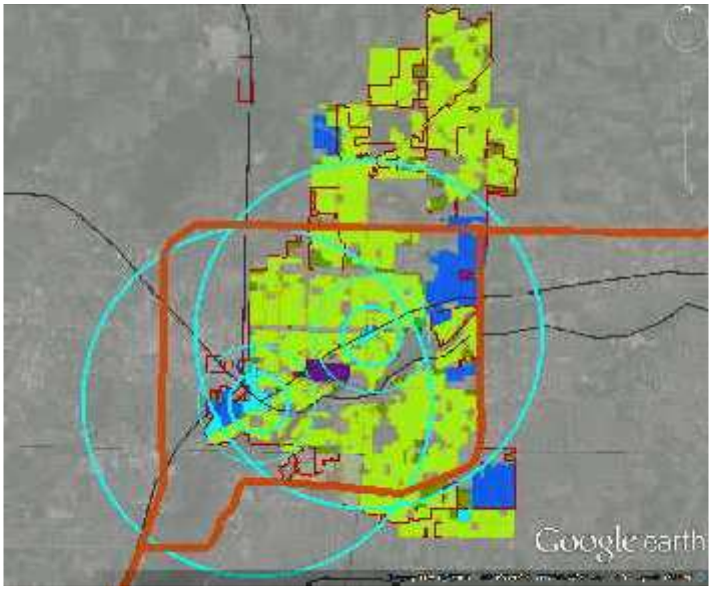


Figure 98: Primary, secondary and tertiary pedsheds are illustrated from Appleton's downtown and Southwest Industrial Park with industrial in blue & purple, and residential areas in green; Highways 41 and 441 in orange lines; and the City limits in red lines.

Employees in these locations can easily enjoy trails, parks, picnic near the riverfront, enjoy an event or festival shop or dine in many places in downtown Appleton. This qualitative advantage of place compounds the benefit of Appleton's physical advantages, discussed in the previous section and numerous sections above. Together, Appleton's many advantages tell a compelling story to potential industrial users.

While it is true that Appleton has no genuine megasite—as the Garner report rightly observed—the City's portfolio of locations is balanced and diverse enough to suit most other industrial uses not requiring massive scale. Consistent with our macro view, whereas the absence of a megasite might have been a very significant negative factor in the Old Normal, during the post-WWII industrial boom of mega-factories, going forward the Old Normal is scaling down industrial requirements and promises to scale the industry down even further. Like the cell phones in our pocket, machinery of many kinds are getting smaller, lighter and smarter--- as are the firms rising into the new manufacturing and machinery segment.

Today's advanced manufacturing sector can make do with 10,000's of 100,000's of square feet rather than millions. And these are the disruptive young firms that will dominant growth the New Normal. So, not only does Appleton not necessarily need a megasite to compete as it might have in the Old Normal, but it has quality of space, and proximately to that quality of space that is highly desired by many high-tech starts likely to lead growth going forward.

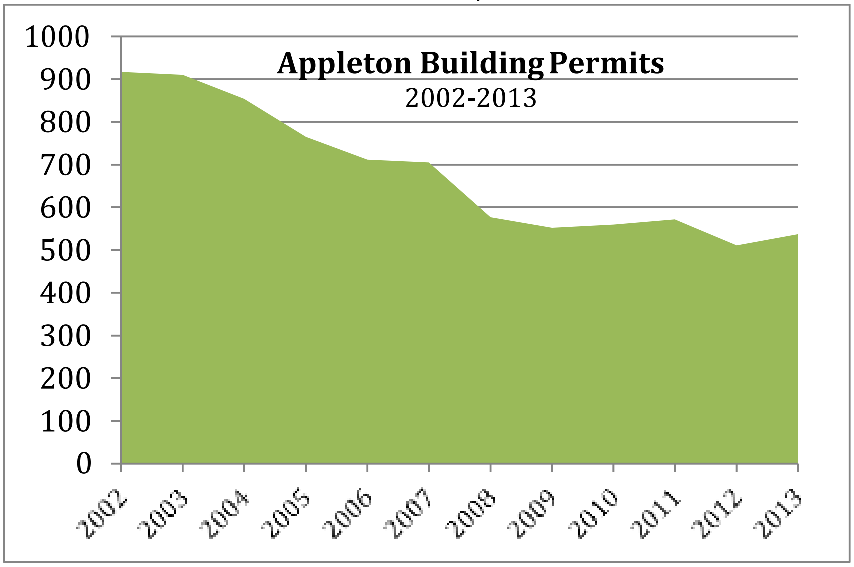


Figure 99. Appleton Building Permit data from 2002-2013. Source: City of Appleton.

7.7 Building Permits

According to Appleton's 2013 Growth Report, the total number of building permits rebounded to 537 permits issued in 2013 compared to only 511 permit in 2012— a multi-decade low. The number of building permits issued in Appleton has consistently declined since the dotcom recession of the early millennia, as shown in the graph Figure

99.

As discussed above, and in our core macro view, many similar markets exhibited a very similar structural decline in development activity before bottoming and experiencing a strong rebound since the Great Recession's ebb—particularly areas of high density. If Appleton undergoes follows a similar pattern, 2012's building activity bottom may have lagged many other urban areas—but it could portend increased activity as in other comparable markets. Just as Wisconsin's peak sprawl moment lagged the nation's peak sprawl before ultimately catching down to slower growth, perhaps Appleton's development has lagged the upswing in many other urban areas before it will ultimately catch up. If so, the brick and mortar transition emerging elsewhere could begin to materialize substantially in Appleton in the coming years.

Quite notably, just as total permit activity bottomed in 2012 developers installed more multifamily units than in any other year in more than a decade. 236 multifamily units were installed in 2013 compared to 2012's 122 units, according to Appleton's 2013 Growth Report. This type of explosive growth is a sign of pent-up demand, as major macro adjustments manifest in a specific market, such as Appleton, and present substantial opportunities for new development. It is also is a positive indication that area developers perceive the changing landscape emerging in the New Normal, see new opportunities emerging in Appleton and will continue to seize development opportunities as they emerge.

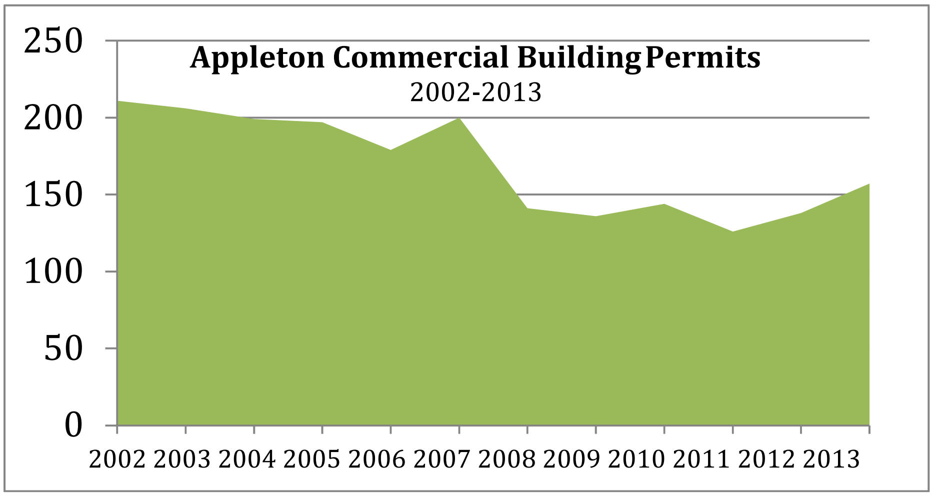


Figure 100 Appleton Commercial Building Permit Data for 2002-2013. Source: City of Appleton.

This opportunity driven vigilance will help monitor the shifting real estate landscape going forward, as developers develop their own intelligence by assessing current market conditions in Appleton. These assessments, such as the market study prepared by Moegenburg Research Inc. whose demand analysis found an "insufficient supply of high end/riverfront rental units in Appleton," will lay the analytical foundation for future development in Appleton. Expect more studies in the future, as conditions in Appleton—already creating compelling opportunities early in the cycle—continue to succeed in adjusting to overall macro conditions as these new trends mature. These private sector efforts can provide excellent information to support the City's own efforts at the city-wide scale, such as this report.

More evidence that building activity in Appleton has bottomed can be found by comparing the 2012 low of total activity to that of commercial permit activity alone in the chart in Figure 100. Note commercial permits in Figure 100 seem to have bottomed sooner and picked up faster than total building permits identified in Figure 99.

This is a positive for growth in Appleton. Commercial activity is typically considered a better leading indicator than residential markets, as their planning precedes economic activity[78] and by this measure activity in Appleton appears to be picking up as a new cycle emerges.

The total value of all construction also accelerated into 2013—from $49,084,251 in 2012 to $88,486,657in 2013—according to the 2013 Growth Report. Consistent with the number of permits, the dollar value of commercial permits made up a large proportion of the total of value of permits issued in 2013: jumping to $48,700,000 in 2013 more than

[78] Whereas growth in residential markets typically react to market conditions once growth has materialized in commercial and industrial sectors.

doubling totals from 2011 and 2012 which were closer to $10-15,000,000. This is a positive indication that further strengths the case that Appleton is accelerating with positive growth into the New Normal; however, a large proportion of this amount was the result of a only a few projects, including a new gas station, church expansion and, most especially, the large expansion at St. Elizabeth hospital.

Appleton can target one or more of these activity measures for continued upward progress. Further action can focus the City's efforts to proactively engage today's changing competitive landscape, rally public support and send a strong signal to the private sector that Appleton is a community built to thrive in the next century.[79] With the robust and diverse asset base, excellent location, high qualities of people and place and the many other strengths discussed throughout this report, Appleton is well positioned to lead by building on its strengths—and this is a great benefit in itself, because other (competing) communities must build from scratch at great expense or go without.

The following two sections take a closer look at recent permit activity in different areas of Appleton.

Figure 101 Building permits by year are show with orange tags. Appleton's TIDs are shaded in various colors. Source: City of Appleton.

7.7.1 Permits Clustering, but not in TID districts

As discussed above, Appleton already has a number of Tax Incremental Districts (TIDs) to target particular areas for investment. In 2013, Appleton continued its efforts by designating two additional TIDs #'s 9 and 10. Emblematic of the success of these initiatives, Appleton also closed TID #2 in 2013 after generating net revenue of $13,200,000 generated.

A geographic analysis of permit activity over the last five years—created with data courtesy of the City's GIS Department—produced the map in Figure 101 showing the location of construction permits issued in Appleton as well as its TID districts.

This analysis indicates the vast majority permit activity is clustering, but not in TIDs. The City would benefit from further efforts to facilitate development activity in key areas in concert with broader community development and economic development activities, and is presently making plans to do so.
Indeed, this report was commissioned towards just such an effort.

The following two sections take a closer look at recent permit activity in different areas of Appleton.

[79] *e.g.* By creating new metrics. For example, Appleton could announce maximum permit response schedules as a part of a new program to streamline the permitting process specifically, and perhaps the development process generally—squarely addressing a chief concern voiced by the development community, discussed in the section Interviews, below.

7.7.2 Permits in Central Appleton

The map in Figure 102 shows again the locations and the year of construction permits issued for the last five years in central and downtown Appleton.

Figure 102: Permits are shown with orange box icons, against a background illustrating the downtown area in dark purple, office & industrial areas in purple and shades of blue; commercial areas in red; and residential areas in shades of green – all within the City limits.

Notice residential areas have dominated the issuance of construction permits. Very few permits were issued in non-single family residential areas (tan) in central Appleton, including high-value targets such as the Central Business District (CBD) and other mixed use areas (purple), retail as well as the industrial and business industrial areas (light blue and dark blue). Higher land prices, greater development challenges, higher costs and greater regulatory requirements and building standards are all partly to blame.[80] Despite many significant achievements recently—through the economic downturn—many other projects and properties with genuine promise remain undeveloped. And while the majority of market conditions are beyond the control of local actors, in the relative competitive landscape that is real estate development the difference in the margins matters a great deal—such as public opinion regarding a given development or developer perceptions of one city's management, building codes or enforcement policy versus another's. These are factors within local control, and there is evidence that Appleton should give these procedural elements added focus. The 2013 Growth Report noted a sense in the development community that "the City's development policies relative to infrastructure are onerous." These sentiments are also captured in interviews performed for this study, discussed in the SWOT and branding survey results, which are more fully reported in the Appendix.

But overall, Appleton's prioritization of its downtown has been a success—evidence by the robust business cluster there. The City's continued focus and effort, through many iterations of the downtown plan and many more individual projects, is now paying substantial dividends to the community, the economy and all the residents and businesses therein. And because Appleton is the geographic center of the entire Highway 41 corridor the City's continued progress downtown is to the benefit of stakeholder beyond city limits.

Houdini Plaza, new trails, greenways, pedestrian improvements and the downtown trolley are all significant initiatives and testament to Appleton's ability to lead from strength. Appleton's geographic advantages afford it the opportunity to achieve economic development objectives with local and regional corridor plans and community development activities. In this way, community development is the key to economic development in Appleton—because Appleton sets its proverbial city square in a central location within the area of Houdini Plaza, the City Center, the Farmers Market, and parking decks, as rational economic decision-makers, will be pulled to the high quality of offerings and utility in such a prime location. In part recognition of the strategic importance of its downtown and urban quarter as

80 In most markets, Greenfield development is still easier and cheaper than greyfields or brownfields. Consistent with our macro view in the Appendix, however, the traditional geographic advantage of many greyfield and brownfield properties will increase making them more competitive development choices relative to far flung greenfields. In this context, while incentives and deal-sweeteners can play vital roles in the success of a development, neighborhood commons, public amenities and community infrastructure can be as much or more important over the long run—and is also generally within the sole discretion of the City and residents.

the dense heart of the region, and part self-interest, that Appleton made clear in its most recent Comprehensive Plan it will "continue to make downtown revitalization a top priority."[81]

With numerous well-crafted strategies in place—such as an updated downtown plan, the corridor plans for Wisconsin Ave, Richmond St., and South Oneida St., the Fox River corridor and green and blue infrastructure plan, and the conceptual design for the Industrial Flats area—Appleton should consider re-doubling efforts toward tactical and procedural execution, perhaps crafting new programs or announcing new initiatives to meet specific needs, such as those voiced by the development community. Even trial programs or temporary initiatives can provide the necessary incentive or action to realize some real improvements or target achievements, or eliminate some real (or perceived) bottleneck. Plans that need to move ahead may include the decision to remodel or develop the Library; construction of a new exhibit hall; and further redevelopment for mixed residential and commercial projects that attract both young professionals and empty nesters.

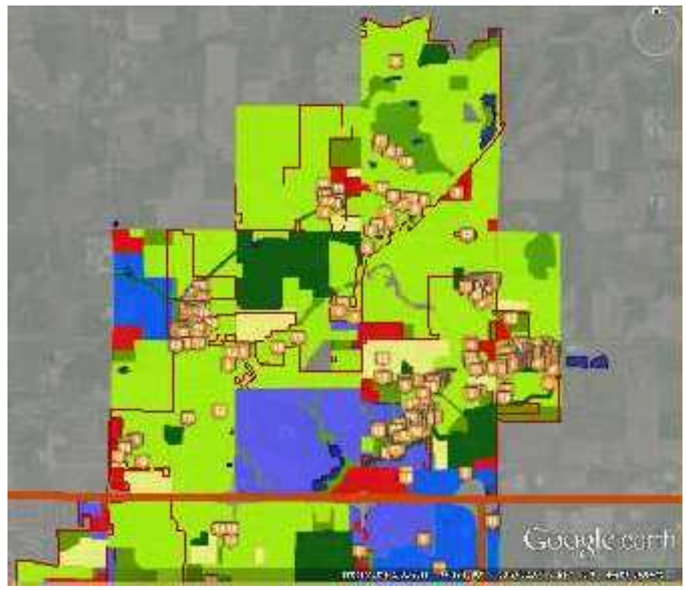


Figure 103 Permits in Northern Appleton are shown with orange box icons, against a background illustrating, office & industrial areas in purple and shades of blue; commercial areas in red; and residential areas in shades of green – all within the City limits.

Most importantly, due to the size and scope of the evolving macro environment discussed throughout this report, and its positive implication for the future of dense areas and hubs of regional networks—such as Appleton—the City should regularly monitor its plans for downtown. As the geographic center and dense heart of the Highway 41 corridor the success of downtown Appleton is integral to the success of the entire region. As new trends emerge and reveal new opportunities, it will be vital to review and update the priorities outlined in the current downtown plan, for example.

7.7.3 Permits in Northern Appleton

North of Highway 41, as in central Appleton, construction permit issuance is predominately occurring in residential areas. The cluster effect seen in building permits is even more pronounced; with the large majority of permits being issued is one of three primary clusters, and is illustrated in Figure 103.

Again, few permits have been issued in the last five years in the non-residential areas, indicating a lack of demand for space in the post recovery market in northern Appleton. This is result of declining assessed values of the larger homes built in this area during the peak of the prior cycle. This is also evidence of the ongoing structural weakness in certain real estate segments[82]—that will continue to mature as the new cycle develops—and mentioned recently in

[81] See Appleton's 2010 Comprehensive Plan Chapter 12 page 156.This focus on the core hub of the Highway 41 regional corridor is also a sound strategy given the forecast in the core macro view in the appendix, wherein we expect dense hubs and clusters to outperform less dense areas—even those pockets of density within rural areas.

[82] E.g. sprawl, discussed infra.

the 2013 Appleton Growth Report.[83] City officials report that special assessment policy changes should help with future new residential growth.

But Appleton's north side is uniquely important to the City's future as its *only* substantial growth path. And while the success of Appleton's well-crafted downtown plan is essential to the health of its economy and community both now and in going forward in the north side could be the key to its economic success in the future. To the south, Lake Winnebago has always provided a natural obstruction to any traffic other than boats—but a boundary agreement with the Village of Harrison prohibits Appleton from annexing any territory on its south side and southeast side for 50 years.[84] Other boundary and jurisdiction agreements with surrounding communities also limit Appleton's authority in all directions but northwest, toward the Town of Center where Appleton projects extraterritorial jurisdiction for three miles from its own boundary.

8 Foodshed Development

An important component of this project was to objectively identify potential targets for economic development. This section discusses the current state of the local food system or "foodshed" immediately surrounding Appleton.[85] It builds on the analysis in previous sections of the report, such as Appleton's geographic location and retail analysis, but draws from many other tools and data sources—including the recently released USDA 2012 Census of Agriculture—to develop an assessment of current conditions in the foodshed.

Discussed further below, the three-county area where Appleton is located has rich base of agricultural and culinary assets—with an atypical foodshed profile. Many of the food-related businesses there are already thriving, evidence of the robust food clusters in place. The following analysis considers the prima facie case for economic development of the foodshed and explores suitable strategies to catalyze the emergent cluster.

As discussed in our core macro view, the agriculture sector is experiencing some of the most significant adjustments in the transition from the Old Normal to the New Normal—and food and the food economy figures to play an even larger role in economic health and success in the more crowded, wealthier and hungrier future. Going forward, local food production is likely to be an increasing strength to productive foodsheds, their economies and communities who are able to grow from within—or a crippling weakness to challenged, unproductive foodsheds who must rely on food exports from other regions or nations and all the sensitivities and costs that come from with dependence on trade.

Foodshed redevelopment can be a significant pillar of an "Economic Gardening Strategy" that targets growth in the agriculture and food sectors of the local economy. It promises a number of direct effects such as increased jobs and sales taxes, as well as a number of indirect effects such improving the health, wellness and enjoyment of residents and tourists alike. An Economic Gardening Strategy is an inwardly focused strategy that emphasizes assisting new and existing businesses within the local community and to encourage job growth from within rather than recruiting businesses elsewhere to relocate from outside the area. Specifically, local food production and value-added processing are two examples food-based strategies can provide promising pathways towards economic diversification, job creation, greater sustainability and local resilience. These types of intra-regional strategies may return to utility and prominence, and perhaps even overtake traditional global strategies dominant during the Old Normal.

As discussed in our macro view, in Appendix E – Emergent Macro Drivers, large-scale agriculture crowded out small-scale, local production as the "international vending machine" made it possible to get food in season no matter where in the world you were. As a result, Agriculture is a substantial sector in many regional and state economies, such as

[83] Which noted development sluggishness on the north side was partially attributable to real estate purchased at high prices of the last cycle.
[84] Beginning in 1999, see Appleton's Comprehensive Plan Chapter 2, page 12.
[85] A foodshed is the geographic region that produces the food for a particular population, or could produce food for population within this same area.

greater Appleton and Wisconsin; yet most of the region's bountiful agricultural production is exported. Ironically, much of the food eaten off the dinner tables of America's most fertile areas are imported from other foodsheds, with very little grown, processed and consumed within the same foodshed.

The Economic Gardening Strategy cultivates and supports entrepreneurial activities within local communities in hope of creating more business startups, greater and more durable small business growth, and increased local revenue retention and money multiplier. Each foodshed is unique, however, and the opportunities or needs of one foodshed are not necessarily the same as another foodshed with different soils, rainfall, labor pool, etc. Depending on the location, size, health, diversity and productivity of a given foodshed, the optimal initiative may be a new farmer's market, a community garden, a backyard garden program or a land co-op, or perhaps even a brick and mortar shared-use kitchen, food incubator, or food hub.[86]

The most successful and sustainable initiatives will seamlessly integrate into the fabric of the community and market-oriented systems that are already in place. And so many foodsheds are disadvantaged in the area of foodshed redevelopment because there is very little existing food economy to build on.

Appleton, on the other hand, has a substantial food economy to build on. The City is located in the heart of a region with a robust portfolio of agricultural assets and long history of rich production, one of the largest farmer's markets in the area, a strong restaurant cluster and a growing reputation as a culinary and cultural destination. Not only does it lie within a fertile region, but it co-locates dense population of hungry people—matching supply and demand elements in a single location. This is a large competitive advantage over many other fertile areas, which are often sparsely populated, remote, or both; challenging the economics of substantial foodshed development.

Like many of its strategic advantages discussed previous sections, Appleton's food economy potential seems like an ideal candidate for consideration of foodshed development as an *Economic Gardening Strategy*—one well suited to thrive in the New Normal matures and food demand grows and shifts both locally and global.[87]

As a result, this section discusses the potential for foodshed development in and around Appleton. Because successful foodshed strategies are adapted to the unique conditions of each foodshed, the following analysis is necessarily open and objective—toward evaluating the foodshed as it is, in order to understand realistic steps forward. In addition to the analysis below, consideration was given to a large number of elements including, climate, ecology, transit, economic geography, land use, current and historic crop potential, demographics, demand centers, market and distribution systems, as well as local history, traditions and culture.

8.1 Supply Overview – Agricultural Sector by the Numbers

Each foodshed is unique, with its own strengths and weaknesses that are critical to understand before initiating a foodshed development project. Towards developing the factual basis necessary to make such foodshed evaluations with sufficient objectivity and detail, this section features select data from the recently released 2012 USDA Census of Agriculture. The decennial Ag Census provides a comprehensive baseline of data, which is augmented by other data sources in the sections that follow.

[86] A foodhub is "a centrally located facility with a business management structure facilitating the aggregation, storage, processing, distribution, and/or marketing of locally/regionally produced food products." - See more at: http://blogs.usda.gov/2010/12/14/getting-to-scale-with-regional-food-hubs/#sthash.8E8fB9N7.dpuf
[87] Particularly as the Ascending Asian middle-class grows wealthier and demands ever increasing quantities of food with little ability to increase conventional farming in many Asian foodsheds, e.g. China. See the section Emergent Macro Drivers in our core macro view the Appendix.

8.1.1 Foodshed Farm Totals by County

In the following Table 104 results from the 2012 USDA results are summarized for the 3-county region surrounding Appleton, Wisconsin, and individual results from each of Calumet, Outagamie and Winnebago counties is also included:

2012 Agricultural Census	Calumet	Outagamie	Winnebago	Area Total
Number of Farms	719	1,170	1,117	3,006
Land in farms (acres)	142,374	250,748	155,520	548,642
Average size of farm (acres)	198	214	139	184
Median size of farm (acres)	80	86	51	72
Estimated value of land and buildings:				
Average per farm (dollars)	$1,092,980	$1,129,579	$585,332	$935,964
Average per acre (dollars)	$5,520	$5,271	$4,204	$4,998
Est. value of machinery and equipment ($1,000)	$123,861	$203,649	$109,183	$436,693
Average per farm (dollars)	$172,269	$174,059	$97,746	$148,025
Total cropland (farms)	656	1,014	1,022	2,692
(acres)	120,851	210,085	126,153	457,089
Harvested cropland (farms)	603	886	802	2,291
(acres)	117,438	201,680	113,883	433,001
Irrigated land (farms)	10	25	25	60
(acres)	21	439	445	905
Value of Ag. products sold ($1,000)	$213,203	$302,233	$126,573	$642,009
Average per farm (dollars)	$296,527	$258,319	$113,315	$222,720
Crops, including nursery and greenhouse crops ($1,000)	54,359	105,588	52,283	$212,230
Percent crops	25.50%	34.94%	41.31%	33.06%
Livestock, poultry, and their products ($1,000)	$158,844	$196,644	$74,290	$429,778
Percent livestock	74.50%	65.06%	58.69%	66.94%

Table 104. 2012 Agriculture Census, Source: USDA.

Looking at the bottom row of the table first, notice farms in the greater Appleton area generate the majority of their value through livestock operations. The mix of livestock sales attribute to more than 2/3's of total value of agriculture goods produced, and led by Calumet County's with a nearly 75% livestock share. Livestock sales are substantial in all counties, accounting for more than half the value of good produced in each county. Pockets of livestock intensity such as this are typical in Midwest, dotted here and there amongst the ubiquity of the crop and row farming that dominates the landscape.

Partially as a result of this focus on livestock, the average income per farm is very high, particularly in Calumet and Winnebago with average values of products sold per farm at nearly $300,000 and more than $250,000 respectively and roughly double the national average.

Even more atypical, the 3-county region recorded more than 3,000 farmers. This is a remarkable number of farms reporting in an area with such high population density, discussed above, is one of the densest pockets of population in the state and a key feature and driver of its economy. The Census Bureau estimates nearly 400,000 residents live in Calumet, Outagamie and Winnebago counties in 2013.[88] The simultaneous density of farmers is explained by noting the average and median size of farms in the greater Appleton area, both of which are much smaller than national averages. The total number of acres in production was nearly 550,000. Thus, the average size of a farm in the study area (184 acres) is less than half the size average national farm (400+ acres), and median farm in the study area is even smaller. So, while agriculture operations in the 3-county area are roughly half the average size, they create roughly double the agricultural value per farm.

Table 105 Farm size in the tri-county region. Source: USDA Ag Census, 2012.

Farm Size (acres)			
	Calumet	Outagamie	Winnebago
Farms by size:			
1 to 9 acres	68	108	125
10 to 49 acres	196	345	417
50 to 179 acres	246	351	340
180 to 499 acres	143	241	168
500 to 999 acres	36	83	51
1,000+ acres	30	42	16

Notice in Table 105 that distribution of farms is greatest in sizes between 10-49 acres and/or 50-179 acres, depending on the county. In aggregate, the 10-49 acre category led the area with 958 total farms making up 32% of farms in the study area, followed by the 50-179 acre category with 31%. The number of micro farms operating on less than 10 acres (10% of all farms) also outnumbered the number of mega-farms operating on more than 1,000 in each county. In the study area as a whole, less than 100 farms were producing more than 1,000 acres—less than 3% of reporting farms.

Figure 106 Location of area farmers markets. Source: Wisconsin Extension Offices

8.1.2 Foodshed Farmer's Markets

Both Wisconsin and Appleton's rich agricultural asset base support a number of farmer's markets. Given Appleton's strategic location and population density, it is not surprising that Appleton's downtown farmer's market is one of the largest and most visited in the area.

88 Calumet, 49, 617. Outagamie, 180,345. Winnebago,169,541.

Table 107. Regional Farmer's Market data, Source: USDA Ag Census, 2012.

Regional Farmers Market Data	Calumet	Outagamie	Winnebago	Area Total
Farmers' markets, 2009	5	4	4	13
Farmers' markets, 2013	3	6	6	15
Farmers' markets (% change), 2009-13	-40%	50%	50%	20%
Farmers' markets reporting fruit & vegetables sales, 2013	1	4	4	9
Farmers' markets reporting fruit & vegetables sales (%), 2013	33%	67%	67%	-
Farmers' markets reporting animal products sales, 2013	0	4	3	7
Farmers' markets reporting animal products sales (%), 2013	0%	67%	50%	-
Farmers' markets reporting other products sales, 2013	1	4	4	1
Farmers' markets reporting other products sales (%), 2013	33%	67%	67%	-

The map in Figure 106 shows a number of area farmer markets both within the 3-county study area and beyond. Many of these farmer's markets are newly created, the majority of which opening within the last 15 years.

Table 107 summarizes the latest data from USDA reports the information from farmer's markets in the 3-county foodshed.

Notice the overall number of markets grew between 2009 and 2013, even as Calumet County lost two farmer's markets. Despite the foodshed's livestock cluster, less than half of farmers markets reported selling animal products as reported in 2013. In fact, no market in Calumet County offered its visitors meat choices—but this may have recently changed.

(Continued on following page)

The 2014 schedule of farmer's markets in the greater Appleton area was assembled Wisconsin County Extension:[89]

- Appleton: Saturdays 8 a.m. to 12:30 p.m. - June 21 - Oct. 25 on College Avenue between Appleton and Durkee streets.
- Appleton: Wednesdays in Houdini Plaza June 4-Sep 24. 3:30-7:30pm
- Downtown Appleton Summer Art and Green Market, 8 a.m. to 12:30 p.m. June 15, July 20, Aug. 17, Sept. 14. and Oct. 14.
- Appleton East Festival Foods: 8 a.m. to 1 p.m. Sundays from June 16 - mid October in the Festival Foods Parking Lot in Darboy, W3195 Van Roy.
- Appleton North Festival Foods: 8 a.m. to 1 p.m. Wednesdays, from June 16 - Oct. 27 in the Festival Foods Parking Lot in Appleton, 1200 W. Northland Ave.
- Appleton Riverview Gardens Neighborhood Markets - 3 –7 pm May–October.
    - Mondays - Riverview Community Center
    - Tuesdays - Randall Ct. Apartments, Appleton.
    - Wednesdays - Jacobs Meat Market & Appleton's Third Ward (location TBD). Thursdays - Columbus Elementary & US Venture, Appleton. 268-8489.
- Brillion: every Saturday from 7:30 - noon from July 1 - October 31.
- Chilton: every Friday from noon to 5 p.m. June 13 - Oct 31. Chilton Eagles Club.
- Dale: 3 to 6 p.m. Friday, June - October, town hall parking lot, W9641 State 96.
- Greenville: 3 to 7 p.m. from June 6 - October 3, at Lions Park, State 76. Wednesdays–Jun 4–Oct 1. 3–7pm. Hwy 76 and Parkview Ave.
- Kaukauna: 7:30 a.m. to noon Saturdays, rain or shine, June 14 - Oct. 18, in the parking lot behind the Second Street shops.
- Menasha: 2 to 6 p.m. Thursdays from June 12 - Oct. 30. , Main Street on Marina Terrace downtown.
- Neenah: Saturdays 8 a.m. to noon, June 21 - Oct 18, at Shattuck Park, 210 E. Wisconsin
- Avenue, Neenah. Oneida: Noon to 6 p.m. Thursdays, June 26 - Oct. 9, off Hwy 180 and State 54 at N7332 Water Circle Place
- Shawano: 8am–12pm Saturdays June 21 - Oct11.. Franklin Park (200 Block of S. Washington Ave.), Shawano
- Seymour: 2 to 6 p.m. Tuesdays, June 17 – Oct 21, at Nagel Park, Depot Street on State 54 near Woodland Plaza in Seymour.
- Waupaca: Daily, Year-round 6am–6pm. E. Fulton St. & Main St. (City Square)

As you can see, 2014 was the biggest farmer's market season yet. Markets in Appleton will operate 4 out of 7 days during select weeks this season. The growth of these alternative distribution hubs throughout the foodshed is consistent with the view of a small, intensive foodshed discussed in the previous section.

[89] Available on the Outagamie Extension page at: http://outagamie.uwex.edu/files/2013/07/2014-Appleton-Area-Farmers-Markets.pdf

8.1.3 Hobby Farmers and Cottage Industry

To better understand the conditions in Appleton's dense cluster of small farms reporting to the Ag Census, this section examines the data in the 3-county foodshed more closely, examine Figure 108. First, in the table to the right, notice the large number of farms reporting sales of less than $2,500 annually. In Winnebago County these micro-farms represent not only the largest group in the county, but the largest group in any county. Also notice the wide disparity between farms with sale of more than $100,000 and those with sales of less than $2,500, with the highest and lowest distribution representing the largest number of farms, with relatively few farms in between.

Farms by value of sales:	Calumet	Outagamie	Winnebago
Less than $2,500	181	317	506
$2,500 to $4,999	29	60	70
$5,000 to $9,999	46	89	78
$10,000 to $24,999	63	76	83
$25,000 to $49,999	59	74	84
$50,000 to $99,999	103	119	72
$100,000 or more	238	435	224

Table 108 Farms Ranked by Value of Farm Sales

Looking at the study area as a whole, small farms with less than $2,500 in annual sales are the largest group, making up 33% of all farms in the 3-county foodshed. Indeed, the majority of farms reporting to the Ag Census generated less than $25,000—well below the average individual income in the U.S., as indicated in Figure 109.

Farms by value of sales:	Area Total	Percent of Total
Less than $2,500	1,004	33%
$2,500 to $4,999	159	5%
$5,000 to $9,999	213	7%
$10,000 to $24,999	222	7%
$25,000 to $49,999	217	7%
$50,000 to $99,999	294	10%
$100,000 or more	897	30%

Table 109 3-County Farms Rankings by Value of Sales

Because the sales generated by their farms do not create enough income to live, most farmer operators supplement their income with other activities or gainful employments, as shown in the table in Figure 110.

Principal operator by primary occupation:	Calumet	Outagamie	Winnebago	Area Total	Percent of Total
Farming	383	655	438	1,476	49%
Other	336	515	679	1,530	51%

Table 110. Farming as a Principal Occupation

This is not uncommon amongst the general farming population today, but the need for other sources of a primary income is especially evident in the Appleton foodshed. And while these hobby farmers do not generate enough income to live off their farming income alone, they are active and productive participants in the local economy and generate goods which their either consumer themselves, barter with a neighbor or sell.

And they are vital elements of the grassroots, local food economy—usually made up of innovative, knowledgeable and hardworking tinkerers and problem solvers. These are vital intellectual resources necessary to sustain a robust agriculture economy in the 21st century. Intellectual capital is as much or more important than a region's physical capital, it's soil, pests and weather—particularly as the demands of modern consumers raises quality requirements and the challenges of today's shifting climate threatens the performance and profitability of farmers mistiming the seasons, or who get wiped out by extreme weather events.[90] The foodshed's large class of workers engaged in the agricultural cottage industry is another source of economic strength and diversity, and also very hard to replicate by other foodsheds.

[90] There has been a major crop failure somewhere in the world in each of the last 10 years.

8.1.4 Appleton's Organic Production

Examining organic production provides a more specific view of the class of innovative agricultural tinkerers discussed in the previous section. Organic certification is relatively new, and those who have migrated into the growing space represent many of the most opportunistic and entrepreneurial operators. Table 111 features selected data from the 2012 Ag Census.

As seen in Table 111, the number of organic farms was very small relative to the overall number of farms in the 3-county foodshed: 28 organic farms vs. more than 3,000 total farms. Very few commercial organic operations exist, but those that do are generating substantial sales. The ten organic farms in Calumet County generate more than $1.6M in annual sales, followed closely by Outagamie County with $1.27M.

Organic Production	Calumet	Outagamie	Winnebago	Area Total
# farms	10	11	7	28
$ value of farm sales	$1,606,000	$1,269,000	$20,000	$2,895,000
Farms with USDA National Organic Program certified production	9	7	1	17
Farms with organic production exempt from certification	2	6	6	14
Farms with acres transitioning into Organic Program	3	6	-	9
By value of sales:				0
$1 to $4,999				
# farms	2	-	6	8
farm sales in $1,000	(D)	-	(D)	0
$5,000 or more				
# farms	8	11	1	20
farm sales in $1,000	(D)	$1,269	(D)	$1,269

Table 111. Organic Farm Production, Source: 2012 Ag Census

8.1.5 Foodshed Production Profile by County

Agricultural production across the region is not robust merely in terms of raw quantity of goods produced, but also with respect to the variety of goods in production.

Table 112 further details the production profile by county, starting with the livestock production that dominates the foodshed's activity.

Unsurprisingly, cattle and calves led all livestock categories with more than 200,000 head, within which

Select livestock and poultry:	Calumet	Outagamie	Winnebago
Cattle and calves inventory (farms)	289	517	253
(number)	71,336	99,409	35,196
Beef cows (farms)	79	146	86
(number)	1,265	2,202	761
Milk cows (farms)	144	222	95
(number)	30,166	38,017	13,851
Cattle and calves sold (farms)	251	462	212
(number)	50,131	65,913	18,464
Hogs and pigs inventory (farms)	23	49	24
(number)	363	2,053	219
Hogs and pigs sold (farms)	23	52	18
(number)	670	2,522	812
Sheep and lambs inventory (farms)	19	21	27
(number)	203	805	355
Layers (farms)	57	89	99
(number)	1,929	1,986	1,783
Broilers and other meat-type chickens sold (farms)	11	24	26
(number)	1,532	2,838	2,645

Table 112 Livestock Production, Source: 2012 Ag Census

cattle and calves sold led milk cows in each county and overall. Chickens followed cows, with more almost 250 farms reporting a flock of nearly 6,000 layers—and a much smaller number of farms (~60) reporting even larger numbers of broiler and other meat chickens. Also present is a sizeable hog population, particularly in Outagamie County which reported more than 2,500 hogs and pigs.

The size of these livestock populations implies that the 3-County foodshed is importing its feed from other foodsheds to sustain these animals, but Table 113 examines selected crops to discover what farmers in the foodshed are growing:

Select Harvested Crops:	Calumet	Outagamie	Winnebago
Wheat	-	-	-
Oats for grain- farms	37	74	48
acres	725	1,568	799
bushels	35,680	87,962	44,332
Barley for grain- farms	18	8	3
acres	307	302	220
bushels	13,464	12,272	13,600
Sorghum for grain- farms	-	1	-
Sorghum for silage or greenchop- farms	8	6	8
acres	115	217	626
tons	294	6,487	7,304
Soybeans for beans- farms	274	449	402
acres	23,438	56,773	31,589
bushels	1,101,765	2,611,627	1,274,786
Dry edible beans	-	-	-
Forage - haylage, grass silage, and greenchop- farms	417	559	468
acres	34,164	43,850	22,562
tons, dry	122,833	149,362	64,817
Sunflower seed- farms	-	-	2
Vegetables harvested for sale- farms	60	27	22
acres	2,254	2,846	777
Potatoes- farms	8	1	4
acres	2	(D)	1
Sweet potatoes- farms	-	1	-
Land in orchards- farms	11	17	21
acres	54	97	49

Table 113 Crops in the 3-County Region, Source: 2013 Ag Census

Soybeans leads all crops shown with more than a million bushels produced in each county, and more than 2.5M bushels in Outagamie County alone.

But again, unsurprisingly, the foodshed reported substantial acreage dedicated to forage and land used for hay and greenchop, of which roughly 100,000 acres was dedicated to producing crops suitable for livestock consumption. Some oat and barely for grain production was also reported, much of which likely meant for human consumption. As suspected at the beginning of this section, however, the foodshed appears to not be self-sustaining in terms of livestock feed; meaning it imports needs.

More surprising, notice the category "Vegetables Harvested for Sale," more than 100 farms in the foodshed were growing fresh vegetables, an encouraging sign. Calumet and Outagamie County's both reported more than 2,000 acres of vegetable production— and Outagamie County closer to 3,000 acres of production despite having half as many vegetable farmers (27) compared to Calumet County (60). Land in Orchards, shown in Figure 114, also shows strong data, with more than 10 orchards reported in each county, and while small relative to the overall number of farming operations, the small size of these few orchards implies that most of their production is intended for local

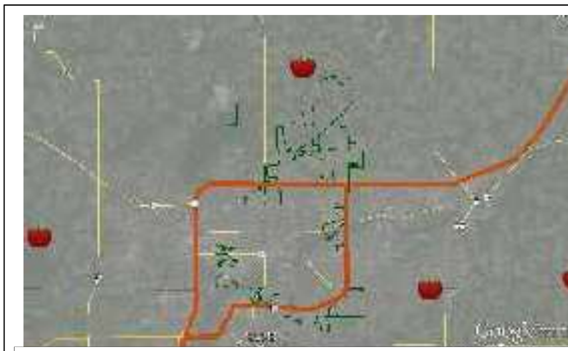


Figure 114 Selected Orchards in the Appleton area (red apple icons) City limits in green outline, Highways 41 & 441.

consumption rather than for export to national or global markets. The map to the right shows several of these orchards closest to Appleton—those actively marketing their orchards.

The following section examines the local food economy more closely.

8.1.6 Local Food data by County

This section analyzes USDA Census data from a different perspective: food produced and consumed locally. This section makes reference to this the non-linear, closed-loop system within the broader market as the "intra-foodshed economy. "Even in Appleton's dense pocket of small farms—the envy of many foodsheds—the majority of the foodstuffs grown in the foodshed are presumably sold in export markets, rather than consumed by residents. This generates higher incomes for farmers—when they bring their livestock to market, for example[91]— but also necessitates that the vast majority of food consumed in the foodshed must be imported from beyond the foodshed's borders—because the majority of local production is sold in export markets. And, while the size of this linear export market may dwarf the intra-foodshed market and define the character of the foodshed in many ways, it does not tell the complete story of a food system.

	Calumet	Outagamie	Winnebago	Area Total
Farms with direct sales, 2012	46	122	57	225
Farms with direct sales, 2007	46	104	49	199
Farms with direct sales (%), 2012	6.40%	10.43%	5.10%	7.49%
Farms with direct sales (%), 2007	6.30%	7.60%	4.90%	6.40%
Value of all direct sales, 2012	$311,000	$1,346,000	$218,000	$1,875,000
Value of all direct sales, 2007	$234,000	$912,000	$326,000	$1,472,00
Value of direct sales as % value of total sales, 2012	0.15%	0.45%	0.17%	0.29%

Table 115 3-County Foodshed Sales Comparison 2007-20012, Source: 2012 Ag Census

As in many foodsheds around the nation, the local food economy in the 3-county foodshed is small but not insignificant. And in this way, Appleton is not an atypical foodshed and rather mirrors larger, rural and fruit orchard foodsheds discussed above and in our core macro view in the Appendix, as shown by the data in the table in Table 115.

Typical of many foodsheds in the U.S. today, a very small percent of total sales is comprised by direct farm sales, intended for immediate human consumption. In each of the 3-county foodshed shown above, direct farm sales accounted for less than one percent of overall sales.

More encouraging, the number of farms with direct farm sales increased in Outagamie and Winnebago counties between the 2007 and 2012 Ag Census. Eighteen new farms reported direct farms sales in Outagamie County in 2012, which brought the percent of farmers in the County with direct for sales up to more than 1 in 10. As a whole, the entrepreneurial Outagamie farmers generated $1,346,000 in direct farm sales—more than a million dollars more than direct farm sales in either Calumet or Winnebago counties, and nearly triple the value of both counties combined.

The table in Table 116 organizes more specific Ag Census data to further detail the size and shape of the local food economy.

[91] Particularly with livestock prices making multi-decade highs in the early part of 2014.

Given the number of livestock in the foodshed, the presence of only 1 small slaughterhouse facility is surprising, and potentially negative.[92] And while the area possesses a large concentration of milk cows, this implies that the majority of cows intended for meat consumption are sold to market. Additional slaughterhouse capacity could provide farmers more opportunity to produce value-added products and target local consumers more directly.

Even more notable is the complete lack of any food hubs or shared-use kitchens—now that Fox Valley Culinary Kitchen has closed.[93]
Also, notice again the number of vegetable farmers reported for Calumet, Outagamie and Winnebago counties in 2012 were 60, 27 and 22. While the study area's total (109) stayed the same between the 2007 and 2012 Census', this came from mixed results as Winnebago lost 15 farms producing vegetables while Calumet gained 15—a zero sum affair. More positively, the aggregate number of vegetable acres grew by 18 acres.

The number of farms producing vegetables for fresh market managed to grow from 52, from 54—but the number of acres harvested for fresh market was cut nearly in half, as 13 farmers in Winnebago County exited the category and took their 313 acres out of production.

A clear positive is the number of orchard farms and acres, both of which experienced explosive growth from Census to Census. The number of orchard farms nearly doubled from 25 to 48, while the number of orchard acres nearly doubled as well from 101 acres in 2007 to 200 in 2012.

With the necessary inputs abundant locally, food businesses can import less fresh produce from other regions. Strong vegetable and fruit production are

	Calumet	Outagamie	Winnebago	Area Total
Vegetable farms, 2012	60	27	22	109
Vegetable farms, 2007	45	27	37	109
Vegetable acres harvested, 2012	2,254	2,846	777	5,877
Vegetable acres harvested, 2007	2537	2143	1179	5,859
Farms with vegetables harvested for fresh market, 2012	19	21	14	54
Farms with vegetables harvested for fresh market, 2007	11	18	23	52
Vegetable acres harvested for fresh market, 2012	78	159	36	273
Vegetable acres harvested for fresh market, 2007	52	338	139	529
Orchard farms, 2012	10	17	21	48
Orchard farms, 2007	5	13	7	25
Orchard acres, 2012	54	97	49	200
Orchard acres, 2007	36	51	14	101
Berry farms, 2012	5	8	5	18
Berry farms, 2007	5	6	3	14
Berry acres, 2012	NA	53	NA	53
Berry acres, 2007	5	57	NA	62
Small slaughterhouse facilities, 2007	0	1	0	1
Greenhouse vegetable and fresh herb farms, 2012	0	2	2	4
Greenhouse veg and fresh herb sq feet, 2007	0	-	-	0
Food hubs, 2012	0	0	0	0
Farms that practiced or sold value-added commodities	16	22	NA	38
On-farm packing facility	8	9	NA	17
Farms marketing directly to retail outlets	9	27	NA	36
CSA farms, 2012	-	7	-	7
CSA farms, 2007	1	10	3	14
Agritourism operations	3	5	3	11
Agritourism receipts	NA	$178,000	$18,000	196,000
Farm to school program, 2009	1	0	0	1

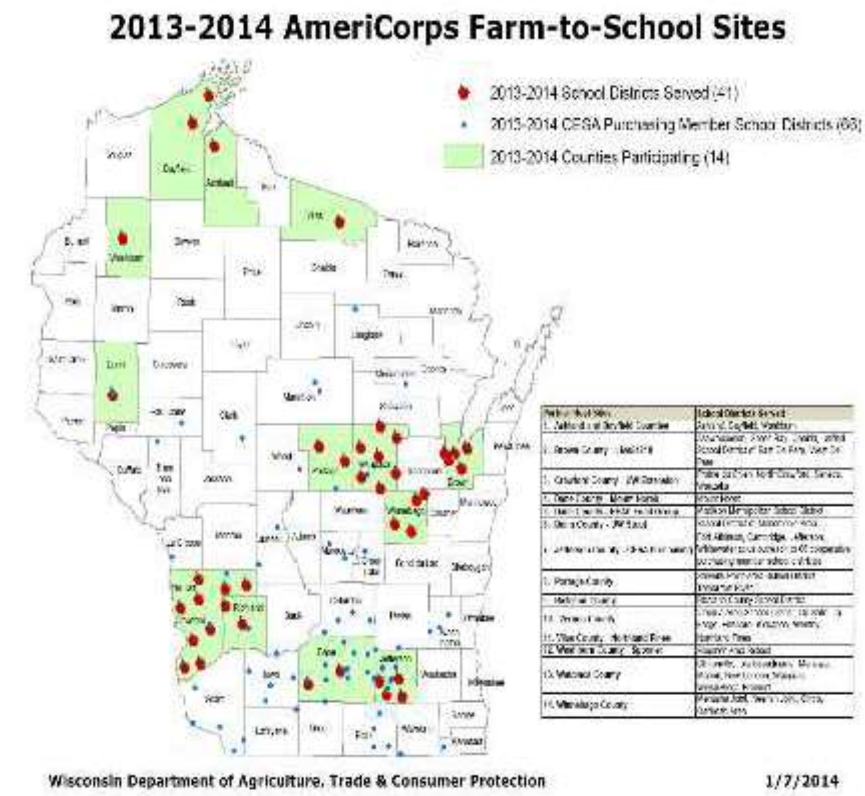
Table 116 Detailed Foodshed Data for the 3-County Region, Source: 2012 Ag Census

[92] And worthy of further exploration into the needs of local livestock raisers.
[93] Once operated by Ken and Donna Klausen in Appleton, discussed in detail further below.

powerful tail winds bolstering the foodshed's capacity and potential for development. Unlike many foodshed's dominated by monoculture of non-consumable commodity crops, the 3-County foodshed has some measure of diversity in place.

