

## A TRADE AREA ANALYSIS OF WISCONSIN RETAIL AND SERVICE MARKETS: **UPDATED FOR 2015**

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### **Abstract**

For updated Trade Area Analysis (TAA) of Wisconsin counties we use the sales tax data as reported by the Wisconsin Department of Revenue for 2015. *Only those counties that have elected to collect the optional county sales tax are included in the analysis.* Because sales tax data are used one must keep in mind that the analysis focuses only on taxable sales and may not reflect the total level of activity in the county. Using Pull Factors and measures of Surplus and Leakage the relative strengths, and weaknesses, of local retail markets are identified. An example of how to explore changes in Pull Factors over time to identify strengths, weaknesses opportunities and potential threats is also provided.

### **Introduction**<sup>1</sup>

When a community is exploring economic development options one area of interest is local retail and service markets. Communities naturally ask “are local retail businesses reaching their fullest potential or are there weaknesses that need to be addressed?” In order to address these basic questions communities need to have basic insights into the relative strengths and weaknesses local retail and service markets. One approach to identify these local strengths and weaknesses is to examine patterns in current sales activities using the tools of Trade Area Analysis.

The power of Trade Area Analysis (TAA) is the simplicity of the tools and the ease of interpretation. Community economic development practitioners have found that this simplicity has led to community leaders, businesses and concern citizens to adopt the tools and insights gained from TAA. The tools of Trade Area Analysis have proven to be a powerful foundation upon which to build a conversation about community economic development options. Indeed, some businesses have found these tools to be useful in developing business feasibility plans and have been accepted by a number of bank loan officers.

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<sup>1</sup> For a more detailed discussion of alternative methods to analyze local retail and service markets, see the UW-Extension, Cooperative Extension program entitled “Downtown and Business District Market Analysis” by Bill Ryan and Matt Kures at <http://fyi.uwex.edu/downtown-market-analysis/>

The weakness of Trade Area Analysis is the lack of geographic detail. The data, in the case of Wisconsin, are provided at the county level (and only for counties that have implemented the county option sales tax) which may or may not reflect the true geographic economic market area. In our case here, from a purely economic perspective, the county is an arbitrary political boundary that may or may not reflect local retail and service markets.

Because the TAA reported here ignores the geographical or spatial element of the community's markets, local knowledge of shopping opportunities and behavior is extremely important. There may be very sensible reasons why TAA identifies a particular weakness or strength. For example, one community may be found to have large weaknesses in motor vehicle sales suggesting a market potential. But it may be the case that a neighboring community has a large concentration of automobile dealerships (a strength for that community) and hence easily explains the initial weakness for the community of interest. Knowledge of the condition of surrounding markets is vital to interpreting the results of the analysis presented here. The key is that TAA can serve as a foundation for a conversation about local retail and service markets.

What we will do in the following few pages is to review the tools of Trade Area Analysis and some of the simplifying assumptions that allows the analysis to move forward. Initially, residents in the local market or trade area of interest (e.g., the county) have the same tastes and preferences across the state. This assumption allows the community practitioner to compare the local market to a state average. We then show methods of estimating demand with unique trade area characteristics. As described above, the trade area is defined by the availability of data and the geographic area that the data are reported.

For this particular study we will use sales tax data reported by the Wisconsin Department of Revenue at the county level. Specifically, counties that have imposed the local option sales tax are included in this analysis. Because the data is drawn from tax sales receipts only taxable sales are considered. If a particular item is not included in the tax base, then no data is available. Hence care must be taken and one must keep in mind that the analysis is of "taxable sales". Still, the analysis provides one set of information that can be used to develop a picture of the local retail market.

## Trade Area Analysis

*Sales retention* is an indirect measure of locally available goods and services, assuming people buy locally if possible. While measurement of actual sales is relatively easy, measurement of the sales potential presents some difficulty. This assumes that not only that tastes and preferences are identical but also the local trade area is demographically similar to the state.

*Local potential sales* can be estimated by statewide average sales per capita adjusted by the ratio of local to state per capita income (Deller, et.al. 1991; Hustedde, Shaffer & Pulver 1993; Shaffer, Deller & Marcouiller 2004; Stone & McConnen 1983):

$$PS_s^i = P_s * PCS_{state}^i * \frac{PCI_s}{PCI_{state}} \quad (1)$$

where  $PS_s^i$  is potential sales in community  $s$  for sector  $i$ ,  $P$  is population,  $PCS$  is per capita sales,  $PCI$  is per capita income.

Care must be used in accepting the computed potential sales from equation (1). It ignores all of the shopping area and consumer characteristics that are located within the immediate and surrounding shopping areas. The potential sales provided from equation (1) assume no differences in local consumption patterns except adjusting by relative local income. For example, the approach of Trade Area Analysis used here does not account for differences in the socioeconomic characteristics of the region, other than income. But this readily calculated estimate represents a realistic initial estimate.

One way to estimate the sales retention is just divide actual sales by sales potential. Actual sales can be obtained from a variety of sources, including census of business, sales tax data, and the merchants themselves. Another approach to sales potential estimates the number of people buying from local merchants (Hustedde, Shaffer & Pulver, 1993; Stone & McConnen, 1983). The *Trade Area Capture* estimates the customer equivalents. Trade Area Capture used in conjunction with the *Pull Factor* permits the community to measure the extent to which it attracts nonresidents (e.g., tourists and nonlocal shoppers) and differences in local demand patterns.

Trade Area Capture estimates the number of customers a community's retailers sell to. Most trade area models consider market area as the function of population and distance. Trade Area Capture incorporates income and expenditure factors with the underlying assumption that local tastes and preferences are similar to the tastes and preferences of the state. The verbiage here can become somewhat confusing in that the phrase trade area discussed above has a definite spatial meaning, but Trade Area Capture is aspatial. Thus, the Trade Area Capture estimate suffers from the same caveats enumerated for Potential Sales estimated:

$$TAC_s^i = \frac{AS_s^i}{PCS_{state}^i * \frac{PCI_s}{PCI_{state}}} \quad (2)$$

where notation remains the same with the addition of *TAC* is Trade Area Capture and *AS* is actual sales.

The number calculated from equation (2) is the number of people purchased for, not the people sold to or actual customers in the store (i.e., if one person buys food for a family of four, all four are counted). If Trade Area Capture exceeds the trade area population then the community is capturing outside trade or local residents have higher spending patterns than the state average. If the Trade Area Capture is less than the trade area population the community is losing potential trade or local residents have a lower spending pattern than the statewide average. Further analysis is required to determine which cause is more important. Comparison of the Trade Area Capture estimates for specific retail or service categories to the total allows for additional insight about which local trade sectors are attracting customers to the community. It is important to make Trade Area Capture comparisons over time to identify trends.