Ample vegetable and growing fruit supply is also supportive of the potential for wash-and-cut operations adding value to value-chains in the foodshed. Many of these are emerging as key revenue drivers for many facilities across the county, particularly in fruit-dominate foodsheds such as the Pacific Northwest and the Mountain West regions. Mission Mountain Food Enterprise Center in Ronan, Montana, for example, provides a large wash-and-cut capacity to the counties it serves, which include the top fruit production counties in the state. One of its anchor tenants, a local farm co-op, uses Mission Mountain's physical wash-and-cut capacity to process fresh fruit and vegetable products for distribution through local farm-to-school programs.

Figure 117 Farm-to-School Sites



Wash-and-cut operations are relatively straightforward and not necessarily capital intensive, able to process fresh fruits and vegetables into simple, but highly desired value-added products. While relatively labor intensive, they are also scalable and training is relatively basic. Most importantly, wash-and-cut operations produce fresh and season-extended fruit and vegetable products that are in high demand, as healthier and more natural alternatives to heavily processed snacks and junk foods.[94] Nationally, the number of farm-to-school programs totaled more than 2,000 in 2011—a 500% increase from 2004.[95]

Farm-to-school programs are considered further in the following section.

8.1.7 Farm to School Programs

As shown in Figure 116 the 3-county foodshed reported only 1 farm to school program in 2009, but significant interest has developed and numerous activity in the development of farm to school programs and lunch program overall in general have taken place, with more planned.

[94] The government funds specific grants for schools to purchase fruit and vegetable products, through its Fresh Fruit and Vegetable program. (See here http://www.fns.usda.gov/cga/factsheets/ffvp_quick_facts.htm) Many of the schools participating in Mission Mountain's farm-to-school effort use these funds.
[95] Barham, James, Debra Tropp, Kathleen Enterline, Jeff Farbman, John Fisk, and Stacia Kiraly. Regional Food Hub Resource Guide. U.S. Dept. of Agriculture, Agricultural Marketing Service. Washington, DC. April 2012.
Available: http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5097957

This past school year, for example, Winnebago County was selected by AmeriCorps for its four of its Farm-to-School Sites, as shown in the map on that is displayed in Figure 117.

Notice in the map in Figure 117 that AmeriCorps farm-to-school programs nearly surround the foodshed's other two counties, Outagamie and Calumet. The experience of these programs should be carefully observed for opportunities to develop these important, potentially enormous intra-foodshed value chains.

The foodshed's rich agricultural base makes it possible to more readily pursue economic development strategies focused on re-linking local food economy and dis-intermediating the institutional supply chain—which contains significant student populations. If these concentrated institutional bellies could be matched with local food supply it could not only increase youth access to fresh, nutritious food, but only unlock the potential for substantial value chains to forge within the foodshed.

Institutional demand and other select demand factors are given in the next section.

8.2 Food Demand – Feeding the Foodshed

The foodshed's large farming population of more than 3,000 small, productive operations is co-located with a large population of the nearly 400,000 residents living in the 3-county study area—and even more population distributed north and south along Highway 41's corridor of urban areas, discussed in the location analysis above. This combination of population density and agricultural intensity is a relatively rare mix of strong supply and demand drivers. The co-location of production and consumption shortens the potential distance from farm to table. This reduces fuel consumption and allows very short value chains to develop, which are highly resistant to increases in transportation costs—such as those seen in the last decade. In the New Normal of higher fuel prices discussed in our macro view, value chains with this geographic advantage will enjoy a competitive edge over longer value chains, stretched across multiple foodsheds or multiple continents so successful while transportation costs were low during the Old Normal.

By comparison, many other foodsheds either struggle with poor conditions or few farmers cultivating small acreage in sparsely populated areas. Still other foodsheds thrive with good conditions and large farms growing commodity crops for export to the international food economy, discussed in our core macro view—but these too exist in rural areas far from hungry population centers. This second type of foodshed is very common across the Midwest which is dominated by corn or soybean monocultures, interspersed with rather large pockets of livestock production and smaller, fewer pockets of other specializations[96] produced for national and international markets.
Fewer foodsheds have a large number of small farms thriving in good conditions, and fewer still are co-located with large populations of hungry consumers—such as Appleton's foodshed.

To take one such thriving foodshed, for example, four counties in South Florida were the subject a recent study conducted by Manheim Solutions[97] in which ~2,000 farmers with nearly ~780,000 acres in production operated an average farm size of 403.75 acres. Fewer farmers were producing more acres on larger farms compared to Appleton, and the local population was also larger—612,717 people lived in the 4-county area (compared to Appleton's nearly 400,000). However, these counties also possessed the best conditions for growing certain citrus fruits, which the vast majority of farmers there produce making this area the top producing citrus-producing counties in the entire country. So while excellent growing conditions exist and the large farmers in the foodshed are very productive, the vast majority of that produce is not consumed by the (also) large local population but rather exported for consumption around the country and the world.

[96] Particularly orchard fruits and specialty grains.
[97] Indian River, Martin, Okeechobee and St. Lucie counties in Florida.

Or take another thriving foodshed, for example, Latah County, Idaho and Whitman County, Washington, which were part of another foodshed study performed by Manheim Solutions in the Pacific Northwest. The two densest counties within this rural area, and also the most urban, Latah and Whitman counties have a combined population of slightly less than 85,000 people. Nevertheless, there were 2,351 farmers producing on more the 1.6 million acres and an average farm size of 687.63 acres. The heart of wheat country, Whitman County's average farm size is more than 1,000 acres per farm—as massive wheat fields made Whitman County the top wheat-producing county in the Washington and the nation. Like the South Florida foodshed, above, farmers in the Latah and Whitman County foodshed are thriving, but agriculture production is dominated by very large farms producing commodity crops for export.

Specific recommendations for each foodshed were unique to each set of circumstances; however, both studies found that each foodshed could benefit from diversifying production and rebuilding local value chains to match the local abundance of food production capacity to local demand from nearby urban populations, consistent with an inward looking Economic Gardening Strategy. Due to the presence of such well-established large farms in both foodsheds, the general means to achieve this were also similar: (1) encourage existing producers to diversify into new products intended for local consumption, or (2) encourage new start-ups to do the same (though inevitably small because of high land prices small farms are often best-suited to diversifying a foodshed's production profile). With much less population than the 4-county foodshed in South Florida, the potential for the Latah and Whitman county foodshed to build their local, intra-foodshed economy is limited by its low population. This limiting factor was a primary reason the study concluded a new food innovation center should not be built at that time;[98] whereas the relatively large population in South Florida drove that study to a find that a brick-and-mortar facility should be strongly considered as an economic development strategy.[99]

With so many small, productive farms generating relatively high incomes Appleton's foodshed appears to be flourishing. Its density and intensity of small farms is the lofty goal of many other foodsheds across the spectrum, either trying to attract new farms and diversify production in existing developed foodsheds, such as in the Midwest and our two examples above, or those foodsheds trying to foment in undeveloped or challenged foodsheds. To these foodsheds, Appleton's 3-county foodshed is in the lead by several key metrics—useful as a benchmark and even a hopeful vision for what a dynamic and robust foodshed might look light.

And the foodsheds simultaneous density of urban population also increases the foodshed redevelopment potential of the area, similar to the way in which the 4-county South Florida foodshed, above, or foodsheds in Chicago's exurban rim or upstate New York benefit from collocation or close proximity to dense and hungry populations.
As no two foodsheds are the same, however, the most appropriate strategies for Appleton will depend on its unique characteristics. Strategies suitable to other thriving foodsheds in the Midwest or the examples above where large farms thrived during the Old Normal are unlikely to be suitable in Appleton where many small farms are already in place. Whereas other foodsheds focus on diversification and downstream production to reestablish a significant local food economy, Appleton's foodshed appears to have robust downstream segment already in place.

The presence of strong supply and demand drivers helps establish the prima facie case that conditions in Appleton's foodshed are ripe for an inward focused development with an Economic Gardening strategy. Naturally blessed with a bounty of agricultural assets, and with foodshed profile already tilted towards the future, the greater Appleton foodshed could be ready for upstream strategies to scale up an emergent local agriculture economy that is already taking shape. Appleton could widen its lead as a thriving foodshed by actively targeting the sector for economic development—aiming to make an advantage set to grow more valuable in the New Normal even stronger.

98 The study also found more competition in the shared-kitchen segment than previously known, with several new kitchens recently opened or planned. The combination of relatively low population and stiff competition could not be overcome the foodshed's many strengths and growing asset base.
99 Also unlike Latah and Whitman counties, this area of South Florida was underserved by alternative food processing infrastructure, e.g. share-use kitchens. This infrastructure gap, a 365-day growing season, and a very large co-located population made a compelling case for foodshed development in South Florida.

The sections below further examine test the prima facie case that foodshed development is an appropriate economic strategy for Appleton, beginning by estimated the size of certain demand channels.

8.2.1 Foodshed Demand Model

Building on the demographics discussion, above, the following section examines select aspects of foodshed demand. Table 118 summarizes the results of a consumption model developed from national averages to calculate per capita food consumption estimates for the roughly 400,000 people living in the 3-county region in 2013, as estimated by the Census.

Table 118 Appleton Regional Foodshed Consumption

Commodity	Est. Consumption (lbs. per capita)	Est. Regional Demand (total lbs.)
Fruits and vegetables, total	*643.6*	**257,440,000**
Fruits, total	**250.9**	**100,360,000**
....Fresh fruits	126.8	50,720,000
....Processed fruits	124.1	49,640,000
....Frozen fruits	4.9	1,960,000
....Dried fruits	10.1	4,040,000
....Canned fruits	15.3	6,120,000
....Fruit juices	93	37,200,000
Vegetables, total	**392.7**	**157,080,000**
....Fresh vegetables	187.7	75,080,000
....Other fresh vegetables	29.9	11,960,000
....Processed vegetables	205	82,000,000
....Vegetables for freezing	73.1	29,240,000
....Vegetables for canning	95.2	38,080,000
....Vegetables for dehydrating	13.9	5,560,000
....Potatoes for chips	15.9	6,360,000
Meats, total	**764.1**	**305,640,000**
....Beef	61.2	24,480,000
....Veal	0.3	120,000
....Lamb and mutton	0.7	280,000
....Pork	46	18,400,000
....Poultry	72.6	29,040,000
....Chicken	58.8	23,520,000
....Turkey	13.9	5,560,000
....Fish and shellfish	16	6,400,000
....Eggs	247.3	98,920,000
....Shell	170.4	68,160,000
....Processed	76.9	30,760,000
Dairy, total	**600.5**	**240,200,000**
....Fluid milk products	22.1	8,840,000
....Fluid cream products	23.9	9,560,000
....Condensed and evaporated milks	7.5	3,000,000
....Cheese	32.4	12,960,000
....Frozen dairy products	25	10,000,000
Fats and oils, total	**85.2**	**34,080,000**

8.2.2 Institutional Demand[100]

As discussed in the Appleton Demographics section above, another notable feature of Appleton is the large size, fast growth and high quality of its school system. The many students in these schools make up a large source of institutional demand that represents a substantial portion of consumption on in the foodshed. Increasing the availability of local food products in schools is a pressing concern of many and both the federal government and states are making funds available and developing programs and resources to support the development of farm to school value chains. Requirements are also changing and new label and nutrition requirements will come into effect in the 2014-2015 school year, and so institutional value chains are being reconsidered from top to bottom.

In Wisconsin, the Department of Public Instruction supports farm to school efforts with research, training, technical assistance, and grant opportunities and provides a wealth of information on its website: http://fns.dpi.wi.gov/fns_f2s

In Appleton, notably an early effort to improve nutrition and wellness in school was undertaken at Appleton Central Alternative Charter school in the 1990's—which had no kitchen facilities before a new school lunch program was redesigned. In partnership Natural Ovens, a Wisconsin food company, and its Peak Performance program, the objective was to positively influence student performance by improving school nutrition and food access. Natural Ovens financed free nutritious breakfasts for many years, before Aramark took over food service. A report issued in December of 2004 contains a

[100] For purposes of this preliminary foodshed analysis, other sources of institutional demand were not measured, e.g. other schools, hospitals, jails, retirement centers, veterans facilities, etc.; however each of these segments are potentially large sources of institutional demand.

number of insights into the value of improved school nutrition from an example in Appleton.[101] In the discussion of Appleton's primary school system, above, it was noted that Appleton's population density necessitates a similar cluster of primary schools—with nearly 40 schools in the district. It is one of the largest school districts in the state. And just beyond Appleton's school district, as the map in Figure 27 (earlier in this report) shows, are even more primary schools that service to residents in nearby towns.

The individual appetites of these students add up to a substantial portion of the overall food daily demand in the foodshed, and on days when school is in session these individual students gather into the lunchrooms at one of the 38 schools in the Appleton school district. In Wisconsin, students are generally in school 180 days of the calendar year, or 51.5% of the days in the year. The table in Figure 120 models consumption for the 16,212 students in the Appleton school district for the duration of the school year:

Table 119 Foodshed Consumption by Appleton School District Students

Commodity	Est. Consumption (lbs. per student)	Est. Total Lbs Demanded Appleton School District
Fruits and vegetables, combined total	*643.6*	*3,582,355*
Fruits, total	**250.9**	**1,396,540**
....Fresh fruits	126.8	705,784
....Processed fruits	124.1	690,755
....Frozen fruits	4.9	27,274
....Dried fruits	10.1	56,218
....Canned fruits	15.3	85,162
....Fruit juices	93	517,649
Vegetables, total	**392.7**	**2,185,815**
....Fresh vegetables	187.7	1,044,761
....Other fresh vegetables	29.9	166,427
....Processed vegetables	205	1,141,055
....Vegetables for freezing	73.1	406,883
....Vegetables for canning	95.2	529,895
....Vegetables for dehydrating	13.9	77,369
....Potatoes for chips	15.9	88,501
Meats, total	**764.1**	**4,253,072**
....Beef	61.2	340,647
....Veal	0.3	1,670
....Lamb and mutton	0.7	3,896
....Pork	46	256,042
....Poultry	72.6	404,100
....Chicken	58.8	327,288
....Turkey	13.9	77,369
....Fish and shellfish	16	89,058
....Eggs	247.3	1,376,501
....Shell	170.4	948,467
....Processed	76.9	428,035
Dairy, total	**600.5**	**3,342,455**
....Fluid milk products	22.1	123,011
....Fluid cream products	23.9	133,030
....Condensed and evaporated milks	7.5	41,746
....Cheese	32.4	180,342
....Frozen dairy products	25	139,153
Fats and oils, total	**85.2**	**474,233**

The estimates in Table 119 follow the Appleton Central Alternative Charter School's example of feeding students two meals every school day, breakfast and lunch. While this is less common than the lunch-only focused efforts of most programs emerging today, still other programs offer late-afternoon nutrition to students participating in various after school programs. So, perhaps the best estimate lay somewhere in between one and two meals per day. In either case, as Table 119 shows, students consumer large quantities of foodstuffs through this important institutional channel.

These institutional channels are value chains that many commercial kitchens, co-packers and food hubs are targeting with increasing success. Large institutional purchasers can be vital components to re-linking the intra-foodshed economy and dis-intermediating the supply chain. The few facilities imply that one agreement can negotiate large volumes. One or two large volume purchasers interested in local food purchasing and/or distribution can be the anchors that provide sufficient throughput to sustain a network of local suppliers (e.g. grower's co-op) and necessary processing capacity (e.g. commercial kitchen).

101 http://www.thewholeplate.yihs.net/wp-content/uploads/2010/02/Appleton-school-food-study.pdf

8.2.3 Retail Infrastructure

To help service the foodshed's nearly 400,000 residents, a large network of grocery stores and other food outlets

Network of Grocery & Convenience Stores	Calumet	Outagamie	Winnebago	Area Total
Grocery stores, 2007	6	29	12	47
Grocery stores, 2011	6	25	12	43
% change 2007-11	0	-13.79%	0%	-8.51%
Supercenters & club stores, 2007	1	2	1	4
Supercenters & club stores, 2011	2	2	2	6
% change 2007-11	100%	0%	100%	50%
Convenience stores, 2007	16	72	59	147
Convenience stores, 2011	20	71	55	146
% change 2007-11	25%	-1.39%	-6.78%	-0.68%
Specialized food stores, 2007	2	24	14	40
Specialized food stores, 2011	2	20	13	35
% change 2007-11	0	-16.67%	-7.14%	-12.5%

Figure 120 Network of Grocery and Convenience Stores

Notice the number of food stores declined in each category between 2007 and 2011, except Supercenters. As a whole, the 3-county area lost 4 grocery stores, 1 convenience store and 5 specialized food stores. Growth in supercenters is unsurprising given the dominance of the supercenter model in recent history, as well as the suburban model, generally as discussed above. The wide loss of stores across each other category is also unsurprising given the economic downturn and wild commodity and fuel price inflation that preceded it, as well as the price deflation and demand destruction that followed the Great Recession.

This decline is out of step with emerging consumer preferences for more and better grocery options, as discussed in our core macro view in the section *Shifting Consumer Preferences, Rise of the Locavore*. Wal-Mart is adapting its store models to meet this new consumer demand with smaller stores in more dense areas, its Neighborhood Market model. Other retailers are following suit, e.g. Target. Startups and small business are also rising to meet demand from consumers with small, boutique food service or grocery businesses. In Appleton, such a startup is the Free Market on Wisconsin Ave—which expand its operations in 2014.

This decline across food store categories is also out of step with some desires discovered in the Community Vision developed as a part of Appleton's Comprehensive Plan. Many participants in various visioning sessions voiced a want or need for more grocery options, particularly in the downtown. Consistent with our core macro view, we expect these consumer preferences to remain in place for a generation or more. This is because in many ways the emergent preference for more local, fresh and familiar foodstuffs is a return to the traditional norm predominant through most of human history. Only during the late industrial period and post-WWII (the Old Normal) was the international vending built and local foodsheds disrupted by cheaper, far-flung food imports. As food prices have made structural adjustments higher in the New Normal, however, food imports are losing their competitive edge to the local products preferred for most of our history.

Because we forecast the traditional neighborhood grocery/shop to sustain through the next long cycle, Appleton has seen recent weakness in this segment, and it is a part of Appleton's Community Vision, Appleton should strongly consider targeting the food retail segment as a part of a broader foodshed effort. This is likely to be a successful strategy deployed in many dense, urban areas—even those importing 100% of its food needs—but the economic development potential of these areas is narrow and limited. Productive foodsheds, such as Appleton's, can pursue broader strategies to develop local, interrelated food systems that create positive synergies and feedback loops that multiply through the entire economy.

Beyond the formal food retail segment, the 3-County foodshed and the area north of Lake Winnebago generally are also lacking a food cooperative, as the map in Figure 121 shows.

Figure 121. Regional Food Cooperatives; Data provided by Coop Directory: http://www.coopdirectory.org/directory.htm#Wisconsin.

Somewhat surprisingly, neither Appleton nor Green Bay has a functioning food cooperative, shown in Figure 121.

Figure 122. Regional shared-use kitchens, food incubators and open model copackers are represented by knives and forks

The nearest food co-op to Appleton is in Fond du Lac, Wisconsin. South and Southeast Wisconsin have a much greater concentration of working food cooperatives.

The following section discusses the area's geography in greater detail.

8.3 Foodshed Location Analysis

This section builds on the location analysis above and summarizes a brief location analysis conducted to identify logistical strengths and potential geographic constraints, and begin to assess physical market conditions the 3-county foodshed.

8.3.1 Area Shared-Use Kitchens, Co-Packers and Incubators

A number of licensed shared-use and incubator kitchens exist in central Wisconsin. The map in Figure 123 shows those kitchens actively marketing their operations to small businesses, startups or the public for rent—including several co-packers.

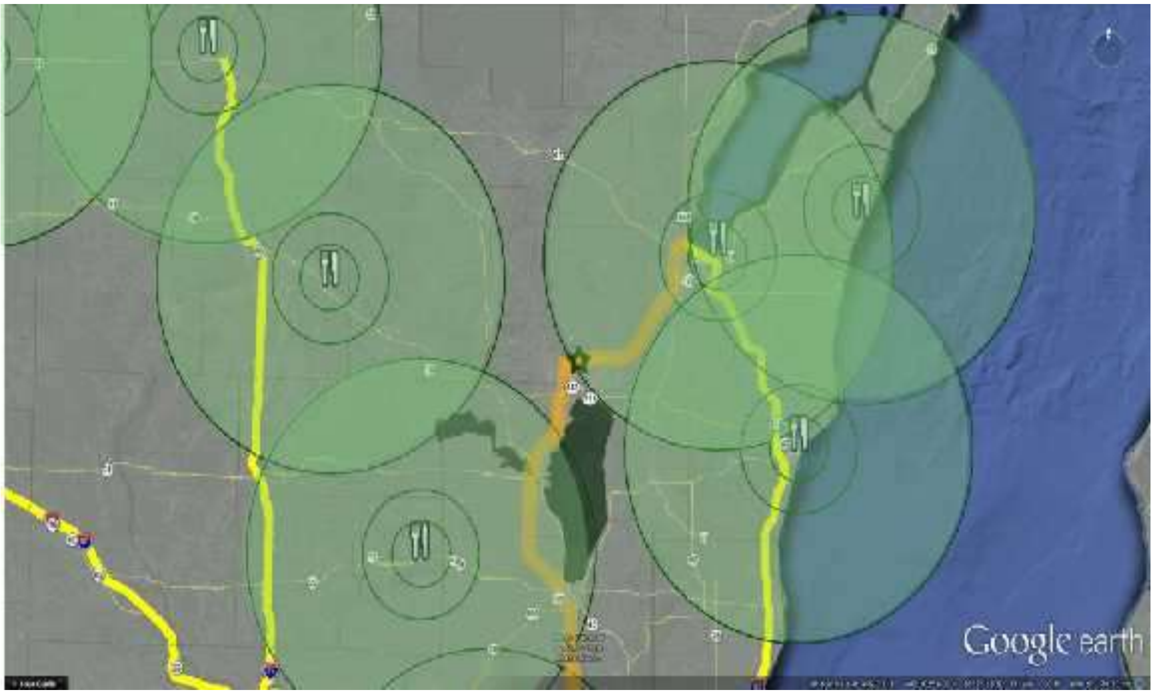


Figure 123. Primary, secondary and tertiary trade areas are drawn for area shared-use kitchens, food incubators and open model copackers

Notice that no facility exists to service potential in Appleton. The nearest shared use facility for rent is in Green Bay. This service gap development recently with the closure of Fox Valley Culinary Kitchen in Appleton, discussed in the following section.

8.3.2 Former Shared-Use Kitchen in Appleton

Ken and Donna Klausen owned and operated the Fox Valley Culinary Kitchen, for three years before closing it on February 15, 2013. In 2010, they opened the kitchen in the same space they had operated their own business Mudd Creek, LLC to provide a licensed, commercial kitchen for rent at affordable rates. "Seeing a lack of such a facility in the Fox Valley and a growing desire of individuals to start their own food business," the Klausen's put their own business on the backburner and fully funded the shared use kitchen.

From an economic development perspective, it was a great success. In just 3 short years, the Fox Valley Culinary Kitchen helped more than 40 businesses start up, many of which are now vendors at the Appleton Farm Market. Even more remarkable, four of food processors graduated from the Fox Valley Culinary Kitchen to their own brick and mortar facility (including Dalla Terra Pasta in Appleton, Kangaroostraunt in Kaukauna, Hippie Wayne with Green Tomato Artisan Market and Kitchen in Appleton and Bayside Bakery in Sister Bay)—which is the core mission and dream of all food incubators.

One of the fundamental problems with the shared-use and incubator model is that the facility shares a lot of the downside risk with the start-ups but very little of the upside. This is especially true in the case of shared-use kitchens and food incubators who often subsidize many of a food start-up's largest costs, e.g. space, equipment, licensing and compliance obligations, utilities and even labor in some cases. But when the food start-up is successful that nearly almost means the shared-use kitchen or incubator loses the start-up as a tenant because they scale into volumes too high for the facility to accommodate.

In the food business it is very common for a new product to go from small batches of, say, several dozen or even several hundred pounds to contract opportunities that require tens of thousands or even hundreds of thousands of pounds per batch. When a product is ready to make that jump—often an order of magnitude or more—to and mass market through national or international distribution channels, there already exists a large universe of facilities ready to take on the business of processing and production for the successful food start-up: co-packers. With the appropriate recipe in the appropriate co-packer, most facilities can immediately scale a successful food product to very large volume.

But creating successful products that can scale in the first place is very hard. And it is not a common experience at all facilities that food incubation creates too many new food businesses. For example, University of Idaho's Food Technology Center in Caldwell, Idaho includes a shared-use kitchen. A research lab in the same facility keeps the facility's finances sustainable, and so the licensed, shared-use kitchen is offered for rent[102] at reduced rates of $15 for baking to $30 for wet/hot processing. Notwithstanding this well-equipped facility being available at very subsidized rates, facility manager Jim Toomey reported to Manheim Solutions in a previous study that his facility seemed to be good for job retention and had supported some expansion of existing businesses (farms, orchards); however, *sui generis* job creation from new and successful food business was more rare. Without a hit product that scales out into a large-scale co-packer right away, many other startup-food business suffer the small-batch and small market dilemma, wherein they achieve profitability but cannot not generate enough revenue to be able to afford their own equipment and facility. This revenue ceiling prevents these food businesses from accessing capital to attain scale on their own.

Given the high degree of difficulty, it is no small success that a private business such Fox Valley Culinary Kitchen was able to incubate so many other businesses, and graduate four of them into their own facility. All in three short years.

The Klausen's closed their kitchen to refocus on their own business—perhaps because of some of the difficulties and tradeoffs presented by the shared-use model. Higher rental rates may be good for the shared-use kitchen's books, for example, but the higher rent you charge your fledging food tenants the more pressure you put on their young business. It is harder for a private, profit-maximizing business, such as the Klausen's, to subsidize other business than it might be for institutional or non-profit kitchens, such as the Food Technology Center in Idaho.

The gap left by the closure of the Fox Valley Culinary Kitchen is discussed further in the location analysis in the following section.

8.3.3 Competitive Analysis –Trade Areas

This section discusses the potential impact on the competitive landscape from the closure of the Fox Valley Culinary Kitchen. This private operator did not close for total lack of success, as in the case of many projects where the developer builds it but no one comes—because they misjudged the market or failed to perform a market study. No, the Fox Valley Culinary Kitchen successfully incubated many small businesses in its short life, and graduated a remarkable four business into their own brick and mortar processing facilities, as described in the previous section.

This is further testament to the strength, balance and dynamism foodshed discussed throughout this section. It is also a positive indication of the economic development potential foodshed strategies might have in Appleton. As the

[102] After a mandatory basic training in food business and food processing.

Fox Valley Culinary Kitchen experience exhibits, the demand for food processing service is manifest in the foodshed. With its closure, however, this service demand is potentially not being met. This could damage economic growth if there is a local firm that cannot start its business because it cannot affordably access a licensed facility. As in the retail analysis above, the map in Figure 124 draw the primary, secondary and tertiary trade areas for shared-use locations in central Wisconsin—notice that our hypothetical firm in Appleton could make the trip to facility in Green Bay, just 30 miles away.

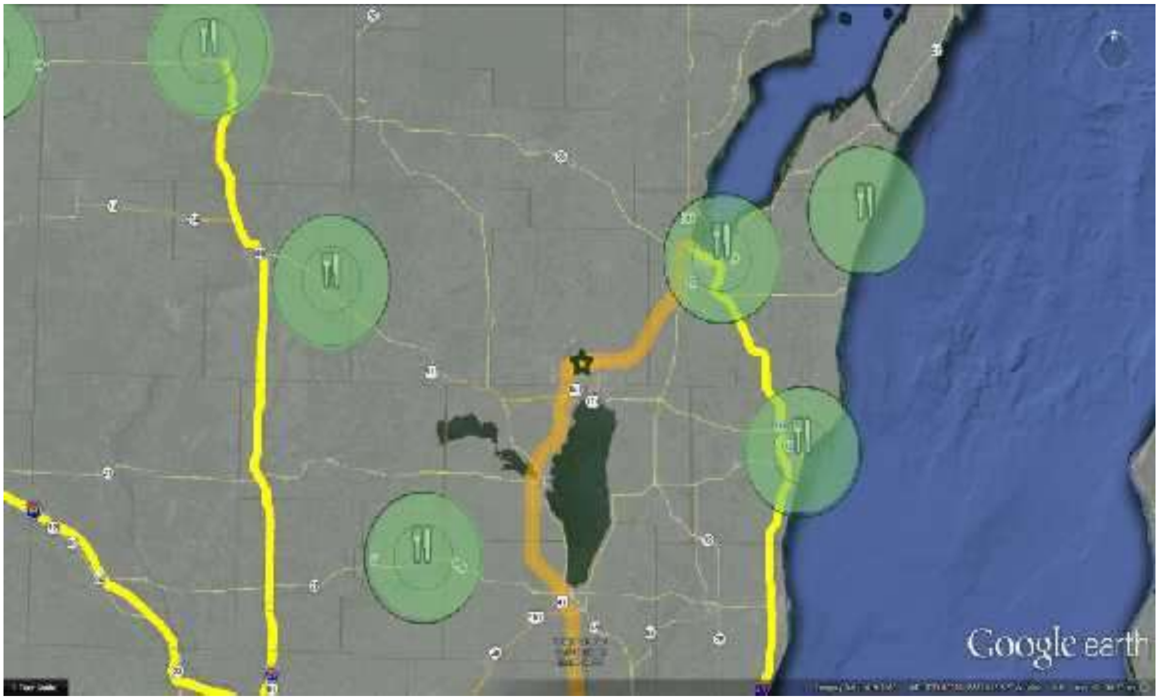


Figure 124. Primary and secondary trade areas are drawn for area shared-use kitchens, food incubators and open model copackers.

8.3.4 Appropriate Primary and Secondary Trade Areas

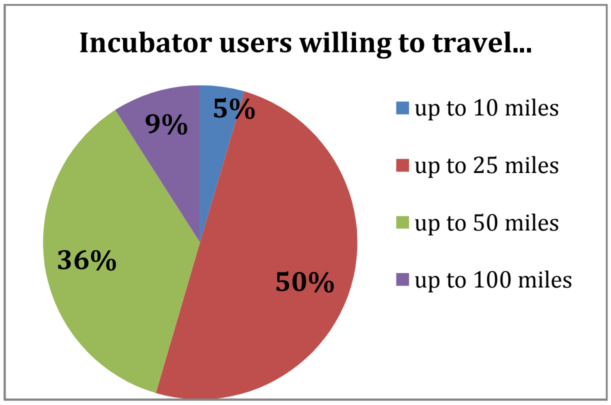


Figure 125. Food processor survey data

Not all food businesses are willing to travel this far however. Whether due to cost, inconvenience or other factor, many small food or farm businesses are not willing to travel more than twenty-five miles. The pie graph in Figure 125 shows the results from a number of different potential use surveys, which were combined to estimate the distances potential users of a food processing facility would be willing to travel (and still make a profitable trip). As you can see, the majority of potential users would be unwilling or unable to travel further than 25 miles. So, if our hypothetical food startup in Appleton is a firm that has such a distance constraint, then it may not be able to startup in the first place—because the facility in Green Bay area is too far.

A substantial proportion of respondents, however, would be willing to travel up to 50 miles—and nearly 1 in 10 would be willing to travel up to 100 miles. This implies much larger trade areas than used in the retail analysis, above, but the logistical calculation is different for consumers than for-profit businesses because they define and maximize their resources in different ways.

Another reason to survey potential users of a shared-use processing facility, or any other facility as part of market research, is because effective trade areas vary from geography to geography and from business to business.[103] The results shown in the pie chart above are useful as a benchmark in similar rural areas where they were produced. The foodsheds represented in the pie chart in Figure 125 are also dominated by large farming and food businesses, which are generally willing to travel farther for services because they can make few trips, with larger loads and benefit from economies of scale.

In a foodshed such as Appleton, however, which is more dense, with large urban areas, tighter geography as well as a large cluster of small operations, it is very likely than smaller trade zones are more appropriate. This is particularly true because Wisconsin features numerous food processing facilities for rent, and with such a competitive landscape the true effective geographic market for rental facilities such as these tends to shrink as competition (for essentially the same services) intensifies.

A final reason to consider narrower trade areas in determining the potential drawing range of a shared-use kitchen or food incubator is that many newer facilities are incorporating retail components to diversify their revenue streams and even their performance through economic ups and downs. Combing production and retail elements into a single facility, business, or cluster of businesses in one location can provide an advantageous physical connection between (previously separated) actors in the local food economy. For example, recently opened Blue Mountain Station in Dayton, Washington, is located at the edge of town with frontage on US 12 near the Port District and within the urban renewal area. The Port Authority has adopted a strategy to attract and cluster food businesses in a purposefully located and themed industrial park, with a natural and organic culinary center as catalytic anchor. Blue Mountain Station's greater mission is to support and grow businesses that add value to agricultural products grown and produced within Dayton's foodshed—before they are consumed or shipped out of the foodshed—to foment positive economic development in the local food system and economy generally. A small retail component is incorporated into a thoughtful design that encourages visitors as an attractive destination to drive, park and shop—which seems a natural fit for the foodshed in which many small farms do this around Blue Mountain Station drive direct sales from "you-pick" orchards along busy roads to wineries with wine tasting rooms and a retail shop.[104] This is very analogous to foodsheds in wine and fruit country across the United States, *e.g.* Northern California, or SE Wisconsin and SW Michigan along the I-94 corridor, where hundreds of farms and orchards benefit serve millions of travelers to-and-from Chicago.

For all of the above reasons, the map in Figure 126 is drawn with the traditional primary and secondary trade areas used above in our retail analysis.

[103] And even from time to time, as fuel prices and general transportation costs rise and fall.
[104] These are very common in wine and fruit country everywhere, *e.g.* Northern California, or SE Wisconsin and SW Michigan along the I-94 corridor, where hundreds of farms and orchards benefit serve millions of travelers to-and-from Chicago.

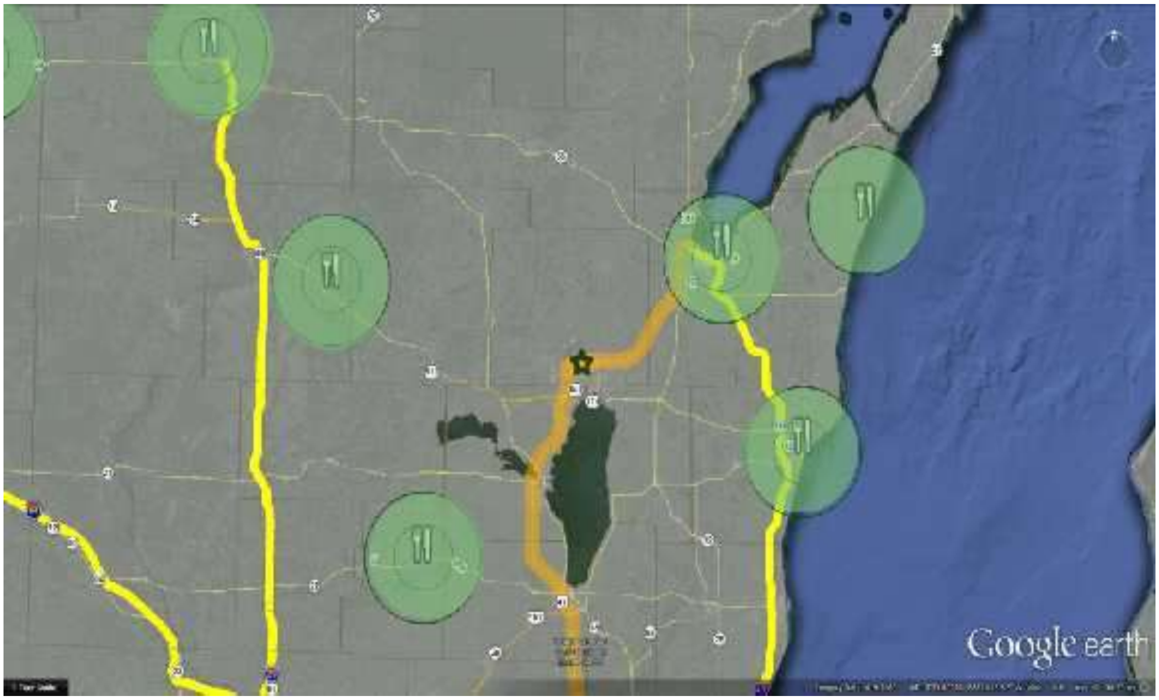


Figure 126. Primary and secondary trade areas are drawn for area shared-used kitchens, food incubators and open model copackers

While these retail trade areas may be too narrow,[105] the geographic gap left by the closure of Fox Valley Culinary Kitchen becomes evident. Neither greater Appleton nor most of the 3-county area is serviced within another facilities primary and secondary reach. Startup businesses unwilling or unable to travel so far must find another facility, build their own, or go without.

Food start-ups in and around Appleton are currently disadvantaged by these conditions relative to their competitors in neighboring areas.

A food processing capacity of some kind in Appleton could be included as part of foodshed redevelopment program consistent with an Economic Gardening strategy. A municipal, non-profit or public-private partnership could potentially serve the demand for licensed, rentable kitchen space more sustainability than a for-profit business such as Fox Valley Culinary Kitchen—and perhaps support area food businesses to an even greater extent, either through lower rents, more subsidies or broader service offerings. Such a project could not only fill the current service gap within Appleton, but foment activity in a sector crucial to economic health and competiveness in the next century.

The following section discusses the potential for foodshed redevelopment in Appleton in greater detail.

8.4 Fulcrum of the Foodshed

Throughout its history Appleton has benefited from its natural transportation advantages, as discussed in the location analysis above. The physical attributes that made Appleton a natural crossroads has carried through to the built-environment today and it still operates as a crossroads of Highways 41 and 10, as well as collecting most other regional roads North of Lake Winnebago. Appleton is also the geographic center of the region's urban areas—being roughly equidistant from where urbanity begins to the North in Green Bay from where it ends to the South in Fond du Lac. Appleton's advantage at heart of Highway 41's urban corridor benefits its local food economy just like other

[105] Specific data should be collected as a part of a future effort to determine the most appropriate trade areas for this use in this area.

segments of the economy. Food businesses located there enjoy a geographic advantage similar to the one enjoyed in Appleton's retail segment by Fox River Mall—the more rational choice for shoppers travelling from both Green Bay and Fond du Lac.[106]

Located at the fulcrum of the foodshed, Appleton's economic geography helps support the prima facie case that the greater Appleton foodshed could be ready for targeted economic development.

Moreover, a national view of shifting foodshed geography supports the conclusion that Appleton's dense and intense cluster of small but productive farmers is an ideal target for further development. Recent research shows a clustering phenomenon beginning to emerge in some local food systems, which is evidenced by rich pockets of strong foodshed development emerging in certain geographies while other foodsheds wane.[107] Increasingly, the distribution of local food producers, related regional distribution infrastructure, and other relevant market activity and actors are becoming increasingly non-uniform over time. Existing local food clusters are growing more rapidly than other areas. If this trend remains in place, then food cluster density will continue to increase over time—creating dynamic and thriving food clusters in some leading areas.

In many ways, Appleton's foodshed is already leading. Not only does the foodshed possess a cluster of small farmers, but Appleton itself maintains cluster of bars, restaurants and other eating establishments—and draws one of the largest farmer's markets in the region as well. The food culture in Appleton is well-established, its producers, consumers and eating establishments all exist in significant numbers, including a large number of micro farms and cottage industry, all of which helps identify Appleton as an emerging food cluster.

The foodsheds many strengths and advantages could be further developed, towards fully realizing or even maximizing the economic potential of the food economy in the region. The work and success of Fox Valley Culinary Kitchen could continue, and be more sustainably built through a broader, more comprehensive effort that included the cooperation of many organizations and groups and met the needs of many foodshed actors beyond those looking for a rentable licensed kitchen.

The following sections discuss what such a broader effort might be in general, and what it could look like in Appleton.

8.4.1 Agricultural Urbanism

Agricultural Urbanism is a property development strategy gaining popularity in the private sector. For use in this study it is adapted for use as an economic development strategy. This type of strategy is available to rural and suburban foodsheds with a sufficient profile of agricultural assets, growth potential, and ideally some agricultural heritage and/or culinary culture. This strategy goes beyond mere urban agriculture, which simply aims to increase food production on land within the city limits and increase access to fresh, local food for urban populations. Agricultural urbanism is a comprehensive strategy that centralizes and celebrates the production of food, particularly local and regional food, as a central element in the design and organization of the community.

In the leading foodsheds clustering new growth discussed in the preceding section the abundance of locally produced food and a diversity of locally produced food products has broad implications for communities: greater food security and health, improved independence and resilience of the economy, large environmental benefits of intensive, sustainable production, a multitude of social opportunities offered by agricultural and culinary activities—which are accessible to every member of the community, regardless of age. Each application of agricultural urbanism should be unique, and determined beforehand with specific and rigorous evaluation, but the positive impacts it

[106] See section above, Appleton's Regional Retail Trade area, which discusses why Appleton is more rational choice for shoppers from Green Bay or Fond du Lake while Green Bay is a less rational choice for a shopper from Fond du Lac and vice versa.
[107] "Emerging Spatial Dependencies within U.S. Organic Supply Chains" Hooker and Shanahan, Journal of Food Products Marketing 2012. Available at http://dx.doi.org/10.1080/10454446.2012.701989

promises are common across foodsheds if successfully implemented: increased agricultural productivity, growth in the local food system, development of new, intra-foodshed value chains, more jobs and job-creators—and for strategies including physical infrastructure— critical support, space, utilities and perhaps processing capacity for food businesses, an even improved public commons and amenity, with more green space, habitat and quiet enjoyment that supports the real estate market, encourages development, even density, and creates conditions for a healthier, happier population.

Appleton's foodshed profile indicates it could be such a leading foodshed, which supports the potential it could achieve some or all of these positives with supportive policies and action, such as those achieved by Hardwick, Vermont.

8.4.2 Market Square Model

The *Market Square* is a type of agricultural urbanism development first conceptualized at the design firm of Duany, Plater, and Zybeck (DPZ); which DPZ's defines as "Agrarian Urbanism." The Market Square is a property development strategy that incorporates the production and business of food into the design and function of the development, either in existing communities, on the edge of town, or as a part of a regional plan to cluster new start-up townships across a rural area to preserve rural acreage as productive farmland.[108] A well-located Market Square serves an economic role in the community and helps to "satisf(y) the commercial needs of the population" according to DPZ.[109]

The unifying element is a traditional town square to host a farmers' market and other purposeful gatherings. Around the square are a number of related facilities such as common use multipurpose space, commercial kitchen, barns, and all-season vendor spaces and retail shops.

Instead of the more traditional golf course and clubhouse amenity, DPZ substitutes professionally managed farmland into its property development strategy. But similar to a golf course, a market square development attracts residents who either want to engage in active farming and gardening activities or who want to live close enough to benefit from the culinary richness and cultural experience but prefer to pay for the locally produced and prepared food rather than laboring themselves. The core farm operations are centrally and professionally managed, perhaps independently, but a garden area is open for use by residents with storage areas and equipment also for common use.[110]

[108] Such as a land bank.
[109] More information is available on DPZ's website: http://www.dpz.com/Technique/AgrarianUrbanism?from=Thought.AgrarianUrbanism
[110] Designed as a subdivision or community development, this function could be outsourced by the local housing association to farm management company, as a golf course community might outsource course and clubhouse needs. A private model is not required, however.

Figure127. A Market Square conceptual model designed by Duany, Plater and Zybec

As imagined by in the illustration in Figure 127, Market Square is located at the edge of town and connected to many acres in production is shown.[111] A multipurpose facility (#1) is the largest structure and serves as an exhibit and meeting hall, which is connected to a university building (#2). A culinary institute and commercial kitchen (#3) are across the market square (#9), while stalls for the farmer's market (#4) exist on frontage to the road. In the back, barns and other production buildings (#5) give way to the agriculture land (#8). New mixed-use developments are shown adjacent (#s 6 and #10), one of which has a community garden in the center (#10).

From a developer's perspective, marketing a food-centric development is little different than a sports or golf-centric project. After all, developing and managing a large farm operation is very similar to managing a large golf course, only a farm's operating expenses actually produce food people can eat instead of the finely-cut grass, water hazards and sand traps that a golf course landscaper "produces." DPZ believes both food as a land management models can drive real estate sales as golf has, and perhaps the market square model could outsell the golf course model in a food-centric future of the New Normal.[112]

Also from a development perspective, the market square model is relatively inexpensive, particularly compared to expensive golf course amenities. Many of its structures are relatively cheap to build, but still a Market Square strategy can strive for high-end design at lower development costs thanks to its (typically) rustic motif. Phased in over time, start-up costs can be back-loaded[113] by prioritizing the development of farm and garden acreage, which could be initiated with no brick-and-mortar structures. Small, pre-fabricated storage sheds, a small hoop-house set-up and an open-air processing area could be sufficient for the first seasons. From there, farm and garden operations are generally scalable, even in urban areas which tend to have higher land and potential remediation costs.[114] Because

111 Similar to DPZ's project in Southlands, B.C. Canada.
112 No coincidence, DPZ conceived this strategy in the wake of the 2008 financial crisis and commodity price shocks, which brought high food prices and the sensitivity of certain elements of the food system in sharp focus.
113 This could be particularly useful as an economic development strategy, whereas a private development likely would need to complete all or several phases in order to drive premium real estate sales.
114 Of brownfield or greyfield properties.

fixed-structures are not required to begin, management teams have the flexibility to scale into facilities and expand services as demand and as clients materialize. This flexibility improves capital management and avoids waste.[115] Moreover, with a relatively light development footprint, sunk costs should be less prohibitive to redevelopment in the future in the event a market square model fails as an economic development strategy or is so successful that the large downtown or otherwise urban garden acreage becomes too valuable as a development property to warrant continued community agricultural production.

The market square concept is a template which each community tailors to its particular wants or needs. DPZ developed this concept in extension of their theory of "the transect." According to DPZ, like nature, human habits exist on a scale from the most remote to the most dense. A different design and scale is appropriate in each segment along the transect. In its productive vision of agricultural urbanism with agricultural land attached, DPZ's market square was designed across three transects: from rural and suburban downtowns, to agricultural edge zones, and finally at rural county cross roads, where growers cluster to share infrastructure, facilities, resources and knowledge.[116]

8.4.3 Market Square as Cluster Catalyst

As an economic development strategy, the market square aims for both direct and indirect, enabling effects to promote the clustering phenomena identified in previous section. The clustering trend can be nurtured by Market Square's purpose-built infrastructure, which provides the physical space for related programs, services and activities. This enhances existing foodshed strengths, helping it maximize its potential, and address many of its weaknesses if designed to meet the specific needs of the foodshed.

Such a cluster strategy could facilitate the *labor pooling effect*, whereby the food cluster increases the concentration of specialized skills and related inputs. This creates increased access to these specialized skills, and increased competition. Importantly, fostering the naturally occurring clustering effect in such a way is an appropriate Economic Gardening Strategy that emphasizes helping existing businesses in the community encourages job growth within the region. In Appleton, fomenting the labor pooling effect within the food sector with such an inward looking emphasis is more possible because of the labor already in place. Not only does Appleton's foodshed contain a very large concentration of small farmers with specialized skills, but Appleton also maintains a cluster of food manufacturers. Food manufacturing is the third largest employer by NAICS subsector, as discussed above re Local Employment Dynamics.

A market square will also enhance the regional food cluster by facilitating *intermediate input effects*. Similar to the labor pooling effect, the cluster invigorates the incentives for specialized suppliers, inputs and services to co-locate—either internally created of externally attracted—to enter the market with related but differentiated products and services already located within the cluster. In short, the cluster will invite free riders who move in to offer related, or complementary, products and services. This is potentially very useful strategy for Appleton foodshed's because its ability to attract a cluster of food processors has already manifested: evidenced by the large commercial food manufacturing base.[117]

A market square strategy can provide multi-purpose infrastructure to meet this diverse array of needs, while targeting development at the base of the food chain to encourage durable long-term growth that reverberates throughout the food sector. This could come in the form a shared-used kitchen, such as the one the foodshed just lost in Fox Valley Culinary Kitchen.

[115] The flexibility of this strategy also makes it easier to replace. With a light footprint, land uses can evolve as market conditions develop.
[116] Achieving outposts of more cost-effective density in rural areas also benefits the agriculture producers in their businesses. When being rezoned, the farmland attached to the outpost can be preserved for production which some lands banks are pursuing as a preservation strategy.
[117] Which employees more than 5,000 people, see Figure 55, above, summarizing Appleton's largest employers.

Or, instead of a simply processing capacity, agricultural urbanism can incorporate intensive agriculture as a core function even in denser urban areas. Such an operation can play a direct economic development role, though often small. A professionally managed community farm-garden can create a combination of both permanent and seasonal jobs, including a farm manager.

The Market Square can also help exchange knowledge and techniques in the economy and community by bringing local experts together to exchange best-practices or connecting them to the public to inspire the next generation of growers or entrepreneurs. As such, a Market Square project can encourage the *knowledge spillover effect*, in which the cluster enables greater and easier diffusion of new ideas, technologies, experiences and techniques—such as season-extension and other adaptive, weather-resistant techniques helping small producers produce more dependably in a changing climate, or deliver products to market early and/or later in the year when higher demand commands higher prices for fresh, local foodstuffs.

Incorporating retail, community and even eco and culinary tourism elements, the Market Square model can serve as a magnet strategy. DPZ's original development vision combined useful and productive activity with high-design and place-making that would serve as a destination. A multipurpose third place worth the trip for many different people for many different reasons whether by foot, bicycle, car or horse carriage. As fully imagined, the Market Square is a functioning commercial space that directly supports economic activity and simultaneously contributes to common health and enjoyment of the community—that also builds lasting value for the homes attached to the development.[118]

This type of strategy should appeal to those who are environmentally motivated because it achieves a number of sustainability goals by closing the foodshed's economic loop in a variety of ways: by reducing food miles and reducing fuel consumption; encouraging sustainable farming techniques and promoting density; restoring the soil and improving air and water quality; and by increasing the health of the residents and tourists alike and improving quality of place.

At the same time a Market Square project—like many other Agricultural Urbanism strategies—elevates the foodshed's culinary and cultural traditions and it reinforces extant social and economic assets. It combines common-use infrastructure and public space with professional savvy to nurture the ongoing cluster of food-related enterprises in the foodshed. And so, this type of strategy should appeal to those interested community development and even social discourse—because it can give the community a kind of front-yard garden to serve as a focal point and fomenter of social interaction. This food-focused sociability is rooted in the organizing, growing, processing, exchange, cooking, and eating of food, all taking place in and around the Market Square. It attracts those who would enjoy participating in the shared labor of agriculture or the community of food preparing and/or sharing but who do not own their own farm, or have a yard, or access to licensed commercial kitchen, etc. For community members simply seeking active participation the various "foodworks" can offer rich, rewarding and often tasty experience. This can lead to extended social networks as renting gardeners make friends of new garden neighbors, sharing conversation and techniques— and perhaps even healthy competition between neighbors. Even passive participants can enjoy a leisurely walk through the Market Square. Seasonal celebrations can be hosted in the Market Square's facilities to celebrate the harvest, or rent for private events such as weddings. All ages can participate in the many tasks required to grow, cook, make preserves, and otherwise operate the many activities hosted in the facilities of a market square facility. Elderly citizens have a nearby place where they can socialize and receive assistance with the "hard" work required in growing a garden, and it is a place where university students, high school students, elementary students can find educational opportunities.

[118] Recall DPZ envisioned the Market Square as a strategy to sell residential real estate, similar to the selling draw created by a golf course. Developed as part of a broad economic development strategy, as here, a Market Square or other kind of foodshed development initiative may not target increased residential home values directly.

Even as a residential development strategy, DPZ envisioned its Market Square as "third place" for social interaction that supplements the primary location of home and the secondary location of work or school. This type of lively, multi-purpose location can draw residents and visitors alike. And unlike a shopping mall or most other public spaces, the Market Square is a social collector that encourages visitors to either linger or be active without the pressure to purchase anything. Not just another third place or additional space within the commons, a multi-function Market Square offers a greater variety of functions compared to other squares or park and perhaps introduces a more compelling environment than conventional shops, cafe and pub—at least to certain segments.[119]

Any Agricultural Urbanism strategy or Market Square project must be designed to the meet specific needs of a given foodshed, and thus requires extensive due diligence and public input. As a real estate strategy it should target some real estate objectives either for unused/underutilized land, new development, surrounding neighborhoods or corridors—but ideally it should also address some specific land use need(s), in geographically advantageous location. Such land use planning and needs assessment are fundamental considerations for municipalities and businesses,[120] and in Wisconsin land use planning is Smart Growth legislation—which requires land use planning assess current conditions and the future, including designing specific objectives, policies, goals, specific programs to meet them.[121]

The following sections discuss the whether such needs are apparent in Appleton.

8.4.4 Agricultural Urbanism in Appleton

Agriculture has played a key role in the Appleton community since before its founding, and its residents have benefitted from the rich, hearty quality of life and economy that comes with it. As highlighted throughout the preceding analysis, Appleton's economy and community continue to benefit today from an ongoing abundance of agricultural activity nearby and next to its thriving urban space. Recognizing the strong conditions and emergent growth within this unusually intensive urban foodshed, Ken and Donna Klausen, for example, opened their kitchen facility for rent to start Fox Valley Culinary Kitchen—in order to maximize the opportunity for many food businesses in and around Appleton. Such licensed kitchen capacity is a key element of a Market Square strategy, as discussed in the previous section, and the precedent of its success in Appleton in Fox Valley Culinary Kitchen is evidence that such a strategy could play a catalytic role in the local food system going forward.

Recognizing the same opportunity another private initiative, Riverview Gardens, began a "financially self-sustaining social enterprise, focused on job training for people in need, in an urban farm and park setting in downtown Appleton, Wisconsin."[122] Its ServiceWorks program serves adults and high school youth who are unemployed, underemployed, or in need of positive and purposeful activity and teaches them transferrable job and life skills. Riverview Gardens offers a variety of programs at its downtown farm location, which includes a beautiful community center—available to for public events—and community public space. Its vision is to grow into a replicable community-outreach model that uses agricultural urbanism to change the paradigm for addressing poverty, homelessness, and unemployment in the Appleton, the Fox Valley and beyond. Work shares are available at Riverview Gardens, whereby a person can trade time instead of money to receive all the benefits of CSA shares. In many ways Riverview Gardens is targeting many of the same broad objectives as a Market Square might as part of an economic development strategy, working to maximize the unique opportunities created by Appleton's unique juxtaposition of agricultural intensity and population density.

And the importance of this relationship is not lost on the citizens of Appleton or its leaders. As Appleton's 2010 Comprehensive Plan makes clear: "Appleton is committed to maintaining the vitality of this urban-rural collaboration." The 2010 Plan went on to outline a number of foodshed related objectives, including:

[119] Such as gardeners, foodies, or agri-culinary tourists.
[120] Particularly going forward in the new normal of higher transit costs as geographic considerations retake their traditional importance as a key driver of economic decision-making—discussed at length in our macro view.
[121] Which the 2010 Comprehensive Plan notes regarding its "Land Use Element" in Chapter 1, page 4.
[122] More information is available on its website: http://riverviewgardens.org

OBJECTIVE 8.1: Maintain the viability of the regional agricultural sector that provides locally-grown food for residents and raw materials for Appleton's food processing and other businesses.

8.1.1: Preserve important farmlands and avoid fragmentation of agricultural areas in the region

8.1.2: Directing new development to infill or redevelopment sites, or to locations contiguous to existing urban areas in Appleton and other communities;

8.1.3: Encouraging compact development patterns that use land efficiently; and

8.1.4: Supporting county, state and private initiatives with the goal of preserving prime agricultural land in the region

8.2: Preserve important natural features and enhance environmental quality throughout the community in order to secure economic, recreational and health benefits for area residents.

8.3: Continue and expand efforts to preserve, restore, and interpret important features of Appleton's rich history.

8.4: Support the organizations, events, and venues that make Appleton the arts and cultural center of the Fox Cities.

8.1.4: Ensure the availability of adequate event space and logistical services to facilitate cultural and related events within the community.[123]

In a place of population density and agricultural intensity such as Appleton, one program or initiative can accomplish many of these goals simultaneously. And Appleton has experience pursuing multipurpose foodshed programs. For example, the City has supported community gardening programs, such as the Community Gardening Partnership; a program of Goodwill of North Central Wisconsin. More than small plots of land to increase small-scale agricultural activity and access to fresh, healthy food—community gardens are social collectors where citizen farmers exchange ideas along with pleasantries and help build connections that contribute to greater community.

No surprise then, after continued effort and gaining popularity, the Community Gardening Partnership now contains 18 community garden sites in Appleton—predominately on private land.[124] The Partnership aims "provides opportunities for diverse groups to share their experiences and knowledge with other gardeners at a variety of community locations while also promoting such things as self-sufficiency, environmental stewardship, creation of healthy civic space, and donations to food banks."[125] The Partnership has also offered a variety of educational classes and demonstrations on subjects from healthy eating to making jams and jellies or dehydrating deer jerky to lessons on composting—and has built a strong collation of national and local partnerships, such as the Salvation Army and the J.J. Keller Foundation.[126] The great success of Appleton's community gardens is consistent with the analysis above, and emblematic of the foodshed's small, intense profile—showing the dynamic energy within the local food system translating from regional typology down to the grassroots level.

Also unsurprisingly, Appleton's Downtown Farm Market is the area's largest—having grown to more than 150 vendors. The City orchestrates a chorus of activity around this traffic generator, which features live music each week activities and food available inside Houdini Plaza each week. Downtown's cluster of cafes, bars, restaurants, retail stores, Museums *et al.* benefit from the high traffic generated by the market. As the 2010 Comprehensive Plan noted, the Downtown Market as "one of the primary events drawing visitors to the downtown." Consistent with the discussion in the previous section regarding the utility of Agricultural Urban strategies, the Comprehensive Plan went on to recognize the vital role a farmer's market played in the community *and* the economy:

> For these producers, the market offers an outlet to sell their products at a price that is often higher than they would receive from other outlets. For community residents, the market provides entertainment and an opportunity to buy fresh food and other goods. Downtown businesses benefit from the visitor traffic that the market generates.

[123] Comprehensive Plan Chapter 8, page 107.
[124] A complete list is available on the Community Garden Partnership's website: http://www.communitygardenpartnership.org/gardens.htm
[125] As noted in Appleton's 2010 Comp Plan, and described on the Community Garden Partnership's website at: http://www.goodwillncw.org/programs/community-services/community-garden-partnership.html
[126] Appleton has a long traditional of charitable giving and support from a number of community members and groups.

From modest beginnings, the Appleton's downtown market has expanded. In the summer and fall, it operates two days—Saturday, and a smaller market on Wednesday. From November to the end of May, the Farm Market operates inside the City Center Plaza. With all the farmer markets in Appleton area, as noted above, Appletonians can now shop at a farmer's market four days a week during peak season.

Going forward this network of alternative distribution infrastructure could continue to expand, to new locations and perhaps new days. The location analysis conducted as part of this study examined the area's economic geography—such as the areas demographics, land uses, land values, etc., as discussed above—and also preliminarily identified at least two potential areas where farmer market expansion could provide utility to residents and future growth.

As shown in the map in Figure 128, two areas showed potential fresh market gaps.

Figure128. Area farmer markets scheduled to operate in 2014 are shown with yellow baskets. The green baskets represent two potential areas for farmer market expansion. Highways 41 and 441 are the orange lines transecting the Appleton city limits.

Analysis of the pedestrian walksheds, similar to that in the retail location analysis above, shows these two areas are under-serving potential pedestrian shoppers. A young family pushing a stroller living north of Highway 41, for example, has no walkable market option—even within hard walk zone.[127]

Like many other farmers markets shown in Figure 128, these potential new locations lay on the edge of the existing urban area. These two locations are also generally situated near existing retail clusters, to the mutual, immediate and long-term benefit of both. These North and South locations could also play a role in drawing traffic away from downtown on designated market days, which may help to alleviate traffic congestion downtown—but more specific and detailed study would be necessary to quantify such potential.[128]

[127] See Location Analysis, above.
[128] Though adding to traffic in the new locations, which may be ultimately desirable.

8.4.5 Potential Market Square in Appleton

Beyond potential farmer market expansions, the research points toward other opportunities for foodshed development as well. The closure of Fox Valley Culinary Kitchen creates a service gap that could be specifically targeted. A core component of a Market Square strategy, and many other Urban Agriculture strategies, a licensed shared-use kitchen could anchor such a brick-and-mortar facility with a broader, more diverse foodshed development mission. As discussed above, however, an economic development strategy that incorporates a real estate component—like the Market Square—should also be driven by some real estate objectives either to find a productive use for vacant or underutilized land, or new development, improved amenity or common space for surrounding neighborhoods, or to address some specific land use need(s). Above all it must be located somewhere geographically advantageous for the success of the facility itself as well as the surrounding area. But it need not be publicly owned and operated with economic development as its core mission; private ownership and management are workable models and even preferred by DPZ[129]

Such needs and such a location could exist on Appleton's north side. The area north of Highway 41 presents a number of different development challenges. As recent Appleton growth reports have highlighted, settlement in this area is relatively sparse and many private lands are available for development north of Highway 41 even close to the highway along Enterprise Ave. and Evergreen Dr., currently zoned for office use. An alternative model could also ameliorate some of the City's current construction pressures—particularly if such an effort included affordable housing options. As the 2013 Growth Report notes: "the average list price of single family lots in existing subdivisions is over $70,900 which is cost prohibitive for entry-level, new construction homes." The report went on to note this is 35% more than the average for Outagamie County because "according to developers, this high cost is attributable primarily to two factors, 1) The land was acquired at the height of the market (2008 and prior), and 2) The City's development policies relative to infrastructure are onerous."[130]

While a Market Square strategy can do nothing about parcels purchased at the peak of the prior cycle, it could make the first investment in a new phase of growth for the north side. A small investment of in density and diverse housing stock in the north today could set a course that leads Appleton's growth in a more structured and predictable development pathway—above and beyond the economic development potential the Market Square and its related programs and services will provide the foodshed and local economy.

Critically, the northwestern edge of town is where Appleton's only extraterritorial jurisdiction projects its authority beyond city limits, which hems in its future expansion potential because of jurisdiction agreements made between the City of Appleton and surrounding communities; yet the north requires significant road improvements. New right-of-ways will likely be required to meet future infrastructure needs required by development. Apple Creek Road, Edgewood Drive east of Ballard Road, and Broadway Drive, for example, will eventually require widening. Moreover, stormwater is already a serious consideration on the north side and stormwater management will add a costly piece to most development scenarios because of the North's low-lying areas in floodplains—including many wetlands. The presence of current and historic wetlands is in potential direct conflict with future development projects. And, as the 2013 Growth Report noted, as growth continues to fill into northern subdivisions and commercial spaces, the area will need additional police, fire, school and recreational areas to meet growing demands.

So, Appleton's only growth path—to the north—is generally considered to be more difficult, more expense and raise new environmental issues than the urban City of Appleton has typically dealt in the past—or certainly at a larger scale.[131]

---

[129] As home owners associations are being perfectly capable organizations, many of which are managing golf courses, ski resorts and other recreational properties (usually with a professional management company).

[130] The development community voiced a number of concerns in specific discussions conducted for this study, discussed in the Interviews section below.

[131] Or simply never considered, as the 2013 Growth Report notes, many wetlands likely existed to the South and throughout the Fox Valley corridor—but these areas were settled before wetlands were recognized for their ecosystem services and their development regulated.

In its 2010 Comprehensive Plan, Appleton noted that the majority of the land within the City's extraterritorial jurisdiction is classified as agricultural, open space and vacant lands (including land that was undeveloped). 114.4 acres of the extraterritorial area are wetland acres. Also in the 2010 plan the City declared an intention to leave the majority of this area remain in agricultural, open space or wooded area "over the next twenty years," continuing:

> Consistent with the Outagamie County Comprehensive Plan, the City's intent is that these areas should not be developed until some distant time when they can be provided municipal utilities and brought into the City. Scattered, low-density development in this area will prove difficult to serve and may provide a barrier to orderly urban growth of the urban area.[132]

But perhaps an alternative development strategy can address many of these issues and establish a higher and better use for this challenging, but inevitable extraterritorial expansion area—leading a clear path towards future development rather than waiting "twenty years" for the future to arrive, as the City currently plans to do.

The map in Figure 129 highlights the extraterritorial jurisdiction to Appleton's north in Green.

Figure129. Appleton's extraterritorial jurisdiction is highlighted in dark green. Again area farmer markets scheduled to operate in 2014 are shown with yellow baskets. The green baskets represent 3 potential areas for market expansion.

Notice that the extraterritorial area on Appleton's edge is the boundary between the City's urban areas and the County's agricultural and natural acres. This is natural fit for a large Market Square development, as originally conceived by DPZ for example, on the edge of town attached to substantial productive acreage. A Market Square on the edge of town could be the active, managed nexus between the urbanscape and the countryside. Represented again by the large green basket, this is also an area of town that could benefit from service by a small farmer market—which could be incorporated into a broader Market Square project.

132 Chapter 10: Land Use, page 144.

Given the majority of the current land use in the extraterritorial jurisdiction is already open space or agriculture acres and the stormwater, floodplain and infrastructure issues all present challenges cost prohibitive to many traditional modes of development, a small, but intensive mixed-agricultural purpose could generate a higher and better use whilst ameliorating many of the areas development concerns. Stormwater and floodplain issues can be avoided or remediated at less cost in an agricultural use because it is less intensive development. Over time the smaller but more intensive agricultural use can incrementally study and improve the unique hydrogeology issues in the area, with phased development that slowly improves the land with piecemeal and as-needed drainage, earthmoving and other infrastructure projects. Rather than waiting for the inevitable to eventually arrive, intensive agricultural use in this area would at least provide some incentive to improve the land over time. As part of a public or non-profit project,[133] land improvement can be prioritized more readily than in a typical private development—as well as other important considerations, such as conservation, habitat preservation or even wetland restoration.

Notice also in Figure 129 that a second location within the extraterritorial jurisdiction is depicted by a large green basket at an intersection of two large roads. Instead of locating right on the edge of the urban area, as a new farmers market could, a Market Square located deeper within the County's rural space could be better suited to the needs of producers with larger capacity requirements—such as the areas commercial farmers and livestock raisers. A large scale processing capacity, for example, such as certified dairy or slaughterhouse facility, could attract county farmers down to the Market Square north of town.[134] This location could not only offer greater accessibility to facility users and their large trucks but less traffic nuisance for urban residents were the facility located in town. And while this location could still encourage greater density and residential development in a cluster strategy that matured over time—such a rural Market Square might trade utilities best suited to the needs of its large scale users at the expense of small scale users (community gardeners) or community interest (increased public space).

Adjacent to or within the urbanscape, however, a Market Square development could affirmatively "set the edge" of the urban boundary on Appleton's north side —behind which the acreage is dedicated to intense agricultural use, and in front of which denser, more intensive uses fill in purposefully. In front of the Market Square, residential, commercial and mixed use developments can start small but phase over time, on schedule or organically as market conditions allow and demand materializes. One multi-family building, a stretch of row-housing and a mixed use commercial development across from the Market Square itself can be the seed around which grows an intentional, planned and productive new north Appleton.

Figure130. A conceptual design by DPZ showing a Market Square integrated into an urban area's corrugated edge.

The illustration in Figure 130 from DPZ[135] shows how different intensities of agriculture can "plug in" to the edge of a community. Publicly or privately managed, a hundred tractor farm (left) with the Market Square at its head, two small

[133] Such as Riverview Gardens.
[134] A larger share-used kitchen capacity to replace the gap left by Fox Valley Culinary Kitchen.
[135] Available on its website: http://www.dpz.com/Technique/AgrarianUrbanism?from=Thought.AgrarianUrbanism

ten farms (center), and three one-acre cottage farms (right) fit together like jigsaw pieces.[136] As shown, dense development had already been pulled to the edge with the Market Square and adjacent farms now acting as a clear urban boundary.

This edge could last indefinitely, if the agricultural lands are deemed worthy of conserving in their current use. Or, at some distant time in the future, the City could decide to grow past the edge with little concern to sunk costs—because even though dense or intense agriculture uses may improve the land over time, they are still essentially greenfields, less expense to redevelop than brownfields or greyfield properties.

Already Appleton has the premier urban square in the region and a thriving farmer's market. Across the river, Riverview Gardens is effectively pursuing its own urban agricultural vision—producing many public enjoyment and economic development goods. In the area a number of farmer's markets, retail outlets and you-pick orchards are each playing their part in the local food system. Any foodshed development initiative should seek to complement, not compete with these other many activities in the foodshed. Due diligence will be required to identify the best opportunities (e.g. to fill the licensed kitchen gap) and to identify risks and threats to disrupting or displacing existing food businesses—and how best to integrate an urban agriculture strategy into the local food system and fabric of the community.

And beyond this intra-foodshed cooperation between as many stakeholders as possible or practical, a foodshed development strategy in Appleton should look to neighboring foodsheds to partner with similar efforts nearby. As discussed in our macro view, as globalism gives way to regionalism, sub-regional cooperation—or at least coordination—is preferable to intra-regional discord.

In short, it seems evident Appleton has a unique potential to combine economic development and community development into a single initiate: foodshed development. This is another opportunity for Appleton to lead from strength, as it has in many of its recent community development activities to support the downtown revitalization.

In sum, a fully equipped Market Square in Appleton, attached to a farm operation—or some other combination of elements identified in future study, consultation, conversation and planning—could produce the following benefits and public goods:

<u>Food</u>

- Increased supply of local food
- Increased public access to farm and garden space
- Increased season extension knowledge and capability[137]
- Improved food access and security
- Development of closed-loop food cycle
- Greater foodshed independence

<u>Energy</u>

- Fewer food miles
- Less fuel use
- Less sensitivity to external price increases/shocks (for business and consumers)
- Increased community sustainability/resilience
- More closed-loop calories

[136] Perhaps under separate, even independent management (though a cooperative or highly coordinative model is central to the long term success of the strategy.

[137] Not only increasing off-season production capacity, but disseminating this knowledge via increased hands-on opportunities (direct employment, classes, demonstrations, etc.)

Economic
- Job creation
- Job training
- Hobby training
- Complementarity with other foodshed businesses
- Traffic magnet
- Anchor agri-culinary, agri-tourism asset
- Use of underutilized real estate
- Encourages nearby development

Waste
- Composting and vermiculture projects/programs can create high value soil and fertilizer (worm castings)[138]
- Waste-to-fuel
- Anaerobic digester

Water
- Ameliorate development concerns on City's north side
- Highly efficient irrigation systems can maximize production while minimizing water usage

Civic/Social
- Increased public space
- Increased green space
- Dynamic third place
- High utility, multipurpose and traditional community infrastructure
- Complementarity with other gardens/farms programs and initiatives, and related organizations
- Education and training opportunities

9 Incentives Evaluation

Incentives are a necessary tool for economic development programs. Financing, tax credits, grants, revolving loans and other programs help the host community compete in attracting a new business or the expansion of an existing business. Given that Wisconsin has limits on the extent of tax incentives, Appleton needs to be vigilant and assertive relative to the effective use of those programs that exist. Appleton should be watchful for the ways that other communities are using local and state incentives and make an effort to be competitive relative to the best practices of communities in the State.

The incentive programs need to be accountable, according to the Pew Center on the States, in its report: Evidence Counts: Evaluating State Tax Incentives for Jobs and Growth.[139] Wisconsin is regarded as one State leading the way on evaluation and accountability for individual incentive agreements and periodic incentive policy evaluation. Appleton should use the same policy evaluation, and individual incentive review practices as identified in the Pew report.

[138] Done masterfully in Milwaukee at Growing Power Farms, which maintains large compost and vermiculture operations and produces high-value worm castings and donates, its excellent soil, expertise and labor to beautify vacant street corners or vacant plots in challenged neighborhoods—what founder Will Allen calls a "flower explosion"—and other public and institutional use.

[139] *Evidence Counts: Evaluating State Tax Incentives for Jobs and Growth*, published by The Pew Center on the States, April 2012, page 2 - Table. See the following link: http://www.pewtrusts.org/en/research-and-analysis/reports/2012/04/12/evidence-counts-evaluating-state-tax-incentives-for-jobs-and-growth

9.1 State Incentive Programs

Wisconsin has a variety of state tax credit and grant programs funded at modest levels to address a variety of targeted business sectors and industry clusters. General tax credits offer business and industry the greatest relief.

Several programs are aimed at technology and early stage technology companies. Growth of technology companies is the most sustainable path for economic development.

Two critical features are also targeted with State Incentives: international trade and job training. The support of international trade has the benefit of extending Appleton's advanced technology companies into promising overseas markets. Every dollar of sales brings extensive multiplier benefits locally.

Job training grants and programs are important to sustaining Appleton's leadership position in the development of workforce skills and talent. Effective utilization of such programs will require partnerships with State and Federal workforce development organization, along with training providers such as the Fox Valley Technical Institute, the Wisconsin Manufacturing Extension Partnership and the Workforce Board of the Fox Valley. The more highly trained the workforce, the greater the opportunity to be competitive domestically and globally.

Figure 131 displays a table that examines the ability of Cities across Wisconsin to utilize State incentive programs for the benefit of local companies. Appleton's ability to facilitate funding of such incentives shows that it can help those companies recognize the leverage and savings available in State incentive programs. Appleton should constantly remind its businesses of the potential for State tax credits and grants when those companies are planning an expansion. It is especially important to remind local branch operation business managers of the State programs so that the Appleton facilities are able to include the potential value of incentives if the corporation has other locations that it can consider for the expansion or relocation of the business.

Comparison of State Incentive recipients by Municipality

City	Jobs Tax Credit	Economic Dev Tax Credit	DATCP Tax Credits	Early Planning Grant (WEDC)	International Market Access Grant (WEDC)	Technology Business Development Investment (WEDC)	Business Expansion and Retention (WEDC)	Bond
Appleton	1	2	5	10	2	0	1	0
Eau Claire	0	4	1	2	0	1	1	0
Fond du Lac	1	3	3	0	0	0	0	1
Green Bay	0	12	23	7	2	0	0	1
Kenosha	0	0	0	1	1	0	0	0
Madison	0	7	51	23	14	8	1	3
Oshkosh	0	1	1	4	1	0	0	2
Racine	1	4	0	5	1	0	1	0
Waukesha	2	1	4	4	3	2	0	1

Figure 131. WEDC Annual Report, Searchable Data, accessed March 1, 2014.

9.2 Local Incentives

Appleton has demonstrated its willingness to provide business assistance with the establishment of industrial parks using tax increment financing as a means of installing municipal infrastructure and encouraging the development of land for commercial, office and industrial facilities.

Tax increment financing has become a valuable redevelopment tool for the assembly of property and the demolition, remediation of property, and the construction of modern municipal infrastructure to support the new uses of those sites. Use of these tools is necessary to sustaining the vitality of Appleton as an employment and trade center for the Fox Cities region.

Appleton continues to promote its willingness to provide Industrial Revenue Bonds and similar tax exempt financing for important development project in the community. Those efforts should continue.

Currently, the City is focused on privately financed projects that are facilitated by TIF investments in property assembly, demolition and infrastructure. The City's involvement is secured by agreements binding private redevelopers to mutually agreed development and redevelopment plans and construction.

Appleton provides small economic development grants to businesses in Tax Increment Financing District 7. . Appleton should continue this practice. The City should consider establishing a program for grants and loans from other funding sources to assist remodeling and rehabilitation of office and industrial buildings that are part of a stagnant inventory of vacant buildings in its industrial parks and along the major commercial corridors of the community that may act as a catalyst to attract private lending and investment.

One point made to the Manheim Team on the community tour was that no vacant industrial building sales and no City industrial park lot sales occurred during 2013. The reasons for such stagnant conditions have been discussed with real estate, business and banking leaders in the community. Efforts are underway to address those issues which were identified in the SWOT and Survey results, and were recognized by City leadership prior to the consultants engagement.

Further, the consultants were advised that federal Community Development Block Grant regional revolving loan programs were being reorganized in the State. Apparent, CDBG "entitlement" communities such as Appleton can make a one-time buy in for businesses in the City to become eligible to apply for funding by the regional revolving loan programs. This effort is stalled at the State level, but if it is revived, Appleton should consider this program as an opportunity for participation.

Other Wisconsin communities that offer a Revolving Loan fund capitalized with CDBG funds include: Green Bay, Oshkosh, Fond du Lac, Sheboygan, Waukesha, Wausau, and most other Wisconsin communities. We understand from staff that Appleton must buy a $500,000 capitalization contribution, and that seems worthwhile to be truly competitive. A discussion needs to occur with businesses and bankers. Appleton could benefit substantially from lending to growing businesses. Appleton should buy-in to the revolving loan program, and make an effort to actively market the program as part of its retention visits, and as part of marketing projects to developers in connection with TIF and other commercial and industrial development promotion.

Following the recommendations in the Pew report, Appleton should consider analysis of its incentives relative to the following key elements:[140]

1. Cause and effect
2. Winners and losers
3. Unintended beneficiaries
4. Timing – when are they approved; how long do they last
5. Economics of budget trade-offs
6. Indirect benefits

Appleton may also wish to offer policy maker's analysis of incentive by have an economic model of the project prepared using software packages such as REMI or IMPLAN. Access to this software may be through the government affairs program of a nearby university, or through collaboration with regional agencies or the State of Wisconsin economic development agencies.[141]

Asking companies to repay incentives is becoming the norm among State and local governments according to a Wall Street Journal article. Most State and local incentives are accompanied by development agreements that provide for thresholds of jobs, investment and other benefits to the economy. If those thresholds aren't met, "claw backs" are instituted the recover the government incentives.[142]

10 Sales and Marketing Branding Interviews, Findings and Direction

10.1 Introduction

In order to fully understand the present brand position of the City of Appleton, Wisconsin, Brand Acceleration conducted individual interviews, focus groups, and on-line surveys of key audiences. Utilizing a series of questions, we sought to identify key words, phrases, feelings, thoughts, and emotions as they relate to the city. By understanding the present brand position, the research will help in the development of promotional message strategies that are much more likely to be acceptable to the numerous target audiences. Additionally, this newly-acquired knowledge should help in the development of a strategy to *move* the brand, changing the brand position, if desired.

This effort included research contact with area employers, stakeholders, retail and tourism representatives, site selection consultants, c-suite executives, and real estate professionals. The consulting team has prepared the following observations and findings that lead to the sales and marketing strategy, the economic development milestones, and the long-term economic development strategy.

10.2 Methodology

Over the course of March 20 and 21, 2014, Brand Acceleration, along with our partners at Manheim Solutions, visited several individuals and conducted three focus group interviews with approximately sixty-five people. Armed with a select list of questions, the interviews sought to discover opinions shared by people in the region. As is often the case, it didn't take long before we began hearing the same thoughts, concerns, and ideas, both positive and negative. As promised to the participants, all comments and opinions are kept in confidence without attribution.

[140] Ibid, page 19.
[141] Ibid, page 26.
[142] *States to Business: Give Our Cash Back*, the Wall Street Journal, by Jennifer Levitz, article published April 22, 2011.

In April of 2014, an online survey, including over twenty questions, was sent to approximately 1,000 people in four key groups; Staff and Stakeholders, Employers, Site Selection Consultants, and Retail and Tourism Representatives. From nearly 120 respondents, or 12%, we were able to collect valuable findings about the city and region. These comments are included in Appendix G – Online Survey Comments recorded here exactly as they appeared – misspellings and all.

Most people were able to see the big picture, offering useful insights into the Appleton brand. We did encounter a few "cheerleaders." For example, one person used the effort as a venue to support an exhibition center, another promoted public transportation, and a few just wanted to profess their love of the area. While these are important issues, to them, they do not shape or reveal the brand message.

In order to add depth to the research, phone conversations were conducted with several site selectors, company executives, and economic development professionals.

As promised to the participants, all comments and opinions are kept in confidence without attribution.

10.3 Brand Acceleration Observations

We love the fact that people were very honest with their comments, providing both praise and criticism of Appleton. Not surprisingly, the findings were very clear, showing consistent beliefs about the city's workforce, educational systems, lifestyle, advantages, government, and challenges.

In brand research, perception really is reality. The collective perceptions held by those interviewed and surveyed are the realities the City of Appleton must face. Even though a large number of those surveyed have little understanding of just what economic development is, their opinions are valid and shape the direction of the city and region.

10.4 Area Strengths and Advantages

Employers, stakeholders and site selectors were interviewed and surveyed to identify the strengths and advantages of Appleton. Local responses were strong regarding quality of life. Employer and site selector responses significantly pushed other strengths and advantages to the top of the list. Here is how their combined opinions look, in rank order:

1. Workforce / Work Ethic / People
2. Transportation / Connectivity / Location
3. Higher Education
4. Low Cost
5. Downtown
6. Quality of Life (General)
7. K-12 School

Other categories were mentioned, but were much too low to be of significance to the brand. They included healthcare, safety, cleanliness of city, entertainment.

10.5 Workforce / Work Ethic / People

Something we heard repeatedly during our visit to the city was strongly supported by the online survey responses. The workforce in Appleton is the city's strongest asset. Often mentioned, across all audiences, was a strong willingness to work, a history of work, and an attitude of pride in work. Because of this, we've come to the conclusion that people in Appleton really do love to work and take great pride in doing their jobs well.

Another term that was often used to describe the area people is "friendly." It is clear that the people in Appleton exude traditional American mid-western values such as kindness, courtesy, friendliness, helpfulness, and a welcoming spirit.

10.6 Transportation / Connectivity / Location

Second only to the city's workforce, Appleton's connectivity to the region and outside world is seen as the next big asset. Situated in east central Wisconsin, Appleton enjoys the advantage of being part of a region with a population of well over 600,000. Highway 41, soon to be Interstate 41, the city's strong railroad connections, and the area airport offer great advantages.

Air connections are seen as good, but not great. Because of the limited number of flights, especially direct flights, and the cost of air travel, the area airport is not seen as great. There is a serious concern about the possibility of a reduction of scheduled flights. We understand that the name of the airport is in the process of being changed to the Appleton Regional Airport to match is 3-letter FAA abbreviation of "ATW." This change will help the City and the region be identified it with its most prominent geographic asset – the Appleton name. Further enhancement will occur when the Airport secures service port status through the U.S. Customs and Border Protection Agency to become a User Fee Airport. Establishment of a CBP User Fee Airport will serve air traffic arrivals, including cargo, entering the United States inbound for Outagamie County, the Fox Valley Area, and surrounding communities. See Section 3.3 Air Access.

Conveniently located along the Highway 41 Corridor, Appleton offers easy access to Green Bay, Oshkosh, Milwaukee, and Chicago, an advantage to businesses and residents alike.

10.7 Higher Education

Higher education in Appleton is seen as a huge asset for the city and region. During the face-to-face meetings, we heard great examples and glowing praise of the many higher education options. We were impressed by the educational options offered by the universities and community colleges. Employers had great things to say about the higher education opportunities in the region. They expressed very high regard with the quality of education and the workforce advantages they offer. In particular, Fox Valley Technical College is a shining star. It consistently offers needed programs and has a reputation for listening to and working with employers to meet their needs.

10.8 Low Cost

Land and labor costs are very important factors in site selection for jobs projects, however we strongly advise against pushing the low-cost labor advantages too hard. It is not advisable to target jobs that pay lower wages. Rather, testimonials should be solicited to give evidence of productivity advantages of the regional labor market.

10.9 Downtown

Downtown Appleton has huge potential to be one of the most prominent attractions to business, the creative class, a tech workforce, and young professionals. It already has a very attractive collection of retail, dining, and entertainment establishments that are only a taste of what it could be. If the city desires to attract and keep young professionals, downtown issues, such as housing and parking, must be addressed.

10.10 Quality of Life

The people of Appleton and the region are very happy with the regional quality of life. Even though they express concerns over the lack of some amenities, they like the pace, safety, schools, healthcare, and people.

In the economic development industry, we know that quality of life rarely drives major jobs projects. Why? Because when a jobs project comes to an area, the company hires people who are already there. That being said, once a community or region is on the “short list” of places being considered, the small management team of three to five families must find what they need.

10.11 K-12 Schools

While area residents and employers consistently mentioned the quality of area schools, there were no specifics about *why* they felt this way. We assume it’s mostly regional pride. One person mentioned that some schools listen to employer needs. Another mentioned that regional schools may be better than Appleton schools. Evidence of school employer partnerships should be prepared to illustrate the advantages of the K-12 schools in the region.

10.12 Area Weaknesses

While people proudly mentioned the good things about Appleton, they used the opportunity to share their concerns, as well.

1. Government: Although the City of Appleton has numerous recent positive actions, the people we interviewed may lack awareness of them. A number of interviewees described the City as unfriendly to business, from slow and cumbersome permitting and code enforcement to perceptions that it acts with in a less-than-helpful style. They indicated that Appleton should be consistent and predictable in government policy and administrative actions.

2. Multiple Municipality Cooperation: Some cited concerns over the perceived lack of cooperation between the City and other are municipalities. This may be a regional issue, but we suspect that these perceptions stem from item number one. In any multijurisdictional region, communities must cooperate. This may be solved by just doing a better job of telling the public and business community about cooperative efforts.

3. Downtown:
    a. Parking: This is an issue that was mentioned often. Downtown has so much potential, but the cost and inconvenience of parking was cited as a significant issue. If street parking is metered, they should be very affordable and should be free on weekends and after 6 pm. Parking decks should be very low cost and should accept credit/debit cards. Technology now exists that allow parking customers to pay and manage their experience via their smart phones. A downtown parking study was commissioned to address these issues.
    b. Riverfront: The downtown riverfront area has huge potential. Even though there are several current downtown development projects underway, there is a perceived lack of development, housing, and retail, especially along the riverfront.
    c. Housing: In order to attract a young, educated, creative class, and professionals to the downtown area, attractive housing is a must. One of the hottest trends driving this young and educated workforce is their passion for a live/walk/work environment. As the City moves to make such improvements, it needs to keep its activities in the forefront through a consistent local public relations effort.

4. Miscellaneous. Other factors that were mentioned were high taxes, lack of a local brand identity, and a perceived lack of racial and cultural diversity. It is suggested that a public relations effort is needed to diminish the negative perceptions regarding attitudes about taxes, brand identity and racial and cultural diversity.

10.13 Audience Insights / Staff and Stakeholders

Made up of elected officials, chamber staff, and community leaders, this group of insiders shares a strong belief in and support of the city. They tend to rank the quality and importance of K-12 schools, higher education, and connectivity as better than employers and site selectors. Non-governmental organizations in arts, culture, entertainment and community-based groups are significant resources. Their opinion of the workforce is very similar to other groups.

10.14 Employers

Employers see the workforce as a very strong asset for the region. They love the work ethic, workmanship, and reliability of the area workforce. When trying to attract talent to the region, they see the schools and healthcare as big pluses, but express concern over air connectivity and government "unfriendliness."

As we expected, the location and highway connectivity are major pluses for employers in the region. Moving product to and from the area is easy. Rail is seen as an advantage, but limited to a few users.

As it relates to lifestyle and attracting management personnel to the area, cold winters are significant barriers. Our feeling is that there are probably people out there who love a winter lifestyle, including winter sports, hunting, etc. Since the weather cannot be changed, it may make sense to embrace it and market it to the city's advantage.

10.15 Retail and Tourism Professionals

This group shared many of the same positive attitudes about the city. They feel the workforce, higher education, and quality of life are strong advantages. Even though they feel the amenities of the city, such as shopping, dining, and the Performing Arts Center (PAC) are outstanding, they seem to have a significant case of Green Bay and Madison envy. They strongly feel that the city has much to offer and that it would be even better if the issues of downtown parking and riverfront development were addressed.

The subject of an exhibition center was mentioned several times, mostly by one or two people who are strong advocates for the building of such a facility. Except for these people, we heard no strong arguments for or against it.

We were surprised to hear that neither the city, nor the convention bureau has a well-funded advertising program to promote Appleton to prospective visitors in the surrounding region. Online respondents strongly believe that visitors would drive up to 100 miles to enjoy the city's offerings.

10.16 Site Selection Consultants, C-Suite Executives, and Real Estate Professionals

The findings, as they relate to this very important group, are both good and bad. The bad news is that most are completely unaware of Appleton and the Fox Cities region. For the most part, they have never heard of the area and have never considered it for a jobs project. When asked to choose the population of the region, they couldn't. What this means is that they have no awareness of the size and potential of the area's workforce.

The good news is two-fold. First, they don't know the area, so the city has a clean slate that allows it to create a fresh message, growing the brand in the minds of this crucial audience. The other good news is that, when prompted, they agree that the location and highway connectivity are good. What this tells us is that what they like about the area is in near perfect alignment with what the other groups highlighted.

Their opinion of the workforce is that it is very likely a hard-working, upper Midwest, group of rugged individuals. This opinion is not based on any awareness of the area, but on their belief that Wisconsin and the upper Midwest is populated by people with just such a strong work ethic and a history of hard work. They are mostly unaware of the education system and skilled workforce, believing that the workers are generally average or unskilled.

They do have an opinion of Wisconsin that it is a labor union state and that it has high taxes and is somewhat business unfriendly. They are encouraged that the recent political and fiscal climate is improving.

10.17 Target Industries

When asked which industries best fit Appleton, respondent answers were mixed. Some simply selected industries based on what is already in Appleton, and others were a bit more thoughtful in their answers. Factoring in the findings of the recent Garner Report, the following industries are likely the best choices, in order.

1. Manufacturing* (Garner & Manheim) (Includes assembly, auto and truck components, wiring, aerospace, aircraft, etc.)
2. Food and Beverage (Garner & Manheim)(Includes processing, packaging, ag. products, dairy products, public use kitchen and market square projects)
3. Office (Garner & Manheim) (Includes financial, insurance, regional and district offices, etc.)
4. Healthcare (Garner & Manheim) (includes medical devices, hospital, healthcare, instruments, research, etc.)
5. Retail (Manheim)
6. Logistics (Garner & Manheim) (Includes distribution, shipping, pick and pack, etc.)

* Machining, metal fabrication, and plastics are common key parts of auto components and transportation equipment.

10.18 Positive Opportunities

Appleton has a huge opportunity. If the City will continue to focus on being business servants and on being a positive force, the entire region could benefit. Along the way, the City should actively tell the public, through a strong public relations effort, of its activities.

According to Edward Hess, professor of business administration and Batten Executive-in-Residence at the University of Virginia Darden School of Business: “These leaders were servants in the best sense of the word. They were people-centric, valued service to others and believed they had a duty of stewardship. Nearly all were humble and passionate operators who were deeply involved in the details of the business. Most had long tenures in their organizations. They had not forgotten what it was like to be a line employee.”

In spite of the best efforts of elected officials and city staff the perception is out there that City as an organization has lost its perspective for serving the business community. Therefore, elected officials and staff need to continuously commit to customer service training and feedback and provide testimonials to the benefits of the City’s business advocacy efforts.

11 SWOT Analysis

The focus groups, identified by the City of Appleton Community Development Director in collaboration with other internal and external stakeholders, included: 1) business leaders; 2) retail and hospitality; and 3) community stakeholders. One 4-hour SWOT session was conducted for each category.

A total of thirty-six stakeholders were invited, with 31 participating in the SWOT sessions held on the first floor of Appleton City Hall in the City Center Conference Room on March 20th and 21st, 2014. In attendance were stakeholders from Appleton-based employers, educators, economic developers, elected officials, government employees, and community stakeholders. Appendix H contains a full listing of all the SWOT comments, as written before combination and consolidation.

The SWOT summaries revealed some consistent themes for the City of Appleton to consider in moving forward with economic development activities:

Strengths	66
Weaknesses	75
Opportunities	37
Threats	49

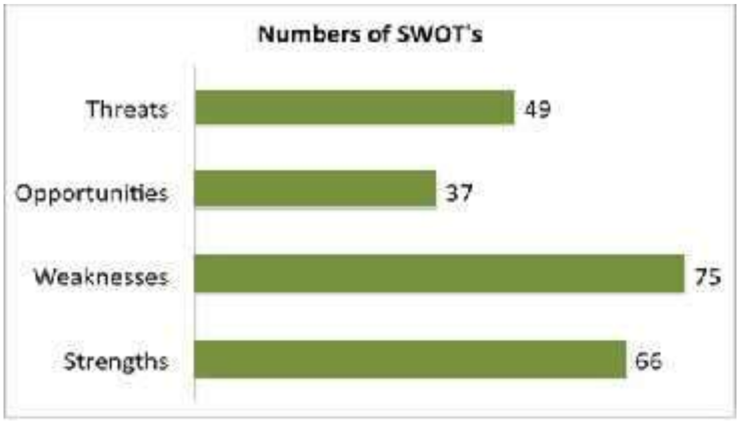


Figure132. Aggregate SWOT results

Strengths

Post-secondary and higher education offerings (i.e. Fox Valley Technical College, Lawrence University, etc.)
Strong manufacturing/processing sector
Availability of agricultural products for food processing
Cultural events (i.e. Performing Arts Center, Mile of Music Festival, etc.)
Fox River Mall is a retail and shopping draw
Appleton Regional Airport
Competitive labor costs
Quality K-12 educational system (public, including Charter Schools; private)
Reputable Health Care System

Weaknesses
City of Appleton building department process (i.e. costs, process, etc.)
City of Appleton does not have a strong economic strategy
Difficulty in employers finding and retaining skilled industrial and technical talent.
Physical appearance of entry to City of Appleton
Poor public transportation network
Land-costs in downtown Appleton
Availability of large industrial parcels
Availability of "Class A" office space
Lack of funding to support local economic development
Elected officials lack of awareness of economic development (i.e. how tourism impacts their local economy, which entity does what type of economic development work, ability to seek grant funding to support businesses in economic development, etc.)
Lack of cooperation over entities roles and responsibilities toward economic development

Opportunities
Riverfront development (i.e. recreational trails, housing, etc.)
Strengthen the connection with Lawrence University (i.e. better bus routes for Lawrence students)[143]
Improve and diversify downtown Appleton housing choices
Connect the regional institutional buyers with regional food production
Improve rail service to industry and passenger service

Threats
Corporate mergers and acquisitions (i.e. paper industry, headquarters moving out of Appleton, etc.)
Regulatory climate for area businesses
Costs of electricity for industrial use is high
Availability of loans, venture capital funding, tax-programs

Building upon the results of the SWOT focus groups, an electronic survey was circulated to a broader community audience as noted in the Section 10.2 Methodology. In addition, personal interviews were conducted with community business leaders (see last paragraph of Section 10.2) on a confidential basis to help establish the area strengths, advantages, weaknesses, insights, and opportunities more thoroughly discussed in Sections 10.3 to 10.18.

[143]The bus routes comment came from the SWOT sessions, but other comments about involving students, faculty and administrators and more extensive efforts for internships and incubating business or entertainment activities emerged later.

12 Economic Development Milestones

The Manheim Solutions Team has identified potential ways to grow and diversify the economy, and to establish parameters for future growth policy (per sections K & L of the original RFP). This section also establishes performance measurements, benchmarks and milestones for the Economic Development Strategic Planning Process (per section E of the original RFP).

We define "Economic Development Milestones" in terms most recently defined in the IEDC Study *Making It Count: Metrics for High Performing EDOs*[144]*,* and included as resource material listed with the appendices at the end of this report. We believe the following reflects current 'best practices' for the City of Appleton and the Fox Valley Region.

The metric measurements are *nuanced and define as follows:*

- *Consequences/Feedback* – Measures that consider the effects on an organization in terms of use of resources to both develop and excel under new performance measurement system.
- *Meaningful Benchmarks* – Measures that provide for comparisons over time or across cases (i.e., that are longitudinal and/or cross-sectional)
- *Actionable Items* – Measure of outcomes, not just outputs; measures that are not just retrospective but prospective
- *Qualitative Outcomes* – Measures that account for value brought to an organization in ways that are not easily quantified, including capacity-building in the workforce and industry and relationship building.

These guiding principles are the basis of the metrics we selected from our observations and recommendations above.

12.1 EDC Recommendations on Adopting Metrics

The City of Appleton has taken the first important steps, including the completion of a strategic plan, identifying its limited resources in staff time and budget, and setting out to develop an economic development strategic plan that not only serves the City, but also with the goal of serving the region. It is important not to 'out-run' your capacities.

We stress that *someone must be assigned to each metric* to ensure accountability across the City and regional partners, where appropriate. Further, and just as important, there *must be 'buy-in' from the top*. This report is just not about staff implementation, but also about engaging elected officials and private sector leaders to set policies that they are willing to carry out, as noted in Section 11.

Some of the metrics we are recommending can be set for a certain time period or specific project. If metrics are no longer relevant, then remove them from the list. If there is a new challenge or opportunity, do not just 'add' to the list, but vet it being sure that the City or partner has the resources (capacity) to do the project.