Trade Area Capture measures purchases by both residents and nonresidents. The *Pull Factor* makes explicit the proportion of consumers that a community (the primary market) draws from outside its boundaries (the secondary market, including residents in neighboring areas or tourists). The Pull Factor is the ratio of Trade Area Capture to municipal, in our case here county, population. The Pull Factor measures the community's drawing power. Over time, this ratio

removes the influence of changes in municipal population when determining changes in drawing power. The Pull Factor is computed as:

$$PF_s^i = \frac{TAC_s^i}{P_s} \quad (3)$$

A Pull Factor (*PF*) greater than one implies that the local market is drawing or pulling in customers from surrounding areas. A Pull Factor less than one implies that the local market is losing customers to competing markets. The Pull Factor, much like percent sales retention estimate, can also be loosely interpreted like a location quotient. Pull Factors significantly greater than one often indicates an area of specialization for the local market. For example, tourist areas tend to have high Pull Factors and location quotients for restaurants, hotels and miscellaneous retail stores. The use of any tool by itself can often lead to erroneous conclusions. One must use a variety of tools to gain a clearer understanding of the local economy.

An alternative way to think about sales retention is to compute local *Surplus* or *Leakage* by looking at the difference between actual sales (*AS*) with Potential Sales (*PS*):

$$S / L_s^i = AS_s^i - PS_s^i \quad (4)$$

If actual sales (*AS*) is larger than Potential Sales (*PS*) and equation (4) is positive then there is said to be a Surplus, or the local market is performing better than one would expect. One could reasonably interpret a Surplus as the dollar value of the Pull Factor being greater than one. If actual sales (*AS*) is smaller than Potential Sales (*PS*) and equation (4) is negative then there is said to be a Leakage, or the local market is performing below what one would expect. Again, one could reasonably argue that a Leakage is the dollar value of the Pull Factor being less than one.

## Core Data for Analysis

Before turning to the Trade Area Analysis for Wisconsin counties that have sales tax data, two core pieces of information are required. The first is the Index of Income and the second are per capita expenditure levels for the state. The Index of Income is reported in Table 1 along with the county population and per capita income. For this analysis 62 counties have imposed a sales tax from which the data are derived.

Table 1: Based County Characteristics

	Per Capita Income	Population	Index of Income		Per Capita Income	Population	Index of Income
Adams	38,097	20,215	0.862	Lincoln	38,486	28,493	0.871
Ashland	34,292	16,103	0.776	Marathon	42,941	135,780	0.972
Barron	43,948	45,455	0.995	Marinette	39,593	41,298	0.896
Bayfield	39,945	14,985	0.904	Marquette	35,432	15,050	0.802
Buffalo	44,893	13,188	1.016	Milwaukee	41,507	956,406	0.939
Burnett	37,966	15,328	0.859	Monroe	36,074	45,379	0.816
Chippewa	40,924	63,460	0.926	Oconto	39,713	37,417	0.899
Clark	36,917	34,423	0.835	Oneida	45,061	35,563	1.020
Columbia	43,393	56,615	0.982	Ozaukee	71,126	87,470	1.610
Crawford	37,047	16,392	0.838	Pepin	41,395	7,335	0.937
Dane	51,523	516,284	1.166	Pierce	40,129	40,958	0.908
Dodge	39,816	88,574	0.901	Polk	39,807	43,437	0.901
Door	50,276	27,766	1.138	Portage	39,519	70,482	0.894
Douglas	36,697	43,698	0.831	Price	39,454	13,675	0.893
Dunn	35,640	44,305	0.807	Richland	37,994	17,662	0.860
Eau Claire	42,818	101,564	0.969	Rock	38,713	161,188	0.876
Florence	40,094	4,481	0.907	Rusk	33,424	14,333	0.756
Fond du Lac	42,434	101,759	0.960	Sauk	40,745	63,379	0.922
Forest	34,585	9,127	0.783	Sawyer	39,154	16,437	0.886
Grant	38,237	51,829	0.865	Shawano	36,916	41,579	0.835
Green	43,254	37,063	0.979	St. Croix	45,139	86,759	1.022
Green Lake	43,544	18,836	0.985	Taylor	34,260	20,540	0.775
Iowa	42,374	23,825	0.959	Trempealeau	40,910	29,509	0.926
Iron	46,905	5,917	1.062	Vernon	35,532	30,362	0.804
Jackson	40,994	20,652	0.928	Vilas	42,455	21,398	0.961
Jefferson	39,495	84,395	0.894	Walworth	40,546	103,527	0.918
Juneau	36,256	26,395	0.821	Washburn	40,337	15,694	0.913
Kenosha	39,748	168,068	0.900	Washington	48,564	133,251	1.099
La Crosse	42,314	118,011	0.958	Waupaca	41,031	52,066	0.929
Lafayette	41,818	16,853	0.946	Wausara	36,693	24,178	0.830
Langlade	39,355	19,410	0.891	Wood	39,202	73,608	0.887

Fifty-four of the 62 have an Index of Income below one and Rusk, Taylor, Ashland and Forest Counties having a per capita income close to below 80 percent (Index of Income below 0.80) of the Wisconsin average. Here, the Wisconsin average is defined as including only those counties that have a county sales tax. Because of the relatively low income levels we would not expect spending in these counties to be on par with the state average and these averages are adjusted downward as described above. At the same time one would expect counties that have higher income levels (e.g., Dane, Ozaukee and Washington) to have higher spending levels than the state average and thus are adjusted upward.

The second set of data is the state per capita expenditure levels. It is vital to recall that the data are drawn from taxable sales, not total sales. As a result the estimated potential sales as well as surplus/leakage levels are conservative.

Table 2: Wisconsin Per Capita Sales: 2015

	Wisconsin Per Capita Sales
Motor Vehicle and Parts Dealers	1,377.08
Furniture and Home Furnishings	177.00
Electronics and Appliance	157.57
Building Material and Garden Equipment and Supplies Dealers	723.37
Food and Beverage	400.08
Health and Personal Care	125.15
Gasoline Stations	284.63
Clothing and Clothing Accessories	301.08
Sporting Goods, Hobby, Book, and Music	154.89
General Merchandise	1,009.46
Miscellaneous Store Retailers	636.05
Nonstore Retailers	261.58
Arts, Entertainment, and Recreation Total	152.77
Accommodation	272.88
Food Services and Drinking Places	1,056.97
Repair and Maintenance	254.43
Personal and Laundry Services	241.79

The largest single category of expenditures is motor vehicle and parts dealers with a state-wide per capita expenditure level of \$1,377.08 in 2015, which is down from \$1,775.82 in 2014. This result is largely attributed to the expensiveness of automobiles. The second largest single category of expenditures is food services and drinking places (restaurants and taverns/bars) at



\$1,056.97. The third largest is general merchandise with per capita spending of \$1,009.46. There are two potential reasons why this category is as large as it is: (1) the growing popularity of “big-box” stores such as Wal-Mart and Target is drawing a larger share of consumer dollars and (2) many of the “super” stores have expanded into carrying groceries which is in direct competition to more traditional food stores. Many of these “super stores” have become one-stop centers where customers can purchase food, clothing, hardware, toys, electronics, and even have prescriptions filled in one store. A third potential explanation might be the reintroduction of the “general store” into the market place, but these take the form of combined gasoline and convenience stores which very well may view themselves as general merchandise.