Finally, be sure to take credit where credit is due. Your metrics reflect what your organization actually accomplishes, not for an outcome that just happened on your watch. Be sure to *share credit* where appropriate, too.

[144] Making It County: Metrics for High Perming EDOs, Economic Development Research Partners, International Economic Development Council, February 3, 2014, Washington, D.C. See Appendix M of this report.

12.2 Metrics

In selecting the following suggested metrics, The Manheim Solutions Team did so with our client, The City of Appleton, in mind first, then its economic development partners and the region. Secondly, we are not addressing *community development issues*, but *economic development steps.* Obviously, the two areas are strongly inter-related but we must focus on economic development outcomes.

Next, some metrics address *internal* objectives to the City of Appleton (measures that help an economic development department to conduct its business), while others are *external*, such as outside marketing and tasks that may be carried out by regional partners and collaborators.

1. City of Appleton's internal economic development strategies need to address the following key issues:
    a. City of Appleton internal management structure:
        i. The Community & Economic Development Department needs to be recognized and acknowledged as the single point of entry on behalf of the City, supported by communication policies to and from other City Departments.
        ii. Continue streamlining the permitting process by implementing such strategies such as 'fast-tracking' permits by removing obstacles, either real or perceived. Examples would include improving communications between applicants, developers and City Hall.
        iii. Continue to promote business-friendly customer service response.
    b. Gather testimonials from businesses (cost and government responsiveness). E.g., develop a community relations campaign highlighting 'success stories' where the city's assistance helped a business start-up or expand.
2. The City of Appleton needs to continue supporting educational partnerships through the following efforts:
    a. Education-Workforce Partnerships:
        i. Engagement and career awareness in manufacturing and technology (e.g., high schools, Fox Valley Tech, Workforce Board, SHRM chapter, Chamber, etc. partners).
        ii. Evolve "Bridge Programs" to bridge STEM skills to workplace skills with Workforce Board, Fox Valley Tech, and other training providers.
    b. Assisting in the promotion of business alliances in high schools and Fox Valley Tech around key regional clusters include:
        i. Office (including financial, professional and engineering services, and information technology)
        ii. Healthcare (including medical)
        iii. Manufacturing (including auto, heavy equipment and related parts and components)
        iv. Food and Beverage (including foodshed development initiatives)
        v. Retail
        vi. Logistics
    c. Support education partnerships and workplace learning programs that are already in place, including:
        i. Appleton Area School District Work-based Learning Curriculum.
        ii. "Birth to 5" program.
        iii. Advocate the use of business executives to market career opportunities of manufacturing/technology jobs to students and parents.
        iv. Advocate strong manufacturing partnerships with high schools.
        v. Continue to position the library as a substantial resource to students, unemployed or people looking for jobs because the library is the community's most accessible resource institution.

3. The City of Appleton needs to identify roles and responsibilities:
    a. City of Appleton key roles:
        i. Business retention & expansion in partnership with the Fox Cities Regional Partnership.
        ii. In order to overcome competitive perceptions, consider restructuring permit and impact fees. E.g., storm water fees, review the 'best practices' permit and inspection fees utilized by neighboring communities; APA recommendations.
        iii. The development process needs to be streamlined and made more responsive.
    b. The City is responsible for the appropriate operation of industrial expansion & attraction
        i. 100 acres "Ready to Go" - Southpoint Commerce Park
        ii. 200 acres land-banked, that need to be served with streets and utilities before TIF eligibility expires; or renew TIF eligibility
        iii. To accelerate lot sales, consider creating more aggressive sales policies to drive purchase and construction activities (and avoid speculation).
    c. ARA (Appleton Redevelopment Authority)
        i. Prepare plans for the redevelopment of Appleton's commercial, industrial and residential transition areas and corridors, and coordinate efforts with the City, County, civic and cultural organizations, private property owners and businesses.
        ii. Create mixed use residential-commercial-entertainment redevelopment projects that attract young professionals and empty nesters.
    d. ADI (Appleton Downtown Incorporated)
        i. Downtown Marketing – local, regional promotion and advertising placements and social media integration.
        ii. Organizing Farmers Market, concerts, gallery walks, parades – attendance vs. last year or prior years.
        iii. Placemaking activities – activating public space through programs, public art and low cost infrastructure enhancements.
        iv. BID management – to sustain and improve the economic and social conditions within the districts – BID property values and vacancy rates vs. prior years.
    e. Fox Cities Regional Partnership:
        i. Business retention & expansion in partnership with the City of Appleton.
        ii. Business Attraction, including outreach to site selectors and commercial and industrial real estate brokers.
        iii. External marketing, including brand development and awareness in partnership with the City.
        iv. Regional research and data collection and reporting in partnership with the City.
    f. Fox Cities Convention & Visitors Bureau
        i. Events that bring conferences and visitors to the community.
        ii. Coordination with recreational, cultural and performing arts organizations.
        iii. Collaboration with hospitality businesses and organizations.
    g. Fox Cities Chamber
        i. Promote growth and prosperity for the region.
        ii. Talent/workforce initiatives:
            1. K-12 programs – Your Future, Career Fair and STEM.
            2. Talent retention, development and attraction, including: Talent Upload, Concierge and PULSE.
        iii. Coordinate economic development strategies with the Fox Cities Regional Partnership and the City.
        iv. Collaborate with the City to collect feedback to further improve the business perception and overall climate.
4. The City of Appleton and its partners need to continue to participate and collaborate on regional retail attraction, such as:
    a. The City of Appleton needs to market the retail region to be recognized as both the Appleton and Oshkosh MSA's through education of tenant representatives, site selectors and brokers.
    b. The Fox River Mall (FRM) is the retail anchor of a 30-mile Appleton retail trade area (Rt. 41 Corridor) and is important to Appleton's and the Fox Cities' identity as the strongest retail trade area of Northeastern Wisconsin.

i. Green Bay – multiple regional malls occupancy vs. FRM.
ii. Oshkosh – regional strip/outlet center and mall occupancy vs FRM.
iii. Fond du Lac – Forrest Mall occupancy vs FRM.
iv. Defending FRM & Appleton & its commercial corridors.

5. Neighborhood Retail – e.g., attracting 'specialty retail' & attraction to City's commercial corridors.
    1. National retailers in different retail specialties – measured by conversion of suspects to prospects to new business openings.
    2. Local retailers in different retail specialties – measured by conversion of suspects to prospects to new business openings.
    3. Foodshed issues:
        a. Attract and retain specialty groceries.
        b. Increase nutrition for lower income households through distribution of locally grown food.
        c. Attract new producers & shared use incubator kitchen: value of production – measured by conversion of suspects to prospects to new business openings.
        d. Market square project (Riverside Garden & future similar projects)
6. The City and its partners need to continue identifying a strategy that engages the 'Creative Class.' E.g., – "How to keep our kids here, and invite those who have left to come back"
    a. The City and ARA need to continue investing in attractive, pedestrian friendly mixed use corridor and riverfront projects and amenities.
    b. The City should assess improving the parking fee structure to identify revenue & utility for visitors, employees, customers, taxpayers, businesses. Recognizing the City's parking and traffic studies in 2015 budget, the City needs to embrace the feelings of the community, such as customers have ability to use credit cards and smart phones to pay parking fees.
    c. The City, ARA and other partners should continue encouraging the development and sustaining the prominence of hospitality, entertainment, recreation and leisure destinations.
        i. Library.
        ii. Performing Arts Center.
        iii. Exhibition Center.
        iv. Other entertainment.
        v. Special entertainment events.
        vi. Farmer's Market.
        vii. Regional sporting facilities.
    d. The City and ARA should continue to facilitate development and redevelopment that creates an attractive mixed-use environment for retail, office and housing in the downtown. E.g., affordable multi-family development and reasonably appealing hospitality and entertainment venues.
    e. The tools must be in place and supported in order to accomplish the above. These tools include a well-funded ARA and ADI, establishment of a revolving loan fund, the use of TIF and other statutorily permitted development and redevelopment tools.
7. The City shall address redevelopment of brownfield sites through use of government grants and redevelopment tools such as TIF.
8. The City is responsible for competitive Incentives relative to neighboring communities and regions.

13 Economic Development Action Plan

Using the selected metrics described in Section 12, The Manheim Solutions Team proposes the following action plan. The plan links back to the performance measurements outlined in Section 12.

The work plan concludes with the identification and assignment of roles and responsibilities necessary for both the internal and external execution of the Economic Development Strategic Plan. This will form the Action Plan and will link back with the performance measurements and benchmarks that will identify in the future the success of the Economic Development Strategic Plan. The Action Plan will also call on all the stakeholders to create a feedback loop regarding Appleton's need to reexamine the elements and roles of the plan, annually.

Action Plan Project (Goal)	Key Measure (Action)	Agency Responsible	Comments
Business Attraction:			
Accelerate business park lot sales, for growth and expansion of the tax base	Continue fast approvals and create more aggressive sales policies to drive business park purchase and construction activities, which will drive growth of tax base and jobs.	City of Appleton	This policy and process change may require adoption by City Council. The adoption process should take no more than 60 days.
Outreach to Site Selectors, Commercial & Industrial Real Estate Brokers	Create an email marketing campaign and a customer friendly web site. Target highly-desirable site selectors, real estate brokers, and c-suite executives, growing the Appleton region brand and driving recipients to the new website. Online advertising: Budget: $15,000 to $35,000 annually. (See Section 14.2)	Fox Cities Regional Partnership; City of Appleton	Partner with appropriate regional economic development organizations in mission trips, trade shows, conferences, and other regional promotional efforts. Notes: 1) Use CRM (Customer Relationship Management) software to track the economic impact of various projects attracted to Appleton / region. 2) Track the number of jobs from several sources, but count only those for which the City/partners have provided some support. (E.g., incentive package, site selection assistance.) 3) City to track additional results through its annual growth report.
Business Attraction Marketing Campaign	Develop marketing campaign targeting key clusters: Office; Healthcare; Manufacturing; Food & Beverage; Retail; and Logistics. Components to include an e-mail marketing campaign, new website in the first year then assess and refine in future years. (See Sec. 14.1, 14.2 of report for details).	City of Appleton; Fox Cities Regional Partnership	Next to an image campaign, marketing is the most expensive plan component. The City may coordinate and collaborate with the regional economic development organization, or undertake a marketing program directly.
Retail / Tourism Marketing Campaign	Continue the visitors' attraction campaign targeting a 100-mile radius around the city; with supplemental funding identifying Appleton as the central city of the region. (See Section 14.2)	Fox Cities Convention & Visitors Bureau; City of Appleton	Budget: $30,000 to $50,000 annually. (See sections 3, 5, 7 & 8 for demographics and industry clusters data.) The City should support and be appreciative that this activity is funded by the Bureau as function of keeping Appleton identified as the central city in the Fox Cities region.

Action Plan Project (Goal)	Key Measure (Action)	Agency Responsible	Comments
Business Retention & Expansion:			
Improve customer service to businesses	Conduct annual survey of businesses regarding city's customer service	City of Appleton	The city may incorporate this and related questions as part of its business retention survey.
Consistently demonstrate business friendly protocols in all interactions between business and the City Appleton	Gather testimonials from businesses as evidence of consistent government responsiveness. The city may incorporate this and related questions as part of its business retention survey.	City of Appleton	E.g., develop a community relations campaign highlighting 'success stories' where the city's assistance helped a business start-up or expand.
Business Retention and Expansion: Streamline permitting process	Continue 'fast-track permitting.' Review commercial permitting processes and streamline where appropriate to assure that permits are issued in a predictable and professional manner, and customers receive clear communication.	City of Appleton	This policy and process change may require adoption by City Council. The adoption process should take no more than 60 days.
Overcome negative competitive perceptions	Restructure permit, inspection and storm water processes to be convenient for the consumer. Permit, water and storm water fees need to be competitive relative to nearby communities and other communities that the City competes for expansion and new projects.	City of Appleton	The city may incorporate this and related questions as part of its business retention survey. Review the 'best practices' permit inspection fees and water, storm water fees utilized by neighboring communities; and IEDC and APA best practice recommendations.
Retention Visits	Continue to conduct 40 annual site visits to key industries using business retention software to tabulate and analyze results. (For additional metrics, see the *Business Retention & Expansion* metrics in the IEDC Report in Appendix M)	City of Appleton	Too often, communities try to survey too many of its businesses which often leads to resistance of the businesses to accept the invitation. The continued use of established CRM software will allow for annual comparisons of data collected, and possibly other communities nationwide.

Action Plan Project (Goal)	Key Measure (Action)	Agency Responsible	Comments
General Economic Development:			
Continue to measure effectiveness of economic development program (Bonus metric)	Conduct Cost-Benefit analysis of completed and proposed projects.	East Central Wisconsin Regional Planning Commission; Fox Cities Regional Partnership; City of Appleton	Use of IMPLAN or similar software will provide the City with substantiation of a project's benefits in terms of job creation, construction spending, new tax revenue, and indirect and secondary investment, jobs and revenues. This task may be performed by a university extension advisor or researcher.
Encourage development of the regional foodshed: ag. production, processing, retail grocery, distribution, shared-use kitchen, and market square project	Increase local food production and evidence of sales, distribution, processing and consumption. Foodshed benefits include: improved nutrition; new companies; and increased jobs & local output.	UW Cooperative Extension; City of Appleton, Fox Cities Economic Development Partnership; local community service agencies	The foodshed involves production of locally and exported fresh & processed food. Riverside Gardens is a start for a market square project. A shared-use kitchen could be an incubator project for the food business.
Workforce:			
Encourage partners to engage in career awareness in manufacturing and technology (High school, Fox Valley Tech, Lawrence University, Workforce Board, SHRM chapter, Chamber, etc. invited to participate as partners)	*Activity metrics:* student tours of manufacturers, technology companies; organized visits by WIB partners to area companies. Other metrics: encouragement of company executive participation; number of parents participating in programs. *Performance metrics:* Actual hires by company from school programs. Evidence of progression of students from high school programs to technical schools and 4-year college.	Appleton School District, Fox Valley Tech, Workforce Investment Board, Lawrence University, Fox Cities Regional Partnership, Fox Cities Chamber, City of Appleton	The City should encourage support from its partners to 1) improve student career awareness through plant tours, job fairs, etc., and 2) increase awareness of education programs e.g., apprenticeships, internships, student tours and career fairs.
Encourage partners to organize target business programs in High Schools, Fox Valley Tech, & Lawrence University, around key regional clusters	Long-term metrics include assistance in sustaining high student enrollment, graduation rates, internships, apprenticeships & job placement.	Appleton School District, Fox Valley Tech, Lawrence University, Workforce Investment Board, & other Education Institutions, City of Appleton	Key clusters include: Office; Healthcare; Manufacturing, Food/Beverage; Retail; and Logistics.
Encourage partners to emulate strong manufacturing & career partnerships with high schools.	Identify 'best practices' examples in neighboring communities; develop implementation schedule and budget for programming. Results: number of graduates entering manufacturing jobs.	Appleton School District, Fox Valley Tech, Lawrence University, Workforce Investment Board, other Education Institutions, City of Appleton.	The core high school & college programs and curricula are likely in place, but need to be communicated. There may be difficulties coordinating the partnerships with state and federal curricula requirements.

14 Sales and Marketing Plan

14.1 The Brand – Message Strategy

Appleton's brand is quite clear, and the message strategy is "Appleton," expressed as follows:

1. The greater Appleton region is home to unbelievably hard-working people who take pride in doing a great job and see work as a proud part of the area's identity. With a regional population of over 600,000, this represents a very attractive available workforce. Employer testimonial ads would be especially effective in telling this story.

2. With highways leading in any direction, and Highway 41's pending change to interstate status, Appleton has a very attractive advantage that many just can't match, especially when you add in the location and workforce advantages. It is central to the Highway 41 corridor, meaning it is right in the center of a large workforce region.

3. Backed up by quality higher education, especially Fox Valley Technical College, workforce skills are attractive in the greater Appleton area.

The City of Appleton may wish to consider undertaking a full branding study to further refine the "Appleton" brand and prepare specific messages, new logos, advertising and graphics as part of developing its message both locally and externally.

(Continued on next page)

14.2 Marketing Opportunities & Budgets

So, what should the city do with all of this information? The findings point to several items that should be considered in order to help grow the city economy, including jobs and investment. For example:

1. Reach out to site selection consultants, C-suite execs, and real estate professionals with a powerful marketing campaign, telling them the story of Appleton's workforce, location, education/training, and connectivity. This could be accomplished by:
    a. Development of a City of Appleton economic development website:
        i. Focusing on the "Appleton Region." The website should tell the Appleton story, but should be proudly inclusive of the City's partnership with the Fox Cities Regional Partnership and New North, Inc.
        ii. Coordination, collaboration and linkages to the regional economic development organizations that establish Appleton as the central city in the Fox Cities region by budgeting $25,000 to $35,000 annually either funded in conjunction with the partners or funded by the City.
    b. E-mail marketing campaign:
        i. Directly targeting highly-desirable site selectors, real estate brokers, and c-suite executives, growing the Appleton region brand and driving recipients to the new website.
        ii. Coordination, collaboration and linkages to the regional economic development organizations that establish Appleton as the central city in the Fox Cities region by budgeting $10,000 to $15,000 annually either funded in conjunction with the partners or funded by the City.
    c. Online advertising:
        i. Targeting online connections to publish favorable editorial about Appleton:
            1. Manufacturing (Garner & Manheim)(Includes assembly, auto and truck components, wiring, aerospace, aircraft, etc.)
            2. Food and Beverage (Garner & Manheim)(Includes processing, packaging, ag. products, dairy products, public use kitchen and market square projects)
            3. Office (Garner & Manheim)(Includes financial, insurance, regional and district offices, etc.)
            4. Healthcare (Garner & Manheim)(includes medical devices, hospital, healthcare, instruments, research, etc.)
            5. Retail (Manheim)
            6. Logistics (Garner & Manheim)(Includes distribution, shipping, pick and pack, etc.)
        ii. Coordination, collaboration and linkages to the regional economic development organizations that establish Appleton as the central city in the Fox Cities region by budgeting $15,000 to $35,000 annually either funded in conjunction with the partners or funded by the City.
    d. Partner with appropriate regional economic development organizations in mission trips, trade shows, conferences, and other regional promotional efforts. Coordination, collaboration and linkages to the regional economic development organizations that establish Appleton as the central city in the Fox Cities region by budgeting $10,000 to $15,000 annually either funded in conjunction with the partners or funded by the City.

2. Retail / Tourism Marketing Campaign by the Fox Cities Convention & Visitors Bureau:
    a. Targeting a 100-mile radius around the city.
    b. Appleton should express its support and appreciation for the investment in retail and tourism as the central city in the Fox Cities region. However, we recommend supplemental City budgeting of $30,000 to $50,000 annually for branding "Appleton" in the Highway 41 Region for that 100-mile radius.
    c. The benefit to Appleton of this investment is further top of mind awareness of the leadership of Appleton by hosting a variety of key civic, cultural, recreation and hospitality organizations that help establish the region as a leader in retail and tourism.

15 Target Industry List

15.1 Manufacturing* (Garner & Manheim)(Includes assembly, auto and truck components, wiring, aerospace, aircraft, etc.)

1. Transportation Equipment Manufacturing (Garner)
    1. Heavy Duty Truck Manufacturing
    2. Motor Vehicle Body Manufacturing
    3. Motor Vehicle Transmission & Power Train Parts Manufacturing
    4. Other Motor Vehicle Parts Manufacturing
    5. Aircraft Manufacturing
    6. Aircraft Engine & Engine Parts Manufacturing
    7. Other Aircraft Parts & Auxiliary Equipment Manufacturing
2. Innovative Technologies (Garner)
    1. Plastics Material & Resin Manufacturing
    2. Adhesive Manufacturing
    3. Miscellaneous Chemical Product & Preparation Manufacturing
    4. Ground or Treated Mineral & Earth Manufacturing
    5. Iron & Steel Pipe & Tube Manufacturing
    6. Industrial Machinery Manufacturing
    7. Commercial & Service Industry Machinery Manufacturing
    8. Air & Gas Compressor Manufacturing
    9. Radio & Television Broadcasting & Wireless Communications Equipment Manufacturing
    10. Instruments & Related Products Manufacturing for Measuring, Displaying,& Controlling Industrial Process Variables
    11. Irradiation Apparatus Manufacturing
    12. Surgical & Medical Instrument Manufacturing
    13. Testing Laboratories
    14. Research & Development in Biotechnology
    15. Research & Development in the Physical, Engineering, & Life Sciences

15.2 Food and Beverage (Garner & Manheim)(Includes processing, packaging, ag. products, dairy products, public use kitchen and market square projects)

1. Pet Food Manufacturing
2. Frozen Specialty Food Manufacturing
3. Fluid Milk Manufacturing
4. Cheese Manufacturing
5. Dry, Condensed, & Evaporated Dairy Product Manufacturing
6. Meat Processed from Carcasses
7. Meat Byproduct Processing
8. Commercial Bakeries

9. Food Product Machinery Manufacturing
10. Farm Machinery & Equipment Merchant Wholesalers
11. Farm Supplies
12. Merchant Wholesalers
13. Market Square Farm Developments
14. Shared/Public Use and/or Incubator Kitchen (For Profit/Non-Profit)

15.3 Office (Garner & Manheim)(Includes financial, insurance, regional and district offices, etc.)

1. Data Processing
2. Hosting, and Related Services
3. Sales Financing
4. Consumer Lending
5. Other Non-depository Credit Intermediation
6. Financial Transactions Processing, Reserve, and Clearinghouse Activities
7. Investment Banking and Securities Dealing
8. Securities and Commodity Exchanges
9. Portfolio Management Architectural Services
10. Engineering Services
11. Testing Laboratories
12. Graphic Design Services
13. Custom Computer Programming Services
14. Computer Systems Design Services
15. Human Resources Consulting Services
16. Environmental Consulting Services
17. Advertising Agencies

15.4 Healthcare (Manheim)(see Sections 15.1 and 15.3 for medical devices, instruments, research, etc.)

1. Health care and social assistance
2. Ambulatory health care services

15.5 Retail (Manheim)

1. General Merchandise Stores (Costco, Meijer's) (Crossover with Groceries)
2. Motor Vehicle & Parts Dealers
3. New Auto Dealers
4. Grocery Stores (HyVee, Whole Foods, Plum Market, The Fresh Market, Earth Fare)
5. Specialty Food Stores (Trader Joes)
6. Full Service Restaurants (High end)
7. Casual and Quick Service Restaurants (Freshi, Prey a Manger, Freebirds, Elevation Burger, World Burrito)
8. Health and Personal Care Stores
9. Clothing and Clothing Accessory Stores (Lifestyle)
10. Non-Store Retailers (Internet and Catalog Sales)

15.6 Logistics (Garner & Manheim)(Includes distribution, shipping, pick and pack, etc.)

1. Distribution
2. Warehousing
3. Trucking and Transportation Services

Appendix A – Report Organization

Appendix B – Consultant Scope of Services

Appendix C – Globalization in Context

Appendix D – Economic Conditions Q1 2014

Appendix E – Emergent Macro Drivers

Appendix F – Globalization's Rubber Band Snaps Backwards

Appendix G – Online Survey Comments

Appendix H – SWOT Comments

Appendix I – About Our Consulting Companies

Resource Materials:

2010 Appleton Comprehensive Plan
View on the City's Web site:
http://www.appleton.org/government/planning/city-of-appleton-comprehensive-plan-2010-2030

2013 Appleton Growth Report
View on the City's Web site:
http://www.appleton.org/home/showdocument?id=324

Appleton/Walker Parking Study
View on the City's Web site:
http://www.appleton.org/home/showdocument?id=12044

IEDC Report – Making it Count – Metrics for High Performing EDOs
Obtain copy or link from the City's Department of Community & Economic Development
http://www.appleton.org/home/showdocument?id=12034

Appendix A - Report Organization

Following is a review of the text of the Appleton Proposal prepared by the Manheim Solutions Team in response to the City of Appleton Requestor for Proposals for Economic Development Strategic Planning. Following each section of the Manheim response is a brief review of the location of the discussion, findings and recommendations from the Manheim Team to the City of Appleton.

The Manheim Solutions Inc. Team's proposed approach is open and objective—without prejudice to any potential strategy or tactic and proven applicable in multiple geographies. Our data-driven method maximizes the utility of the wealth of information already available us, to better analyze and more deeply understand our markets, economies and communities. With this robust framework, we are better equipped to diagnose the current conditions of specific locations and design optimal strategies and tactics to match, even as variables change from region to region and community to community. This analytical toolbox creates the hard deliverables necessary to take good decisions, implement best-available strategies and achieve measurable progress.

The Manheim Solutions Team believes that the Garner Study, supplemented by the Appleton Growth Report and the Economic Development Chapter of the City's Comprehensive Plan, provide a good basis for the preparation of the Economic Development Strategic Plan. While comprehensive and useful, the Garner Study seemingly misses the opportunity to examine a number of gaps, potentials and alternative options worthy of detailed study and possible action. For example, it fails to consider opportunities for the City to pursue high value retail development, and fomenting the City's role as a major healthcare hub for the region. The Manheim Solutions Team would devote time and effort to further evaluation of those opportunities, as well as a number of alternative strategies.

The Garner Study is examined, compared and contrasted in Sections 3.1 to 3.3; Sections 4.1 and 4.5; Section 5.3; Section 7.6.1; Section 10.17, and Section 14.2.

The City's Comprehensive Plan is examined relative to economic development maters in Sections 1, 2.5, 3.3, 7.4, 7.7.2, 7.7.3, 8.2.3, 8.4.3, 8.4.4, 8.4.5, and 14.2.

The choice of an expanded set of target business clusters and segments is the greatest opportunity for Appleton and the region to leverage its identity branding with the expression of its business expansion and attraction aspirations. Regarding the Garner Study's "optimal targets," the Manheim Solutions Team would work with the City's staff and stakeholders to focus on a few additional target business segments and clusters that would be appropriate given the region's existing business, workforce and education base, and perceived opportunities for realistic success.

Phase I, Evaluation and assessment would be the first phase of the Work Plan, with the Manheim Solutions Team concentrating on gathering and analyzing existing data (A), assessing key trends, forecasts and other factors (B), review of incentive programs (H), review policies, procedures and codes (I), conduct of a "leakage" analysis for retail business (J).

The effort to assess retail potential for the marketplace would require the City to secure City and 20-mile radius reports from ESRI for "Marketplace Potential." The Manheim Team will review the "leakage" potential for targeting national retailers that don't presently exist in the region that may have the potential for seeking locations locally. Given the commitment of the City to the downtown and other key retail intersections in the City, there may some national retail opportunities that would enhance the City's ability to keep key retail developments active and thriving. The City needs to be mindful of attracting second-generation retail and service businesses to keep activity levels high in mature shopping areas.

The Manheim Team will gather information on healthcare specialties that appear to be absent in the region to identify prospects for long-range recruitment of those organizations to the area. Healthcare specialties and medical office buildings are increasingly becoming anchors for business corridors, and contribute to offering high paying local service employment opportunities. Medical retail businesses are attracted to the convenience of high exposure, retail corridors, offering convenience to the nearby neighborhoods.

Current economic development policies, procedures and codes are discussed and evaluated in Section 9, 10 and 11 as part of evaluating local incentives, and perceptions of the City's role in economic development as part of the SWOT and survey processes. More complete review of this data and information is contained in Appendices G & H.

Key trends and forecasts are very thoroughly reviewed on a macro scale and on a regions scale in Sections 2, 3, 4, 5, and 6. Further examination is contained in Appendices C, D, E and F. Opportunities Foodshed development are discussed extensively in Section 8.

Retail trade is examined extensively in the Leakage analysis in Section 7. Further discussion of trends in retail trade is contained in Sections 1.2, 5.3, 7.1, 7.2, 7.3.1, 8.3.4, and 8.4.

Incentive program assessment is contained in Section 9.

Phase II, Interviews. In order to fully understand the present brand position of Appleton, both locally and outside the area, Brand Acceleration would conduct a series of online and face-to-face interviews (D). Utilizing several carefully crafted exercises, Brand Acceleration would seek to identify beliefs, key words, phrases, feelings, thoughts and emotions as they relate to the community. By understanding the present attitudes and brand position, the research would help in the development of a message strategy that is much more likely to be accepted by the target audiences. Additionally, this newly acquired knowledge would help in the development of a strategy to move the brand, changing the brand position, if necessary.

This plan includes research and analysis (discovery) contact with several audiences: The City of Appleton team would be responsible for providing a qualified contact list, including names of local individuals, companies, addresses, phone numbers and e-mail addresses. Brand Acceleration would utilize its own proprietary list of site selectors, real estate brokers, and c-suite executives for the outside perspective.

As with any economic development marketing effort, it is crucial for the Brand Acceleration team to be fully informed about the benefits and assets available in the area. In order to do this, a Brand Acceleration representative would visit the city, meeting with and listening to stakeholders, touring the area, industrial parks and other area assets. This information would be very valuable in the writing of the project Strategic Brief and the development of a powerful and believable brand message.

Interviews with City officials, stakeholders and site selectors are discussed and analyzed in Sections 10 and 11. Full reports of written survey responses and SWOT sessions are contained in Appendices G and H.

Phase III, Stakeholder Analysis. The third phase will require that key stakeholders be identified. An initial report will be prepared to advise and inform key stakeholders with an evaluation and assessment of the inventories and research that form Phase I of the plan (G).

Deliverables for this phase include an electronic (PDF) document of research findings. All answers will be tabulated and ranked. Any participant comments would be shown but not attributed to any particular participant. Beliefs, key words, phrases, feelings, thoughts and emotions would be shown. This would allow the City of Appleton team to strategically use them in marketing communications and public relations strategies.

A summary would be included, offering evaluation of the findings and any potential recommendations for ways to move forward, moving the brand as desired.

Stakeholder Analysis is summarized and reported in Sections 10 through 14. More detailed basis for the stakeholder analysis is completely covered in the full review of the survey results in Appendix G and the SWOT results in Appendix H.

Phase IV, SWOT Analysis. Though an active participatory process, the Manheim Team Will lead the group through our unique quantitative SWOT (Q-SWOT) and complete an asset map of the City and region to help the group develop clear goals and objectives to secure local commitment and ownership to the results of the assessment and evaluation stage of the work plan (C). The public involvement program will be undertaken to solicit feedback from the key stakeholders and the community at large. The consulting team will undertake drafting communications that can be used in direct email communication with key stakeholders. In connection with City staff, parts of the emerging information, goals, objectives and plans will be formulated for circulation and communication to achieve useful feedback from community groups and using social media in a constructive fashion (F).

The SWOT Analysis is summarized in Section 11. Detailed results of the SWOT sessions are located in Appendix H.

Phase V, Milestones. As the evaluation and assessment phase of the project is concluding, the Manheim Team will identify potential ways to grow and diversify the economy, and establish parameters for future growth policy. (K & L) This phase of the study will identify and establish performance measurements, benchmarks and milestones for the Economic Development Strategic Planning Process (E).

Milestones are addressed in Section 12, Economic Development Strategy Millstones.

Phase VI, Action Plan. The work plan effort will conclude with the identification and assignment of roles and responsibilities necessary for both the internal and external execution of the Economic Development Strategic Plan. This will form the Action Plan and will link back with the performance measurements and benchmarks that will identify in the future the success of the Economic Development Strategic Plan. The Action Plan will also call on all the stakeholders to create a feedback loop regarding Appleton's need to reexamine the elements and roles of the plan, annually.

The Consultant will identify best practices in the economic development, business retention and attraction field that produce results in developing economic goals, activities and programs, based upon input from public involvement and other research.

The Action Plan is located in Section 13, the Economic Development Action Plan.

Phase VII, Sales and Marketing Plan. At this point, the Manheim Team will return to its marketing and branding partner to formulate a sales and marketing plan. The sales and marketing plan will identify steps and tools necessary to implementation of the plan and broadcast of the City's identity to key businesses and organizations that represent the business sectors and clusters that the City has chosen as targets of the Economic Development Strategic Plan. This phase will also provide an Economic Development Strategic Planning brochure to explain the plan to the public and key stakeholders. (N)

The Sales and Marketing Plan can be found in Section 14.

Phase VIII, Final Report. A complete final report, including and executive summary, will wrap up the project, containing specific direction on business and organization sectors and targets, an action plan, and a comprehensive review of the performance measurement, benchmarks, and milestones that will measure each institution's and organization's progress toward carrying out the goals and objectives to the Plan. (O)

Appendix B - Scope of Services

Following are the Scope of Services, as promulgated in the *Request for Proposals for Economic Development Strategic Planning,* issued October 8, 2013:

Gather and analyze information to become familiar with the City of Appleton, such as existing demographic and socioeconomic data, labor force characteristics and other key economic indicators.

Prepare key demographic trends and forecasts, social factors, economic factors and financial indicators for inclusion into the strategic plan. This task should include preparation of a market segmentation of the City's retail/commercial and industrial sectors.

Describe the overall strategy and conduct a SWOT analysis. Identify ways to strategically position the City to maximize opportunities, including setting priorities.

Help the City identify what makes Appleton unique and special, and how the City can position itself for the future while retaining those qualities.

Establish performance measurements, benchmarks or milestones that measure the City's progress throughout the Economic Development Strategic Planning Process.

Develop and initiate a public involvement program that engages the community in this process. Electronic surveys, community open houses, social media, info booth at local events and other forms of community outreach could be used to achieve this objective. Additionally, provide summaries to Community and Economic Committee (CEDC), Appleton Redevelopment Authority (ARA) and Council with analyses of all public input.

Identify means by which consultant will work with City staff, elected officials and key community members to identify and prioritize economic development goals and objectives and proposed activities and programs.

Review the availability and effectiveness of City, State, Federal and Regional incentive programs.

Review policies, procedures and codes that affect economic development and growth, and recommend policy, process or procedural changes.

Conduct "Leakage" analysis.

Identify and describe economic development potential and ways to grow and diversify the economy.

Establish planning parameters for setting a future growth policy for industry and workforce.

Identify, analyze and define roles/responsibilities in existing and potential partnerships with other entities both internal and external; (such as other City departments, Appleton Redevelopment Authority, Appleton Downtown Incorporated, Fox Cities Economic Development Partnership, Fox Cities Chamber of Commerce, Outagamie Co., etc.)

Develop a sales and marketing plan with budget projections. Include brand development, marketing tools, a sales plan and implementation strategy.

At a minimum, provide the following deliverables:

An Economic Development Strategic Plan Executive summary. In addition to the written document, a presentation to stakeholders.

A brochure describing the Economic Development Strategic Planning process for distribution to the public.
A comprehensive, detailed document covering the consultant's completed work for items A through N above.
Develop an Action Plan with goals and objectives. Establish implementation steps and timelines.
Complete final report to be formally presented to all stakeholders.

Appendix C - Globalization in Context

The Appleton Comprehensive Plan notes that one of the most powerful drivers of the economy has been globalization: “Supported by low shipping costs, favorable trade agreements, and advancements in telecommunications, an ever-increasing number of products are flowing freely across national borders.”

Today many people tend to use the term “globalization” to refer to the long post-WWII boom when the modern international trade megalith emerged. Some others might cite the industrial revolution and the ensuing few centuries—another great boom—when new technologies, new energy sources and new machines laid the foundation for a modern civilization that supports more than 7 billion people. But there have been many busts along the way, and the story of “globalization” goes back much farther.

In fact, there have been many “globalizations” throughout history when one force or another contributed to overall globalization—often though conquest in ancient history. And while through violent means, Alexander the Great, the Roman Empire, the Mongol empire et al built cities and roads, spread ideas, technology, culture and increased global trade in their time. The Silk Road’s history begins in 2nd Millennium BC and continues more than 4,000 years to the present day. Traders transported jade for almost 2,000 years before Chinese silk began to flow west (during the Han Dynasty), giving the route its name—and in the 2,000 years hence Buddhism, Marco Polo, and bubonic plague have all made great use of the Silk Road.

Like the ebb and flow of goods along the Silk Road, or the rise and fall of the empires and nations controlling it (sometimes ceasing trade for long periods), the history of globalization is also rich with many different chapters and storylines—many cycles. Contemporary scholars divide the process of globalization into three periods: (1) archaic globalization, the period from early civilization to 1600; (2) Early Modern or Proto-globalization, the period from 1600-1800; and (3) Modern, the period from 1800 to the present day. Thomas Friedman also separates the history of globalization into three parts: (1) Globalization 1, from 1492–1800; (2) Globalization 2, from 1800–2000; and (3) Globalization 3, from 2000 and beyond—making allowance for a post-industrial, information technology driven future.

While Friedman ignores antiquity and begins globalization’s history with Columbus’ discovery of the Americas, he agrees with most economic historians who segment globalization into a pre-industrial revolution period ending in 1800 and giving way to a long industrial cycle. Friedman’s division also more clearly breaks globalization into a post-industrial period, ending in 2000 and looking toward the future. Though the precise date will be chosen by future historians, Friedman is likely correct to separate the preceding 200 years from the next 200 years.

Friedman is not along in surmising we are in the midst of a period of great transition—a long cycle of the kind measured in centuries rather than in quarters, years or even decades.

A super-cycle.

1.1 Super-cycles

So globalization is not an unchanging monolith. It is important to distinguish between long and short, and between cyclical and structural changes in the economy. The end of a typical economy short cycle, a cyclical recession, may come every 6 or 7 years on average but may change adjust little or nothing in the underlying structural components of an economy. One day the recession ends, and economic activity continues much the same as it did before.

The end of a super-cycle or the emergence of structural changes in the economy, on the other hand, can have broad implications for economic activity, which can translate into long-standing and permanent changes.

In the 2005 book titled "The World is Flat," Friedman describes a trip he took to India when he realized globalization had fundamentally changed working economic concepts. The convergence of personal computers, work flow software and large improvements in communication technology had 'flattened' the global economy, such that every country (or firm, or individual) on Earth is (or can be) integrated into the global supply chain and compete against every other county (or firm, or individual). He coined this new period Globalization 3.0, the globalization of individuals,[1] wherein a technology-enabled individual in Bangalore, India can compete successfully against a competitor in New York, London or Hong Kong. In short, information technology had empowered the individual such that everyone was in economic competition no matter where they were located—the geographic competitive curve was flat.

Even though Friedman assigns the year 2000 as the line of demarcation, a number of events causing Globalization 3 occurred in the previous millennia. The collapse of the Berlin Wall in 1989 and the end of the cold war and the founding of Netscape and its revolutionary World Wide Web browser, Netscape Navigator, in 1994 are Friedman's first two (of ten) "flatteners" that leveled the global economic playing field. So, the year 2000 may be useful as a round number, there is no single moment or single event that separates the previous 200 yearlong cycle of globalization from the next long cycle.[2]
If we were to ask the managers of Pacific Investment Management Company (PIMCO), they might assign 2008 as the moment when the new long cycle began. PIMCO coined "New Normal" as a term to describe the financial conditions following the financial crisis of 2007-2008 and the global recession that followed. New Normal has since been used in a variety of other contexts to imply that something which was previously abnormal has become commonplace. "We coined the term "New Normal" at PIMCO in early 2009 in the context of cautioning against the prevailing (and dominant) market and policy view that the post crisis industrial economies would revert to their most recent means."[3]

In other words, the crisis triggered a series of large, structural adjustments that altered the path of the global economy. As a result, the past might no longer be a reliable guide for the future. Those strategies successful in the 'Old Normal' may be less successful, unsuccessful or even catastrophic in the New Normal.

Roadmap: First, we will consider... Second.... and then... followed by... finally...

---

[1] As opposed to Globalization 1.0 where countries and governments were the main actors and Globalization 2.0 wherein multinational companies led the way in driving global integration, according to Friedman.
[2] Just as the year 1800 is an approximation with the blast furnace (1760) and Watt's steam engine (1765) coming before (and sometimes cited as the beginning of the Industrial Revolution).
[3] http://books.google.com/books?id=OdYvolUO8RUC&pg=PA12

Appendix D - Economic Conditions Q1 2014

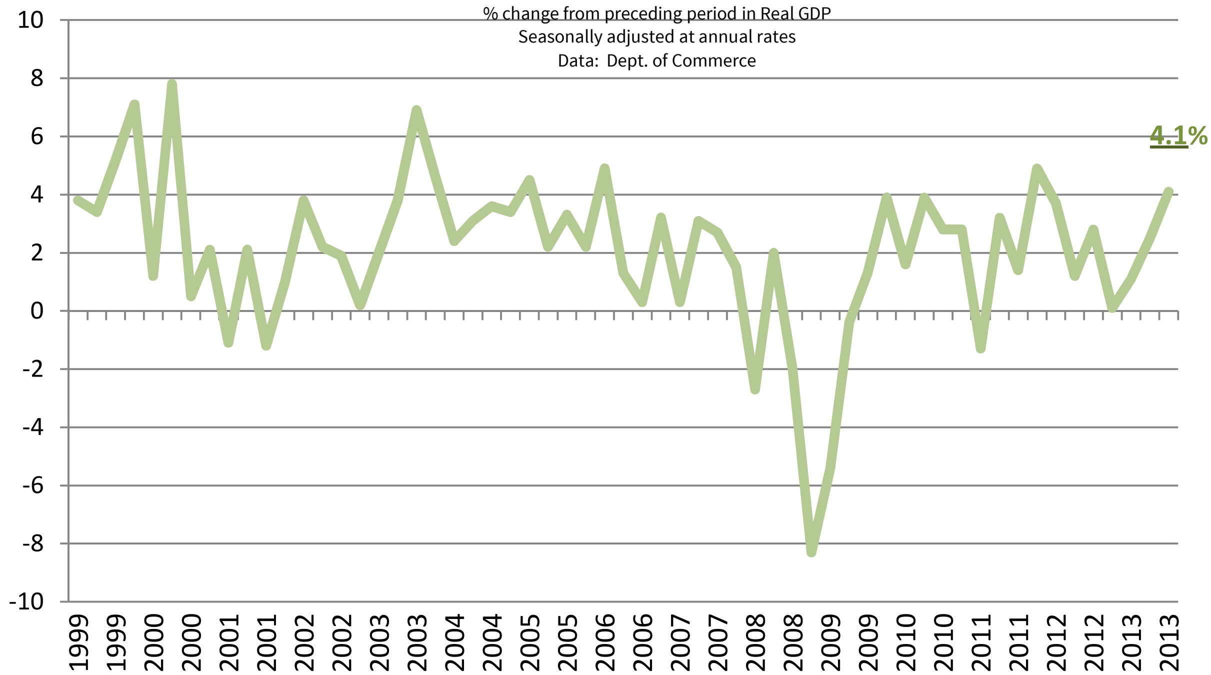
This section will update and supplement the evaluation of long term economic development trends given in Chapter 9 of the Comprehensive Plan. Chapter 9 begins with general summary of then-emerging trends impacting the "shape Appleton's future economy and the economic development programs and policies the City employ to ensure its vitality."

Written in 2010, fresh off the bottoming of the recession in 2009, this summary can be updated today in 2014—five years into the recovery from the Great Recession.

1.1 The Great Recession Ebbs

So what does the New Normal look like so far? The Great Recession is firmly in the rearview mirror, having officially ended in June 2009[1], but its effects have lingered and seemingly held the economy from reaching escape velocity. Now five years removed from the crisis there is more data to illuminate the question, and we may be able to better understand the implications for the future.

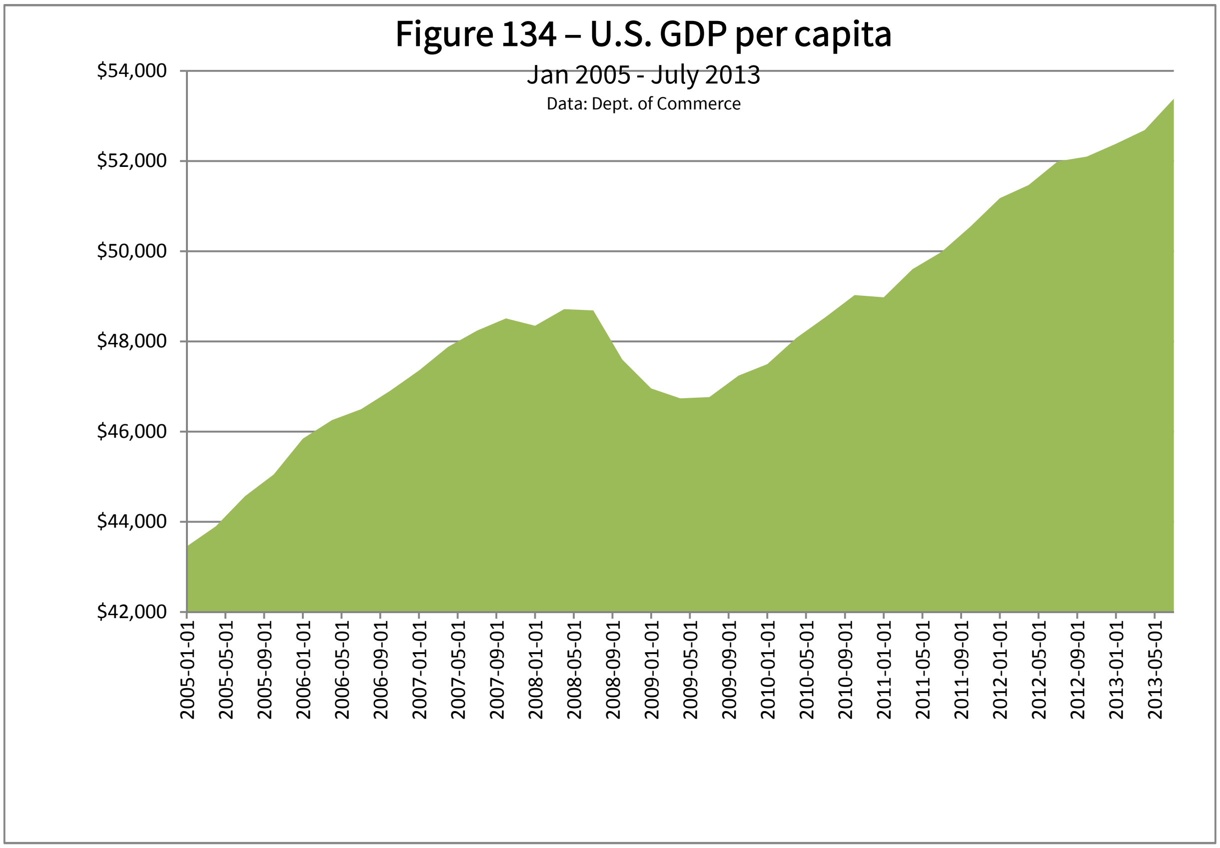
Figure 133 – U.S. GDP - Q1/1999 - Q3 2014



Slow to heal, but still growing, the economy has benefitted from central banks—including the Federal Reserve—implementing and maintain accommodative monetary policy to keep interest rates low. In the U.S. at least, these policies are beginning to be unwound. Towards the end of 2013, citing improving economic conditions, the Federal Reserve announced it would begin to end its more extraordinary accommodative measures, by tapering its quantitative easing (bond purchasing program). Indeed, while some measures of economic activity have lagged, many sectors of the economy have recovered completely.

---

[1] http://www.nber.org/cycles.html



1.2 Gross Domestic Product

Gross Domestic Product (GDP), for example, has recovered to a modest 2%-- relatively strong compared to other developed economies around the world such as Japan or many EU nations. In the most recent quarter available, the third quarter of 2013, GDP climbed to 4.1%.