### **Trade Area Analysis Results**

In addition to the tabular presentation of the results for Trade Area Captured, Pull Factors, Potential Sales and Surplus/Leakage We have presented the Pull Factors in map form. It is important to note that there are at least two reasons why there may be no data for a particular category for any given county. First, there are 10 counties in Wisconsin that do not impose the local option sales tax and hence there is no data available. The second is that there are no businesses within the particular category that are reporting taxable sales.

The volume of results prevents a discussion of all of the results and we have left it to the reader to draw the relevant information for their own purposes. For brevity we have reported only the key variables of interest: Pull Factors and the Surplus/Leakage that is tied to those Pull Factors. The reader must keep in mind to consider both Leakages as well as Surpluses when developing strategies to build local retail and service markets. Naturally, the tendency is to want to focus on addressing weaknesses in the markets, but there may be solid reasons why such weaknesses exist ranging from lack of market size (small populations such as in Florence county may be a real barrier to the creation of certain types of businesses) to spatial competition from neighboring communities. But focusing attention on sectors that have a revealed strength (i.e., large Pull Factors and Surpluses) can build on existing markets. For example, a community that has a strong tourism and recreation sector may find that the further promotion of tourism and

recreation can have strong positive impacts. In other words, it can be just as valuable to build on existing strengths as it is to address weaknesses.

A four step process then comes to light when considering the analysis presented here.

1. Determine which sectors are strengths and weaknesses based on the relative size of the Pull Factor.
2. This determination should first be based on the county in isolation then in comparison to similar counties.
3. Determine the dollar value of the strength or weaknesses based on the Surplus or Leakage.
4. Identify strategies to build on strengths and address weaknesses.

One must also consider the relative size of any Leakage before considering it as a business opportunity. For example, is the Leakage may not be sufficiently large to justify new business enterprises. Rather, a viable alternative to new business formation is for existing businesses within the sector to rethink their business strategies.

The challenge here is to use the analysis as an “excuse” or “reason” to engage the community in a conversation about the strengths and weaknesses of local retail and service markets and strategies that can be pursued to build on those strengths and address the weaknesses.

### **Trade Area Analysis Clusters**

One of the advantages of using the county sales tax as a means to conduct a Trade Area Analysis is that the tax has been in place in numerous counties for a number of years.<sup>2</sup> This

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<sup>2</sup> This includes an analysis of:

2014 <http://www.aae.wisc.edu/pubs/misc/docs/deller.2015.trade%20area%20analysis%20wisconsin%20retail%20markets.pdf>

2013 [www.aae.wisc.edu/pubs/misc/docs/deller.trade%20area%20analysis%20WI%20retail%20markets%20update%2008.14.pdf](http://www.aae.wisc.edu/pubs/misc/docs/deller.trade%20area%20analysis%20WI%20retail%20markets%20update%2008.14.pdf)

2012 <http://www.aae.wisc.edu/pubs/misc/docs/deller.trade%20area%20analysis%20WI%20retail%20markets%2008.13.pdf>

2011 [www.aae.wisc.edu/pubs/sps/pdf/stpap567.pdf](http://www.aae.wisc.edu/pubs/sps/pdf/stpap567.pdf)

2010 <http://www.aae.wisc.edu/pubs/sps/pdf/stpap550.pdf>

2009 <http://www.aae.wisc.edu/pubs/sps/pdf/stpap550.pdf>

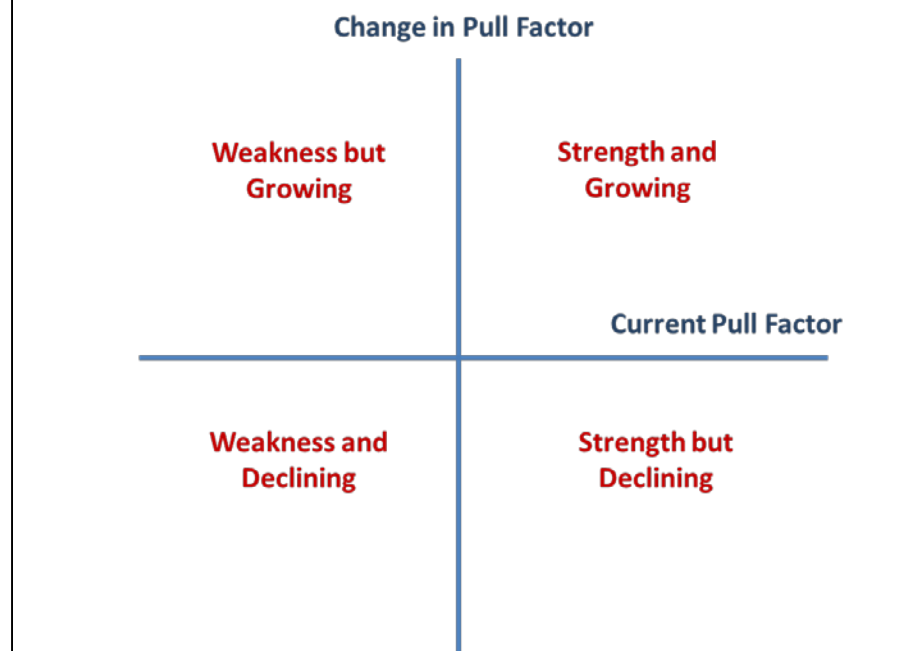
2006 <http://www.aae.wisc.edu/pubs/sps/pdf/stpap512.pdf>

allows us to track the performance of local retail and service markets over time. There is, however, a problem: the Wisconsin Department of Revenue has not been consistent in how the data are reported.<sup>3</sup> Staffing limitations have hindered the timeliness of the releases and changes in the industrial classification systems have changed how the data has been grouped. This latter problem is most evident in the classification of the service sectors. But for retail the ability to compare over time can add an important dimension to community discussions.

There are numerous approaches to conduct comparisons over time but given the range of different metrics developed through Trade Area Analysis it is possible to overwhelm the discussion with too much data. One method to present a significant amount of data in a relatively easy to interpret visual representation is to build on the simple economic cluster analysis offered by Harvard business economist Michael Porter. But rather than looking at location quotient over time and industry sizes we can substitute Pull Factors and size metrics such as Trade Area Captured or Potential Sales.

Consider the outline in Figure 1 where we plot the current value of the Pull Factor (horizontal axis) and the Change in

Figure 1: Cluster Analysis using the Tools of Trade Area Analysis



2005 <http://www.aae.wisc.edu/pubs/sps/pdf/stpap503.pdf>

2004 <http://www.aae.wisc.edu/pubs/misc/docs/deller.TAAcounty.%202006.pdf>

1999 <http://www.aae.wisc.edu/pubs/sps/pdf/stpap428.pdf>

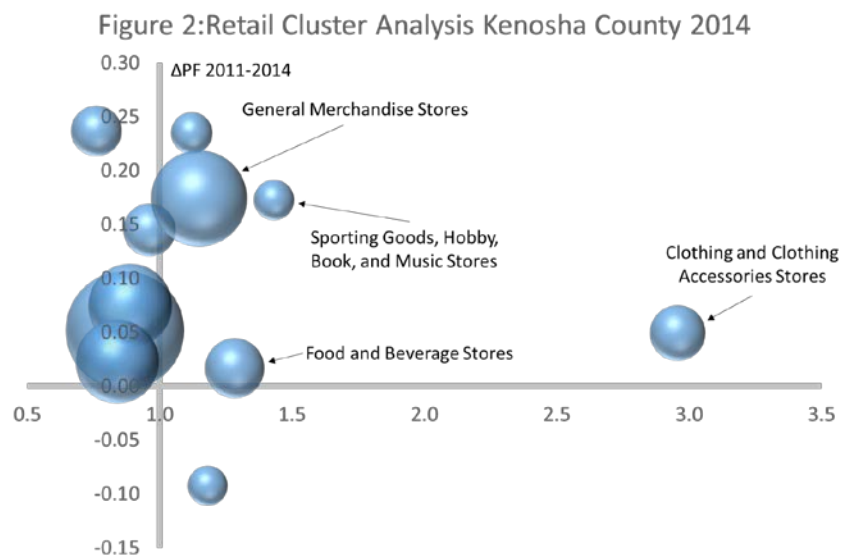
Inconsistency in the release of the data by the Department of Revenue has limited the ability to conduct the analysis on a consistent timely annual basis. The data can also be obtained by contacting the author.

<sup>3</sup> Over the past few years there has been more consistency in the reporting of these data and in time, if the current reporting system remains in place, this problem will be minimized.

the Pull Factor over time (vertical axis).

There are four possible combinations: (1) the Pull Factor is less than one and declining which is the lower left hand quadrant and retail sectors falling into this category could be considered a “weakness and declining”; (2) the Pull Factor is less than one but is increasing over time which is the upper left hand quadrant and could interpreted as a “weakness but growing”; (3) the Pull Factor is great than one, hence a strength, but is declining over time, the lower right hand side quadrant; and finally (4) the Pull Factor is greater than one and increasing over time, retail sectors falling into this category would be considered a strength and growing.

Consider, for example, the retail market of Kenosha County (Figure 2 and Table 3). Here the relative size of the market is based on potential sales (eq.(1)); the larger the “bubble” the greater the potential sales. There are a handful of retail sectors are identified as a “strength and growing”



including clothing and accessories stores, sporting goods, hobby, book and music stores, general merchandise as well as food and beverage stores. There is one “strength but declining” sector, electronics and appliance stores. Particularly of interest is the lack of any sectors that are classified as “weaknesses and declining”. This result, coupled with the observation that ten of eleven sectors are classified as “growing” (Pull Factors are growing in size over the 2011 to 2014 study period), suggests that the retail market in Kenosha County is performing well. It could also be that the Kenosha County retail market is recovering from the Great Recession at a faster pace than the rest of Wisconsin.

Table 3: Retail Cluster Analysis for Kenosha County 2014

	Pull Factor 2014	Change in Pull Factor 2011 to 2014	Potential Sales (000\$)
<u>Strength and Growing</u>			
Furniture and Home Furnishings Stores	1.121	0.235	33,130.0
Food and Beverage Stores	1.284	0.017	67,899.2
Clothing and Clothing Accessories Stores	2.958	0.049	59,509.5
Sporting Goods, Hobby, Book, and Music Stores	1.432	0.173	31,188.7
General Merchandise Stores	1.150	0.174	178,415.4
<u>Weakness but Growing</u>			
Miscellaneous Store Retailers	0.840	0.023	133,370.8
Nonstore Retailers	0.761	0.237	48,678.7
Motor Vehicle and Parts Dealers	0.869	0.051	272,501.3
Building Material and Garden Equipment and Supplies Dealers	0.889	0.074	136,457.2
Gasoline Stations	0.962	0.145	53,403.2
<u>Strength but Declining</u>			
Electronics and Appliance Stores	1.182	-0.092	30,355.3
<u>Weakness and Declining</u>			
N.A.			

### **Strategies for Enhancing Retail and Service Markets**

Individual business owners do not want to “bet the farm” based on a simple Pull Factor and corresponding measure of Leakage or Surplus. Rather, these tools can be powerful in the initial identification of market ideas and concepts. In a sense, these tools can be used in the “plan-to-plan” stage of the business planning process and can provide useful insights.

Beyond aiding businesses in the initial planning stages there exists a wide range of potential strategies can put in place to build on strengths of the local retail markets and address potential gaps. A detailed discussion of the vast range of potential strategies is not the intent of this study. Rather, the intent here is to introduce the reader to a broad range of ideas. The two broad classifications of strategies include: (a) increasing the flow of dollars into the community (e.g., build on Surpluses) and (b) increasing the re-circulation of dollars within the community (e.g., plug Leverages). Increasing the flow of dollars into the community means that the

community is essentially injecting new money into the local economy by attracting consumers from surrounding communities or by capturing the dollars of visitors to the community. Consumers are both individuals as well as businesses. In each case the community is bringing more money into the community. Increasing the re-circulation of dollars in the community means that the community is plugging Leakages of money out of the local community's economy. In other words, the community is actively seeking ways to get people and businesses to spend more locally.

One can almost think of these as broad approaches to address “gaps” and “disconnects” within the local market. Gaps describe the case where a particular good or service is not available at a sufficient level for purchase in the local community. Disconnects are when the goods and services are available but local customers, both residents and businesses, are not making local purchases.

Because these are broad approaches and specific strategies will be applicable to both we will suggest several possible specific strategies across both approaches. For a more focused discussion see the newsletter *Lets Talk Business* produced by the Center for Community Economic Development at the University of Wisconsin-Extension<sup>4</sup> as well as the collection of resources at the USDA National Rural Resource Library and the references therein.<sup>5</sup>

Examples of specific activities a community can undertake to increase the inflow or re-circulation of dollars include:

1. Develop marketing information to help retail and service businesses in identifying market potentials and formulate business plans.
2. Develop community and regional facilities necessary to attract new retail and service businesses.
3. Expand purchases by non-local people through appropriate advertising and promotions.
  - a. Coordinated advertising can build on economies of size and scope.
  - b. Coordinate business hours.

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<sup>4</sup> <http://www.uwex.edu/ces/cced/publicat/letstalk.html>

<sup>5</sup> <http://www.nal.usda.gov/ric/ricpubs/downtown.html>

- c. Sponsor downtown activities such as sidewalk sales or art fairs.
  - d. Organize farmers markets to attract customers downtown.
  - e. Providing convenient parking or public transit.
4. Ensure that key public services (e.g., fire and police, water and sewer, general administration) are more than satisfactory.
  5. Aid businesses in developing employee-training programs to improve quality of service.
  6. Work to ensure that retail development policies aim at complementary growth where local firms are harmonized and not competitive.
  7. Recognize the important role of transfers such as retirement benefits, and unemployment compensation as a flow of funds into the community.
  8. Encourage collective action through the formation of organizations such as Chamber of Commerce or Merchants Association.