In a recent update, the IMF also observed the strength of the global economy in the latter half of 2013 and revised its estimates for global growth higher. After growing at 3% in 2013, the IMF expects conditions to improve further with growth projected to rise ~3.7 percent in 2014 and 3.9 percent in 2015—led by strength in developed economies.[2]

While many Americans feel left out of the recovery (so far), the bounce from the Great Recession might be an above-average rebound from a major banking crisis— at least when measured by GDP. Economists Carmen Reinhart and Kenneth Rogoff presented a draft paper to the American Economic Association in December 2013 examining 100 systemic banking crises in history. They found recoveries took an average of eight years for per-capita GDP to fully recover to pre-crises levels, while the median recovery took 6.5 years. U.S. GDP recovered by the end of 2011—less than 5 years since the crisis began (at the end of 2007)—and in the two years since has steadily risen to new highs. Reinhart and Rogoff also found that in 43 of the 100 systemic banking crises they examined, the final recovery came only after a double-dip recession. Fortunately, the U.S. has avoided such a double-dip recession.[3]

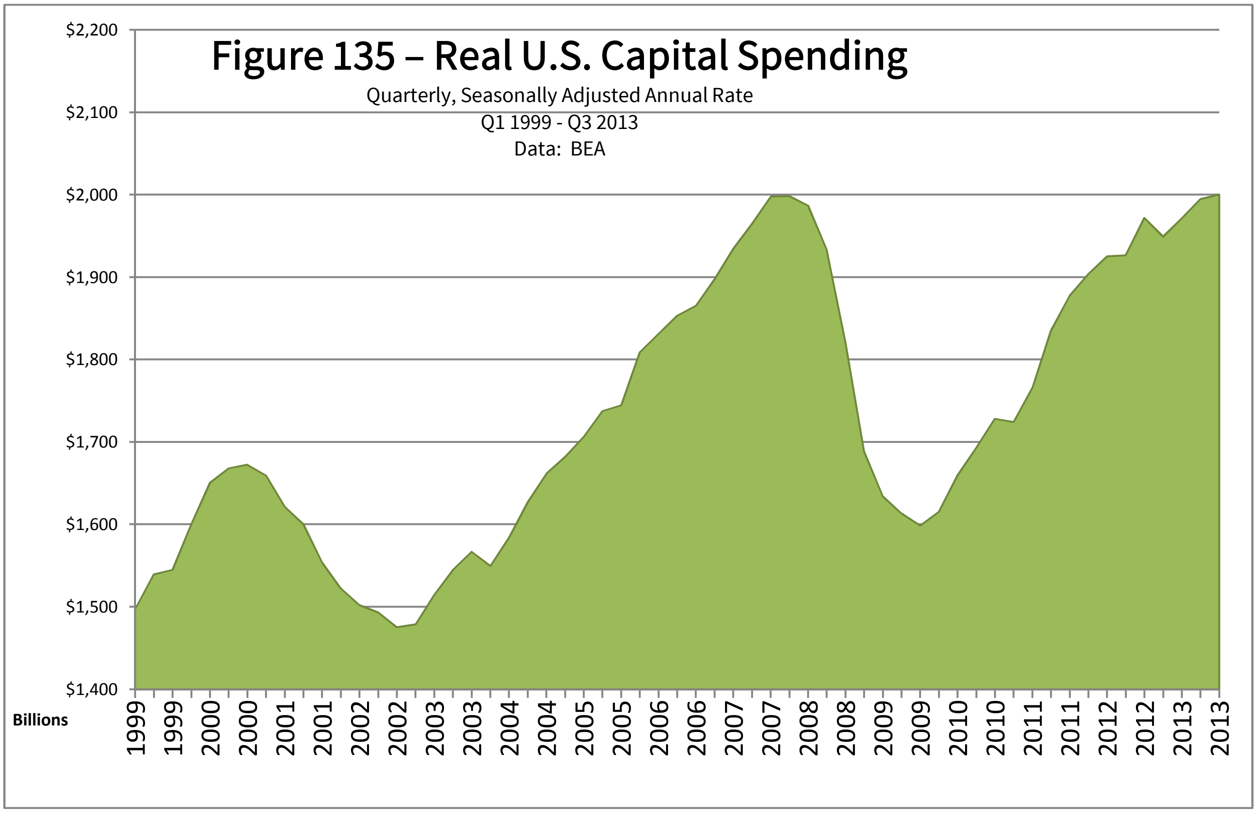
---

[2] http://www.imf.org/external/pubs/ft/weo/2014/update/01/

[3] Unlike several countries in Europe who have experienced double-dip recessions. Reinhart and Rogoff also point out that of the 12 major economies hit by the latest banking crisis only the U.S. and Germany have recovered their GDP per capita to pre-crisis levels.

1.3 Capital Expenditure

Capital spending has also recovered to pre-crisis levels. Corporations have rebuilt their balance sheets and driven profitability to record levels. This high profitability has created large capital reserves on private corporate balance. Indeed, while capital spending surpassed more than 2 trillion dollars in 2013, cash reserves were still growing—to 1.9 trillion dollars as of the third quarter of 2013 up from 1.7 trillion at the end of 2012 according to the Federal Reserve.[4] So, while companies have begun putting large amounts of capital to work, their collective "war chest" of capital remains robust.



And while 1.9 trillion dollars is a lot of capital, the Federal Reserve likely under-reports corporate cash reserves because it only counts the flow of domestic funds. According to 2009 IRS data analyzed by David Johnston, which includes domestic and international assets of U.S. companies, Johnson estimated that corporate cash reserves may have been nearly triple the Federal Reserve reported number—or 4.8 trillion dollars.[5] If the same multiple applies today, there could be nearly 6 trillion dollars of capital reserves on U.S. corporate balance sheets.

Bloomberg recently reported that just the companies in the Standard & Poor's 500 Index could have as much as $3.4 trillion in cash reserves— said Brian Belski, BMO chief investment strategist "the U.S. is on the verge of an early CAPEX recovery, one that is likely to have some considerable legs."[6] Global management consulting firm A.T. Kearny would likely agree based on the results its recently released Foreign Direct Investment Confidence Index for 2013. It ranked the United States as #1 geography for investment for the first time since 2001—reaching the top ranking by overcoming issues such as policy uncertainty, debt issues and broader fiscal concerns.[7]

---

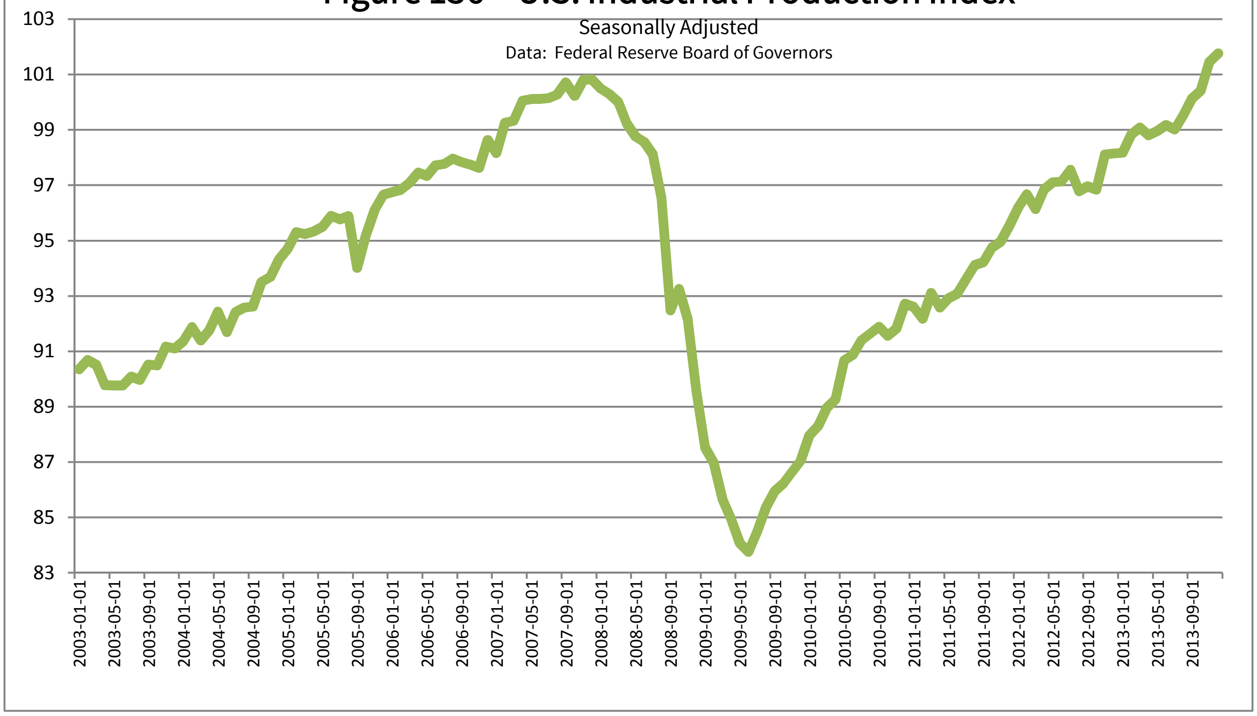
[4] See Line 42, nonfinancial corporate business; liquid assets, available at http://www.federalreserve.gov/releases/z1/current/accessible/l102.htm
[5] http://blogs.reuters.com/david-cay-johnston/2012/07/16/idle-corporate-cash-piles-up/
[6] http://www.bloomberg.com/news/2014-01-09/ford-to-microsoft-seen-adding-to-record-2-trillion-capex.html
[7] Companies participating in the survey account for more than $2 trillion in annual global revenue, see

These capital resources are as timely as they are large, with U.S. firms well equipped to pivot towards the shifting economic conditions in the New Normal. As the confusion of the Great Recession continues to wanes, U.S. firms are likely to continue to increase capital spending as the New Normal's emergent economic themes become more established and better understood. With greater clarity decision- makers will have increased confidence in implanting capital spending plans.

1.4 Industrial Production

Industrial production has also recovered. According to the Federal Reserve, the output of U.S. manufacturers, utilities and mines[8] grew at an annual rate of 3.7% in 2013.This was the strongest gain in U.S. industrial production since the initial rebound in 2010. In December 2013, this monthly estimate of output was 0.9% above its pre-recession peak made in December 2007.[9]

Figure 136 – U.S. Industrial Production Index



1.5 Consumer Spending

Consumers have also gained confidence as the recovery has gained strength. The Michigan Consumer Confidence index has rebounded from its recession lows and remained resilient, although it has failed to return to its pre-crisis levels,[10] as the overall mood of the country towards the economy remains muted.

In terms of hard dollars, however, national U.S. retail sales have completely recovered. In fact, retail sales have steadily gained to new, all-time highs. December retail sales in 2013 grew by more than 4% over December 2012. The President of the National Retailer Federation, Matthew Shay commented on 2013's holiday season that:

---

http://www.atkearney.com/research-studies/foreign-direct-investment-confidence-index

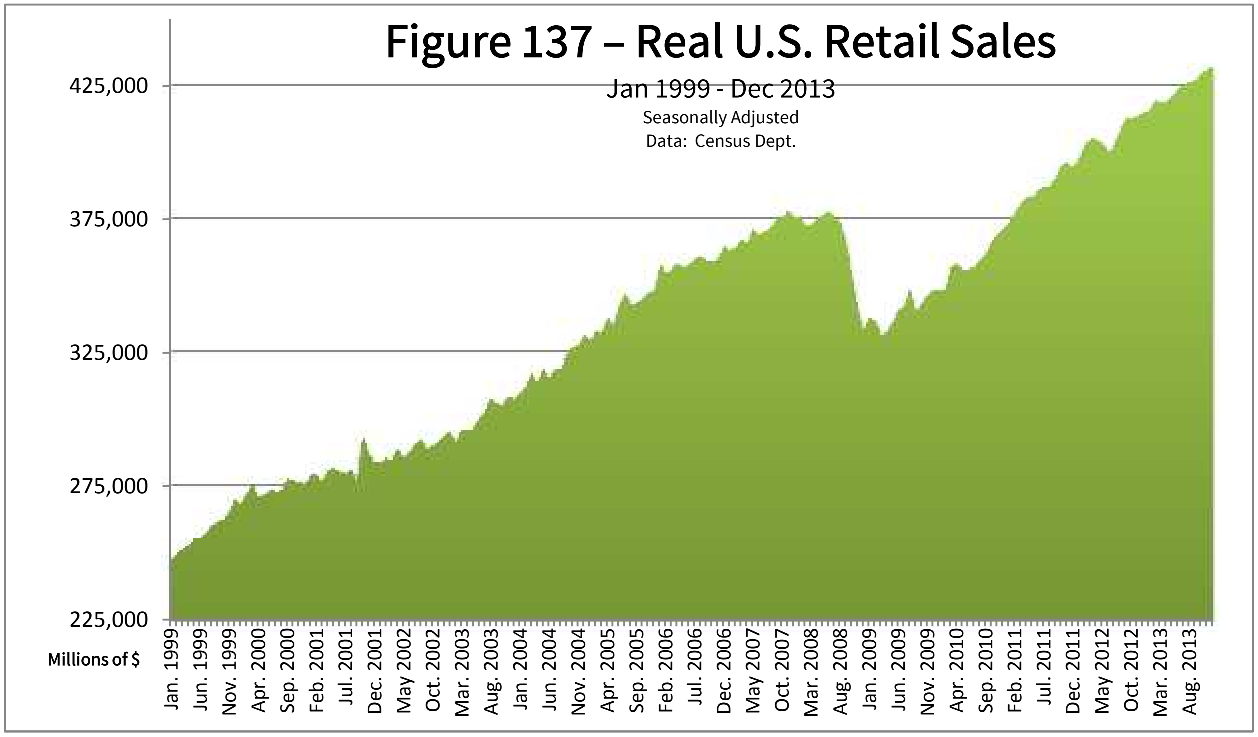
8 Which constitutes industrial production as measured by the Federal Reserve.

9 Industrial Production Notches Strongest Yearly Gain Since 2010 By SARAH PORTLOCK Jan. 17, 2014

10 In fact, the Index has not exceeded the peak it made in 2000.

Despite facing a truncated holiday season, severe weather, and shaky consumer confidence, retailers rose to the challenge and executed their strategies with proven success. Considering that retail sales are an important barometer when measuring the overall health of our national economy, this report provides a level of true optimism that the recovery is picking up steam, and once again, retail leads the way.[11]

The steady rebound of retail sales is welcome, and somewhat surprising given the lagging employment indicators.



1.6 Household Debt

The Great Recession was partly the result of a large credit binge amongst U.S. households. In the wake of the financial collapse, credit availability evaporated along with employment—forcing households to repair their balance sheets (even if through bankruptcy).

This balance sheet repair has manifested very quickly, and may have even run its course.

According to the Federal Reserve's House Debt Service and Financial Obligation Ratios data, the total debt service ratio is not merely decreasing—but it made a new record low in Q3 2013.[12] The debt service ratio for mortgages is also near a new record low, after rising sharply during the housing bubble. Low interest rates and less mortgage debt driven by cheaper home prices and (mostly) increased foreclosures have shrunk the mortgage ratio substantially and, with so many elements combing to foment this new environment, the mortgage debt ratio has shrunk with remarkable speed.

Consumer debt has also plunged to near record lows, along with the financial obligation ratio—which measures debt payments relative to disposable income.

---

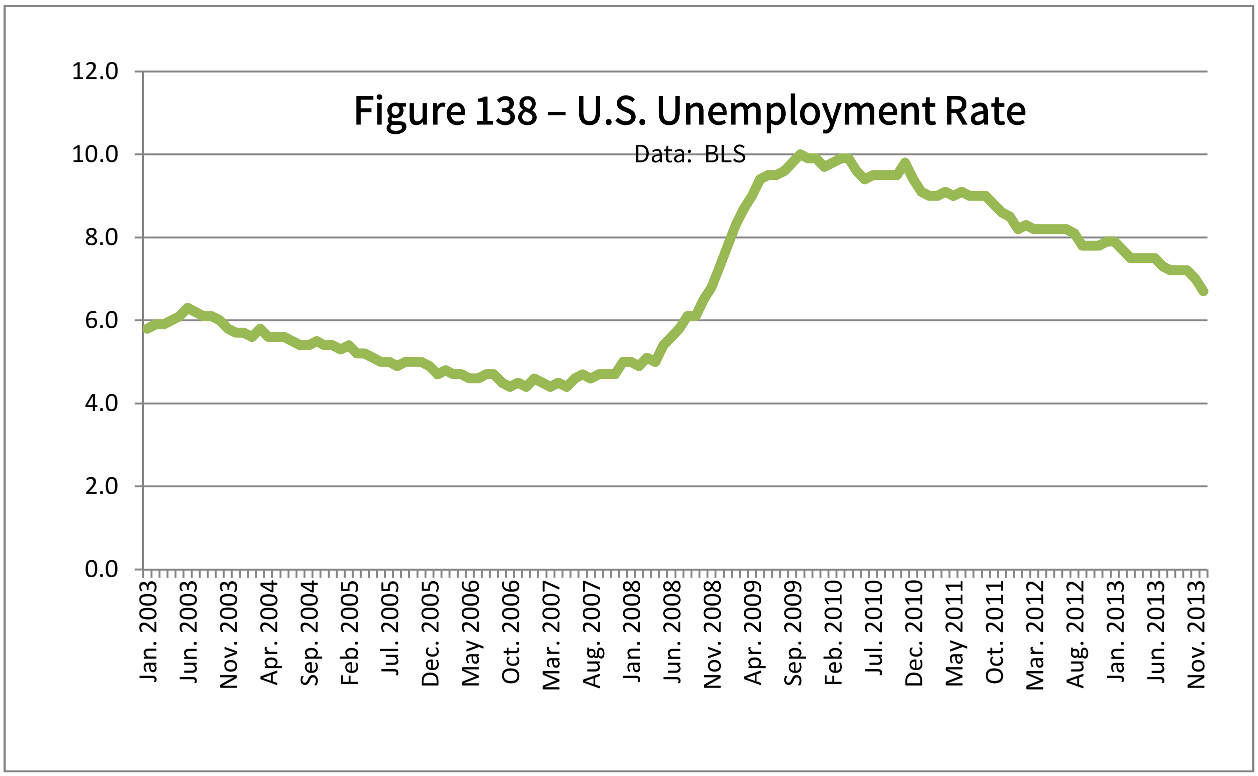
[11] http://www.usatoday.com/story/money/business/2014/01/14/commerce-department-retail-sales-december/4467571/
[12] Available on the Federal Reserve's website at: http://www.federalreserve.gov/releases/housedebt/default.htm

Overall, the data suggests household balance sheets and the general consumer are much healthier than in the last cycle; and thus consumer spending may prove more sustainable than during the housing bubble (when many homeowners used the equity in their home like a credit card)—even as it reaches new levels beyond the peak of the last cycle.

Going forward high debt levels should not act as a headwind restraining economic activity, at least in the near term.[13] Quite the contrary, debt levels may be bottoming implying that debt ratios could begin to widen again. Discussed further in the next section, below, should employment levels continue to normalize more jobs will put more cash in the hands of consumers, which increases their credit worthiness. The two factors increase both spending and confidence, which could combine to drive a virtuous circle of positive economic activity, begetting even more jobs.

1.7 Jobs

For all positives in the recovery to report in early 2014, jobs have been a disappointment. While steady progress has been made in the unemployment rate, it remains stubbornly high compared to most previous recessions, causing some observers to call this a "jobless recovery" so far. The labor force participation rate has also fallen to very low levels, meaning many of the unemployed have given up looking for work (and are no longer counted as being "in" the labor force)—although baby boomers are also retiring, so there should some natural shrinkage in the labor force participation rate in any event.



Wages have also failed to rebound substantially, continuing a multi-decade of stagnant wages in the U.S. Even though productivity continues to increase, real wages remain flat.[14] As noted above, corporate profits have rebounded substantial, but hourly wages grew by just 2 percent in 2013, five times slower than corporate profits.[15]

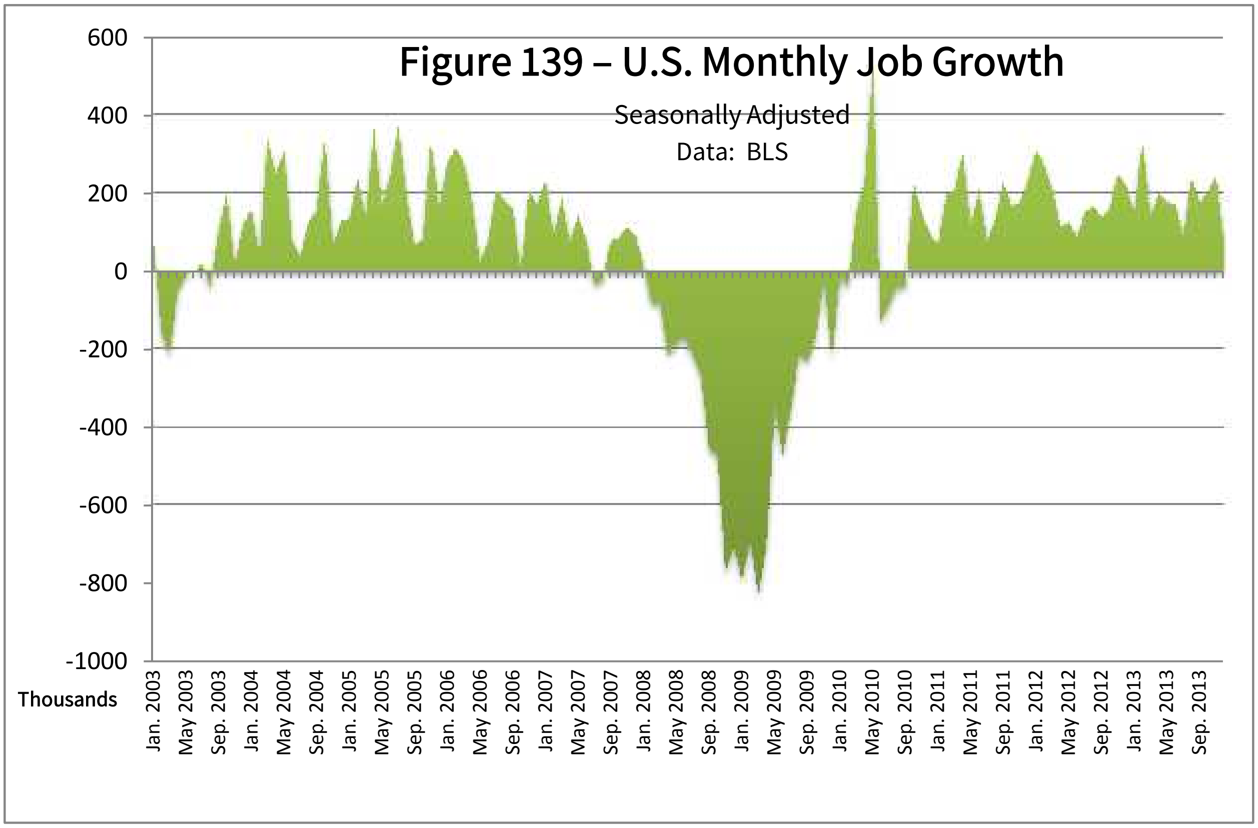
---

[13] Instead, tighter lending standards and less credit-worthy borrowers are often cited as reasons why lending has declined.

[14] Today's workers are the most productive laborers in human history.

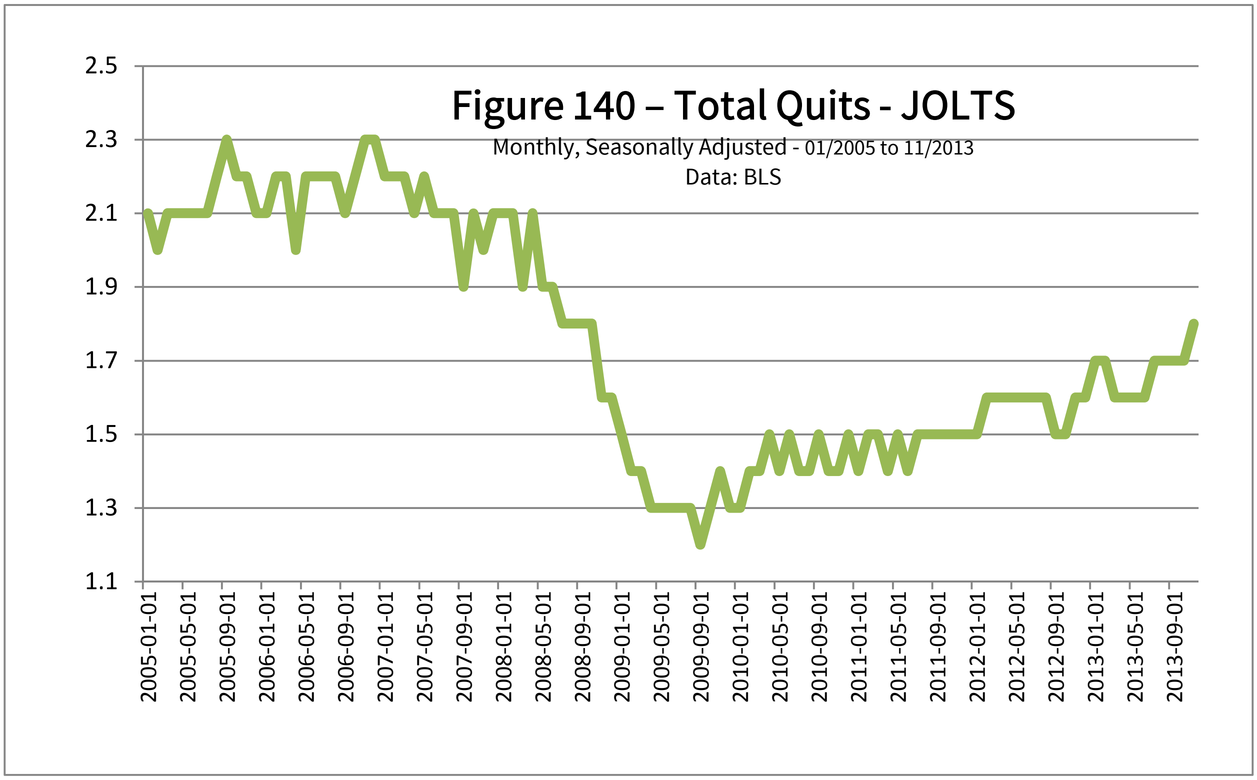
[15] http://www.businessweek.com/articles/2014-01-24/goldman-2013-corporate-profits-grew-five-times-faster- than-wages

Overall job growth has been steady, with nearly three years of consistent employment gains—although the pace of job growth has been disappointing:

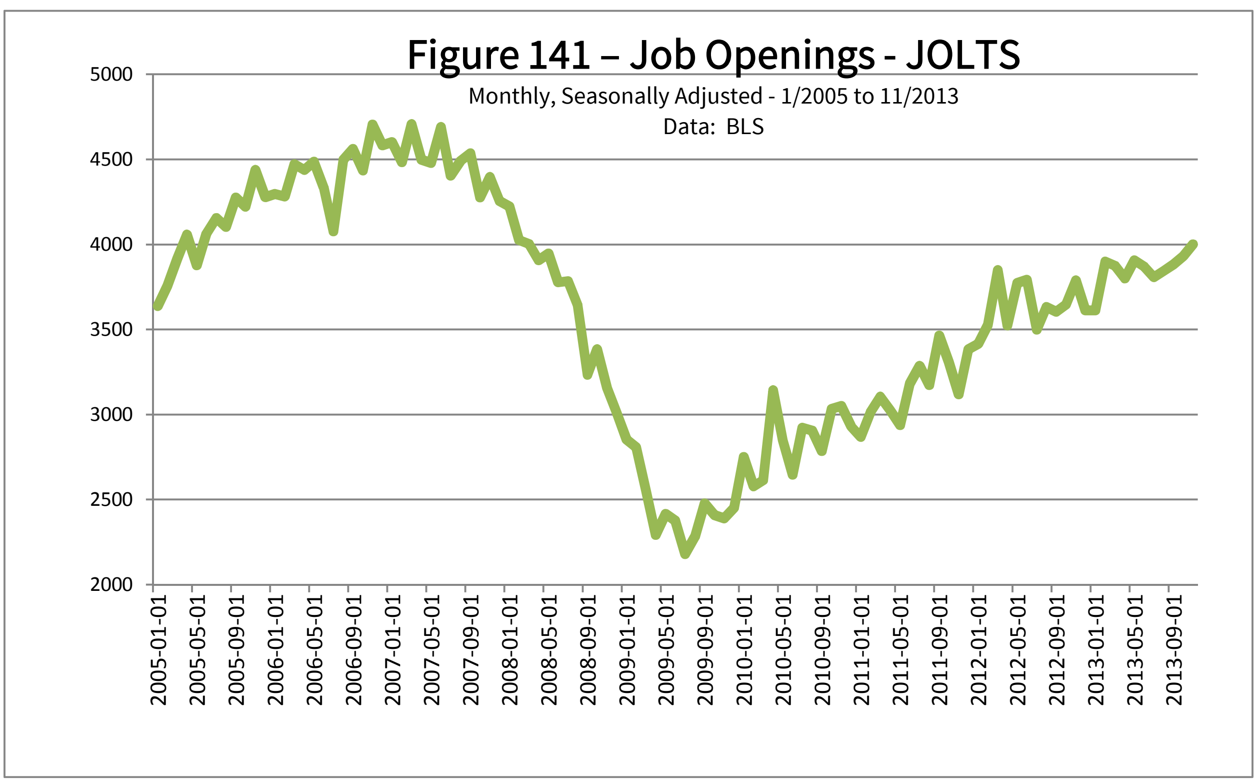


But there are signs the labor market is beginning to normalize. November 2013's Job Openings and Labor Turnover Survey (JOLTS report) recorded that 46,000 workers quit their job in the month of November—climbing to a new cyclical high. This is strong indicator of confidence in the labor force. During recessions, the number of people who quit their jobs decreases as the available of alternative employment options decreases, workers lose confidence and hunker down in the jobs they have to ride out the downturn. When the number of quits is rising, it is a positive indication that the level of worker confidence in the economy is improving.

Even closer examination of the JOLTS report (following page) shows that quits are happening in leisure and hospitality, accommodation and food service. These lower level sectors are important not only because they employ a lot of people, but as entry-level industries they provide the base for workers to move up the income ladder and into better paying jobs. Seeing high quit rates in these areas could be an even more positive indication worker confidence in the economy is improving— and that workers are moving up the income ladder. This may be a particularly good indication for Appleton, given the strong concentration of some of these same sectors, e.g. food service.



The November JOLTS report also showed an increase in the number of job openings— which has also risen to a new recovery highs, but fail to surpass the previous peak. Like the long term unemployed worker, a feature of this recovery is that many positions have remained open for long period. This has challenged employers to find candidates with the skills to fill positions and been the subject of much debate amongst economists and observers.



Appendix E - Emergent Macro Drivers

With economic conditions improving, and in many cases reaching new high water makers, we know the New Normal is not a permanent state of recession. So, we are left to ask: what's different this time.

1.1 Population and the Ascendant Asian Middle-Class

In the last century population exploded from roughly 1 billion to more than 6 billion. Today there are more than 7 billion. Large middle classes emerged in developed economies, notably in the United States, but much of the world's population lived in relatively poor economic conditions. In the next century, population will continue to grow—at a slower pace—but the global economy will shift from merely supporting a planet with billions of people living on it, to an economy supporting a planet with billions in the middle class.

At the moment the population of Asia's middle class is exploding, particularly in China. The rapid ascension of the Asian middle class was heralded at 2013's World Economic Forum as one of the ten most significant trends for 2014.[1]

China's economic reforms and rapid modernization has already made history by rescuing hundreds of millions from poverty, but after decades of progress it is ready to launch hundreds of millions into the middle class. If China's rapid growth continues, then an enormous middle class will emerge from the large share of the population living just below the threshold definition of the middle class.[2] Today there are roughly 500 million people living middle class lifestyles in Asia but this number is set to balloon to 1.75 billion by 2020 – more than a threefold increase in just seven years. [3] This remarkable demographic shift caused one the author of the World Economic Forum's note to observe "the world has never seen anything like this before; it's probably one of the biggest seismic shifts in history."[4]

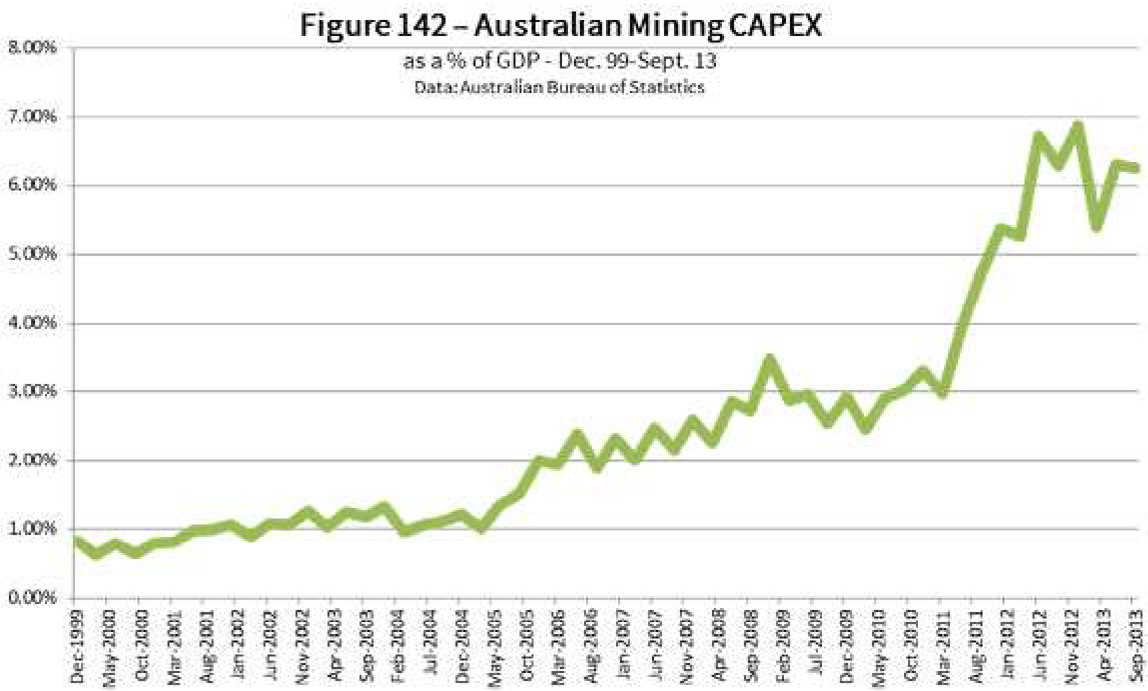
In 2015, the number of Asian middle class consumers is projected to equal the number in Europe and North America—for the first time in 300 hundred years by some estimates.[5]

Combined, this enormous global middle class will generate record demand and drive economic activity far into the future. To meet this demand, firms will require records amounts of capital, both intellectual and physical. This is good news for job seekers, commodity producers and businesses everywhere whether participating directly in the global supply chain or not. However, the scale of global aggregate demand will soon be so vast that it raises proportionately large environmental concerns—can the economic machine grow large enough to support the appetite of the emergent global middle class without causing proportionate environmental damage? Emblematic of these concerns is the large scale environmental pollution already manifest in China—made infamous during the summer Olympics in Beijing—has continued to increase to the point where it poses a clear and present health crisis to the nation, and a potential political crisis for Chinese leadership.[6]

More fundamental, the ascendant Asian middle class will put upward pressure on global commodity prices. A survey contributor to the World Economic Forum observed: "the inexorable growth of the middle classes in

[1] http://reports.weforum.org/outlook-14/
[2] i.e. The New Global Middle Class: A Cross-Over from West to East by Homi Kharas and Geoffrey Gertz, Wolfensohn Center for Development at Brookings Institute, page 9.
[3] Kishore Mahbubani, is Dean of the Lee Kuan Yew School of Public Policy at the National University of Singapore, http://reports.weforum.org/outlook-14/wp-content/blogs.dir/30/mp/files/pages/files/trend-8.pdf
[4] Id.
[5] i.e. The New Global Middle Class: A Cross-Over from West to East by Homi Kharas and Geoffrey Gertz, Wolfensohn Center for Development at Brookings Institute, page 2.
[6] Protests motivated by environmental issues are rapidly on the rise in China. See "China's Environmental Activists," Leslie Hook, Financial Times, September 20, 2013

Asia will put enormous stress on global resources."[7] Indeed, increased demand from China is already a well-documented—perhaps best observed in resource rich Australia, where the materials and mining sector has been rapidly expanding to provide raw inputs for the nearby Chinese economy. The chart to the right shows capital spending (CAPEX) in Australia's the mining and materials sector relative to its GDP. Not only did investment grow more than 7-fold over the preceding 15 years relative to the economy as a whole but it continued to grow into the Great Recession, arresting its acceleration only moderately halfway through 2008. With capital spending growth reaccelerating to new heights in the ebb of the Great Recession, the ascendant Asian middle class experienced the downturn as a mere speed bump as the Asian economies continued their seemingly inexorable progress.



1.2 "The Great Paradigm Shift"

But this investment boom in mining and materials supply capacity is not motivated by mere speculation that a massive middle class will emerge in the future, it is a response to current demand which is already raising commodity prices across the entire spectrum.

Jeremy Grantham, of Grantham, Mayo, Van Otterloo (GMO), developed an equal-weighted index for 33 major commodities with data more than a century old. GMO's index and research illuminated a fundamental shift in the pricing of the commodity complex, a phenomena GMO refers to as "the Great Paradigm Shift." GMO's analysis notes that commodity prices declined consistently for more than a century, as the industrial revolution matured. On average, prices fell by 1.2% per year adjusted for inflation before bottoming in 2002. The benefit of this 102-year compound annual decline of 1.2% has been a powerful tailwind for civilization, to say the least, making it possible to support today's large population and relatively high standards of living. Humanity's ability to consistently reduce the prices of commodities during a period of enormous population and economic growth

---

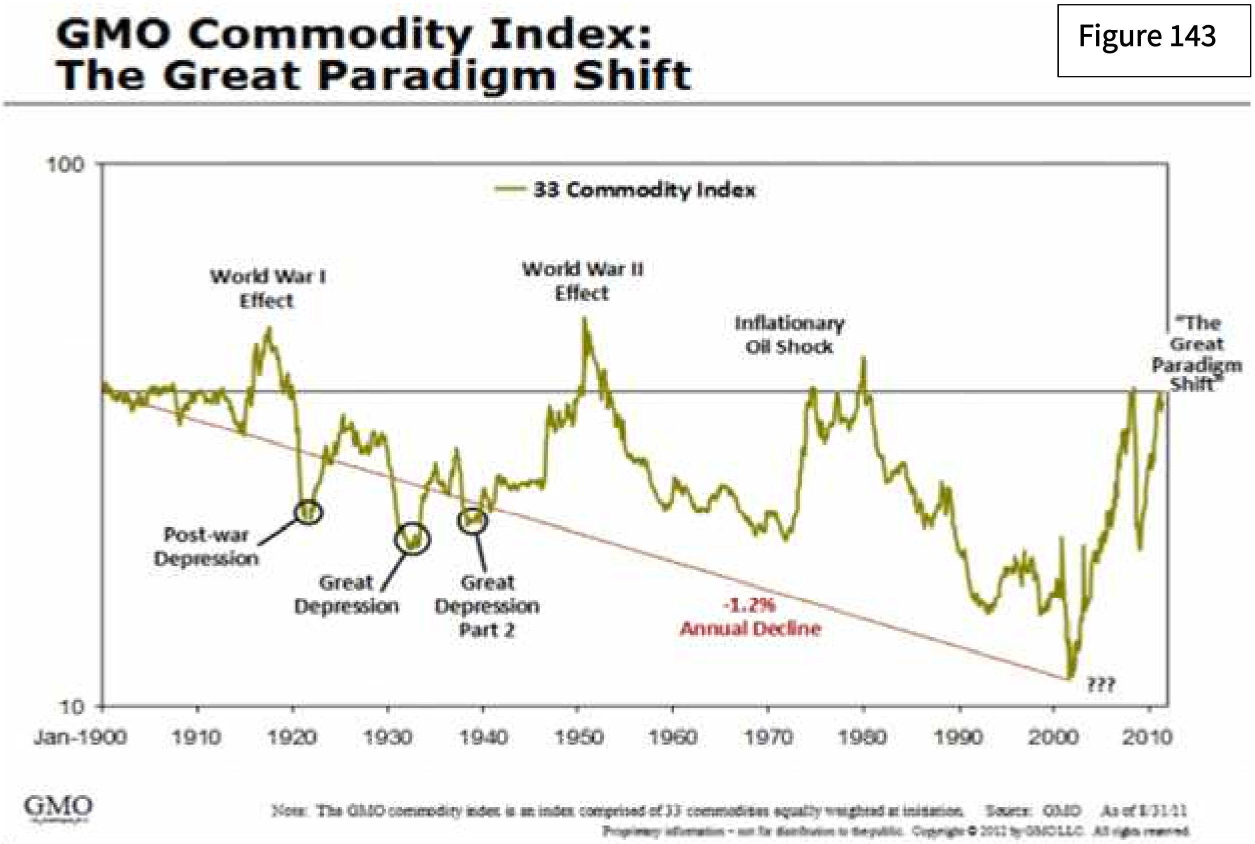
[7] http://reports.weforum.org/outlook-14/top-ten-trends-category-page/8-the-expanding-middle-class-in-asia/

is no small achievement and was won by the hard work and technological progress made over the last century, or the late industrial period. As GMO noted:

Despite digging deeper holes to mine lower grade ores, and despite using the best land first, and the best of everything else for that matter, the prices fell by an average of over 70% in real terms. The undeniable law of diminishing returns was overcome by technological progress– a real testimonial to human inventiveness and ingenuity.

But ever-falling input prices are not a fundamental law of economics; they are functions of supply winning the battle against demand in a given market at a particular time. Of course the balance often reverses and markets respond to demand drivers that push prices higher, sometimes for long periods i.e. during war time. To maintain downward pressure over time, new supply growth must exceed demand growth, or productivity gains must outpace the growth marginal costs, as examples.

Figure 143



GMO's identifies its "Great Paradigm Shift" when prices bottomed in real terms in 2002, when the century-long trend reversed suddenly and substantially.
But unlike previous trend reversals during WWI, WWII and the oil shocks of the 1970's—following the creation of the global cartel OPEC—the 2002 price pivot did come as the result of some unanticipated shock to markets. The price reversal was a result of structural growth in the world economy—Asia's ascendant middle class. GMO notes:

...the key differences from the past were... the sheer scale of China and India and the unprecedented growth rates of developing countries in total. This acceleration of growth affected global demand quite suddenly. Prior to 1995, there was... no difference in aggregate growth between the developing world and the developed world. [But soon after the turn of the century] growth has been 3 to 1 in their favor!

High growth combined with tightening supplies in some markets—particularly oil, discussed further below—produced "the most remarkable price rise, in real terms, ever recorded" in GMO's 110-year of 33 major global commodities.
In other words, measured by price, the ascendant middle class in Asia contributed to a price reversal more powerful than either of humanity's great wars. Unlike war, which creates economic activity and drives demand at the price of closed and ultimately negative feedback loops, the ascendant middle class in Asia is creating positive feedback loops driving growth throughout the global economy.

Also unlike the effects of war's negative systemic shocks, the positive economic shock created by the ascendant Asian middle class is not a temporary condition; rather it is a structural element growing economy that will persist far into the future.

1.3 Oil, The Outlier

Much of the 20th century's great progress is attributable to humanity realizing oil's full potential which revolutionized transit, agriculture, chemistry, medicine and myriad other sectors. Today oil doesn't just power the combustion engine, it makes the food we eat, the medicines we take and even the clothes we wear. In 1900 the world produced only 150 million barrels of oil per year, but by century's end that amount had increased 180 times to 28 billion barrels produced each year.[8] Perhaps the best name for the 20th century might be the "Oil Century."

This oil boom affected civilization in radical and fundamental ways,[9] and oil's incredible utility led to its ubiquity of use in today's global economy. Oil is not only different from other commodities in terms of its utility but also price terms. GMO's commodity index shows (above) an average commodity price decline in real terms over the last century, but GMO analysis notes that oil did not conform to this trend and appreciated in price over the last century.[10] Other research also shows tropical agriculture experienced the strongest and steepest long-term downward trend through the 20th century, followed by non-tropical agriculture and metals—but oil bucks the trend.[11] Oil's experienced a long-term upward trend, only interrupted temporarily during periods of the twentieth century.[12]

[8] Oil Market Report, The International Energy Agency (IEA)
[9] In 1900, only 13 percent of people lived in cities and today more than half are city dwellers—and world grain harvest quadrupled in the last century, allowing world population to also boom.
[10] Although it is important to note that oil prices in real terms remained relatively low and noticeably stable for much of the 20th century. As GMO's research points out, the price surges towards the end of the century and into the new millennium were substantial enough to give oil's entire 100 trend and upward bias.
[11] See United Nations, Department of Economic and Social Affairs, "Super-cycles of commodity prices since the mid-nineteenth century" by Bilge Erten and José Antonio Ocampo, February 2012, page 23. Available at: http://www.un.org/esa/desa/papers/2012/wp110_2012.pdf
[12] United Nations, Department of Economic and Social Affairs, "Super-cycles of commodity prices since the mid- nineteenth century" by Bilge Erten and José Antonio Ocampo, February 2012, page 23. Available at: http://www.un.org/esa/desa/papers/2012/wp110_2012.pdf

The fundamentals driving oils long-term uptrend include incredible demand growth like that experienced by other commodities over the same period, generally greater demand growth—but unlike most other

Figure 144 – U.S. Domestic Crude Oil Production

Peak to Trough- Jan. 1970 - Dec. 2008

Barrels per day - Data: EIA

commodities oil also experienced supply constraints. Sometimes these constraints were natural episodes of demand growth outpacing supply growth, other times artificial constraints were set by monopolies, e.g. OPEC, which held back market-ready barrels of oil to intentionally drive prices higher. It is important to note, however, that while OPEC was able to successfully shock oil markets twice in the 1970's,[13] the opportunity to do so only manifested after real supply-side fundamentals deteriorated in non-OPEC nations, specifically in the United States. The world's largest oil consumer, then and now, the U.S. had also been its largest oil producer—but its domestic oil production peaked in 1970.[14] In November of that year, the U.S. recorded oil production at a rate more than 10 million barrels per day and then declined to a low of 3.9 million barrels per day in September of 2008; a 60% decline.

In the decades that followed peak oil production in the U.S., supply-side fundamentals of the conventional oil market have continued to deteriorate worldwide. Oil is a finite, non-renewable resource. There has not been a discovery of a supergiant oil field in more than 50 years, and many super giants in production have been pumping as many decades or more, with many in decline—some in collapse. For example, production peaked in North America's largest supergiant field—Canterell, in Mexico— in 2006. By the 2008 oil shock, Canterell's production was in rapid decline and fell more than 30% for the year.[15] In 2014 its production is project to fall below 400 thousand barrels per day, after peaking at more than 2.1 million barrels per day. The second-largest

[13] In 1973 and 1979.

[14] As did the oil production in many nations around the world.

[15] Common in fields using injection technology, like Canterell and Gwhar, which pumps nitrogen saltwater or other liquid underground to increase pressure and elevate flow rate. This maintains production at high levels for a time a time but also leads to substantial declines eventually, known as the "overshoot and collapse."

oil exporter to U.S., Mexico's overall production is also in decline and recently moved to denationalize its large state-owned oil company, PEMEX, once a source of national pride, in a desperate attempt to prevent Mexico from becoming from a net-oil exporter to an oil importer.

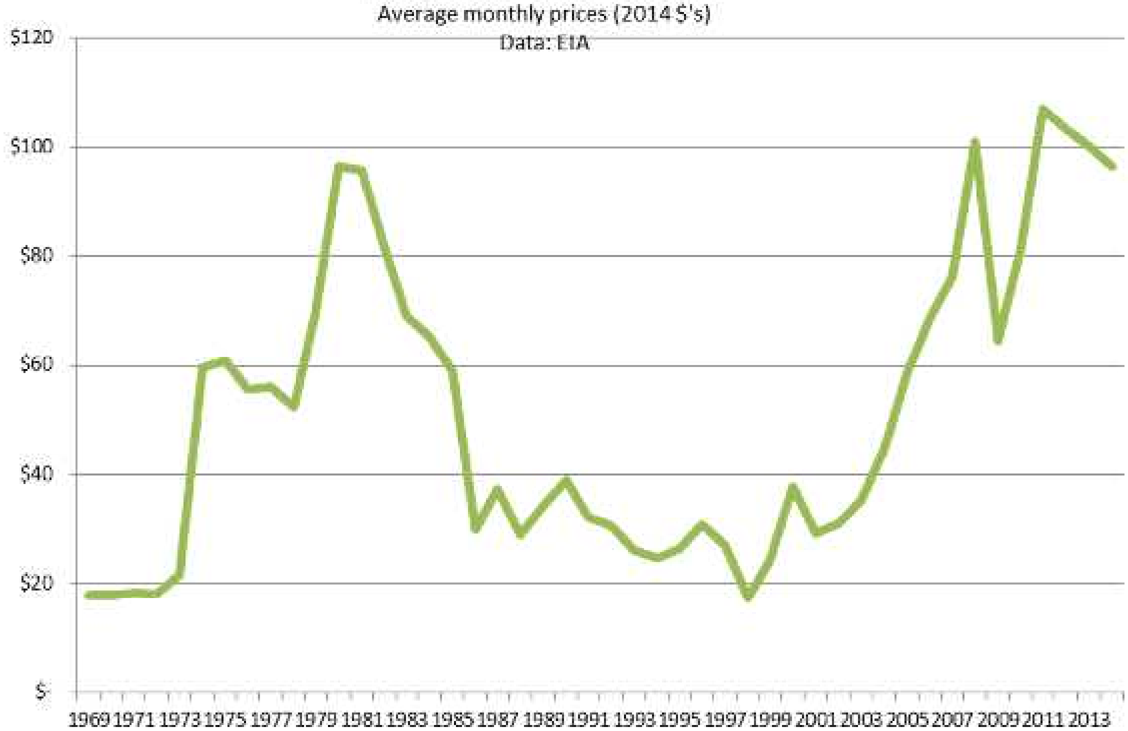
Generally speaking, total discoveries of conventional oil deposits around the world total are approximately 2 Trillion barrels, of which 1 Trillion has already been produced. The first Trillion barrels recovered was the easy to get to, cheap oil: "oil that's found on shore or near to shore oil close to the surface and concentrated in large reservoirs; oil produced in friendly, safe and welcoming places."[16] The ease to develop some of these oil deposits was depicted famously in the introduction to the television show The Beverly Hillbilly's, in which the patriarch of the family discovers a major oil deposit by firing his rifle, missing his target but gets rich by discovering a large oil field just below the surface. While pure fiction, it is symbolic of how efficient these resources were to produce—profitable even with basic, 19th century technology. Indeed, the ancient Greeks likely resourced surface oil deposits to produce their legendary weapon: "Greek Fire."