These broad based strategies are clearly not exhaustive and are meant to only introduce the notion that strategies can range from the simplistic to the complex. It is also important that there is no one single strategy that effective development of the retail and service sectors require a multi-prong approach with overlapping strategies. Finally, strategies need to be constantly evaluated and adjusted to reflect changing markets.

While the tools of Trade Area Analysis are a powerful indicator of retail market strengths and weaknesses, they should not be substituted for detailed business feasibility studies. While businesses have found measures of Surplus/Leakage to be a reasonable first approximation of potential revenues more detailed market analysis is required before specific business investments are made. Again, these tools are most appropriate in the business “plan-to-plan” phase of business planning.

### Conclusions

The intent of this applied research project is to: (1) introduce one set of tools, specifically Trade Area Analysis and market threshold analysis, to community development practitioners; (2) apply the tools to a set of data for Wisconsin counties; and (3) outline a set of simple strategies to

help build on Surpluses and address Leakages. The tools offered here as well as the analysis should be considered one step in developing a complete understanding of the local retail market. The tools can be used to stimulate discussions within the community about the strengths and weaknesses of the local retail markets as well as a simple set of tools that potential businesses can use in the initial planning, or “plan-to-plan”, stages in business development.

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## Trade Area Captured, Full-Time Customer Equivalents (000)

	Motor Vehicle and Parts Dealers	Furniture and Home Furnishings Stores	Electronics and Appliance Stores	Building Material and Garden Equipment and Supplies Dealers	Food and Beverage Stores	Health and Personal Care Stores	Gasoline Stations	Clothing and Clothing Accessories Stores	Sporting Goods, Hobby, Book, and Music Stores
Adams	24.33	9.47	0.00	16.14	0.00	0.00	50.30	2.97	7.05
Ashland	25.67	0.00	0.00	24.70	36.23	0.00	25.88	18.59	8.56
Barron	74.11	35.34	46.56	115.35	62.51	41.56	82.73	30.86	54.02
Bayfield	16.83	0.00	0.00	26.37	22.63	0.00	24.14	7.90	8.03
Buffalo	15.89	0.00	18.30	13.27	0.00	0.00	0.00	1.06	8.05
Burnett	17.32	0.00	9.43	22.74	0.00	0.00	0.00	3.37	14.02
Chippewa	121.79	44.15	138.22	52.77	83.19	43.00	107.81	21.31	133.10
Clark	49.13	24.87	103.08	45.34	24.71	0.00	62.60	5.06	10.60
Columbia	98.24	47.80	33.99	44.74	59.65	59.42	152.15	24.30	23.10
Crawford	22.50	19.50	0.00	11.92	21.53	0.00	0.00	14.18	0.00
Dane	664.72	1127.41	828.64	650.10	888.62	994.02	448.72	904.83	996.54
Dodge	131.05	94.03	35.46	96.81	85.01	74.96	162.57	18.71	114.20
Door	52.26	50.63	23.23	44.30	59.82	28.03	47.21	58.15	48.95
Douglas	57.68	27.46	29.89	103.74	61.75	0.00	105.39	13.11	48.53
Dunn	65.12	32.42	44.97	34.48	47.90	40.03	93.73	16.30	56.21
Eau Claire	134.98	112.12	528.35	289.22	105.76	145.34	110.86	245.29	504.04
Florence	4.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fond du Lac	111.04	170.28	154.66	137.16	139.30	144.36	150.72	95.51	94.02
Forest	17.82	0.00	0.00	20.91	0.00	0.00	0.00	3.47	0.00
Grant	73.36	18.01	23.74	126.37	56.48	42.92	82.23	27.54	42.11
Green	58.65	41.62	27.72	49.58	46.01	29.22	29.32	16.32	17.05
Green Lake	30.34	37.82	12.43	20.22	0.00	0.00	0.00	5.21	24.91
Iowa	38.20	26.89	23.96	32.87	18.36	0.00	47.74	4.32	6.72
Iron	5.60	0.00	0.00	5.25	0.00	0.00	0.00	0.00	0.00
Jackson	30.48	4.50	12.06	15.80	17.69	0.00	0.00	3.44	3.99
Jefferson	122.63	97.89	44.02	127.54	82.22	115.34	169.59	263.21	57.37
Juneau	46.08	10.68	11.87	21.23	29.65	37.58	125.77	5.28	18.91
Kenosha	209.85	242.61	262.66	186.32	289.82	334.48	210.26	679.73	339.05
La Crosse	172.79	164.26	520.07	268.07	213.24	181.00	282.81	267.19	267.72
Lafayette	28.15	5.42	0.00	16.47	0.00	0.00	0.00	1.75	0.00
Langlade	39.50	20.64	0.00	58.26	18.51	0.00	30.81	7.41	26.12
Lincoln	56.20	33.36	64.26	27.05	44.33	31.66	58.30	5.23	54.99
Marathon	217.96	216.67	230.01	284.85	135.57	152.13	215.33	208.06	273.49
Marinette	72.56	26.06	50.98	90.98	87.61	37.72	67.85	20.11	51.66
Marquette	27.82	11.63	27.69	8.47	17.89	0.00	31.57	0.00	0.00
Milwaukee	1088.35	1379.56	1171.46	812.78	1476.80	2049.06	880.76	1860.03	1086.56
Monroe	77.61	26.65	38.28	55.10	39.78	29.90	154.46	14.93	30.46
Oconto	58.81	18.87	27.53	35.41	32.34	0.00	69.00	3.69	21.92
Oneida	72.24	85.96	77.07	129.66	91.57	57.08	32.74	39.55	84.29
Ozaukee	90.52	139.79	93.23	66.46	92.14	105.17	65.07	64.75	85.40
Pepin	11.07	0.00	0.00	13.72	0.00	0.00	0.00	0.00	0.00
Pierce	40.57	19.93	21.12	30.25	47.57	7.08	64.64	11.65	20.93
Polk	52.04	50.89	30.70	115.05	65.27	14.36	60.60	6.64	33.87
Portage	121.43	128.41	159.50	141.63	91.74	79.30	156.26	66.67	120.54
Price	21.00	12.11	0.00	17.53	0.00	0.00	29.63	2.64	11.35
Richland	28.52	10.73	17.52	12.66	16.71	0.00	41.04	5.41	10.71
Rock	253.83	169.13	245.77	263.02	311.28	229.56	306.94	186.94	265.82
Rusk	22.69	0.00	0.00	27.22	22.60	0.00	0.00	2.89	0.00
Sauk	109.07	98.31	41.91	217.38	70.57	163.99	118.02	269.85	150.98
Sawyer	37.99	36.55	0.00	39.94	21.15	0.00	0.00	19.35	22.36
Shawano	77.27	15.99	39.23	47.56	42.90	0.00	53.34	16.57	22.47

Trade Area Captured, Full-Time Customer Equivalents (000)

	Motor Vehicle and Parts Dealers	Furniture and Home Furnishings Stores	Electronics and Appliance Stores	Building Material and Garden Equipment and Supplies Dealers	Food and Beverage Stores	Health and Personal Care Stores	Gasoline Stations	Clothing and Clothing Accessories Stores	Sporting Goods, Hobby, Book, and Music Stores
St. Croix	102.51	65.71	53.06	169.39	126.63	67.66	193.37	34.12	62.38
Taylor	36.12	12.19	57.82	37.41	0.00	0.00	37.64	5.32	17.26
Trempealeau	40.09	110.20	32.11	40.68	20.24	4.71	80.73	5.61	14.95
Vernon	49.76	22.99	38.04	23.33	0.00	0.00	54.45	6.93	15.15
Vilas	42.68	69.34	58.11	35.25	61.11	0.00	50.79	13.44	54.02
Walworth	165.30	134.31	174.22	172.26	114.58	136.51	184.27	101.12	115.09
Washburn	33.34	13.67	12.00	32.08	29.40	0.00	33.09	7.09	38.41
Washington	181.95	200.45	88.10	207.24	156.22	187.87	174.95	95.36	123.74
Waupaca	80.68	40.10	47.53	28.78	75.66	78.86	106.94	16.27	27.94
Waushara	36.91	27.38	8.77	14.93	27.56	0.00	45.99	3.59	23.42
Wood	118.55	123.48	62.31	93.34	104.87	75.31	114.77	35.40	80.55

Trade Area Captured, Full-Time Customer Equivalents (000)

	General Merchandise Stores	Miscellaneous Store Retailers	Nonstore Retailers	Arts, Entertainment, and Recreation Total	Accommodation	Food Services and Drinking Places	Repair and Maintenance	Personal and Laundry Services
Adams	8.37	24.58	44.78	0.00	179.17	15.30	31.41	17.80
Ashland	46.46	20.89	26.93	0.00	33.26	24.19	21.58	30.21
Barron	108.21	100.16	83.83	52.21	43.74	51.13	59.70	82.86
Bayfield	2.52	15.31	17.91	31.11	45.68	18.73	20.75	10.85
Buffalo	1.45	12.36	14.60	0.00	0.00	10.43	9.70	7.70
Burnett	7.80	20.13	19.25	0.00	18.53	21.26	29.75	10.34
Chippewa	98.99	120.51	79.16	49.05	38.25	65.11	111.47	75.92
Clark	7.75	42.50	42.04	0.00	0.00	22.45	45.12	22.18
Columbia	50.30	79.14	68.73	108.11	78.97	65.19	75.97	80.89
Crawford	54.92	29.42	166.86	21.03	37.00	23.68	23.77	26.83
Dane	630.93	749.78	778.32	409.00	738.62	772.39	595.39	721.58
Dodge	91.28	107.27	115.41	75.10	24.32	68.78	101.02	84.10
Door	46.78	67.20	34.52	68.80	246.51	64.09	30.99	62.84
Douglas	89.07	70.51	46.80	28.34	44.89	78.82	105.81	79.65
Dunn	76.00	66.62	47.26	35.59	23.42	48.21	57.74	41.03
Eau Claire	213.59	197.86	114.78	164.96	86.55	165.15	191.43	110.62
Florence	0.00	3.15	7.34	0.00	0.00	6.10	0.00	0.00
Fond du Lac	152.51	112.63	105.67	150.79	70.01	117.84	166.55	101.37
Forest	0.00	9.74	17.06	0.00	8.46	8.47	9.66	5.31
Grant	52.64	64.76	48.19	26.03	15.13	47.82	111.01	47.61
Green	40.71	56.58	51.81	26.80	17.29	32.22	50.93	50.22
Green Lake	23.99	23.20	16.52	16.11	34.12	14.78	17.86	17.94
Iowa	30.05	21.49	72.85	11.33	21.94	23.69	45.81	12.97
Iron	0.00	7.60	6.55	0.00	14.78	10.54	5.78	4.05
Jackson	45.32	23.64	18.34	0.00	30.54	21.14	21.66	20.61
Jefferson	99.71	105.14	96.95	87.14	33.92	103.31	139.17	90.43
Juneau	16.35	28.81	31.56	15.72	40.54	30.22	48.62	33.80
Kenosha	245.18	197.24	193.86	293.46	52.56	264.24	223.06	383.38
La Crosse	276.61	256.24	149.19	142.71	152.86	206.70	204.12	164.35
Lafayette	8.20	12.58	14.60	0.00	1.55	9.72	14.04	18.89
Langlade	62.12	17.90	27.38	0.00	7.98	25.01	43.37	16.78
Lincoln	32.38	29.30	56.19	31.35	11.05	30.97	49.93	23.31
Marathon	273.01	198.38	165.57	166.22	135.18	169.46	221.14	148.07
Marinette	67.37	66.01	44.38	22.45	48.35	50.41	61.26	94.18
Marquette	2.47	18.88	17.98	0.00	18.78	13.12	26.67	14.34
Milwaukee	1192.49	1221.03	1109.81	2027.83	1138.29	1539.20	1117.70	1629.95
Monroe	107.01	56.86	58.50	22.91	66.86	58.27	58.75	61.17
Oconto	8.22	28.33	45.78	28.93	11.10	31.49	26.91	25.07
Oneida	99.57	53.92	59.01	89.28	84.02	55.77	64.95	35.87
Ozaukee	93.42	81.34	81.78	90.65	32.24	71.31	83.65	163.24
Pepin	0.00	15.25	7.93	0.00	0.00	8.48	11.73	5.87
Pierce	6.28	44.85	43.65	16.24	0.00	33.14	32.63	42.59
Polk	60.06	53.65	51.26	44.95	15.97	43.94	73.43	31.27
Portage	120.59	95.54	248.55	59.82	77.88	102.68	106.03	75.05
Price	6.66	18.83	17.18	0.00	16.70	11.64	27.79	22.72
Richland	44.91	22.69	14.68	0.00	7.54	11.19	23.34	10.37
Rock	270.79	223.54	193.69	508.17	129.64	241.40	210.40	179.26
Rusk	26.96	29.95	16.82	0.00	23.99	11.24	23.56	9.50
Sauk	130.78	97.33	121.38	281.23	1052.74	208.95	81.56	125.40
Sawyer	62.52	23.30	18.76	26.01	86.28	31.70	37.04	16.83
Shawano	61.45	56.33	37.74	33.93	25.74	46.86	58.48	32.74

Trade Area Captured, Full-Time Customer Equivalents (000)

	General Merchandise Stores	Miscellaneous Store Retailers	Nonstore Retailers	Arts, Entertainment, and Recreation Total	Accommodation	Food Services and Drinking Places	Repair and Maintenance	Personal and Laundry Services
St. Croix	109.16	106.26	106.91	139.19	40.17	105.18	115.56	88.79
Taylor	41.46	16.72	23.48	18.11	6.09	16.50	38.17	14.13
Trempealeau	7.96	49.47	40.04	0.00	10.36	27.74	42.03	35.08
Vernon	39.07	38.30	69.73	15.99	14.35	22.61	36.61	27.24
Vilas	4.63	37.16	28.71	79.30	108.25	42.99	42.44	32.56
Walworth	165.45	126.10	123.81	150.86	478.52	191.70	134.55	206.41
Washburn	4.13	33.70	26.27	0.00	18.62	19.47	22.39	17.56
Washington	167.70	180.90	333.64	147.07	39.02	146.11	248.78	156.41
Waupaca	47.45	77.99	62.39	76.54	42.61	55.43	64.67	47.39
Waushara	2.65	34.77	22.70	46.07	30.72	21.17	44.12	24.10
Wood	133.81	141.09	132.58	52.62	55.03	86.31	199.09	59.02