The last Trillion barrels of conventional resources, however, is "oil that's buried far offshore or deep underground; oil scattered in small, hard-to-find reservoirs; oil that must be obtained from unfriendly, politically dangerous, or hazardous places."[17] As such, the cost to recover these resources is much higher than the first half of conventional deposits. According to the Wall St. Journal (WSJ), costs experienced by oil majors are rising substantial. Despite spending more than $120 billion in 2013 to increase output—roughly the same

Figure 145 – Real Oil Prices

Average monthly prices (2014 $'s)

Data: EIA



amount spent putting a man on the moon, adjusted for inflation—by Chevron, Exxon and Royal Dutch Shell and yet their production is still down. They have combined to spend more than $500 billion dollars over the last five

[16] Michael T. Klare, "Entering the Tough Oil Era," 16 August 2007, Mother Jones available at http://www.motherjones.com/commentary/tomdispatch/2007/08/entering_tough_oil_era.html.
[17] Michael T. Klare, "Entering the Tough Oil Era," Mother Jones 16 August 2007.

years but are still unable to increase production, and thus unable to respond to nor take advantage of historically high oil prices.[18]

But costs are rising faster than prices, and oil majors are struggling to finance the high-startup costs necessary to develop the "mega projects" required to profitably produce the more difficult conventional resources that remain.[19] Similarly, rising prices and new technologies have made feasible several more trillion barrels of non-conventional petroleum resources, but they too require higher costs. As the Wall St. Journal also reported: "We are beginning to live in a different world where getting more oil takes more energy, more effort and will be more expensive."[20]

Indeed, the totality of these supply and demand factors combined to put large upward pressure on oil prices. In what some called the "third oil crisis," oil prices began rising in the new millennia as demand increased (discussed above) and geopolitical stability deteriorated post-9/11, particularly in the Middle East. In July 2008, just a few months before U.S. oil production reached an all-time low, the price of oil closed at a new all-time nominal high of $145.31 for barrel of West Texas Intermediate (WTI) crude oil on the New York Mercantile Exchange.[21] Most importantly, oil prices rose to new heights in real terms (SEE Figure 4)—exceeding the price appreciation of the 1970's oil shocks.

But unlike the first two oil shocks, which were predicated by unnatural monopoly manipulation, the new millennium's oil crisis was driven by natural economic conditions, e.g. the ascendant Asian middle class and deteriorating conventional oil supplies. So, unlike artificial shocks caused by monopolies or war— both temporary conditions—this shock was driven by fundamentals and likely to persist far into the future, if not a permanent, structural features of the New Normal. This caused great alarm among some commodity analysts and economists, as advocates of the "Peak Oil" theory warned worldwide oil production had reached its zenith, or would soon, and begin a terminal decline of lesser and lesser oil production that could not hope to support a global economy with billions of people living middle class lifestyle.[22] Indeed, the U.S. government was concerned enough to commission a special report concern the potential threat and either avoidance or mitigation of it.[23]

While the danger of Peak Oil was as real as the demand growth and supply degradation manifesting simultaneously, the alarmism from some analysts ultimately proved unwarranted, discussed further below. Importantly, the fundamentals driving oil prices to new highs continue to take shape and will seemingly persist, as structural rather cyclical features in the economy. This will maintain upward pressure on oil prices for the foreseeable future, creating a new floor of high costs on perhaps the most important commodity to the global economy. The strength of this trend can be observed by noticing oil's strong rebound from the 2008 financial crisis low of ~30 dollars, quickly recovering and sustained prices near $100; notwithstanding the Great Recession, as shown in Figure 4.

Oil's rise in the new millennium barely paused for the Great Recession. Its rebound has been so strong that it has risen to make new highs in real, inflation adjusted terms—in defiance of financial panic and subdued growth. Apart from the odd shock caused by war, oil prices were generally steady at around $16 per barrel for its first 100 years as a commodity. But this old watermark seems clearly lost to nostalgia, as these fundamental structural adjustments reset oil prices much higher.

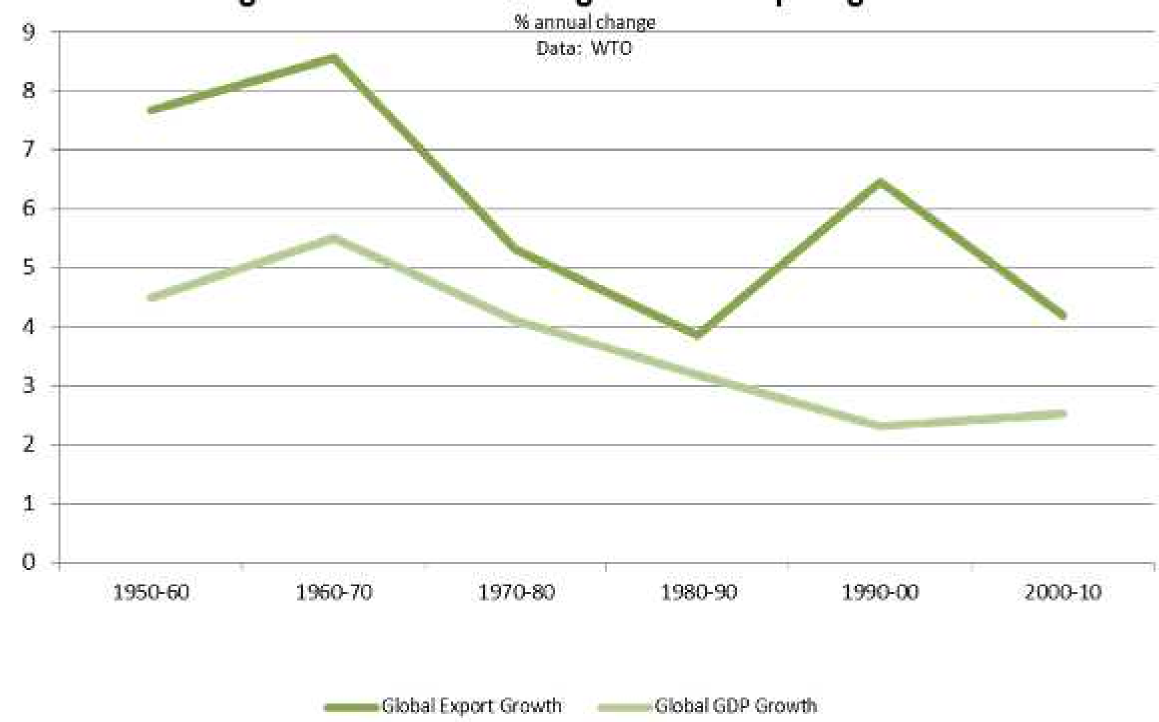
---

[18] "Big Oil Companies' Big Projects Struggle to Justify Soaring Costs" by Daniel Gilbert and Justin Scheck, Wall St. Journal January 29, 2014.
[19] Some hundreds of miles offshore, miles below ground, underneath a mile of seawater.
[20] The WSJ quoted Tad Patzek, chairman of the Department of Petroleum and Geosystems Engineering at the University of Texas at Austin in "Dream of U.S. Oil Independence Slams Against Shale Costs" By Asjylyn Loder Wall St. Journal Feb 26, 2014.
[21] This was the closing price on July 3, 2008; however intra-day trading surpassed $148 per barrel.
[22] Such as the Late Matt Simons, author of Twilight in the Desert.
[23] Known as the Hirsch Report, available on the DOE website here:

1.4 The High Impact of High Oil Prices

The effects of stubbornly high oil prices are already rippling throughout the global economic system. Oil is the lifeblood of truly global economic system, fueling a worldwide logistics system much like real blood delivers nutrients to the human body. Because oil is so heavily relied upon in so many different economic activities, when prices rise it acts like a tax on the entire global economy. The effect is rising prices, or inflation, which can be experienced indirectly by goods with no direct relationship to oil itself—such as organic chicken eggs, for example, because they are mostly likely trucked from the farm, to a market, before being purchased and ultimately eaten by the final consumer. Indeed, more than 90% of goods delivered in the U.S. are conveyed at some point in their journey via truck.

Figure 146 – World GDP growth vs. Export growth



Rising transportation costs cause large impacts on economic conditions because much of the modern global economy we experience today was built on the expectation for low transportation costs, particularly cheap crude oil prices.[24] As Chapter 9 of the Appleton Comprehensive plans notes:

One of the most important of these [long term] trends has been the rising globalization of the economy. Supported by low shipping costs, favorable trade agreements, and advancements in telecommunications, an ever number of products are flowing freely across national borders. While this has expanded markets for some products, it has also made some Appleton-area industries, such as paper and machinery manufacturing, vulnerable to low-wage foreign competition.

As a result of low fuel prices in the last century, global trade ballooned and supply chains grew longer and more complex. In the latter half of the last century, global trade volumes grew at a rate of roughly double the average global GDP.[25]

---

[24] Because prices remained low and stable for most of the early parts of 20th century, see above footnote 26. Until the oil shocks of the 1970's, a harbinger of things to come, prohibitively high oil prices were generally unknown to the economy except during wartime.

To meet growing demand, industries such as agriculture developed massive global systems to supply fruits and vegetables year-round to rich markets in developed economies. No longer would civilization's diet be bound by the seasons—thanks to low transportation costs blueberries can be found on store shelves across North America, having been flown up from large operations in South America. As Michael Pollan noted:

What was once a regional food economy is now national and increasingly global in scope— thanks again to fossil fuel. Cheap energy— for trucking food as well as pumping water— is the reason New York City now gets its produce from California rather than from the "Garden State" next door, as it did before the advent of Interstate highways and national trucking networks. More recently, cheap energy has underwritten a globalized food economy in which it makes (or rather, made) economic sense to catch salmon in Alaska, ship it to China to be filleted and then ship the fillets back to California to be eaten; or one in which California and Mexico can profitably swap tomatoes back and forth across the border; or Denmark and the United States can trade sugar cookies across the Atlantic. About that particular swap the economist Herman Daly once quipped, "Exchanging recipes would surely be more efficient."[26]

The same has been true in many industries besides agriculture, such as textiles, electronics and—as in Appleton—paper and machinery manufacturing.

[25] See below, Figures 146 and 147
[26] Michael Pollan, "Farmer in Chief," New York Times 2008

1.5 The Oil Dependence of Modern Agriculture

The world grain harvest has more than tripled since 1950. Just between 1950 and 1973 farmers doubled the worldwide grain harvest. In this short 23 year period farmers grew humanity's agriculture production by as much as they had managed to achieve in the previous 11,000 years, from the beginning of civilization when agriculture was born up to the mid-twentieth century. Prior to 1950, agriculture gains were achieved primarily by expanding the amount of acreage in production. From 1950 on, however, 80% of harvest growth has come from raising the productivity of land already in production, with much this rise attributable to oil consumption or petroleum-based technologies.[27]

Starting in 1945 the "Green Revolution" raised grain yields from less than 1.1 tons per acre to close to 2.5 tons; and increased yields at a rate of 2.1 percent per annum thereafter. It did so through the systematic application of science to agriculture and food production on an industrial scale. The historic productivity achievement was driven by four principal causes: (1) expansion in the use of machinery, (2) a near-tripling of the world irrigated area, (3) a 10-fold growth in world fertilizer use, and (4) the creation of high-yield seed varieties.

But modern agriculture is very energy-intensive. Three of the four trends principally responsible for per- acre yield increases noted above are dependent on oil. Engines use gasoline or diesel fuel and irrigation pumps use diesel fuel, natural gas, or electricity—to say nothing of the construction or manufacture of the machinery or irrigation systems themselves. Today natural gas is used to synthesize the building blocks of fertilizers and accounts for as much 20 percent of all U.S. farm energy use. Another 19 percent of farm energy use is for irrigation. These are substantial proportions, but in resource-constrained areas irrigation can dominate energy usage, such as parts of India where water tables are in rapid decline and "over half of all electricity is used to pump water from wells."[28]

Beyond production, agriculture is even more oil intense because the grain harvest must be transported from production areas across the globe to the dinner tables—often from one side of the world to the other, and from farms in developing countries to dinner tables in developed countries. By some estimates the "energy used in the food system to move goods from farmer to consumer is equal to two thirds of the energy used to produce the food" in the first place.[29] Part of the explanation is the new and growing category shipping fresh fruits and vegetables over vast distances by air. Unlike the ancient wheat trade or even the modern corn or soybean trade, the Chilean blueberries on Appleton grocery shelves in the dead of winter were not only flown 5,000 miles on cargo planes to the northern hemisphere, but they were flown in refrigerated planes, and then trucked to their final destination in refrigerated trucks. Few economic activities are more energy-intensive, and yet the deep pockets of the developed world are willing to pay a premium to enjoy their preferred breakfast fruit in January, be it a Banana, Blueberry, or Strawberry.

Packing and packaging for all this food also requires a lot of energy, perhaps as much as 7 percent of food system's total energy needs.[30] For some product categories it is common for the energy required to package the product is greater than the energy required to produce the foodstuffs it contains within the package. So, for example, there's only a few cents worth of grain in a box of breakfast cereal—or, as the Center For American Progress's report on agriculture in the 21st century noted: "An empty cereal box delivered to the grocery store would cost the consumer about the same as a full one."[31]

As Michael Pollan summarized:

Chemical fertilizers (made from natural gas), pesticides, (made from petroleum), farm machinery, modern good processing and packaging and transportation have together transformed a system that in 1940 produced 2.3

---

[27] Earth Plan B 3.0
[28] Earth Plan B 3.0, Chapter 2
[29] Earth Plan B 3.0, Chapter 2
[30] Earth Plan B 3.0, Chapter 2
[31] Center for American Progress, Resources for Global Growth: Agriculture, Energy and Trade in the 21st Century (Washington, DC: 2005)

calories of food energy for every calorie of fossil-fuel energy it used into one that now takes 10 calories of fossil-fuel energy to produce a single calorie of modern supermarket food."[32]

This international vending machine can deliver out of season foods to consumers able to afford it, but it requires a lot of "Food Miles" to do so.[33] The rise of cheap transportation energy allowed the total volume of traded foodstuffs, and therefore food miles explode. In the last few decades of the 20th century the value of the international food trade tripled, the tonnage in trade quadrupled, and food miles in the United States and Great Britain grew by 25% and 50% respectively.[34] At the height of the third oil shock, in 2008, produce trucked to Chicago traveled an average distance of 1,528 miles.[35]

1.6 When Prices Spike, the International Vending Machine Breaks Down

The scale of the infrastructure required to sustain this type of far-flung food trade is enormous, and it requires a lot of oil to keep the system running.[36] This makes it systemically vulnerable to higher oil prices, and negative price shocks can put huge stress on the system—causing market interruptions or outright failures. In today's globally integrated economy, the consequences of such failures can be extreme.

For example, in 2008 when oil prices last spiked higher, agriculture commodities followed oil prices higher. There were "tortilla riots" in Mexico, disputes over food rationing in West Bengal and protests over grain prices in Senegal, Mauritania and other parts of Africa."[37] In Yemen, there was a children's march organized to highlight their hunger. Pakistan was forced to deploy the military to defend its grain reserves from looters and smugglers.[38] On the whole, more than 30 countries experienced food riots and related civil unrest in 2008 including Cameroon, Senegal, Ivory Coast, Mauritania, Burkina Faso, Cote d'lvoire, Egypt, Morocco, Mexico, Bolivia Yemen, Uzbekistan, Bangladesh, Pakistan, Sri Lanka, and South Africa. The government of Haiti was even brought down by food rioting in April.[39]
Many analysts identify high food prices, which persisted even after oil spike and collapsed in 2008, as the cause of the Arab Spring, when a fruit vendor in Tunisia lit himself ablaze in protest (in 2010) and in doing so ignited popular uprising which then spread to nation's across the Middle East— stretching from Morocco and the Atlantic in the West to Pakistan and the Himalayan Mountains in the East. As Benita Leusher of the World Food Program reminds us: "A hungry man is an angry man."[40]

The relationship between high food prices and low political stability is nothing new—but today's interconnectedness helps explains how the impacts can be so widespread. Thanks to globalization, developing nations could rely on cheap grain imports from developed nations, such as the U.S. whose grain belt produces far more grain than the U.S. itself could demand. Farmers in developing nations could thus abandon long-held agricultural traditions, with which they carved out meager, but consistent subsistence living—in favor cash crops for export (such as bananas, sugar, cocoa, even flowers). This shift was generally encouraged by economists and organizations such as the World Bank and UN, using the logic of Ricardo's specialization theory, whereby every nation should produce the things it produces best and import things it does not produce very well from nations who produce those goods better.[41] So, the U.S. focuses on growing corn while Cameroon focuses on growing bananas and cocoa, a dynamic which produces more of both, but also means that that more

[32] Micahel Pollan, "Farm in Chief", New York Times, October 12, 2008.
[33] The distance food travels from producer to consumer. "Food miles" was coined in 1990 by Andrea Paxton.
[34] Brian Halwell, "Homegrown"
[35] Gerry Smith, "Support Your Local Farmer" Chicago Tribune July 6 2008.
[36] Of course, even when operating optimally, our food system still leaves billions either malnourished or living with high food insecurity (even within developed economies, such as the U.S.).
[37] Kate Smith and Rob Edwards Sunday Herald, "2008: Year of the Food Crisis" November 11, 2008
[38] "The Global Grain Bubble" The Christian Science Monitor, January 18, 2008.
[39] Joseph Guyler Delva and Jim Loney, Haiti's government falls after food riots, Reuters, April 12, 2008 Available at: http://www.alertnet.org/thenews/newsdesk/N12217781.htm
[40] Comments made on television to CBS News. Available at: http://www.youtube.com/watch?v=tAtyjrehu94
[41] Making the entire system more efficient.

than two-thirds of the world's developing nations are net food importers. These nations must be able to purchase grain in international markets and the ships must arrive in order for them to survive, as Cameroon could not survive on a diet of bananas and cocoa very long.[42]

The economic conditions that culminated in the shocks of 2008 tested a global supply chain that was streamlined and stretched, and like a rubber band snapping backwards we got a glimpse of just how fragile the system is and violence can result. When prices spike the international food vending machine can break down and the ripple effects are far reaching because hundreds of millions of people rely on consistent food imports to survive. In this globally integrated system there is little shelter in any one corner of the globe from production delays, supply disruptions, crop failures or ecological disasters in another corner. The modern food system, for example, is stretched so thin that the Butterfly Effect has awesome power, as 2008 evidences.

Going forward, as discussed above, the ascendant middle class in Asian will continue to develop and demand more foodstuffs. China is already a net food importer, but soon the Chinese butterfly will become the Chinese dragon, with much larger wings to power the global food system; indeed the entire global economy.

[42] They also rely on developed nations buying their exports, which they do less of during recessions. Consumers trade down products during recessions, buying less high-priced fruit and cocoa. This produced a double-whammy for many nations in 2008, who's export prices went down while their import costs went up.

Appendix F - Globalization's Rubber Band Snaps Backwards

Because the modern global economy relies so heavily on oil, it can be susceptible to negative shocks produced by rapidly rising prices or supply shortages. Each of the last major oil shocks produced recessions, causing stress and dislocation in the global supply chain.

Prices matter; and in a global economy whose growth was fed for decades by low oil prices, higher transportation costs matter a great deal. If transportation costs rise, then the economics of today's massive and complex global supply chain gets squeezed, margins are reduced and profits are constrained or eliminated altogether. As prices increase the general cost of doing business increases across the entire economy, previously productive economic activity can become unproductive, even counterproductive. Imagine oil as the Atlas that lifted civilization onto its shoulders to new heights of prosperity and modernity in the 20th century, but if Atlas starts charging higher prices than the effects are widespread and everyone starts thinking of doing business differently, if they can afford to do business at all.

While prices matter, expectations also matter. Expectations of future prices can drive economic activity independent of current prices, and are even priced separately in futures markets. So, even if prices are high today, if expectations are that the conditions driving high prices will be temporary, then rational economic actors may wait until low prices return. When OPEC's second embargo ended in 1979 prices began to normalize; unaffected by artificial constraints. This downward price pressure was assisted by the discovery of substantial oil deposits in Prudhoe Bay, Alaska—which increased domestic production at an important time. Because high prices had been the result of artificial monopoly manipulation and real conditions seemed to be improving (thanks to Prudhoe Bay), long run expectations for oil prices returned to low levels. Fuel efficiency actually declined in the 1980's, as car makers and consumers forgot about high prices and reverted back producing and preferring "gas guzzlers."

So, the oil shocks of the 1970's did not change permanent behaviors and economic activity returned to the previous status quo which depended on cheap transportation prices to support long global supply chains. In the wake of the shocks, the U.S. economy suffered from twin recessions in the early 1980's— and as activity picked up through the decade, the recovery came but many manufacturing jobs went. Decision makers relied on consensus expectations that oil prices and transportation costs would remain low. As a result, capital and labor moved freely around the globe, gravitating to the lowest cost geography. After all, if you could cheaply ship from everywhere, then you could manufacture anywhere.

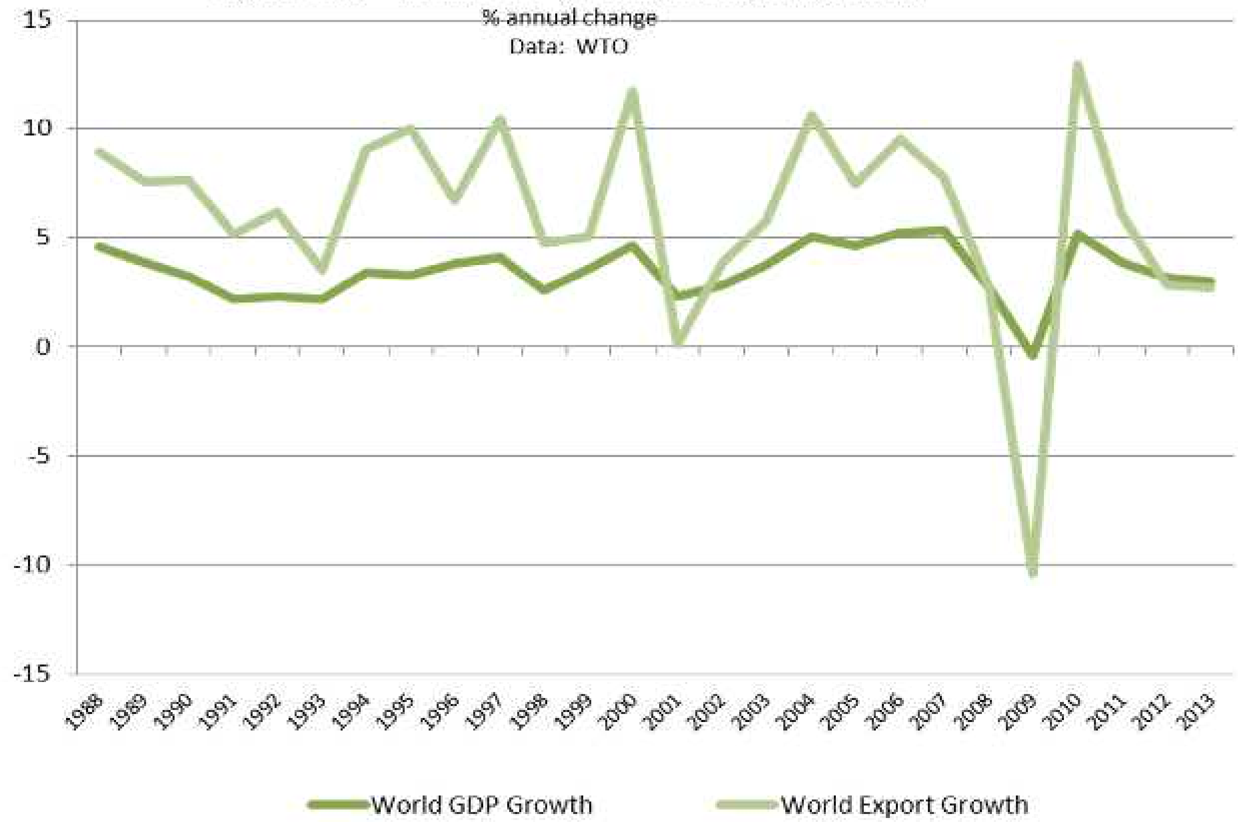
If long term oil prices in real terms have indeed made a structural adjustment higher, as indicated above, then price pressures experienced only temporarily in the past will instead persist, and continue to stress the globalized economy. Those value chains particularly sensitive to transportation costs will fall under severe pressure and many will be completely dislocated. After all, most jobs could only be outsourced to geographies with cheap labor if the benefit of that lower labor cost is greater than the increased transportation costs required to manage a global supply chain.

Unlike the shocks of the 1970's, the general consensus expects higher oil prices to persist—as they are not the result of artificial and temporary conditions, rather physical and market conditions. So as oil prices have rebounded strongly in defiance of the Great Recession's lackluster growth, expectations of future oil prices have also firmed very strongly. Many less productive and unprofitable value chains have already been shutter or redeployed. Many more will fail. Decision makers worldwide are starting to think differently, how to unwind inefficient and ineffective value chains and explore new opportunities better designed to profit in the New Normal.

1.1 Expectations Are Different

Along with real oil prices, expectations for future oil prices have experienced a structural adjustment. The future is hard to predict, but it appears that higher transportation costs are here to stay. As a result, decision makers have already begun the process of adjusting and adapting global value chains. This adaptation appears to be happening very quickly. Notice Figure 147 – after growing at more than twice the rate of average global GDP for most of the last century, global trade volume growth is starting to slow down.

Figure 147 – World GDP growth vs. Export growth



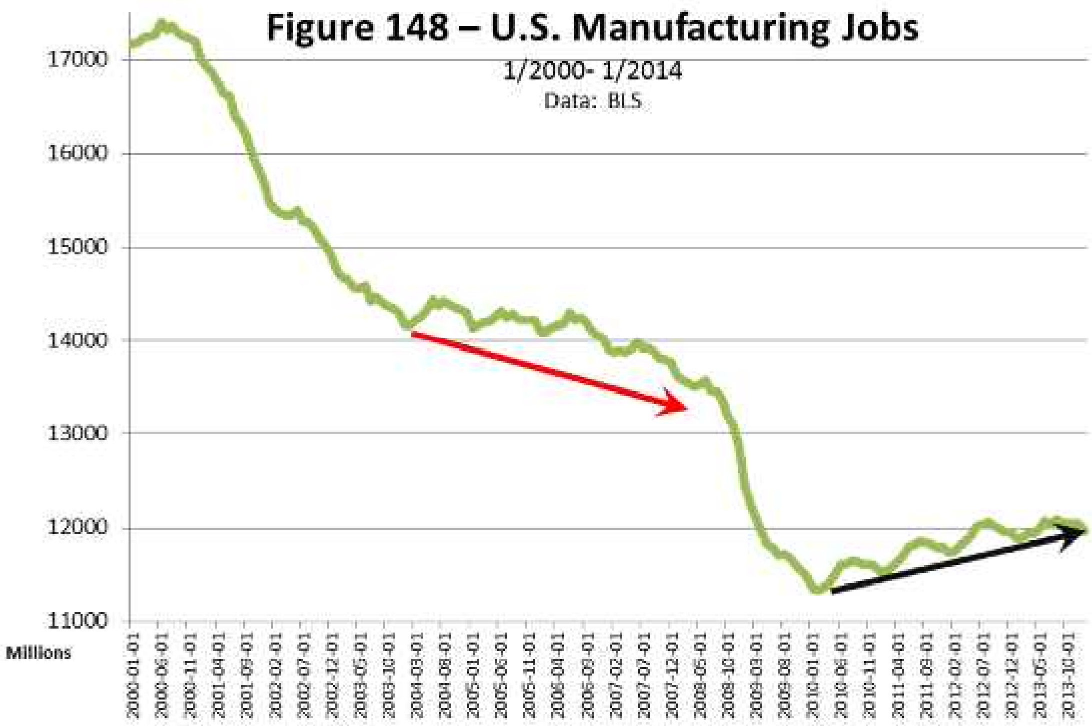
Also notice in Figure 147 that after rebounding very strongly in the initial recovery from the most recent recession, world export growth has flattened out. For the first time in many years export growth has slowed below GDP growth. Most recently, the Netherlands Bureau for Economic Policy Analysis (CPB)[1] reported the volume of world exports and imports in March was 0.5% lower than in February and trade flows were down 0.8% in the first quarter of 2014 as a whole.

It is hard to overstate the implications of this long-term trend change in world export growth from higher-than-global-GDP growth to below average global GDP growth, should it continue forward. And while a very recent development, this is strong evidence that the globalized economy is undergoing substantial structural adjustments. This hard pivot away from global growth and back towards regional and local development will have dramatic consequences on the economic competitiveness of most, if not all, cities and regions.

[1] The CPB aggregates measures of imports and exports for 96 countries around the world, plus sub-Saharan Africa. It provides monthly update, and is the most up-to-date measure of trade flows available.

1.2 Return of Manufacturing Jobs

After peaking in 1979,[2] manufacturing employment in the U.S. experienced a long term structural decline. Cheap transportation costs lured manufacturing jobs away from the U.S. in each recession over that time—so while the economy would recover, there would be less manufacturing jobs each cycle.



The current recovery, however, has broken this trend. Manufacturing jobs are returning. Notice in Figure 148 that manufacturing jobs bottomed during the depths of the recession in 2009—but have marched steadily higher ever since (indicated by a black arrow). This contrasts sharply with the recovery from previous recession, following the dot com bubble, in which the economy recovered strongly—indeed many sectors overheated, such as construction, housing, etc.—but manufacturing jobs were consistently lost (indicated by a red arrow).

Some of these jobs are newly created, but others are jobs previously outsourced and returning to the U.S., a process known as "re-shoring." The structural changes in long-term expectations, discussed above, include increasing agreement amongst decision makers that the U.S. (and North America) provides optimal locations for business activity. According to a recent Grant Thornton survey of corporate executives more than 1 in 3 U.S. businesses with international operations were 'likely' or 'very likely' to move goods and/or services work back to the U.S. in the next 12 months[3]—including some IT services, widely believed to be forever lost aboard.[4] If these reported expectations manifest, then as much as 5% of total U.S. procurement may come back to the U.S. in 2014. Wally Gruenes, Grant Thornton's national managing partner for industry and client experience, was quoted saying:

The idea of going overseas was to drive costs down. Now, most manufacturers are looking for partnership to share information at a very detailed level. The extent to which suppliers are willing or able to share that

[2] Also the year oil last peaked in real terms.
[3] As of 11/2013.
[4] See http://www.grantthornton.com/issues/library/survey-reports/manufacturing/2013/11-survey- reshoring.aspx

information could inform whether they'd like to do business. They might need collaboration or face-to-face meetings, and the proximity of a supplier can be important.

A complete analysis should consider the timely delivery of supplies and materials, quality issues and the process of addressing any defects. A local supplier can fix these issues more immediately, and that creates a win/win for the supplier and the manufacturer.[5]

This type of close collaboration is increasingly important in the advanced manufacturing and technology sector emerging today. The Grant Thornton survey report concluded that "savvy executives will also analyze the intangible costs related to offshore suppliers, including lost intellectual property or damaged customer relationships due to late deliveries or poor quality."[6]

The Wall St. Journal recently reported more than 80,000 manufacturing jobs had been recreated in the U.S. since 2010 as a result of private companies moving production back to the U.S. from abroad. Whirlpool, for example, is moving some of its washing-machine production from one Monterrey, Mexico, to a plant in Clyde, Ohio, to take advantage of lower electricity and product-transportation costs. Harry Moser, president of the Reshoring Initiative, a nonprofit group that monitors such activity, noted that while the U.S. continues to lose manufacturing jobs to offshore locations, returning jobs are now enough to offset losses—creating net inflows and net new jobs. "We've stopped the bleeding," Moser said.[7]

Since 2003 job offshoring has slowed from an estimated 150,000 manufacturing jobs per to an estimated only 30,000-50,000 manufacturing jobs/year, a 70% reduction. Over the same ten year period, reshored jobs grew from only 2,000 manufacturing jobs in 2003 to 30,000-40,000 manufacturing jobs in 2013 according to Reshoring Initiative's data.[8]

1.3 Shifting Consumer Preferences, Rise of the Locavore

As the supply side is changing rapidly, the demand side is also shifting and another class of decision makers are adjusting their expectation and preferences: consumers. Appleton's Comprehensive Plan 2010 observed a "growing push" to buy local, and this trend has continued to mature. Consumers are developing new preferences and adapting new behaviors which are contributing to the stress on the Old Normal's global system.

Consumers are smarter than ever before and have more choices than ever and this gives today's shoppers greater discretion. This consumer power gives individuals a large opportunity to align their purchases with their own personal preferences—including tangential preferences such political or religious motivations. Consumer awareness and preferences for local products is gaining the most momentum. Made in the USA is just one example of a major marketing campaign that has raised consumer awareness, which have dovetailed with improvements in logistics and labeling technology that have allowed country of origin standards to be put in place.

Certain segments, such as agriculture and food, are experiencing rapid adjustment to this trend— evidenced by the rise of successful of grocers such as Wholefoods and Trader Joe's, who have been able to create higher margins in a traditionally low margin business by offering consumers identifiably local products.[9] "Locavores," or consumers strongly biased against eating foods shipped over long distances, have proven a robust segment—

[5] http://www.supplychain247.com/article/reshoring_likely_to_radically_reshape_u.s._economy_in_the_next_12_ months

[6] http://www.grantthornton.com/issues/library/survey-reports/manufacturing/2013/11-survey-reshoring.aspx

[7] Whirlpool Shifts Some Production to U.S. From Mexico Move to Add 80-100 Jobs at Washing-Machine Maker's Ohio Plant, James Hagerty, Wall Street Journal Dec 19, 2013

[8] http://www.plasticstoday.com/articles/%E2%80%9Cmade-usa%E2%80%9D-gains-popularity-companies- reshore-manufacturing

[9] Although it is still impossible to source 100% of products locally, patrons of WholeFoods and Trader Joe's are content with knowing the origin of its "fresh" or "organic" products.

powering rapid growth as businesses rush to develop new value chains.[10] Symbolic of this trends growth, the number of farmer's markets exploded over the last 20 years—from just 1,755 in 1994 to more than 8,000 in 2013.[11]

USDA has also taken important steps to foment this growth by creating its organic certifications and through programs such as Know Your Farmer Know Your Food. More recently, federal food programs have begun experimenting with sourcing requirements that require public schools to purchase a certain percentage of its food from local sources.

Emblematic of both the strength of these trend changes and their power to have an impact on the real economy and real lives are childhood obesity data released for the U.S. The Centers for Disease Control and Prevention found childhood obesity plummeted in the last decade, by 43%; the first significant decrease in the obesity rate in any group.[12]

1.4 Rising Wages and Demand in Emergent Economies

At the same time, higher labor costs in a maturing Chinese economy have reached the point where the lowest-cost labor has begun leaking to other, even lower cost, geographies—particularly those in Southeast Asia. Many BRIC nations—the darlings of the developing world—have achieved significant economic progress and poised to launch large populations into the middle class, as we have seen above. As these economies develop, standards of living increase these countries both produce and consume more goods and services, but wages also rise. After many years of impressive growth, wages are starting to catch up to those in some developed economies—adding to the pressure on the existing global supply chain.

Importantly, a positive impact of this growth is greater demand. Still perhaps the most important economic driver, global demand is evolving as the developing world's development continues to mature. Jim O'Neil, former Director of Goldman Sachs Asset Management—who coined the term BRIC in reference to the rising economies of Brazil, Russia, India and China—recently wrote:

The world has changed. In the late 1990s, the U.S. accounted for almost 20 percent of world imports: through that channel, changes in the U.S. directly affected the rest of the world—and the U.S. labor-market data was crucial information. In 2013, U.S. goods imports were in the vicinity of $2.3 trillion. That's about 14 percent of U.S. gross domestic product and just more than 12 percent of world imports—less than in the late 1990s.

China's imports now stand at a little less than $2 trillion, some 20 percent of GDP and roughly 10 percent of world imports. Since the recession, China's yearly imports have surged by more than $800 billion. Unless something remarkable happens, China will soon be world's biggest importer...

...As China becomes a more consumer-driven economy, its demand for new kinds of imports will grow. China is already the biggest export market for Japan and South Korea, and the third biggest for the U.S. Before the decade is out, it will probably be Germany's biggest export market, too.[13]

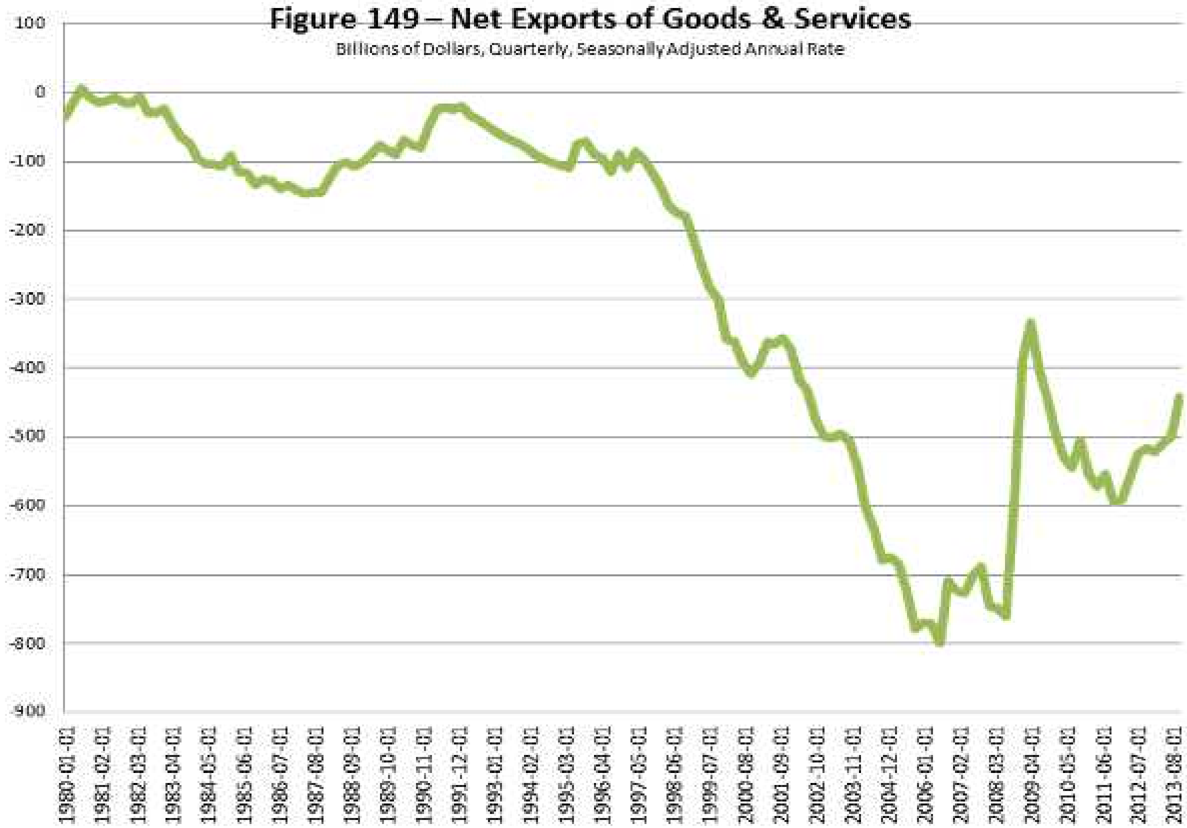
This ascending Asian demand[14] will drive economic activity and innovation, helping to reshape the future of the global economy.

---

[10] Locavore was introduced into the Oxford American Dictionary in 2007.
[11] According to USDA AMS Marketing Division data, which is self-reported on a voluntary basis.
[12] "Prevalence of Childhood and Adult Obesity in the United States, 2011-2012" published in the Journal of the American Medical Association, February 26, 2014
[13] Jim O'Neill "Nobody Should Care About U.S. Jobs Numbers," Feb 20, 2014 Bloomberg.
[14] See the Ascendant Asian middle-class, discussed above section 19.1

1.5 Thinking Regional, Acting Local

With so many factors combining in the same period, it seems clear that the Old Normal of 'go big' and 'go global' is giving way to a new, more efficient and counter-global normal. Going forward a smarter and more nimble environment in which local and regional strategies will be increasingly successfully at the expense of global strategies. Global networks and value chains will be disrupted and often displaced in a competitive rebalance that will tilt the advantage towards regional and local opportunities.



While certainly a long-term trend, it was wrong to presume that the U.S. would never stop importing more goods, or that it would always import twice as many goods as it exported—as was the zeitgeist of the old normal. Like the increasing number of U.S. manufacturing jobs noted above,[15] U.S. (and North American) exports are beginning to rise, see Figure 149. U.S. imports have simultaneously begun to fall and appear to show signs of leveling out, just as all global trade growth is leveling out and may have reached a near term limit.

The direct implications of these trade flow trends are threefold: (1) export-led growth will no longer be a magic bullet for developing economies, and (2) export growth is will return to developed economies (already manifest in the U.S.) and may accelerate, particularly in certain sectors, and (3) supply chain rebalancing will create opportunities to displace imports with regional and local production, known as import substitution. In the short run this will lead to a shorter, more dis-intermediated supply chain—led by growth in locally and regionally closed-loop value chains that siphon activity out of global trade flows altogether. This will provide a powerful tailwind pushing U.S. economic activity forward, as many of the same trends rolling over or reversal are precisely those which acted as a headwind to the U.S. economy in the Old Normal.

---

[15] Figure 148

Over the medium and long term this local and regional growth may once again give way to growth in global trade, as the global middle class matures and creates massive amounts of demand. China is already the world's largest agriculture importer, which is great economic benefit for the U.S.—the largest agriculture exporter—and Asian demand will only continue to grow. This implies the tide of global trade will reverse, and China will no longer be factory to the world… but the world's consumer. Asia will become the world's largest importer if China's current growth trajectory is not dislocated, likely before 2020.

This bodes very well for the prospect of U.S. exports in the future, which may again emerge as the primary economic driver after this period in the near term of strong inward growth and increased attention and activity at the regional and local scale.

During this period of disruption decision makers who actively engage the transition, reevaluate their assets and activities, and pursue updated strategies suited to the New Normal's competitive landscape will have a strategic advantage over late adopters. And because many of these new strategies are really rediscoveries of traditional building blocks of healthy economies and societies that gave way to the cheap-transit reality of the global industrial economy, every economy and region should be able to develop a new strategy for their own needs in the New Normal specific to the unique conditions of its geography.

Appendix G - Online Survey Comments

All comments are shown as they were written by the respondents, including misspellings, typos, and grammatical errors.

When it comes to attracting and retaining businesses, what do you believe are Appleton's strengths?

Quality of life. Cost of living, Talent. Proximity to Chicago

Quality of life, Cost of living. Labor force. Availability of development sites.

Not sure what the value offering is. I would assume low land costs, good tax incentives, perhaps good availability of power and labor, but just assumptions.

None that come to mind

Workforce K-12, secondary, post-secondary education options and their quality Thriving economy that seems to dampen business cycle Access to highway, rail, and air transportation Overall quality of life

Schools, sense of community, welcoming, good workforce/work ethic, big city amenities, small town feel, generous

Quality of life, talented and motivated workforce, strong regional economy

This is a beautiful area with well educated, hard working people. We have always supported our schools, we have great healthcare facilities, there are many cultural opportunities, and we're close to Milwaukee and Chicago so it is easy to enjoy what larger cities can offer without dealing with that size on a daily basis. Varied recreational opportunities abound from winter sports, boating and summer activities to Timber Rattlers baseball and the Packers. Our airport is convenient and our highways are extensive. Our local government is effective and diversity of the area is growing.

Safe, friendly, affordable, well run EDC and chamber

Strong work ethic of people Quality of life Cost of living

Low crime, quality of life, schools, cost of living, access to transportation, friendly people, work ethic

Good schools, lots of parks, low crime, relatively low unemployment (i.e. below state average).

1. Workforce is educated, skilled and strong work ethic 2.cost of living is low 3. disaster free- practically 4. Easy traffic can get to a 60 mile radius in 60 mins 5. all transportation in accessible - bus,air, ship, highway & rail 6. Secondary education system strong with FVTC & UW

1) Quality of life 2) Cultural institutions/diversity 3) Workforce quality and commitment to education

Its diverse community. Great education, shopping, airport, and Fox Valley Tech

Work ethic and the great community for families.

Education, Creative Workforce - in particular design professionals associated with packaging industry Quality of Life - trails, river, PAC, downtown
Strong and educated work force

Strong Corporate Base Quality of life Strong workforce Strong educational system for families and work force

Quality of life factors, good schools, cultural attractions, low crime, etc.

Low crime, strong work ethic, educated work force

Safe and pleasent enviroment Good education systems college prep and core functions Affordable Housing Good base of workers with strong ethic and performance

Dedicated employees, shopping, restaurants and job availability.

Friendly, caring citizens, Fox River, good schools and infrastructure.

Depends on type of business. In general, balanced economy, strong work ethic, skilled labor force, modest cost of living, good consumer base (for retail businesses), low crime rate, reasonable transportation, access to water, good recreational/entertainment options, good educational/vocational institutions. Also important to consider these as relative strengths (e.g. relative to other mid-sized, midwestern cities). Some businesses are simply not as interested in mid-sized, midwestern cities.

1. Ease of getting around town and the region 2. Vibrant downtown and attractive riverfront 3. Safe

Affordability, Quality of Life, Safety, Good Healthcare, No Traffic, Good Work Ethic

Natural resources and a family friendly communities

The community, people and infrastructure of thecity/area.

Midwestern work values, stability and quality of life would be first and foremost. Manufacturing/machining knowledge. Level of service (people try to be helpful, including City/County folks). Educational system, especially FVTC.

excellent healthcare systems, strong Catholic school systems, Lawrence University, cultural events, parks, public high schools, UW Fox Valley; PAC, recreational opportunities; small town values;

The strength of our work force, Midwestern Values, proximity to mass transit; Highway, waterways and two large airports. Strong manufacturing supply chain and experience. School systems, k-12 and technical and universities. Great place to raise a family, safe with lots of recreational and arts opportunity. Development is accepted and encouraged.

Downtown Community Good business climate

Good school systems in the area. Nice area to live with lots of options to closely get to the big cities or the north woods on weekends.

consistent economic growth.

Good work force, getting better all the time. Dedicated people. Lower cost of living to comparable cities. Great amenities in the city. Great accommodations and attractions.

Progressive attitude. Excellent schools. Reasonable taxes. Great neighborhoods. Higher education options.

Quality of life Workforce Highway & airport

Trained & well educated citizens. desirable community resources

Strong and well educated workforce in both the technical environment and professional fields. The re-developed downtown is a plus having a good balance of commercial use, public attractions, accommodations, available space, and well maintained building fronts. The industrial space has great infrastructure and many positive amenities with road and rail access. And the outdoor and recreational facilities in the area are second to none with low crime rates.

Our diverse industrial market base, quality workforce, a strong Downtown, Arts and Cultural activities, high quality of life for their workforce, responsive post educational system for training skilled workers, physical location within the state, accessible rail and 41, great school district, outstanding healthcare systems,

Talented workforce, recreation, and diverse, quality, education.

The people are talented and well educated. The overall environment is friendly and pleasant. The school system is excellent. Recreational opportunities are abundant. Good transportation available.

Economy has been relatively stable. No major layoffs and population continues to grow.

Clean and modern community appearance; progressive nature of community, low crime rates, excellent and progressive schools; expansive community resources.

Excellent schools - both public 4K-12, private preschools, and colleges/universities (especially Lawrence), good governance, good sense of community. Commitment to the arts/arts education. It is very family-friendly.

Location and ammenities related to quality of life.

Existing business strength Great workforce Multi-modal transportation

quality of lif highly educated workers quality schools and universites and tech collledge

Low cost of Health care, good schools and welcoming community.

I can only comment on the quality of life that appleton provides, which I think is pretty high. Its a fairly small, easy to be in, community. It has nice neighborhoods (although the City needs to put more $$ and policy changes into supporting its downtown neighborhoods)

Quality of life; education; health care; safety.