Pull Factors

	Motor Vehicle and Parts Dealers	Furniture and Home Furnishings Stores	Electronics and Appliance Stores	Building Material and Garden Equipment and Supplies Dealers	Food and Beverage Stores	Health and Personal Care Stores	Gasoline Stations	Clothing and Clothing Accessories Stores	Sporting Goods, Hobby, Book, and Music Stores
Adams	1.20	0.47	0.00	0.80	0.00	0.00	2.49	0.15	0.35
Ashland	1.59	0.00	0.00	1.53	2.25	0.00	1.61	1.15	0.53
Barron	1.63	0.78	1.02	2.54	1.38	0.91	1.82	0.68	1.19
Bayfield	1.12	0.00	0.00	1.76	1.51	0.00	1.61	0.53	0.54
Buffalo	1.21	0.00	1.39	1.01	0.00	0.00	0.00	0.08	0.61
Burnett	1.13	0.00	0.62	1.48	0.00	0.00	0.00	0.22	0.91
Chippewa	1.92	0.70	2.18	0.83	1.31	0.68	1.70	0.34	2.10
Clark	1.43	0.72	2.99	1.32	0.72	0.00	1.82	0.15	0.31
Columbia	1.74	0.84	0.60	0.79	1.05	1.05	2.69	0.43	0.41
Crawford	1.37	1.19	0.00	0.73	1.31	0.00	0.00	0.87	0.00
Dane	1.29	2.18	1.61	1.26	1.72	1.93	0.87	1.75	1.93
Dodge	1.48	1.06	0.40	1.09	0.96	0.85	1.84	0.21	1.29
Door	1.88	1.82	0.84	1.60	2.15	1.01	1.70	2.09	1.76
Douglas	1.32	0.63	0.68	2.37	1.41	0.00	2.41	0.30	1.11
Dunn	1.47	0.73	1.02	0.78	1.08	0.90	2.12	0.37	1.27
Eau Claire	1.33	1.10	5.20	2.85	1.04	1.43	1.09	2.42	4.96
Florence	0.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fond du Lac	1.09	1.67	1.52	1.35	1.37	1.42	1.48	0.94	0.92
Forest	1.95	0.00	0.00	2.29	0.00	0.00	0.00	0.38	0.00
Grant	1.42	0.35	0.46	2.44	1.09	0.83	1.59	0.53	0.81
Green	1.58	1.12	0.75	1.34	1.24	0.79	0.79	0.44	0.46
Green Lake	1.61	2.01	0.66	1.07	0.00	0.00	0.00	0.28	1.32
Iowa	1.60	1.13	1.01	1.38	0.77	0.00	2.00	0.18	0.28
Iron	0.95	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00
Jackson	1.48	0.22	0.58	0.76	0.86	0.00	0.00	0.17	0.19
Jefferson	1.45	1.16	0.52	1.51	0.97	1.37	2.01	3.12	0.68
Juneau	1.75	0.40	0.45	0.80	1.12	1.42	4.77	0.20	0.72
Kenosha	1.25	1.44	1.56	1.11	1.72	1.99	1.25	4.04	2.02
La Crosse	1.46	1.39	4.41	2.27	1.81	1.53	2.40	2.26	2.27
Lafayette	1.67	0.32	0.00	0.98	0.00	0.00	0.00	0.10	0.00
Langlade	2.03	1.06	0.00	3.00	0.95	0.00	1.59	0.38	1.35
Lincoln	1.97	1.17	2.26	0.95	1.56	1.11	2.05	0.18	1.93
Marathon	1.61	1.60	1.69	2.10	1.00	1.12	1.59	1.53	2.01
Marinette	1.76	0.63	1.23	2.20	2.12	0.91	1.64	0.49	1.25
Marquette	1.85	0.77	1.84	0.56	1.19	0.00	2.10	0.00	0.00
Milwaukee	1.14	1.44	1.22	0.85	1.54	2.14	0.92	1.94	1.14
Monroe	1.71	0.59	0.84	1.21	0.88	0.66	3.40	0.33	0.67
Oconto	1.57	0.50	0.74	0.95	0.86	0.00	1.84	0.10	0.59
Oneida	2.03	2.42	2.17	3.65	2.57	1.61	0.92	1.11	2.37
Ozaukee	1.03	1.60	1.07	0.76	1.05	1.20	0.74	0.74	0.98
Pepin	1.51	0.00	0.00	1.87	0.00	0.00	0.00	0.00	0.00
Pierce	0.99	0.49	0.52	0.74	1.16	0.17	1.58	0.28	0.51
Polk	1.20	1.17	0.71	2.65	1.50	0.33	1.40	0.15	0.78
Portage	1.72	1.82	2.26	2.01	1.30	1.13	2.22	0.95	1.71
Price	1.54	0.89	0.00	1.28	0.00	0.00	2.17	0.19	0.83
Richland	1.61	0.61	0.99	0.72	0.95	0.00	2.32	0.31	0.61
Rock	1.57	1.05	1.52	1.63	1.93	1.42	1.90	1.16	1.65
Rusk	1.58	0.00	0.00	1.90	1.58	0.00	0.00	0.20	0.00
Sauk	1.72	1.55	0.66	3.43	1.11	2.59	1.86	4.26	2.38
Sawyer	2.31	2.22	0.00	2.43	1.29	0.00	0.00	1.18	1.36
Shawano	1.86	0.38	0.94	1.14	1.03	0.00	1.28	0.40	0.54

Pull Factors

	Motor Vehicle and Parts Dealers	Furniture and Home Furnishings Stores	Electronics and Appliance Stores	Building Material and Garden Equipment and Supplies Dealers	Food and Beverage Stores	Health and Personal Care Stores	Gasoline Stations	Clothing and Clothing Accessories Stores	Sporting Goods, Hobby, Book, and Music Stores
St. Croix	1.18	0.76	0.61	1.95	1.46	0.78	2.23	0.39	0.72
Taylor	1.76	0.59	2.82	1.82	0.00	0.00	1.83	0.26	0.84
Trempealeau	1.36	3.73	1.09	1.38	0.69	0.16	2.74	0.19	0.51
Vernon	1.64	0.76	1.25	0.77	0.00	0.00	1.79	0.23	0.50
Vilas	1.99	3.24	2.72	1.65	2.86	0.00	2.37	0.63	2.52
Walworth	1.60	1.30	1.68	1.66	1.11	1.32	1.78	0.98	1.11
Washburn	2.12	0.87	0.76	2.04	1.87	0.00	2.11	0.45	2.45
Washington	1.37	1.50	0.66	1.56	1.17	1.41	1.31	0.72	0.93
Waupaca	1.55	0.77	0.91	0.55	1.45	1.51	2.05	0.31	0.54
Waushara	1.53	1.13	0.36	0.62	1.14	0.00	1.90	0.15	0.97
Wood	1.61	1.68	0.85	1.27	1.42	1.02	1.56	0.48	1.09