The work ethic of the residents and a good quality of life for employees. In certain industries there is a great deal of good R&D coming out of local companies.

Downtown Appleton is lively, with events and scenery that attract people, thereby bringing revenue. We have, like, five coffee shops within four blocks, so that's bound to bring some people.

Mid-sized community that balances some of the good of small communities (safety, friendliness, access to nature) with the good of larger communities (diverse people, culture, diverse activities, economic opportunity) Good road network, low crime rate, clean environment

To qualify my answers, Appleton by itself does not attract or retain businesses. It is only within a regional context that we retain or attract business. With that as a proviso, the region's strengths include: a productive and talented workforce, a top-notch community college for workforce training, a strong high school graduation rate, a low crime rate, good transportation infrastructure.

Regional emphasis as well as everything mentioned in #3: Great schools, libraries, affordability of living here, friendly, easy travel throughout the area, located within two hours of many great urban and natural resources, city and county parks, Lawrence University, community of philanthropy, neighboring communities have a pride and identity of their own, progressive, successful historic downtown, beautiful river, many options in types of neighborhoods (historic, newer, etc...)

The Appleton Area School District provides excellent public school education. The community is very good for families and children.

Great infrastructure. Clean, friendly, progressive, walkable community

Location, work ethic of population, culture and recreational opportunities. Relatively modern infrastructure.

Vibrant multi-modal Transportation System in good condition, sense of community pride, high quality community facilities, progressive leadership.

Available industrial/business park space Vibrant downtown Strong workforce

Its location close to Green Bay and Oshkosh is key. There are already several companies located in Appleton and the surrounding area that makes a need for complementary businesses. Plus there is an airport close by and several amenities that make people happy to live there. FVTC is a great asset that helps companies find qualified workers.

Diverse business sector that provides mix of industries. Quality of life (Great schools, safe, culture/arts) and affordable cost of living to draw more loyal and dependable employees.

Market capacity

Quality of life, education, skilled workforce, reasonable costs

Strong downtown presence Excellent healthcare system, schools and recreational activities. Cultural diversity

Educational system K-12 and Post high school Trained and motivated workforce Modern technology in core industries Social services entrepreneurship/collaboration Cleanliness and presentation Manufacturing ecosystem; jobs for spouses Import/export know how

People, variety of shopping and entertainment, safe environment.

Labor pool, low operating costs, excellent infrastructure.

Size, location, and a good work force.

Quality of Life Hard Working Safe

Progressive City Good work ethic Good Schools Attractive Downtown

Excellent stable workforce. Good quality of life for individuals and families. Big enough to have amenities like the Performing Arts Center. Small enough for people to know their elected leaders personally. Relatively inexpensive housing options. Good downtown. Neighborhoods that are friendly and welcoming. Very safe. Very affordable.

community-oriented city, safe city to live in, easy to navigate within the city

Community connections, people know who does what and can give you there contact information

Clean environment; task-oriented work force; variety of educational opportunities.

Quality of life Cultural opportunities Family friendly Health care systems Good schools Diversity (I put this as both a strength and a weakness as it's diverse for a small WI city but still not very diverse)

Diversity of businesses in the region; high quality educational institutions; solid infrastructure.

1. Great schools 2. A wonderful park system 3. terrific water

Strong workforce; beautiful aesthetic to the community; excellent schools.

Adequate transportation links to other markets, low labor costs, cheap place to live.

Good schools, community involvement and events.

work ethic, productivity, access to talent, strong transportation infrastructure, education system with above average graduation rate, availability of buildings/land, arts/culture, low crime

Good workforce Strong infrastructure Personal enriching opportunities ... arts, recreation, sports, etc.

When it comes to attracting and retaining businesses, what do you believe are Appleton's weaknesses?

Total office product

Labor force may not be deep enough

People are not aware of its value proposition. What is Appleton? Low cost, highly skilled labor, not sure what the offering is.

High costs, and poor state economic development.

Weather Not near airport hub

weather (especially this winter), perception of high taxes, difficulty in attracting talent, family community - not necessarily attractive to singles

Distance from major metros, relatively small population concentration.

I think we're changing from an area that was too concentrated on the paper industry to a more diverse economy. I'm not sure that has been a very easy change. I'm not sure we've responded well to the global economy, though I could not give details on what would be a good response.

Climate, fairly rural compared to metro areas

Specific skill developement Lack of investment in "infrastructure" and things to support new businesses "Red tape" of government

Climate, state taxes

Over-regulation and higher taxes. Most builders (when asked anonymously) would tell you that the fire code is stricter than anywhere else. All neighboring communities are easier to work with and less "in your face" oversight and/or inspection.

1. Downtown does not have enough to be a center and a destination we need better parking, more retail, more restuarants and entertainment. 2. Government - the process for new projects is how do we stop it rather then how do we make it work. 3. Winter 4. Abilty to reatain top level exeuctives to the area

1) An increasingly hostile attitude toward business on the Common Council, and a lessening perception that City staff can negotiate a deal with an employer/developer/etc... that the Common Council will endorse and approve. There are signs that this is becoming a significant issue.

Lack of non-chain restaurants.

For Downtown the local gov restrictions.

Ugly, sprawled out City that is not appealing to young professionals or creative class

City government. Negative attitude of city engineering department

Less Corporate Home office based companies

This area is the most anti-small business I have ever lived in. I don't think it is the intent of local government but it is clearly demonstrated by action that Appleton favors asthetics and government over small business.

Lack of vision, over regulation, risk averse and higher costs than surrounding areas

Municipality overlap and over governess

within the education enviroment, training in the skills field; welding, machining, etc. tough regulatory enviroment that is not pro business, hard to get permits, stuck in rules, politics, etc. willingness of the communinty to move from a very pleasent middle size city to take the step to a more vibrant business community=what is the culture the City is willing to accept or move towards

The city has grown faster than expected and doesn't appear very organized, in lay out.

For downtown, it is perceived that parking is expensive. Wisconsin has higher than average property taxes. Growing diversity in the area, but still pretty "white".

Cold, long winters (I'm not saying this just because this past winter was one of the coldest!), higher tax state, location may be perceived as a bit "out of the way" (could also be a strength?), not a right-to-work state (e.g. vs. southern states), lack of diversity. For high-tech businesses, we don't currently have a critical mass of other high-tech firms or a world-class research university to attract employers, employees. I also feel Appleton needs to do more to attract and retain young professionals.

1. Conservative mindset, fiscally and politically 2. Can't find the place on a map -- the airport needs a new name; "Fox Cities" and "Fox Valley" confuse outsiders 3. Too provincial; too many municipalities, too many county board members. 4. Lack of diversity; tolerant but not terribly welcoming to newcomers and those who are different 5. Too risk-averse. Why can't we get an expo center built? 6. Pay scale, especially for professional jobs, is much lower than it should be given the cost of living. 7. Despite a relatively high population base, we are stuck as a third-tier market and can't attract upscale retail like Trader Joes, etc. 8. Lack of urban amenities, such as more public transportation (we need a commuter bus or train between Green Bay and Appleton!) 9. Suburban sprawl is unappealing. Need to clean up the ugly stretch of Hwy. 41 between Green Bay and Appleton; knock down the billboards and plant trees! 10. Too much emphasis on building roads and public safety. Shift some funds from these to cultural and educational concerns.

Climate

City of Appleton Fire Department Inspectors

Not sure.

Very parochial thinking. Lack of sophistication. Taxes. Cost of utilities. Lack of many types of skilled labor. Weather. No interstate/port

lack of sidewalks in areas; weak public schools; vacant buildings and unkept lots (overgrown); polluted rivers; but working on it

The climate, unless it is a data center or cold storage warehouse (cold climates can be positive). Tax incentives for companies to want to grow and expand in our area. Appleton is a small market, need to look at the entire valley to get density and that still puts us in a smaller market. Some companies may see that as a hurdle to growth.

Perception difficult to get projects permitted.

Diversity in the community makes it difficult for us to attract team members in with a diverse culture. The offerings of churches, salons, etc. are limited for them.

Not a strong enough commitment from the Mayor to push development/redevelopment. We pay a lot in property taxes, but we also have a lot of amenities that others do not.

Not aggressive enough. Gaps in researching prospects. Need more cold calls. Greeting and meeting with new businesses to welcome them. Assuring existing businesses thy are valued.

Local govt Coordination

Housing costs limited cultural diversity, social outlets for younger people.

There is the lack of a Redevelopment Authority that can be found in other communities. Incentives become political footballs with the Council often creating or perceived to create an overly long review process. The permitting needs to be streamlined as well. The climate does not help us either.

Lack of strong community brand within the state and region, difficulty when working with inspections and fire departments on new construction and remodeling projects, very conservative city council often unwilling to take risk for economic development growth, lack of cooperative regional efforts to do strategic planning and marketing

Diversity, climate, entertainment and nightlife.

Uncertain state funding for municipalities and schools. Uncertain future for bus system. Somewhat parochial attitude in segment of the tax paying public.

Local government has been considered to be more difficult to work with that surrounding communities. This may simply be perception, but it may be affecting growth.

the culture of alcohol consumption & too many distribution points. Creates social issues that seem to be more significant than other communities of comparable size.

Poor public transit, over-reliance on planning for cars. Some outdated zoning rules, pertaining to live/work options on College Ave, in particular. (Parking rules, for example, related to buildings, and also code matters, making commercial codes apply when people plan to live above a store, but the residential portion is also subject to commercial codes. Not sure if this is a state-wide law, or local, but it is an impediment.) Also, there are local loons who insist on doing things like Open Carry of weapons at Farmers' Market, and that disturbs our normally quiet, peaceful community.

some of the special interest groups running good community planning.

Sprawl Wider cross community collaboration

not marketing as a gateway to the world ie new Internatonal airport rail and excellent infastructure available

Too much focus on drinking.

The core neighborhoods adjacent to College Ave and Wisconsin Ave business districts need to be revitalized and supported. Appleton should not charge for parking in the downtown areas. This dissuades downtown shoppers.

cosmopolitan feel - better restaurants and entertainment venues

There aren't a lot of opportunities for entry level and mid-level professionals here so I believe many people out of college bypass Appleton for bigger cities with more job opportunities.

In the downtown area, the only stretch that is appealing is College Ave. from Meade to Richmond. All the surrounding areas give the impression of a lack of safety, if the library studies are anything to go by. We spend so much time making sure our downtown/historical district is a attracting attention that the rest of the city is ignored.

People here who fear change and progress

Lack of regional cooperation, especially the "in-fighting" between communities. The fact that two airports within 30 miles compete with each other is ridiculous.

The region's weaknesses include demographic challenges associated with generating sufficient workers 10-20 years out, lack of economic incentives, high level of taxation, skills gaps in engineering, machining and welding, lack of brand awareness on the national level.

Desirability of a place to live for young urban professionals, rigidity of rules, lack of quality multi unit housing in or near the downtown

Lack of true leadership and vision for the future. Elected officials kow tow too much to the local big businesses, who should be pulling more of their weight when it comes to paying taxes.

Too small, cold climate

Competition with the greater NE Wisconsin areas such as Green Bay.

Proximity to Interstate System, no major port location.

Wisconsin not known as a business location nationally - thsoe that are aware of the state probably does not know much after Milwaukee or Green Bay.

I hear some negatives about crime in Appleton. The cost of rent or price to buy land can also be sometimes high. There is great infrastructure in place with the major HWY system but I think it can still be expanded upon. HWY 41 and 441 are very busy dangerous roads.

Need to build technology base. We are behind other communities in providing medical research facilities, technology industry and industries of the future. Need to work on selling the quality of life benefits of the area (entire Fox Valley) - not just Appleton.

Regulatory hurdles Governmental cooperation within area Air transport Tax structure

Climate, perceived cultural weakness (erroneous but nevertheless), parochialism

Too many hoops for businesses to jump through to meet City standards Internal City policies and ordinances.

Tax structure caused by duplicative governmental functions Fox Cities name is unknown outside of Fox cities Population size is at the bottom of where site selection consultants start to look Not a right-to-work state

Focus mainly on downtown and not out lying areas like the Northside

Tightly held inner circle, lack of vision, do it yourself attitude, predisposition toward non profits, fear based thinking that hampers innovation and limits competition.

Aging population. Need to focus on training the work force. Educate people that they can make a good living without going to college.

lack education for types of job available Need more cooperation between municipalities Need to work as a region not just the city

Losing its manufacturing base High speed internet Airport isn't well know Need major interstate Lack rail and large manufacturing sites

The downtown could be more diverse with grocery, bakeries, other small scale retail needed on a daily basis. Many of our charming historic neighborhoods and buildings are in jeopardy - and these are what set communities apart. I think a new public library and exhibition center would serve residents and visitors alike and boost the economy.

high taxes

Lacks consistent flow of people downtown - Public spaces not welcoming for not consumer activities

Inflexible government or political forces.

Diversity (I put this as both a strength and a weakness as it's diverse for a small WI city but still not very diverse) Family focused leaves those who don't have children left out

Distance from major markets; lack of a national reputation; City inspectors are sometimes difficult to work with.

1.lousy customer services 2.. Appleton reacts vs being pro-active 3. No marketing plan, today's choice

Highly regulated (which is good and bad); not in a strong location for logistics.

Lack of leadership, ambivalent attitude toward recruting from outside the area, no incentive programs. Too many programs such as Chamber, New North, etc. that operate more as social organizations rather than business recruiting organizations. Lack of name recognition and brand recognition of the "Valley" beyond the immediate region. People in Milwaukee and Chicago regian associate Fox River with their Fox River. Airport name- who knows what Outagamie County is?

Taxes are high

taxes, permitting process, can do business attitude, lack of collaboration

Lack of diversity

City Leadership, lack of planning, competition from neighboring communities, no local business attraction programs, few incentive programs, unwilling to take risks, location in regards to major markets,

High taxes.

marketing is weak. who in the government is responsible for connecting potential investors with available spaces?

I don't know if Appleton is nimble enough to compete in today's fast paced competitive markets.

Lack of a strong creative class. Provincial. Core neighborhoods are experiencing some deterioration.

Infrasturture, Rail/Highway System in need of upgrades- 441/10 corridor

As a site selector, what would you find most appealing about Appleton?

Cost of doing business, highway and rail

Cost of living. Labor force.

Limited to no barriers to entry. Zoning issues are minimal, government is pro-business, trained labor force, tax abatements, these are the aspects I would find appealing. I am just not sure if those traits are consistent with Appleton's offering.

How would you rate Appleton’s K-12 schools?

Great public schools, great private schools, great tuition value for privates.

My children attended Appleton public schools and we well prepared for college and the job market.

Parochial schools are better but affordable compared to bigger cities

Familiar with numerous cases of the school system being very wasteful in the technology dept. They spend way too much money on administration and administrators, and then have no supplies for students. I know several teachers personally that put out lots for supplies for their classroom and students because the office can't or won't furnish it. That said, without getting into the politics, I also feel that the teachers are part of their own problem. The outside looking in, I think the low dropout rate compared statewide or nationally, has a lot to say about our schools overall. Due to factors such as that, I pulled my ranking up to where it is.

The City remains willing to spend money to improve, and the schools have, to date, dealt with challenges (mandated testing, diversity) fairly well.

It seems there is an effort underway to help guide students who may not wish to pursue a 4 year college degree into vocational programs or technical training. This is a much needed step forward. There is an imbalance which exists between availability of workers and needed skills and training.

Advances have been made, but there is much that needs to be accomplished; improved media centers (libraries); repairs and remodeling of facilities needs to be expedited; fine arts and literature needs to be nurtured

Overall, my three children succeeded and thrived in school and in college for two. Third one going to Marquette this fall. Still there were shortcomings in offerings of classes.

There are plenty of choices of many charter schools with specialty offerings.

Good

top notch and citizens willing to spend to update and stay state of the art

AASD is wonderful both neighborhood schools and especially the diversity of charters

All of the school districts in the Fox Valley are excellent

Rating is a relative term

My children who are now adults got very good educations in the AASD system, and I'm grateful. However, I think that overall the system still is steeped in "how we've always done it" and a little timid about innovation. Nevertheless, there are quality teachers and administrators always striving for excellence. Also, the community generally supports schools through daily support and referenda.

strong schools, still need to collaborate with businesses to identify current/future workforce opportunities

I believe the school system is responsible for a lot of growth in Appleton since families want their kids to go to the AASD.

I think we are overly self-contented about the quality of our schools

When students graduate from Appleton's K-12 schools, how prepared are they for the workforce?

I think there are still a lot of "fluff" courses on the curriculum. Get rid of those and go much stronger into technology, manufacturing, engineering, science, medical

Good

Improvements in work force readiness are a major initiative for the schools. Preparedness for post- graduate education has been more of an emphasis but workforce skills is becoming a higher priority.

I don't have any children who have graduated from AASD. I have heard good things but have no real data.

As much as any school system can do

This is a national issue so I don't believe AASD is below the standard but they are all struggling with workforce readiness.

Not sure they are prepared adequately for the work force. It seems AASD focuses more on preparing students for college, and not every child is appropriate for college.

Need to teach kids college is not always the answer. Continued education is but check out the trades and technical colleges. Great paying jobs.

This is my impression for graduates.

They have a good base upon which to build, but need more specific training for the jobs employers offer.

having a joint vocational school, not all students will go to college

lacking soft skills and clear expectations of opportunities for careers in this region and nationally

All coleges and tech school should have to offer..."gut check" and "Real World" classes as requirements and put students thru the ringer on finances, tough bosses, bad co-workers, etc. etc.

Though much depends on field of study and market availability

Current challenge for all educational institutions

This is a poor question we have a wide variety if higher education programs. No all the same students are not the same business expectations not the same. Better question do our best graduates find work locally, do our bes professionals find work locally. The answer to not is no.

I think they are extremely well-prepared. However, the jobs are not always ready for them due to economic issues.

No matter the type of education, they will always need on the job training, particularly for high-demand jobs like welding, IT, and management.

Vocational and technical training is good. No graduate programs exist except through for profit schools or branch campuses of other institutions.

Between Lawrence, FVTC and UW-Fox I think kids are coming out with good skills

How would you rate the Appleton area's higher education institutions?

Lawrence is exceptional but low awareness or confusion on what it actually is and does; UWO is improving in academic reputation; Fox Valley Tech is a jewel, one of the best of its kind in the midwest; St Norbert very good but under-appreciated.

Lawrence, Fox Valley Tech, and UW Fox Valley are all respected institutions that maintain high standards and provide excellent education.
FVTC gets very high marks. They hear and see a need for skilled labor (machinists, sheet metal, etc) and they develop schooling to fit. They offer their ear to local industry.

Lawrence is an underutilized asset. Its new President has indicated he wants to reach out more to the City, and that ought to be reciprocated.

The tech schools seem to be embracing their role in practical training and education in areas of job demand, the 4 year public universities have still not fully embraced this concept.

Lawrence U. is working on developing an entrepreneurship program - that is a step in the right direction, but its liberal arts focus is probably not a major draw for potential employers. UW Fox collaborations with Platteville and others to offer 4-year degrees can be a plus. Strategic collaborations with parts of UW Madison (if possible) might also help for some employers.

We have real gems in our community of Lawrence University, UW FoxValley; FVTC, UW Oshkosh; UW Green Bay & St Norbert College. Greater collaboration between all of these institutions would be fantastic.

Two local universities, the technical college and other training facilities close by!!!

Excellent technical college; excellent UW two-year campus that offers collaborative degrees, engineering program from UW-Platteville, for example. Excellent liberal arts university, Lawrence University. Competing for-profit private colleges have recently entered the mic of places they can study

We have an excellent Technical college and university campus. We need to take advantage of some of UW Oshkosh programs as well.

Very good

The Technical College and University prepare students well for their chosen path.

Fox Valley Tech is absolutely top- notch, UW- Fox is a real asset and Lawrence is an excellent university.

Lawrence U, FVTC, UWFV, UWO, UWGB, St Norbert's, etc all great schools that fill a niche

Cost for Lawrence is relatively high.

FVTC is a Gem

Lawrence University is a gem of a liberal arts college and conservatory. UWFox is a hidden treasure which provides access to one of the best public universities in the world. FVTC is a huge community asset with all sorts of work force training and education.

Having a strong technical college, two-year UW campus, and top-tier liberal arts college offers a superior mix of opportunities and diverse pool of graduates for employers.

How would you rate the quality of Appleton's workforce?

The state as a whole is slightly above average, but I can't speak about how it is locally.

While not deep in some segments, the quality is good in terms of talents and attitude.

People here are well educated, have a good work ethic, are generally honest and reliable.

I would rate it better than the average. Most that come in for applications to our business have a sense of savvy and willingness to work.

Need more people focused on FVTC - skilled jobs. Skilled jobs is the key to our future!

Generally strong work ethic but significantly lacking in diversity which hinders innovation and the ability to think beyond the boundaries of the local area

Fox Valley Tech and other technical training programs are a plus

The workforce here is productive and the work ethic superb. That said, it can be a challenge to find highly educated workers for specific needs -- it's hard to attract young, energetic professionals to a small market.

hard working; good work ethic; requiring additional skills trainings and advancement opportunities

Some get it, many don't about what it really takes. To many have a "silver spoon" mentality.

I have found labor at all levels to be top notch. Well educated, hard working, innovative, and motivated to get the job done right.

Most if only school trained come out of college with an entitlement attitude rather than an attitude of wanting to continue learning and work their way to greater positions.

I think for skilled workers, the workforce is good. I do not think that we have a very diverse professional workforce because there are limited job opportunities to these individuals out of college.

Midwesterner's work ethic.

Not trained in the jobs that are avaiable.

I think we have a superb workforce with long-standing work ethics favoring hard work and pride in quality work.

Workforce quality is very high, the challenge is not enough in the pipeline to fill current and future needs

We need bolder, more creative thinkers who have been out in the world.

How would you describe Appleton's workforce?

New North, Inc. has information that actually proves the productivity of the area is higher than nationwide.

excellent work ethic

This IS our greatest strength.

Compared to other parts of the country, this area is known as having a good work ethic.

Business leaders are complacent. Elected officials are complacent.

Hard-working without a doubt.

When considering areas where you would consider locating a business, where would Appleton place on your list of prospective locations?

Really depends on the requirement

We are logistic driven.

Can't answer, every client is very different and have very different needs.

i'm biased in Appleton's favor.

Compared to what?

Depends on the type of business.

Depends on the kind of business.

Depends on the type of business and workers I'd be looking for. Appleton isn't necessarily very attractive to creative class , millennials, innovative folks

Cannot answer--everything depends on the type and needs of the particular company

Not sure what area you are considering (nationally, internationally) but I think Appleton has many of the positives needed for locating a business.

This region is very appealing but business leaders are looking at the Fox Cities region not necessarily just Appleton depends on the needs and other viable options w/ specific costs.

How would you describe Appleton's passenger airline connectivity?

Airline service declined considerably after Midwest Express was bought. Prices increased considerably. r/t from New York went from <$300 to ~$700. We stopped flying to Appleton/Green Bay and my son flew to O'Hare and drove. The airports are terrific, but underutilized.

can't seem to support direct flights to many cities (e.g. Denver). Flight connections that go through O'Hare are problematic and off putting. Flights are far too expensive (e.g. ridiculous costs to fly to Twin Cities).

Need direct flights to major cities.

it's a joke. I fly out of GBay or Milw

I don't fly frequently. I think it is a challege for Appleton's airport to stay competitive with pricing. Many people are willing to drive to Milwaukee to save money or avoid connecting flights. This is less of an issue for those flying on business.

Unfortunately Green Bay has more options AND are usually less expensive. My company sends me out of Green Bay despite my personal preferences.

expensive and limited direct flights

too pricey

We have the best airport

Not many direct routes, but decent connection opportunities. I flew to Rome last fall, total travel time less than if I had driven to Milwaukee or Chicago for departure.

Limited airlines have caused a rediculas pricing options. Need another provider ie Frontier or Southwest

Oftentimes drive to MKE for price and direct service. But ATW and GRB offer great connectivity (via connections)

Options are somewhat limited and expensive. Losing regular flights to Milwaukee hurt.

Need to attract more options.

Would like more direct flights to AZ

Combine Appleton and Green Bay airports so you have one decent airport instead of two crappy ones

Many times need to fly to a hub first
To many cancellations, or delays I would rather drive to Milwaukee or Chicago and take a direct flight than chance missing a connection (which has happened many times, I missed a destination wedding and almost a cruise departure).

Reasonably connected for a mid-sized midwestern city. There are trends in the airline industry that make it tough to improve service for a city of our size; Allegiant and Delta's Atlanta non-stops are a nice plus for a city of our size.

It's quick, close and convenient to fly from Appleton. But if you have a family or a larger group, the extra cost to fly from Appleton vs. driving to Milwaukee or Chicago is not worth it.

Limited flights in and out and costly. It is cheaper to go to Milwaukee or maybe a Green Bay

In all practicality we have two major airports in Outagamie and Brown Counties.

Pretty good service, though a bit costly

Connectivity is decent, but airline prices really usually dictate that we use Milwaukee instead. Parking is cheaper, but for four air tickets and one car, the numbers require us to use the larger airport.

limnited airlines and few direct flights to large municipalities beyond adjacent states.

As commented previously, with two airports competing against each other, the passenger capacity is split, and as such, limits more impactful and necessary direct connections and larger aircraft.

Very very poorly connected. We need more major direct flights originating from Appleton, not puddle jumpers that connect in Milwaukee or other cities. We miss Midwest Express that used to have direct flights out of Appleton to major destinations.

Good but always can be expanded

The declining number of local connecting flights concerns me.

Impressive that a city of this size has commercial airline service.

Need customs service at ATW.

Good connectivity but reliability and prices are challenging

Limited fights, but can get to hubs. I generally fly from Milwaukee as I can get to my destinations quicker. Cost is about equal using park and fly at hotels in MKE when factoring in the fare difference.

How would you rate Appleton's location and connectivity (highway, freight rail, air, etc.)?

It works well. Still construcion in the Oshkosh area.

Hwy 441 is the best thing that ever happened to the Fox Cities

While Hwy 41 is not technically an interstate, that really is a technicality. It is very easy to drive to Green Bay, Milwaukee, Madison, even Chicago.
As much as I hate road construction we sure look outdated compared to Oshkosh and Green Bay!

easy access to many parts of the state, but limited to other parts (i.e. Madison)

41 is not interstate at present, having to navigate Chicago for anything east is detriment

Combination of 41, 10, and 29 give us great connectivity north, south, east and west.

With the exception of highways to the southwest (LaCrosse) our highways are very good, well maintained, and expanding in capacity.

41 as an interstate should help? 41/441/10 interchange improvement will help. Highway 10 great help to the west.

Will be better when construction projects are completed

Need to finish the 441/41 exchange. Major issue to our connectivitiy.

Gov. Walker has set plans in place for Hwy 41 to become an interstate highway in the coming years

US 41 conversion to interstate will help.

Can't wait until Hwy. 41 is a federal highway!

work needs to be done on the 441 interface via 41

Again we have an airport, an expressway surrounding the city. All major roads lead to us! RAILROAD is a b ad 8 letter word in Appleton due to how it cuts through the city at an angle. We really do not have a "rail yard" to go along with the issues.

It would be nice to have competing rail service. We also have to deal with the geographical barrier of Lake Michigan.

Good

I wish there was passenger train service but otherwise it is very good. Upgrading 41 to interstate is a good thing.

We would benefit from passenger rail.

441 needs improvement as well as looking at a northern bypass

It is great to have a regional airport here, though the ticket prices are expensive and the desitinations are limited. The highway system is improving with the upgrades to 41.

The road network is good; the airport competition hurts everyone in NE Wisconsin. The inability to fly direct hurts all business prospects..

More mass transit in different forms, connectivity via rail to Milwaukee and Chicago, affordable cabs, etc.. would make it excellent

We need a regional transit system. We need more major airlines coming to the Outagamie county airport. Air travel to and from Appleton is very, very disappointing.

I-41 will help to boost this connectivity. This location could be enhanced by increased utilization of mode terminals. Instead of Freight rail just passing through, utilize the cross roads of 41 & Hwy 10 along with the Airport.

Need to get the Interstate designation finalized for US 41 Important to maintain a viable railroad connection

Great airport, good roads but the HWY are unsafe due to lots of traffic, I believe more rail should be used and expanded everywhere.

Too much emphasis on highway - need to create a more walkable community with more transit opportunities, bike lanes and better connection between Downtown and Riverfront. Manufacturing shouldn't be the dominant priority because of the changing marketplace. Service and innovation sectors are growing - need to focus more on technology sectors and creating community that will attract creative professionals and innovative leaders.

Lake mi and lake Winnebago get in the way.

Need 41 to be an interstate ATW is a Gem we need to support

Highways are generally excellent. Our airport is a great asset but only if ample local connecting flights remain available. The airport is super easy to use, and parking is inexpensive.

Land-locked with some access to Interstate 41, but too much residential growth along the cooridor impacts connectivity.

How would you rate Appleton's lifestyle?

COLD winters! But Wisconsin is a beautiful place.

Pretty good but lots of room for growth

Safe and good schools

I would not give it an "excellent" because it is not a large metro area with the corresponding cultural and

I feel safe in Appleton and am proud to raise my kids here. Neighborhoods are quiet and well kept. I was told before I moved here that there is no "bad area" in Appleton and I would agree. I know people who live in every district and there are a few bad apples, but by enlarge this community is awesome.

every city says they have a good quality of life. I think it is different for everyone.

better than most places, but this cosmopolitan mayberry has stretch marks

family focused

We are very fortunate to have found Appleton as a place to live

Love the downtown area and their events.

Appleton is very basic with little to no acceptance of the new or different, especially as it relates to entertainment, dining, etc.

As a baby-boomer who raised a family here and now as an empty-nester, I feel Appleton offers a great lifestyle. The weather is what it is and will repel a certain segment of people. The thing I feel we really need to focus on is how to make area more appealing to young professionals. That's a key to future growth, in my opinion.

Excellent place to work and raise a family! It's convenient, safe, comfortable and fun. However, for single and childless people, Appleton lacks the thrills of an urban area. That's the tradeoff.

Would be nice to be closer to major sporting venues. We really need a large conference center. PAC is wonderful and brings culture and art to the community, need smaller local groups playing off of that. There is a nice diversity of restaurants in the area for a night out. There are great programs for kids, lots of soccer, football, baseball you name it you can find it. The night life for young adults seems vibrant with safe places to go. It is a great life Style, you can be as involved as you want to be.

good, but could be better

Unless people get out and explore, they do not know what they are missing!!

There are many cultural and recreational opportunities along with theater and sports venues in close travel distance to Appleton.

Very good

It is a great place to live

There are large city amenities a city our size can't support, but then again, we don't have all of the big city problems, either.

We have a lot of work to do with cultural efforts. Restaurants, shops, etc are also still lacking.

Very good for families, less so for millennials or creative class

Could use more "big city" options, but otherwise a great place to raise a family and work.

Appleton's quality of life is not distinct from the regional quality of life. Answers made on the basis that Appelton is part of the region.
Many options at almost all price points. From the PAC to the TimberRattlers. From t-ball games to Packer games. Parks galore. Too many bars, but many good restaurants. A little on the hard-working side, but also like to play. Extremely safe which enters into all the above.

We match the offerings of much larger cities for much lower cost.

Middle of the road.

Need to be more proactive on growing the creative class, bike trails, natural areas

With regards to Appleton's quality of life, what do you like best?

Accesibility to city amenties and the outdoors

Close to a lake

Parks, pools, neighborhoods

Close to many great weekend getaways

Safety

affordable

Access to parks and farmers markets

Friendliness

multiple things to do

Dining and cultural variety

Safety

safe neighborhoods, recreation opportunities

Great Schools & Social Services
good schools

Educational systems.

good choices for dining

the people

Small town feel, but has most amenities

Safe

With regards to Appleton's quality of life, what do you like least?

Small

Cold!

Not enough radical change to make Apeton stand out.

can't seem to sustain upcale ammenities, restaurants and retailers

Jobs

Commercial focus (signage, advertising)

Winter Weather

lack of progress and change

Doesn't use river as a recreational asset

Shootings, idiots pulling political stunts at farm market
the mall mess for specific stores

lack of diversity

guns at the farmer's market

Outagamie County.

Winter's too long and weather too unpredictable

Hard to get around unless you are in a car

Winter

What’s missing?

Sinlges life. Urban living

Waterfront access, more family entertainment options

investment in a central urban anchor. Much more could be done to invest in a dynamic downtown

More good jobs/higher paying

more large employers driving a larger population

Bike paths and green space

more visionary leadership

riverfront trails and public places, and ways to get ot them

River access and more trails

better use of riverfront for public use

more entertainment options

greater regulation of firearms

Convention Center.

not enough outdoor areas for entertainment and exercis

Trail system

Major museum

Considering Appleton as a place to live and do business, how difficult is it or would it be to attract talented managers to the area?

If I had a nickel for every community that says they are a great place to live and do business I would no longer need to work. I don't think it would be hard, if you pay managers enough you can move them anywhere. But Appleton would not be hard to convince many to move to.

Our salary scales seem to be below comparable small cities -- even in the Midwest

Where will they work? Paper industry seems to be eroding.

If you are attracting talent, I would look at regions north of Des Moines as feeder markets. The weather is a barrier, but you can't do anything about that. As far as the region has come, it simply will not have the advantages of a larger market until there are more businesses employing more and more diverse people who want more and more diverse entertainment outlets.

Mostly due to the winter weather...

Easy if more urban-chic housing options, trail connectivity

Where's Appleton? Zero brand.

We offer a lot of great community characteristics, but lack the options of a larger metropolitan area.

weather would play a big part in a decision along with no easy air travel or passenger rail

I think we have a great offering (except #4) for family based folks.

Appleton is a place you don't appreciate as a young adult until you're thinking of raising a family. Then the quality of life here becomes more evident.

The perception of not having a wide variety of entertainment venues.

Off the "beaten path," not terribly diverse (although getting better). Anecdotally, a hard place to be young and single.

Hard to get people here. Once they are here, hard to get them to move.

Weather, population diversity, proximity to world-class educational institutions, entertainment, shopping, etc. are challenges.

High-energy people seek high-energy thrills, which we may never get here. Our harsh weather does not help.

When I have brought managers or leaders to the Fox Valley they say that the climate is to cold and it is too much of a small town.

Diversity is limited making our attraction to the area for candidates difficult.

Lifestyles are so varied here and income and COL are decent.

Large business headquarters - other areas of country

Unless you grew up in the area the winters are considered harsh. That and the national image that all NE Wisconsin has is the Green Bay Packers (which can be a negative).

I am not sure. For people with families, it's a great and easy choice. For younger singles, it's probably not so easy, because we don't get first run films regularly. (Grand Budapest Hotel didn't open here for at least a month after its national opening. See comment about Macy's in #17 - people make assumptions about the 'sophistication' level of our area.) There are lots of bars, but not as many mid-range non-chain restaurants. We do have wonderful schools and farmers' market, so again, for managers with families, that's great.

As compared to what else. Within the state very easy, compared on a national scale perhaps a bit more difficult.

While Appleton has some nice cultural features, its restaurant scene is pretty bland. Too many late night bars and not enough decent dining on College ave. Can't comment on housing.

weather and lifestyle options that may be missing for some

The city's ranked very high on best places to raise a family, so one could appeal to their sense of familial duty there.

Not something I do

It will definitely depend on where the managers are being recruited from. Very difficult to attract from large city/warm climate areas.

It should be at least - good schools, parks, quality of life Growing cultural/entertainment options

Depends on the industry. Difficult for innovation and/or technology industries

IMHO, this is a known environment whose size either appeals or doesn't. Given it's size, there is much to attract them but it is not the full urban experience many seek...close..but not quite

Cold boring square

Getting them here is the hard part. Once they are here they love it.

I expect that Wisconsin winters and the perception that we are too far north might make attracting managers difficult. If they visit and talk to other managers who have lived here for a while, I think perceptions change.

Hard to attract people to a small town

Lack of a national reputation hurts us here.

Recruitment from outside the state is challenging, however when someone is recruited here, they often don't want to leave.

Low cost of living so people moving in from elsewhere have greater disposable income than If they lived in other areas. This is the trade off for limited social and continuing education opportunities. My employer can't attract top level talent that is willing to live in our community.

Once you get someone here the community sells itself ... Challenge is to get a chance to be considered.

WE can't compete with metropolitan areas for quality of life amenities

Based on its location in Eastern Wisconsin, what resources does Appleton have access to that make it attractive to businesses?

Not Sure

Close to larger population

Which communities do you see as Appleton's greatest competition with regards to attracting businesses?

Other mid-sized midwest cities

Green Bay, Rochester, MN, Stevens Point/Wausau

Green Bay, Madison, Milwaukee, Des Moines

Green Bay, Madison, Twin Cities, Milwaukee

Milwaukee, Chicago and Minneapolis areas for the Midwest

Depends on business

Green Bay

Of the smaller scale businesses, they go to the Greenvilles and Kaukaunas to get away from the regulation mentioned earlier. Of the larger scale businesses, they go to Green Bay, Madison, or Milwaukee to get the larger cities for the perceived larger worker pool.

Green Bay, Milwaukee, Madison

Green Bay. Oshkosh to a degree, but it's pretty dysfunctional.

Madison

Surrounding communities

Depends on the industry

Green Bay

South, lower cost of living, more favorable business climate. Northwest, more progressive communities, lower taxes

Minneapolis

Neenah, Green Bay, Grand Chute and many others cities across the Country.

The surrounding markets, more space, less regulatory hassle,

With the mobility of our population a single community wouldn't be a competitor, but availability of land or buildings to locate in would be.

possibly some of the neighboring villages and townships that have less restrictive land use policies

Mid-sized cities in states like Iowa, Minnesota, Indiana, Kentucky.

Cities of similar size in the Upper Midwest.

Minneapolis, Madison, Pewaukee, Des Moines

For a company that wants to come to Wisconsin; Madison and Milwaukee will be the competition. For a company that wants to come to the Midwest....there is a ton of competition and they are all trying to sell the same thing we are tying to sell. Midwestern values and a strong supply chain...what makes us different?

Madison, Milwaukee areas

Similar regional areas within the United States

Green Bay and Madison

Madison, Milwaukee and Minneapolis

Green Bay Oshkosh

Green Bay, Milwaukee, Madison

GREEN BAY AREA, not just GB Even some of our surrounding smaller cities/town that are not land locked

Locally Green Bay

Oshkosh and Green Bay area.

Green Bay, Madison, Milwaukee,

Education

Madison, Milwaukee, Minneapolis because of a more urban feel and ease of logistics.

Doesn't that depend on the business, their needs and incentives/benefits of competing cities. I think Appleton's biggest competitors are outside of WI in MN, ILL and MI

Green Bay

Wausau, Stevens Point, Madison, Metro Milwaukee

Green Bay. Possibly Fond du Lac, Sheboygan, Manitowoc, because of proximity to Milwaukee.

Green Bay, Milwaukee

Madison Green Bay Menomonee Falls River Falls

Madison

Neenah

Neenah, Oshkosh, DePere and Green Bay

Townships surrounding-all. They seem to work better with Businesses in terms of assistance and cooperation

Appleton government and their lack of interest to help companies relocating here.

Shi'Kahr

Madison Minneapolis Chicago

Green Bay--although it shouldn't be if both areas would work together instead of compete with each other.

It depends on the specific project! You can't generalize this way. Competition for jobs today is global, and the practice of site selection is one where very specific characteristics are carefully assessed and measured based on the very specific parameters of the individual project. If you must generalize, then one could say that communities with a lower tax rate likely provide the greatest competition.
La Crosse, Eau Claire,

Kaukauna, Kimberly, Neenah
Madison, Green Bay and Neenah

Green Bay, Madison

Green Bay Area, Grand Chute and the other Fox Cities are about the same.

Every other community is a competitor, nationally and even internationally

Madison - they are further ahead in recruiting young people via research and technology opportunities.

Oshkosh, Green Bay, Grand Chute, Kaukauna, Neenah

Madison Cedar Rapids Indianapolis

Charlotte NC, Nashville TN Various South Carolina cities

Milwaukee - Green Bay

Indianapolis, Demoinse, cedar rapids, fond Du lac, LA cross, quad cities.

Green Bay

Madison, Milwaukee, Wausau

The Nation and World. A win in any local municipality is a win for Appleton.

Neenah Green Bay

In the state? Madison: Great dynamic community with wonderful cultural options. Milwaukee. In the nation? Other hidden gems like Appleton

Grand Chute - cheaper, Neenah - upscale if they want to live near where they work

oshkosh Green Bay Stevens Point

Green Bay; Oshkosh; Sheboygan.

Probably other community of similar sizes in the Midwest?

Kaukauna, any other city in the Midwest that is on a port or an interstate highway.

La Crosse, Green Bay, Stevens Point, Wausau, Eau Claire, Grand Rapids (MI), Cedar Rapids (IA), Rochester (MN)

Grand-chute, Neenah

Green Bay and Oshkosh

Omaha, Topeka, Cedar Rapids/Iowa City, suburbs of Chicago, suburbs of Minneapolis, Cleveland

Neenah, Little Chute, Kaukauna, Grand Chute
T. of Greenville, T. of Grand Chute, C. of Green Bay, C. of Kaukauna

Kaukauna, because of energy costs. Grant Chute, because of the mall and business density.

west and south of appleton

Madison

Similarly-sized communities in the Midwest

Green Bay/Oshkosh

When it comes to attracting visitors, what are Appleton's strengths?

Diversity in activities

Downtown has lots of bars in close proximity of each other.

Clean, safe.

Arts, Restaurants and safety.

The arts. The fact that there is actually a quaint downtown that does NOT have 5 blocks of a mall. And for those who do want the mall experience,there's a GREAT mall not far away. Also, the city is very close to GBay so you can easily get to the Packer experience without enduring a stay in GBay (yuck).

We have a strong economy with a number of shopping options. The PAC draws impressive performances and a culture of people interested in the arts. Our downtown, although not without its struggles, has a number of anchor businesses that make it vibrant including Lawrence University. Our other universities, such as FVTC and UW Fox Valley offer many resources and our numerous parks and outdoor recreational opportunities are invaluable.

Performing Arts Center, attractive downtown with interesting stores and a variety of museums, friendly people, safety/low crime, Fox River. Many of the main attractions however are not in the city itself: Timber Rattlers stadium, Fox River Mall.

When you are speaking of Appleton you are speaking of the Fox Cities Collective. Shopping, Performing Arts, Sporting events, Festivals, Farmer's Market, Dining.

It's safe, friendly, welcoming, with many different things to see and do... shopping, dining, world class music and theater, the arts, museums, music festivals and events, sports.
Hip downtown, clean, low crime, plenty of diverse activities, close to rural and natural activities too

A walkable downtown, a great variety of restaurants, activities and "energy" that our downtown offers. Our arts programs are incredible, from the PAC to Lawrence, Trout Muesum, etc...

speciality shops, good mix of businesses downtown but the mall is the major draw for vistors

Fox Cities Performing Arts Center Wisconsin Timber Rattlers (Grand Chute) safe and affordable community Fox River Mall (Grand Chute)

PAC, nice downtown, the Fox River Mall nearby, variety of good restaurants

River, trees, PAC, farmer's market, Octoberfest, Mile of Music, restaurants, parks, shopping, Lawrence University, Building for Kids.

Shopping, PAC, locally owned restaurants, OktoberFest,

We have a touch of "exceptionalism" as in American exceptionalism but applies to many local folks have been progressive and open minded in their large decision making. Many, many people in the past 70 years have dreamed,done things and invested,built and executed ideas that helped themselves but also those around them and the community for future years. I guess the strength is the willingness to think bigger than the individual. We have had downtown business' since 1926 so have seen a lot. The feeling that we are special here overrides the checklist of "things" we have strength with, as their are many, the Mall, the downtown activities et al.

Downtown, PAC, Fox River, Farmer's market, Events, Lawrence University

Friendly, safe, downtown activities, performing Arts Center.

When it comes to attracting visitors, what are Appleton's weaknesses?

No convention center

Not enough good restaurants.

Underfunded cultural organizations and unimaginative buyers at major retailers

River activity

Although the downtown is lovely, we could do with a few less bars and a few more specialty retail outlets.The retail outlets we have are SUPER, but there could be more that cater to an older clientele (like women older than 30).

We lack a quaintness, a mystique, that would brand Appleton as a tourist destination.

No national dining. Lacking a convention center (exhibition area). A large multi sport facility.

Not progressive or diverse enough; doesn't have a deep bench for some of the offerings/strengths mentioned above.

Parking meters, not much to do at night except bars

West College Avenue is an eye sore as a first impression. There is no expedition center. We don't utilize our river so visitors are robbed of the true beauty of Appleton. Our Children's Museum doesn't have any WOW factor anymore, we need more street activity in downtown Appleton (Close College Ave more often and let the businesses pour out into the streets, encourage more pedestrian interaction and motor free events.)

Having to pay for parking, this is a deterant and frustration to patrons and businesses alike downtown. Need grocery store or market downtown

limited entertainment opportunities as compared to larger markets not well known outside of Wisconsin and/or midwest

similarity to other mid-size cities in Wisconsin, lack of visibility

Lack of a convention center. Too many buildings in various states of disrepair and/or vacant downtown. Entrance to the downtown area is also weak from the west. While it has improved, still too disconnected from the riverfront overall (and the river frontage itself is disconnected). Could be so much more of a feature for the community than it is right now.

Not enough events, not a good bike trail system, no major sports, always trying to compete with other cities like Green Bay. Just be yourself. Why does anyone think that Appleton actually NEEDS a convention center. What a waste of money!!!

No one knows what Appleton is...its identity outside of our area is non-existant..and frankly that can be a strength or a weakness. Weakness in attracting business' is that CITY gov't overall does not comprehend business, they are TOO thoroughly civil servants. Good business' will attract visitors but city Govt does not really make things easy for start-ups.

Parking, Access, Public transit

Downtown department store. More parking.

When it comes to attracting people to move to Appleton, what are city's strengths?

Low living costs. great schools. low housing costs.

Affortable housing.

safe community, good selection of schools both public and private, proximity to more dynamic places (urban) and easy access to nature (northwoods)

Quality of life

WOW--so many. Safe, clean streets. Excellent schools. recreation. outdoor activities. I know when I talk to people that have moved here, they are SHOCKED at the level of personal safety and are not afraid to have their children take a city bus across town.

We offer a stable economy and a number of large businesses. We have a great school district with a number of residential areas with affordable, but quality housing.

Good schools, low crime, OK economy, increasingly welcome to diversity, Lawrence University, affordable housing, public library, relatvely low cost of living, good healthcare, access to outdoor activities, easy access to other cities via Hwy 41, local airport.

Safety, friendliness, atmosphere, great place to raise a family, shopping

Good schools, safe, affordable living, good quality of life, plenty to do. Good location to other major cities/attractions; airport nearby.

Clean, established downtown area, outlying areas not too run down, variety of housing, GREAt variety of restaurants and shops

Easy to get from one side of the city to the other in 15 mins. Some cities, especially metro, are 45 minute commutes - Not here. PAC, walkable downtown, farm market, river front, trails, bus lines, philanthropic community, family minded. Chamber is a quick and easy way to get connected.

good schools, good services and programs, many varied inexpensive activities, trails and recreation opportunties

affordable, safe, good schools, good network of social services

great place to raise family, good school district, variety of restaurants and attractions, many good employers

School system - including AASD. UWFV, FVTC, and LU, strong network of human and social services via private non-profits especially. Tends to fare OK, relatively speaking, in terms of unemployment and other economic factors. Socially conscious business environment for the most part - key employers such as ThedaCare, Kimberly-Clark, Miller Electric take a proactive approach to building and sustaining community supports, growing work environments. Growing entertainment opportunities, growing diversity, overall progressive atmosphere appears to be taking hold.

safe, good schools, affordable housing, affordable shopping

the mall, the downtown activities, the clean, vital & active offerings. From the Timber Rattlers to the PAC there are first rate offerings across a wide area of interests. Happy to supply a list if you really don't have one from ADI

Housing mix, Educational system, Cost of living, Amenities

Very family friendly, great schools, parks

When it comes to attracting people to move to Appleton, what are city's weaknesses?

Not enough tech companies to attract more diverse incomes to the area

Shopping and eating options

mediocrity

Jobs . We need more residential opportunities for people to live downtown.

Well, despite all those things we listed, it's a small town. People looking for an urban setting like Mpls or Madison are not going to get it. On the flip side, we don't have the crime and other issues in a large city.

We lack a strong transportation system. The residential areas near downtown are underdeveloped and lack community. We have yet to build and market strong developments in our 'green' initiatives. Bike paths, homesteading opportunities, park development and biosolid compost program expansion are only a few possibilities.

People may not realize all that Appleton has to offer for a city of its size; growing number of free lunch students (evidence of poverty/weak economy)

Winter weather

Lack of diversity and at times, open mindedness, some of the things big cities offer are lacking: multiple options for different types of stores, restaurants, services.

Lack of urban trails, riverfront not the best

Taxes are high and getting higher. Streets are getting worn and there are a lot of commercial vacancies. Appleton is "clicky" so it is not easy for outsiders to feel part of the community unless they REALLY put a lot of effort into building relationships and "fitting in".

Housing expensive

lack of entertainment options limited airport options to travel without layovers and high cost of flights lack of diversity

Income disparity, lack of sufficient number of living wage jobs, too many jurisdictional issues get in the way of progress and create tremendous inefficiencies. Outagamie County in particular is too unwieldy, does not function from a pro-active standpoint overall, gets in the way rather than helps in too many cases, etc... Lack of a cohesive identity -- too few take pride in being from Appleton. Neighborhoods are ill-defined. (Weather doesn't help either!)

so many more communities that are close by to live in with better schools, more housing options and more outdoor activities.

biggest is the marginal folks allowed to congregate north of Franklin st. (between Lawe st and Badger ave., south of Wisconsin Ave. I don't know that the word is out if you cause trouble here you will be dealt with. Gorski kept us clear through the 80's but political correctness directly costs us quality of life. Sadly we could learn from Gulianni's NYC.

Job opportunities, taxes

What do you think Appleton's current citizens find most appealing about the city?

Family friendly

No traffic, easy to get around and nice people.

cost of living and easy drives to work and etc.

Clean and safe.

clean. safe. a great place for families. an affordable cost of living. excellent housing.

We have a strong, interconnected community that cares about each other and knows one another.

Safety, friendliness

It's safe and has a good qaulity of life

Cleanliness, appears to be a well 'run' city

Job market and career opportunities. There really is something for everyone, you just have to look for it.

walking trails, small town with good services

safe accessible affordable strong schools

great family-friendly atmosphere

School system, relative safety, diversity, environment, cleanliness, river.

not usre

Safety in relationship to size, Services offerred

Unique downtown

What do you think Appleton's current citizens find least appealing about the city?

Not as friendly to singles. They leave for bigger cities

Use of river front. Bike friendly streets, downtown parking!

I don't think there is unanimity there. Long-time residents want it to stay the same and newer residents want change and more dynamism.

Good jobs

ok, so it is the home of the John Birch society and it's pretty white.

Our commercial development is impressive, but feels excessive. Our city has a lot of advertisement, but lacks quality in green space development and quaintness.

winter weather

That the city is evolving and changing (in age, race, class) in ways that are outside anyone's control, and how city leadership has prepared for and/or embraced the changes and positioned the city for future success.

Lack of adequate transportation options (bus, bike racks, trails, free parking)

The train that runs right through downtown and parking ramps. Yes, it is acceptable in other communities, but Appleton wants to have that small town feel to it. They like driving right up to the front door. Parking ramps are GREAT when you work in downtown, but to patronize downtown... not so much.

paying for parking, could use more public access to riverfront

higher property taxes limited entertainment

not sure

Very slow pace of development in key areas - downtown and riverfront seem to have made some strides, but aren't keeping pace with what some other communities seem to have been able to accomplish in terms of redevelopment.

not sure

See #4. on top of that the lack of good quality jobs. (obviously not unique to us) but we still should incubate jobs...history speaks loudly. Who is starting things like Anchor foods, jacks pizza,GNC, hayes mfg, town & country electric, pierce mfg, SOMEONE show me the incentives!

Government division

Parking issues

How would you rate Appleton's location and commuter connectivity (highway, passenger rail, commercial air, etc.)?

can't seem to support direct flights to many cities (e.g. Denver). Flight connections that go through O'Hare are problematic and off putting. Needs rail connection. Highway connectivity very good

Need more people to use mass transit (Buses)

there are threats to the transit system and it would be a hUGE BLACK MARK to lose the clean, dependable transit system. The airport has come a long way, but you still cannot get anywhere from Appleton without 3-4 transfers.

No passenger rail.... airfare is high in comparison to Milwaukee or Chicago. Additionally, few direct flights.

Great access to arterials and collectors, poor for rail, water, or bus

What commuter connectivity?

air travel is challenging no real options for passenger rail

a train connecting Appleton to Milwaukee is highly desirable

we have no passenger rail, the airport does not have affordable options

I think lake Michigan and even Winnebago create a limited access
having to travel through hubs for air is negative

Connectivity excellent, location seen as a negative because of perceived distance from Milwaukee, Chicago, Minneapolis. Actual mileage and drive-times actually lower than most people believe.

Location is removed. But connectivity OK.

Hard to put this to an answer. Close to the Packers, but several hours from Madison and Milwaukee. That is a mixed blessing.

Lack of interstate status for 41 hurts, since it effectively screens Appleton out of certain opportunities. Question doesn't mention passenger rail, but connectivity via passenger rail to Milwaukee would be a huge plus.

The airport is very convenient, however, the airlines movement to reduce flights makes it extremely inefficient to travel via air from Appleton.

Getting US 41 to Interstate status will help.

Need communication/transportation between the Green Bay and Appleton airports. Airfare is too expensive from our small markets. Need commuter trains between Green Bay and Appleton, down to Oshkosh, Fond du Lac and Milwaukee.

From a quality of life standpoint, what could Appleton do to attract and/or retain young people?

Develop an urban housing environment like many larger downtowns

Develop more urban living options and help clean up city neighborhoods!

We have the reputation for being a good place to raise a family and a boring place for young, single people. a more urban and dynamic downtown area with good mix of upscale residential and retail could make the community more attractive.

Attract employers who will provide good jobs to the young people.

I also challenge this statement. Why do you want to attract a youth culture? Their nature is to come in, stay for a few years and leave. I would, instead, attract people who want a HOME, not a resume pit stop. The primary driver is economic opportunity and the more we make the region attractive for businesses to locate and expand, the more those businesses will attract people who want to make this their home. It's not about creating an attractive community, it's about attracting people who will make it a sustainable culture.

Technology, marketing, and local/sustainable agriculture businesses and policies. Green space, music festivals (like Mile of Music), increased 'culture' budget (initiatives that increase Appleton's viability as a tourist destination) and increased city sustainability initiatives.

Just market what is here. If young people aren't interested in coming here it may be more of a perception issue than a genuine lack of what they want from a community. More unique downtown housing that is affordable to young professionals.

Retaining young people is difficult as they want to see and experience new things. So I think the best thing to do is to attract new and people who want to return after trying something new. It is always good to come home. Attraction should focus on quality of life.

1) Give youth/rising professionals the opportunities to sit at the table and be part of the governing process--don't have the wait until it's "their time" to get involved in lead. 2) City government, businesses and other organizations need to look at what young professionals want and work on developing these areas--the downtown district that supports a higher residential capacity and offers amenities and services like a grocery store would help because Millennials like to be in the center of the action (live, work, play) all within walking or biking distance

Need tech jobs, tech coffee houses, tech bars. Lack tech connectivity.
Beef up our college offerings. HUGE scholarships and incentives. Attract them! If they go to school here, get jobs here, they will stay here!

Greater diversity of entertainment and life opportunities

high speed rail connecting to Milwaukee for ease of travel would be helpful

Need to continue redevelopment efforts that promote unique, locally-owned entertainment, restaurant, and retail establishments. Develop improved "walkability" and consider creating no-traffic area surrounded by mixed retail. Much more to do in terms of public access and use of the riverfront also.

have incubator business', have gov't get out of the way. We should "set the stage" for young folks to engage and execute their ideas. Look at NEST. Create the stage, feed the hunger of the young for exchange and growth of ideas...mentoring them/screening them from gov't regs...buffer zone to reality?????????????

Fiber network, walking/biking community, downtown that is more than bars and restaurants

Brand itself more effectively as a community that great or young people, with amenities that are relevant for that age group.

Social scene that didn't just revolve around the bars downtown

Promote quality of life aspects that matter to young people

I don't have much insight into what that would take.

Publicize social events/lifestyle activities and organizations that are affordable vs. larger metro areas such as private schools and country club memberships. Dining and housing also are much more affordable

Maintain a vibrant and fun downtown Easy access to bigger cities (direct inexpensive flights?) "Cool" urban living areas Networking opportunities State-of-the-art

Use some of the younger managers/executives in the recruiting process

Improve the downtown to be a center a place to hang out and spend time
Not sure we can really do much of anything. People profess to wanting small, local businesses to patronize, vs. being somewhere where everything looks exactly the same as everywhere else. Those same people, however, don't patronize enough small, local businesses to keep them around. Events such as the Mile of Music, if it continues, are a plus.

More professional activities.

Good paying job offerings out of college.

Develop targeted programs to retail Lawrence grads to stay in the area and apply their creative talents - focus on housing, studio spaces, incubator space, etc...Look at models like Paducah, KY etc...Re-purpose old warehouses, empty commercial buildings in Appleton and surrounding communities

Offer more variety in everything; housing, entertainment, eating, shopping, etc. Get rid of the "ole boys" network that strangles positive development; only those that are in the inner circle can get anything done.

Focus on what is important from a lifestyle standpoint for younger people versus the entrenched views of the people who have lived here forever and only know this area

Job Opportunities/Career Advancement

Urban setting for urban lifestyle

More integration of Lawrence students into the community/ jobs that pay well

More non-alcohol focused venues

1. Make it a priority. 2. Study what other mid-size cities have done nationally to identify best practices. 3. Study a few closer examples (e.g. Milwaukee Young Professionals Week) to get ideas. 4. Enlist business community to support/fund a few pilot initiatives, assess results and recalibrate, as needed. 5. Find something we can be the best at and develop/market the heck-out-of-it (e.g. Milwaukee has identified "water" and has really been working that for several years now).

Attractive, affordable apartments downtown, along with downtown grocery shopping. More bike lanes! More public transportation!

Improve the live entertainment opportunities.

Different entertainment other than bars and the PAC.

Find out what todays and tomorrows young people like and determine if we have what they want....housing, activities, social spaces... then find business people and developers that will bring those things to the area.

Find activities for them to get involved in, particularly from a social perspective.

greater economic developement of clean industries; more job opportunites for young folks to want to return, settle and raise a family

More green space, more concerts, more venues to interact, more organic venues, youthful retailers

Provide networking and professional development for young professionals.

Business startups tailored for occupations

Enhance the downtown and riverfront as a place to live, work and play in an affordable, safe manner.

Cool loft apartments downtown, expand the Chamber's Pulse program, create an innovation/maker's space, infuse arts and culture in everything you do!! Be a more walkable, bike friendly community,

Ask them......social outlets

It doesn't have and probably won't have a big- city buzz that is so attractive to young college graduates. More of an urban feel might help; mass transit, urban housing, river amenities

Make it a "cool" destination for a certain target market of young people. Young professionals, young entrepreneurs, young techies?

Provide condo/luxury apartments, improve walkability, be bike friendly, build a new library, maintain modern park amenities and recreation activities, maintain high quality schools including college, etc.

Art movie theater. More diverse restaurant scene. Better public transit, more hip housing near the downtown. Groceries downtown. More non-bar entertainment after 5 pm.

advertise bike lanes nite life great place to raise a family safe and a lot of advancement possiblites

create more family wage jobs

Improve College Ave - more restaurants, more nice downtown living opps, fewer dive bars or bars that attract drug dealing.

Better promotion of what Appleton has to offer. I believe Appleton has a lot of offer-it just isn't promoted

We need more young people to come back to Appleton with ideas from other cities in which they have lived. We need more diverse employment options to make young people want to live here and raise their families.

Everyone who leaves seems to come back eventually. As a young person, I want to leave. It's a great place, but it is Wisconsin.

Be more progressive: public art, free or low cost cultural opportunities, bike path infrastructure, better riverfront recreational access, community sustainability initiatives (local food, public composting, urban chickens), skateboard parks, etc.

More big city options for entertainment / food / shopping

Provide opportunities for productive work/lifestyle connections that will promote advancement

Create a livable downtown, move forward on multi-modal transportation options, invest in the community in terms of public spaces, minimize barriers to new ideas or businesses

Better public transportation - bus, regional transit, passenger rail - Amtrak, for instance, direct air flights to and from major destinations. Improve upon the current social scene - get away from taverns and bars as social outlets. Look to what major cities have to offer young professionals and emulate them.

Continue to implement on-street bike lanes More special events with music (less expensive than PAC)

Like many businesses, keep or increase pay for you people.

Keep doing what you are - maintain the downtown as a vibrant activity center Maintain and expand recreational opportunities (partner with neighboring communities)

Appleton offers a ton of things for people to do and I know several business executives who moved to Appleton for that reason. Again there are several things around Appleton that make it attractive, the Mall, Fox Cities Stadium, PAC.

More riverfront amenities, recreation opportunities, technology and innovation sector jobs/industries, ways to connect young people (through networking groups, etc). More walk/bike paths on and off street. Better housing for young people (town houses, etc).

Also need to include single women

Continue the contemporary urbanization of downtown, eclectic housing, trail development, riverfront development, engage Lawrence more as a destination for community - not just students

Allow them to make a living. Allow them to succeed.

Keep the downtown vibrant.

Get them connected. Pulse

Have good paying jobs available

Millennials like walkability even more than I do. They want a downtown center that has great places to live, shop, and do things. Truly connecting the downtown to the river would be a great start. Keeping historic buildings in use is important as is green space - not filling up every available space with new buildings. A sense of scale and aesthetics in architecture and city planning. Responsive transportation systems that don't rely on automobiles.

Nothing, most of the young people will come back later in life when they have children and are looking for a safe, community-oriented place to live

more bike lanes access to quality food near downtown more opportunities for flexible real estate use downtown

Appleton is very family focused which is a positive but if you don't have a traditional family (mom, dad and kids) then I think it's hard to attract younger people or those who don't have a traditional family structure.

Residential chicken-keeping, pedal pubs downtown, dogs in city parks.

ensure there are lots of fun activities, night life, and interesting/well paying jobs.

Downtown housing, expo center

enhance the riverfront

Housing options downtown and redevelop the riverfront

Not much. Geographically, Appleton is in the middle of nowhere. If people are looking for urban amenities and career opportunities, they are better off in a mid to large metro area. It's a very parochial community and hard for newcomers to assimilate into.

More downtown living opportunities, bike lanes/running trails, diversity, expansion of the downtown arts, entertainment and cultural areas.

More downtown apartments, near the action on College Ave.

grow them from the inside; you're not going to get outsiders to trade what they have for what we have. But rewarding those who grew up here, to stay here, has a chance of working

Provide planning that facilitates young peoples lifestyles. Small urban squares with grocery, coffee, etc. Planning for bike lanes and walking paths would be important as well

More engaging neighborhoods in which to live.

Based on its location in Eastern Wisconsin, what resources does Appleton have access to that make it attractive to tourists/visitors/shoppers/diners?

Water, forests, Mall, many dining opportunites

great potential in riverfront, Timber Rattlers stadium, sports complex. History Museum at the castle, Bergstrom Mahler Museum, Children's Museum, Fox River Mall, Farm Market!!!

River and mall. Entertainment district downtown.

Really? Appleton is not an end destination. It's a place to stay if you have Packer tickets. It's a place to stay if the EAA hotels are full. The primary reason visitors would stay overnight is to take in a PAC show.

The Fox River Mall, Performing Arts Center, Universities, restaurants/microbreweries, fox river, downtown.

For people many people, Appleton is the "big city". If you live in a rural area, you may feel uncomfortable going to Madison or Milwaukee to shop, attend a performance, etc.

Fox River, Lake Winnebago, Lake Michigan, the northwoods and a close proximity to other large cities in the state/region

They promote shopping, but that is such a niche market. What helps is they are close to other amenities--high cliff, lake, agri-business, Packers, TRats

Soccer fields, Fox River Mall, Fratellos and Pullman's on the water, Country Clubs, Golf Courses, downtown, Performing Arts Center, Boutique Hotel (Radisson is too outdated and too plain to be valuable).

highway access, mall, hotels, sports fields, PAC, large festivals, EAA

Fox River Mall Lake Winnebago

I'm not sure that I understand the question

PAC, some nice establishments downtown, some diversity in restaurants.

moderate amounts of employed, educated people...but the growth here is not THOSE people. It is those that consume but do not produce.

Lake Winnebago, Fox Cities Mall, maybe the Timber Rattlers, Green Bay Packers, PAC

Fox River/Winnebago system

Airport

Which communities do you see as Appleton's greatest competition with regards to attracting tourists/visitors/shoppers/diners?

Milwaukee & Chicago

Milwaukee, Madison, Door County, Green Bay/ DePere

Wausau, Green Bay and the Dells.

I just can't imagine that Appleton is an end destination for anyone--unless they want to visit to see a PAC show.

Madison, Milwaukee, and the Twin Cities.

Milwaukee, Madision and Chicago

Sheboygan/Kohler; Cedarburg; Green Bay to some extent; Milwaukee, Madison

Green Bay

Green Bay, Oshkosh, Fond Du Lac, Wisconsin Dells, Milwaukee

Green Bay, Madison, Door County

Madison, Green Bay & Milwaukee

Green Bay, Oshkosh, Grand Chute

Green Bay, Milwaukee, Madison.

Chicago

Green Bay

Madison, Door County

Green Bay

How far do you think people are willing to travel to visit Appleton?

If there's a PAC show, they're taking in something with the Packers or EAA or similar large event

That all depends upon the direction they are coming from. From the North 200-250 miles from the South 50 miles.

not a destination city at the current time. Folks visit for a night, and then leave. not enough to keep them here--unless they are rich and like shopping.

depends on why they are coming here.

How well do you think Appleton competes with other cities in Wisconsin (e.g. Green Bay, Madison, and Milwaukee) with regards to attracting tourists/visitors/shoppers/diners?

Other cities in Wisconsin, our size or larger, support the cultural organizations on a regular basis with tax dollars or room tax. Our cultural organizations could be far more competitive with similar organizations in other cities if we supported there operations more consistently.

These communities have many more options for tourists.

I think we are way more user friendly than any of the above.

How well do you think Appleton competes with other cities in Wisconsin (e.g. Green Bay, Madison, and Milwaukee) with regards to attracting people to move to the area?

Our reputation for being a conservative community both helps and hurts us. Many families who appreciate the family friendly atmosphere don't leave. But we lack a dynamic reputation to draw outsiders in to stay.

I'd pick Madison over the other communities any time, all things being equal.

Much safer and more affordable community lacks diversity which other communities have

They will come if there are jobs.

If you could change one thing about Appleton, what would it be?

I would shake Appleton out of the complacency of mediocrity. We need to stretch ourselves toward excellence. Take risks to invest in better community assets -- better public buildings and resources more ambitious architecture. Significant investment in the riverfront. We are too cautious.

More employers that provide good jobs.

More jobs. More businesses.

Reduction in the amount of advertising and signage.

The communities need to become one. We are too fractured in our efforts. From outside the area we are Appleton NOT Appleton, Menasha, Neenah, Grand Chute, Little Chute, Kimberly, Kaukauna, Town of Menasha, Town of Neenah, etc.

More visionary leadership from officials and a more progressive and accepting citizenry

The riverfronts Obliterate at least one neighboring community

Aggressive in marketing and economic development and A LOT less political.
by having to pay for parking downtown it hurts the small business and pushes folks to shop the mall instead

make our populations more culturally and ethnically diverse

I would make it accessible via high speed rail

Build a first class convention center.

psychology of the city govt to energetically welcome business', understand that they are producers & creators, not takers of resources. Change the mayors title to city manager. Then have those people educate the local legislators the same way.

Stop trying to be the big dog in the kennel. Admit that working together with the other surrounding communities to offer more is what will make the city and the businesses in the city successful

City government with goals and all departments pulling in the same direction to meet those goals.

Better parking in terms of convience, price and spaces

growing manufacturing base instead of shrinking

Weather

The Wisconsin drinking culture is not a positive aspect of living here.

The weather

Longer term solutions/thinking. More investment in quality of life things - green space, youth programs. More investment in economic engines - convention center

More financial involvement from the city toward projects. Seems like Green Bay is always stepping up to enhance their waterfront, develop housing, help finance business building projects, etc.

Move farmer's market one block off of College.

Downtown

Passenger rail service to Milwaukee

We need a convention center.

Free parking downtown

Better planning, more thoughtful approach to neighborhoods, commercial districts, and downtown development. More emphasis on place-making

Bring back all the good that has been lost and get rid of all the crap that has replaced it

Change out the city government. The incumbents are good people who are trying to do the right thing, however, what they know is what they have experienced here. They lack a broader understanding of what it is like to live in other parts of the country and how some of their long held beliefs are holding back this area.

More Corporate Headquarters

Set a vision to grow into the future. Many of the pieces are in place, but Appleton leaders lack leadership and vision to make things happen.

The Council is stuck in detail like most political bodies but getting the vision clear and moving there with support rather than restrictions would be helpful

"Thing". Better planned expansion.

I'm sure there is something, but I can't think of anything right now

Even considering the potential weaknesses described above, Appleton is a city that "works" pretty well. One of our hidden strengths that I haven't mentioned is a really strong base of community leaders who have been largely successful in working to improve Appleton over the years. A lot of cities are not blessed to this degree. Another strength is the incredible spirit of philanthropy in Appleton, which is closely related to my comment above. The area I really feel needs a lot of attention right now is to build energy and focus on ways to attract and retain more young professionals.

The weather! Ha. But barring that, why not give everyone who lives here a "Winter Tax Credit" to use on winter activities, such as skiing, a hot tub, etc.? Seriously, we need cool downtown apartments within walking distance to cool grocery stores, also close to bars, restaurants and shops.

The flat farm land with housing developments carved out in 1/2 mile squares. Functional but not real unique or attractive. Madison and Milwaukee have a wide variety of neighborhoods that have a lot of character. Maybe we need some neighborhood redevelopment. Find some of the older established neighborhoods that have “tired” or rundown housing and redevelop it to add more character and appeal....and a conference center.

Nothing

Make it easier to do business -- have government understand that they are public servants to help, not to simply enforce ordinances.

1] greater collaborative effort with its neighbors; as a equal partner, not as a Big Brother 2] strive for excellence in all aspects of education 3] improve and expand the Appleton public library

I would close College Ave between Appleton Street and Drew Street and make it a walking mall like Madisons State Street. It would allow for outdoor venues to grow and attract people downtown to shop, eat and enjoy music. I think summer farmers markets show the benefit of closing off College Avenue is to people and downtown businesses.

Decrease permitting process

I'd leverage global connections for deeper international awareness.

The permitting and incentive programs.

Free parking Downtown, stronger public transportation system, more progressive city council

Highway connections social outlets for young professionals

Better access to the interstate highway system. Other than straight south, it is a bit of a challenge although improved 29 has helped.

Downtown evening shopping, upscale, contemporary restaurants

Though there has been numerous projects on the Riverfront, they are still moving too slow to develop the river to bring people down there.

Better access to mental healthcare services & less alcohol distribution points. Huge culture of alcohol consumption.

We had an urban planner in to speak last Spring. His words resonated with me. Appleton has always been about planning for cars - parking, traffic flow to/through the downtown. We need these days to be adopting a transit-centered development strategy, which will serve our Seniors as well as the Millenials who aren't buying cars and want to live/work near amenities like groceries. No reason why we have to build more and bigger parking ramps and roads through the downtown instead of investing in trolleys/light rail. We used to have it in our area, and the tracks can still be seen under the pavement on several streets, like Newberry going to Kimberly. It can be a great regional asset. So could passenger rail.

Taxes

improved central city traffic

more jobs

Improve College Ave

More development of neighborhood shopping centers with specialty stores. Walkable

More education to the importance of economic development to the public and elected officials.

The quality of the roads.

Be more like Madison/Portland/Flagstaff/Silicon Valley and less like Little Chute/Kimberly/Kaukauna

More regional cooperation

We tend to settle for "good enough" instead of doing things truly visionary. We're modest and it would be nice to aspire to greatness consistently rather than have that be the exception.

Raise the taxes that corporations currently pay and put that money towards providing adequate funding for public schools, road improvements, and services for those who need them.

More shopping in downtown

Better intergovernmental collaboration

Work more as a member of a region - cooperate on building a regional economy rather than just a local one

Be more progressive regarding economic development. Make more of an effort to creating and attracting new industries (technology/research/small businesses) to fill the gap left by lost manufacturing.

That is branded itself as something that was recognized on a larger national scale.

Agree on a community vision and inculcate it throughout.

The replicated governmental units

Fuller retail experience - Costco, Trader Joe's, Whole Foods, REI

The peditory nature of fox valley technical college bordini center and its negative impact on small business collaboration.

Take more advantage of the waterfront. Good plans in place. Make it happen.

Need to cooperate more with other municipalities

More uniform borders

Positive: Create a multi-use Riverwalk and connect the riverfront to the downtown. Negative: The edges of town where empty strip malls are surrounded by acres of parking lots. The College Avenue entrance to Appleton is one of the worst examples of urban sprawl.

Annex Grand Chute since they share many of our schools and services

Tear down the city center, and make college avenue from Morrison to Appleton pedestrian only space.

More frequent bus/ mass transit system.

I would have the city stop wasting money on consultants and surveys that are poorly written.

the weather!!! winter is too long.

Parking policies and re-think building codes

lower taxes

increase trust among elected officials, business and community leaders, and city staff

Question does not make sense.

Change to City Manager/Mayor form of local government

More use of the Fox River for recreation.

change the culture of balancing operating budgets using internal cuts, and introduce the concept of rising taxes as a necessary graduation to growing the City image. Cutting from the inside has very little to offer as compared with long-term acceptance of (slightly) rising taxes

Getting greater intergovernmental agreements from the surrounding communities.

I would strengthen and make our neighborhoods more interesting places to live.

better planning for residential/commericial/manufacturing blend....and affected highways systems

As it relates to business, which of the following best describes the City of Appleton?

Inconsistently business friendly. There is a general pro-business culture but make it hard for businesses to succeed in our downtown with aggressive parking fees and enforcement and a reputation for overly restrictive building codes.

City departments and inspectors can be hard to work with.

The region is usually friendly to business, but the greatest challenges are the state tax climate.

Don't know.

While I know some things have changed for the better, I work with developers from time to time and have been a part of several construction projects -- the consensus is that building in Appleton is still something to be avoided. Attitude or disposition is more about creating barriers rather than working together to figure things out.

Much better than they used to be but still some hurdles

From what I hear, much red tape

over-regulation.

Trending in wrong direction. Common Council increasingly micro-manages and spends too much time on issues of little import.

From what I read in the Post-Crescent, it seems the City of Appleton has a lot of regulations and not enough coordination between departments to call it generally or extremely business friendly

We are doing well. "Extremely business friendly," in my mind, would mean lower taxes, which would translate to lower quality of life and lack of concern for community and education. I don't think we ever want to be "extremely" in favor of business.

I still hear the grumblings about how hard it to work with city hall, but then you hear the opposite too. Not sure what to believe. It might just be that the complainers didn't get what they wanted

Building projects seem to be a bit of a challenge from an approval/ planning standpoint.

Regulatory issues still a factor

Thanks to the Fox Cities (should be Appleton) Regional Partnership and Appleton Downtown, Inc.

Inspections are a hurdle to growth and expansion.

1. no incentives for businesses 2. Many codes to get through

Business friendly to known commodities, but ignores small business. Favortism toward certain individuals in the development community.

We do a good job of greeting them, but with so little to offer them, we tend to be the brides-maid quite often

How would you rate the City of Appleton's support of business?

I hear more negative than I do positive. Sorry Appleton - it sounds like we have too much red tape here.
Paying for parking downtown penalizes the downtown business and drives them away. Change the way you fund this to create an even playing field for business growth

Very average, though we get way better results than the cities listed above, I think they are not the cities we want to compare to ....how about Austin Tx,

Parking fees bad, too many permits

Seems like there are more barriers to building in the city than in surrounding municipalities. Have heard this from numerous business owners.

Trending down.

This is the only place I have ever lived that will drive small businesses out of business while they work on roads and sidewalks

It is better for business if they need to partner up more than go it alone.

Getting significantly better, but still room for improvement.

incentives for revitalization and development of blighted areas and/or unoccupied spaces.

Lack of redevelopment authority loan programs for small business development.

I don't own a business in Appleton and can't comment. I only patronize them!

red tape length of time to complete large projects

This is not just the City Staff, I think they "get it". This is more about our elected officials.
The city of Appleton is not just appointed officials, it is elected officals and salaried including police and fire. All in all Appleton does not move quickly enough or understand how their policies kill opportunity.

It is imperative that we work as a region!!!!!!!!!

TIF is available, but very little else can be done to lure business.

No local programs to support local business. Must contact people and organizations outside of City government.

How important is it to support a vibrant downtown Appleton, including shopping, dining, and residential?

Without a strong urban downtown Appleton and the Fox Cities will be perpetually stuck in the stereotype of a sleepy, boring bedroom community, would be city.

If you do not have a strong city center, you will not have a strong city. We need more residential options downtown and more employees.

only if you want to enjoy living here

It's our future

It's one of the first impression visitors have, and it's an opportunity to create a difference because most cities our size don't come close.

I think a vibrant downtown is essential, but I sometimes think there is not a lot of acknowledgement of how much support is given downtown businesses with parking ramps, extra police, etc. Sometimes the downtown merchants don't even bother to make sure the walks are cleared in front of their stores in the winter. I used to have my business downtown and it seemed there was a feeling of entitlement on the part of some downtown business owners.

But it has to be done the right way. The recent replacement of Houdini Plaza is a good example of what NOT to do; create spaces that aren't attractive and that no-one wants to be at.

Actions speak louder than words, they shutdown College Avenue for months to redo the road and sidewalks - that says the roads and sidewalks are more important than the businesses downtown

This is CRITICAL.

Downtown is the heart and soul of the fox cities...not just Appleton.

downtown needs to be robust and vibrant in many diverse ways

If you don't have strength there, you have a problem everywhere.

Provides the image or heart of the community.

A vibrant downtown is absolutely essential

We must embrace the New Urbanism, without displacing our current central city residents. Adding grocery availability and public transit would greatly enhance our downtown.

I'm not sure our Downtown Appleton organization has it all figured out.

This is part of developing a livable downtown to attract young professionals and retain retiring baby boomers interested in urban lifestyles.

Vibrant College Ave district is great! Provides sense of place.

Appleton is an island growth happens in other towns and cities. The only real value Appleton van bring. Regonaly is a vibrant downtown band waterfront.

Reflects the quality of life and the quality of a visitor destination

Even New London benefits from an attractive downtown Appleton. We have to work together to get ahead.

It truly IS the heart of the community.

Remove liquor licenses quotas Make it easy for businesses to have sidewalk activity and other creative proposals

In order to attract employers we need skilled workers. These workers are free to live and work anywhere they want, so having a premiere entertainment district is the most important factor for long-term growth.

Need to create residential opportunites in the downtown area to build a base to support businesses, arts, etc. Undesirable rental housing options. Rental units in houses are outdated, apartments are cookie cutter design. Good stock of owner occupied housing near downtown.

If you were a site selection consultant considering Appleton as a location for a jobs project, what would you find most appealing?

Existing community amenities and environment and culture of progress and optimism

transportation, stable workforce, skilled labor availability, ability for community to pull together to meet a need

The story of quality of life that I could tell potential employees.

See the answer to the first question.

Cost of living, hard working candidates

Cost of resources (labor and land) Quality of work force (general work ethic) See areas strengths

The work ethic of the people here.

Good settings for industrial parks, good labor force with the upper midwest willingness to work.

Workforce is educated, skilled and strong work ethic.

Accessibility, educated workforce

How neatly packaged the city is. It's well laid out, easy to navigate, and clean.

The people

Workforce, labor market

Diverse population, generally stable economic conditions

Strong Workforce Ethic

Proximity of Fox Valley Tech, quality of life.

Workforce

Quality of life and educated workforce

Stability. The area tends to lag in economic downturns and holds steady growth in ecomonic upturns. Willingness of Tech and public/private partnerships to develop talent pool. good transportation structure with access to a variety of and high quality modalities.

Good access to major Highways, available locations to locate in and workforce.

Educated, skilled labor force; 4 year liberal arts college (Lawrence); excellent technical school (Fox Valley Tech) and 2-year University of Wisconsin Center (UW-Fox Valley)

See #1 - depends on type of business. Same criteria as #1. Important to segment potential employers and identify key strengths for particular types of employers, as well as "general" strengths of the area.

Appleton offers a safe, comfortable, appealing place to work and raise a family. The workforce is proven to be more productive than most areas of the country. Life in Appleton is stress-free compared to most places in the country. At the same time, there are many cultural opportunities, great restaurants and nightlife.

Good Work Ethic

Availablility of space/land.

lack of significant crime; family values; Catholic schools; excellent healthcare; parks and culture; strong church presence of different faiths; friendly and approachable civic governments; superior libraries

Strength and dedication of the work force and the acceptance of new growth and development.

Great community and central Fox Valley location

Family community where familes come and stay.

Our walking downtown, the riverfront, diversity of our school system(s), available land in industrial parks and undeveloped areas on outskirts

The workforce. Appleton Downtown. Fox ValleyTechnical College, other higher ed. Established construction companies.

Vibrant downtown & riverfront

Workforce quality and availability, transportation infrastructure, low crime rate, and public amenities.

available sites, location within the state, quality workforce

Workforce, the Technical College, Transportation, Housing and "curbside appeal"

Quality of the work force and quality of preK- 16 educational opportunities available. Infrastructure is sound. Amenities such as the PAC. Downtown is much more vibrent than some.

A skilled workforce. A good variety of universities and colleges in the area.

Proximity to major highway systems and other metro areas. Availability of properties on outskirts of city or in adjacent communities.

Schools, smaller size, while having a lot of arts and entertainment and commitment to civic improvements. Nothing in Appleton is more than 15 minutes from anything else. We have a variety of cultures represented in our restaurants, but also, you're never far from a great fish fry.

ability to get to easily both ground and air.

Workforce opportunity and access to higher education Transportation system

location city bond rating property available in industrial park arts

Educated workforce.

Appleton is an 'easy' community to live in. Low cost of living, relatively light traffic (although its getting heavier) and decently low crime rates. These should appeal to workers and families.

work ethic; ease of development; cost of construction and development; quality of work force.

Again, the work ethic.

The older part of the city and they views of the Fox river have aesthetic appeal, and are in closer relation to many businesses. But there are developing areas that may be a bit more isolated. It depends on what the company is going for.
Good place to raise a family, AASD is wonderful, emerging cultural opportunities (ethnic restaurants, coffee houses, community events,etc)

Clean area, nice quality of life, minimal traffic issues, good municipal services

Track record of growth and success of the manufacturing sector, good transportation, workforce productivity and FVTC.

Great schools, libraries, affordability of living here, friendly, easy travel throughout the area, located within two hours of many great urban and natural resources, city and county parks, Lawrence University, community of philanthropy, neighboring communities have a pride and identity of their own, progressive, successful historic downtown, beautiful river, many options in types of neighborhoods (historic, newer, etc...)

I'm not sure

Vibrant downtown with diverse shopping, arts and entertainment

Same as answer to question #1, Location, work ethic of population, culture and recreational opportunities. Relatively modern infrastructure.

Limitless possibilities for room to grow.

Clean area Strong work ethic Good regional location to attract necessary laborforce (between Oshkosh and Green Bay) Great access to higher education (UW system and technical colleges)

I think FVTC and the labor force from the area are great. Their is also a low cost for living which means that employers keep costs down. Also their is lots of manufacturing in the area and services to helps the industry.

Centralized location, excellent quality of life that will draw great employees, strong work ethic, family values, skilled employees willing to learn new skills and be flexible to changing marketplace.

Work ethic Education Quality of life Cost efficiency

Size of community, stable economy, workforce quality, midwest work ethic

Sites easily developable, or ready. Quaility of education of labor pool.

Cost of living verses quality of life. We live very well on a median income.

Fox Valley Tech.

FVTC Number of food processing companies in the area.

Quality work force

Comfortable place to live. Pleasant and friendly people with a nice combination of long-time residents and newcomers. Great education systems at all levels, including a selective liberal arts college, a top-rate technical college, and a UW 2 year college. Lots of cultural opportunities. Affordable housing. Good work ethic. Safe. Recreation and entertainment options.

community-oriented city, safe city to live in, easy to navigate within the city
Density of key buildings downtown and closeness to river

Easy commuting for diverse work force.

Airport

Highly skilled workforce, low cost of living, extensive supplier networks for manufacturers.

1. the warm and welcoming people 2. the Fox Cities 3.Fox River and Lake Winnebago

Quality of life; highly productive workforce.

Transportation links- rail, highway, local airport. Low labor costs.

talent, quality of place, collaboration of community leaders

Strong, well educated workforce Low crime Strong education and healthcare Effective government The breadth of activities available

Large and diverse talent pool

Quality of schools, infrastrucure and low crime. Appleton is a desirable place to be. People want to come to Appleton.

the helpfulness of nearly everyone in the valley, not just government employees, but private sector, too

Beautiful community, access to transportation corridors, educated employees with sound work ethic

Setting. Clean, modern downtown. Cultural diversity

How attentive is Appleton's government to the needs of its current businesses?

I think things get stalled in the top management area of city hall. Progress seems to be hard to come by.

We only interacted with the Appleton on a business basis two times. One project proceeded after long and unnecessary delays while the developer on the second project moved elsewhere. In interacting with businesses located in Appleton there seems to be a bit of apprehension in working with or talking with the local government.

Work on physical improvements to buildings can be challenging.

Some inner drama comes off as unprofessional. Often, the legal and planning are very supportive and responsive, but there is a lack of talent in the economic development area.

I don't know that all of the layers of government understand the importance of economic development to the City. It doesn't seem that many of our council members care much about jobs or job opportunities.

These answers apply to a region as well, not simply to Appleton as a singular entity--impossible to segregate. Same as most governments. Do what they can based on tax levy constraints and taxpayers lack of wanting to pay for the services they actually recieve.

Appleton and surrounding communities need to take a more regional approach to business recruitment and work for the greater good.

Looks to blame business

Still a environment with a bias towards over regulation

Government issues at state, county, local level combined with way too many local governments makes it nearly impossible to pick a location and the battles at all levels of government slow progress and make development too costly. In business, time cosst money. And the governmental pace is too slow for the economics of a project.

My impression is that small businesses get help from the city when needed. Larger business leaders sometimes express the concern that government isn't going to bat for them enough.

Priority is placed on making things easy for the city, not for businesses. Decision-makers are more focused on pleasing vocal constituents than creating a favorable business climate.

A lot of work need to be done here. Appleton is known as the community "not to do business" with. Very difficult permitting, burdensome regulations and a "no" attitude

Need to have a comprehensive focus on local economic development across all departments attentiveness equals frequent communication/dialogue...who is doing that

Thank you very much.

Brand Acceleration, Inc.
Indianapolis   Charlotte   Atlanta
brandaccel.com

317-536-6255

Appendix H - SWOT Comments

The following are the SWOT comments from the March sessions, as recorded by Michele Vachon. SWOT is the acronym for Strengths, Weaknesses, Opportunity and Threats. The comments are listed in the order Michele conducted the sessions, beginning with Opportunities, followed by Threats, Strengths, then Weaknesses. The key code is as follows:

B/P – built environment/physical conditions
O – organizational/government issues
E – education
L – labor force/workforce issues

	OPPORTUNITIES	CATEGORY
1	Institutions could buy more local	B
2	Connect more with UW Extension System	E
3	Broadband	B
4	Rail transportation	B
5	Connect with Lawrence on waterfront more	P
6	Paper R&D	B
7	Waterfront development (i.e. trails, recreation)	P
8	Expand healthcare system	B
9	Alternative healthcare education	E
10	Cultural events and festivals	P
11	Fox Valley Mall	B
12	Better entraceentrance to and from City of Appleton	P
13	Develop stronger regional foodsystem	B
14	Organic farm	B
15	Downtown mixed-used housing	P
16	Develop form-based codes or design guidelines that are flexible	O
17	Create a formal business incubator space	B
18	Do a better job of connecting Passport for the Arts regionally	B
19	Improve downtown Appleton shopping	B
20	Local food production	B
21	Access to recreation and tourism	B
22	Create an "Arts Trail"	B
23	Create artist or creative class housing	B
24	Re-shore businesses instead of exporting	B
25	Re-purpose obsolete commercial and industrial buildings	B
26	More northside commercial development	B
27	Grant funding to support tourism	B
28	Recreational trails for biking, walking, tourism	P
29	Bed and breakfasts downtown	B
30	Exhibition and convention business	B
31	Create a gateway from downtown Appleton to waterfront	P
32	Improve connection in Comp Plans to waterfront	P
33	City of Appleton needs a full-time communications/public relations	O

34	Education City and County officials on tourism	E
35	City of Appleton needs to improve communication and listen to business community	O
36	Grow the Creative Class	B
37	Install pop-up businesses or art installations	P

	OPPORTUNITIES	CATEGORY
1	Institutions could buy more local	B
2	Connect more with UW Extension System	E
3	Broadband	B
4	Rail transportation	B
5	Connect with Lawrence on waterfront more	P
6	Paper R&D	B
7	Waterfront development (i.e. trails, recreation)	P
8	Expand healthcare system	B
9	Alternative healthcare education	E
10	Cultural events and festivals	P
11	Fox Valley Mall	B
12	Better entrance to and from City of Appleton	P
13	Develop stronger regional food system	B
14	Organic farm	B
15	Downtown mixed-used housing	P
16	Develop form-based codes or design guidelines that are flexible	O
17	Create a formal business incubator space	B
18	Do a better job of connecting Passport for the Arts regionally	B
19	Improve downtown Appleton shopping	B
20	Local food production	B
21	Access to recreation and tourism	B
22	Create an "Arts Trail"	B
23	Create artist or creative class housing	B
24	Re-shore businesses instead of exporting	B
25	Re-purpose obsolete commercial and industrial buildings	B
26	More northside commercial development	B
27	Grant funding to support tourism	B
28	Recreational trails for biking, walking, tourism	P
29	Bed and breakfasts downtown	B
30	Exhibition and convention business	B
31	Create a gateway from downtown Appleton to waterfront	P
32	Improve connection in Comp Plans to waterfront	P
33	City of Appleton needs a full-time communications/public relations	O
34	Education City and County officials on tourism	E
35	City of Appleton needs to improve communication and listen to business community	O
36	Grow the Creative Class	B
37	Install pop-up businesses or art installations	P

	STRENGTHS
1	High concentration of metal fabrication

2	Waterfront
3	Lawrence University
4	Cultural centers and events
5	Good quality of life
6	Few natural disasters
7	Low union profile
8	Stable economy compared to nearby cities
9	Availability of Broadband
10	Low crime
11	Farmers Market is year-round
12	Lawrence University is located near downtown Appleton
13	Strong work ethic in existing labor force
14	Skilled technical workers
15	Good public schools
16	Healthcare System is strong
17	Affordable place to live
18	Housing is affordable
19	Industrial parks are located close to highways
20	Redundancy in fiber network
21	Rail accessibility
22	SBDC and SCORE programs
23	Fox Valley Mall is a destination (40-60 mile draw)
24	Mile of Music Festival
25	Minor League baseball team
26	Diversity of industries
27	Philanthropic community members
28	Performing Arts Center
29	Flexible packaging and paper converting industry
30	Community volunteerism
31	Access to recreational opportunities
32	New library (if built)
33	Good regional airport
34	Appleton School District has a good reputation
35	Soccer complex
36	Cultural events and opportunities
37	Beer festival
38	Community pride is strong
39	New gardens of the Fox Cities
40	City of Appleton's concrete street infrastructure
41	Emerging graphic arts and industrial machinery sectors
42	Activities bring people to the downtown area
43	Appleton’s vibrant downtown and entertainment
44	Thrivent out-sources call center, but brought it back when customer service declined, and has new recovered
45	Paper industry – Appvion
46	Agreed with definition of economic development
47	Niche printing industry

48 Strong workforce
49 Work ethic, education, talent, retention
50 Education – public schools
51 FVTI referendum approved for industrial technology and welding program facilities
52 Fox Valley Technical Institute (FVTI) (generally)
53 UW-Fox Cities; UW-Oshkosh; UW-Green Bay
54 Lawrence University
55 Lawrence University's contribution of 25% of air traffic to Appleton Regional Airport
56 Museums
57 Healthcare
58 Festivals
59 Sporting events such as soccer, and other programs
60 Cost of living – affordability
61 Fiber optic is adequate
62 Good resources for small business & start-ups; mentoring for entrepreneurs
63 Farmers market is successful in summer and winter
64 FVTI Culinary program
65 Volunteer fresh food buying clubs
66 Hoop houses for indoor fresh food growing

WEAKNESSES

1 Not enough skilled labor for metal fabrication
2 High turnover rate in office and manufacturing labor sectors
3 Education system is moving away from "technical skills" training
4 Education system does not refer high school graduates to Tech Training Programs
5 Weak career and higher education counseling services provided at high schools
6 Not enough data-entry workers available
7 Lack of apprentice programs with Appleton employers
8 Lack of summer technical and school programs
9 Holes in K-12 Education system
10 Lack of foreign langauge skills and cultural training in K-12 and 4 yr institutions
11 Young workers do not have good softskills
12 Experienced older workforce get more jobs than young people
13 Overlap in City of Appleton Economic Development activities with Regional efforts
14 Businesses need more incentives
15 Appleton is not business friendly in permitting
16 City of Appleton Council people do not understand economic development
17 No formal "trailing spouse" or "spousal job accommodation" program
18 Charter schools are full with wait-lists
19 Lack of non-parochial private school options for K-12
20 Outagamie County does not contribute funds to Fox Valley Chamber
21 Appleton Mayor is not as strong in public relations as Green Bay Mayor
22 City of Appleton licensing, building permits system is not business-friendly
23 Downtown Appleton is not branded or advertised well
24 Lack of riverfront walkway or trails

25 Land in downtown Appleton is expensive
26 City of Appleton lacks a Vision that everyone can get behind
27 Lack of coordinated effort for community and economic development initiatives
28 Appleton is not a very walkable City; poor urban design
29 Appleton waterfront is not well developed
30 City of Appleton does not appear to be facilitation industrial growth
31 City council is not well educated on planning and economic development issues
32 City of Appleton offices are not working in a coordinated manner w/ econ dev
33 Complacency of city council
34 Loss of community-owned businesses
35 Perceived lack of parking in downtown
36 No downtown Trolley
37 Fox Valley Technical School
38 How are Econ Development leads handled
39 Aging workforce
40 Lack of communication between City and County and regional officials
41 Wisconsin Avenue is not appealing to visitors
42 Undeveloped community assets
43 Lack of senior housing
44 Poor public transit (i.e. routes to/from Lawrence, Neenah to Appleton, etc.)
45 Physical appearance of downtown Appleton and entries/exits are not attractive
46 Location of visitor's bureau is not pedestrian friendly or near downtown Appleton
47 Lack of hotel shuttle services
48 Lack of understanding by public officials about the importance of tourism revenue
49 Parking
50 Alternative forms of education are not available
51 Lack of high-end retail in downtown Appleton
52 Cost of infrastructure is high in Appleton
53 City of Appleton is "risk-adverse"
54 City of Appleton underappreciates existing large businesses
55 Better communication between Mayor and Alderman
56 No access to angel-investing network
57 Decline of paper industry
58 Valley Transit (poor public transit)
59 Lack of customer service training for hotel and concierge staff
60 Empty big box stores on College Avenue
61 City's impact fees are too high
62 Parking
63 Insurance industry has trouble finding 4-year degreed employees (company specific)
64 Price of land in Downtown Appleton compared to other Fox Cities
65 Loss of corporate prestige and esteem, e.g. AAL vs. Thrivent; Fox River Paper vs. Neenah Paper; Miller Electric vs. new pa
66 Lack of choice for private schools
67 Lack of urgent care
68 Poor incubator facilities
69 Don’t have great access to capital for start-ups and entrepreneurs
70 Limited low cost industrial space

71	Limited low cost commercial space
72	Land use image problem on College Avenue gateway from US 41 and Airport
73	Lack of design guidelines for commercial building appearance
74	Gateway entrances to Appleton need to be more attractive (mixed opinion)
75	Community/State coordination of maintenance of public lands at gateway entrances (State highways lack of maintena

Appendix I - About Our Companies

1.1.1 Team Organization

Following is the **Team Organization Chart**, which lists the names of key personnel that were assigned to this project. **Roger Hopkins** will take the lead as **project manager** because of his extensive experience with the Fox Valley communities. **Chris Manheim** will provide both operational and administrative support, as the **primary contact** for this project. **Jim Walton** will be responsible for **marketing strategy** (points D, N and O.4), **Michele Vachon** will provide staff support **for SWOT analysis and public involvement programs** (points C and F), and **Dan French** will provide technical support for points A and B. Chris and Roger will be responsible for all other points of the Scope of Services.