Pull Factors

	General Merchandise Stores	Miscellaneous Store Retailers	Nonstore Retailers	Arts, Entertainment, and Recreation Total	Accommodation	Food Services and Drinking Places	Repair and Maintenance	Personal and Laundry Services
Adams	0.41	1.22	2.22	0.00	8.86	0.76	1.55	0.88
Ashland	2.89	1.30	1.67	0.00	2.07	1.50	1.34	1.88
Barron	2.38	2.20	1.84	1.15	0.96	1.12	1.31	1.82
Bayfield	0.17	1.02	1.20	2.08	3.05	1.25	1.38	0.72
Buffalo	0.11	0.94	1.11	0.00	0.00	0.79	0.74	0.58
Burnett	0.51	1.31	1.26	0.00	1.21	1.39	1.94	0.67
Chippewa	1.56	1.90	1.25	0.77	0.60	1.03	1.76	1.20
Clark	0.23	1.23	1.22	0.00	0.00	0.65	1.31	0.64
Columbia	0.89	1.40	1.21	1.91	1.39	1.15	1.34	1.43
Crawford	3.35	1.79	10.18	1.28	2.26	1.44	1.45	1.64
Dane	1.22	1.45	1.51	0.79	1.43	1.50	1.15	1.40
Dodge	1.03	1.21	1.30	0.85	0.27	0.78	1.14	0.95
Door	1.68	2.42	1.24	2.48	8.88	2.31	1.12	2.26
Douglas	2.04	1.61	1.07	0.65	1.03	1.80	2.42	1.82
Dunn	1.72	1.50	1.07	0.80	0.53	1.09	1.30	0.93
Eau Claire	2.10	1.95	1.13	1.62	0.85	1.63	1.88	1.09
Florence	0.00	0.70	1.64	0.00	0.00	1.36	0.00	0.00
Fond du Lac	1.50	1.11	1.04	1.48	0.69	1.16	1.64	1.00
Forest	0.00	1.07	1.87	0.00	0.93	0.93	1.06	0.58
Grant	1.02	1.25	0.93	0.50	0.29	0.92	2.14	0.92
Green	1.10	1.53	1.40	0.72	0.47	0.87	1.37	1.36
Green Lake	1.27	1.23	0.88	0.86	1.81	0.78	0.95	0.95
Iowa	1.26	0.90	3.06	0.48	0.92	0.99	1.92	0.54
Iron	0.00	1.28	1.11	0.00	2.50	1.78	0.98	0.68
Jackson	2.19	1.14	0.89	0.00	1.48	1.02	1.05	1.00
Jefferson	1.18	1.25	1.15	1.03	0.40	1.22	1.65	1.07
Juneau	0.62	1.09	1.20	0.60	1.54	1.15	1.84	1.28
Kenosha	1.46	1.17	1.15	1.75	0.31	1.57	1.33	2.28
La Crosse	2.34	2.17	1.26	1.21	1.30	1.75	1.73	1.39
Lafayette	0.49	0.75	0.87	0.00	0.09	0.58	0.83	1.12
Langlade	3.20	0.92	1.41	0.00	0.41	1.29	2.23	0.86
Lincoln	1.14	1.03	1.97	1.10	0.39	1.09	1.75	0.82
Marathon	2.01	1.46	1.22	1.22	1.00	1.25	1.63	1.09
Marinette	1.63	1.60	1.07	0.54	1.17	1.22	1.48	2.28
Marquette	0.16	1.25	1.19	0.00	1.25	0.87	1.77	0.95
Milwaukee	1.25	1.28	1.16	2.12	1.19	1.61	1.17	1.70
Monroe	2.36	1.25	1.29	0.50	1.47	1.28	1.29	1.35
Oconto	0.22	0.76	1.22	0.77	0.30	0.84	0.72	0.67
Oneida	2.80	1.52	1.66	2.51	2.36	1.57	1.83	1.01
Ozaukee	1.07	0.93	0.93	1.04	0.37	0.82	0.96	1.87
Pepin	0.00	2.08	1.08	0.00	0.00	1.16	1.60	0.80
Pierce	0.15	1.10	1.07	0.40	0.00	0.81	0.80	1.04
Polk	1.38	1.24	1.18	1.03	0.37	1.01	1.69	0.72
Portage	1.71	1.36	3.53	0.85	1.10	1.46	1.50	1.06
Price	0.49	1.38	1.26	0.00	1.22	0.85	2.03	1.66
Richland	2.54	1.28	0.83	0.00	0.43	0.63	1.32	0.59
Rock	1.68	1.39	1.20	3.15	0.80	1.50	1.31	1.11
Rusk	1.88	2.09	1.17	0.00	1.67	0.78	1.64	0.66
Sauk	2.06	1.54	1.92	4.44	16.61	3.30	1.29	1.98
Sawyer	3.80	1.42	1.14	1.58	5.25	1.93	2.25	1.02
Shawano	1.48	1.35	0.91	0.82	0.62	1.13	1.41	0.79



Pull Factors

	General Merchandise Stores	Miscellaneous Store Retailers	Nonstore Retailers	Arts, Entertainment, and Recreation Total	Accommodation	Food Services and Drinking Places	Repair and Maintenance	Personal and Laundry Services
St. Croix	1.26	1.22	1.23	1.60	0.46	1.21	1.33	1.02
Taylor	2.02	0.81	1.14	0.88	0.30	0.80	1.86	0.69
Trempealeau	0.27	1.68	1.36	0.00	0.35	0.94	1.42	1.19
Vernon	1.29	1.26	2.30	0.53	0.47	0.74	1.21	0.90
Vilas	0.22	1.74	1.34	3.71	5.06	2.01	1.98	1.52
Walworth	1.60	1.22	1.20	1.46	4.62	1.85	1.30	1.99
Washburn	0.26	2.15	1.67	0.00	1.19	1.24	1.43	1.12
Washington	1.26	1.36	2.50	1.10	0.29	1.10	1.87	1.17
Waupaca	0.91	1.50	1.20	1.47	0.82	1.06	1.24	0.91
Waushara	0.11	1.44	0.94	1.91	1.27	0.88	1.82	1.00
Wood	1.82	1.92	1.80	0.71	0.75	1.17	2.70	0.80

Surplus or Leakage (000\$)

	Motor Vehicle and Parts Dealers	Furniture and Home Furnishings Stores	Electronics and Appliance Stores	Building Material and Garden Equipment and Supplies Dealers	Food and Beverage Stores	Health and Personal Care Stores	Gasoline Stations	Clothing and Clothing Accessories Stores	Sporting Goods, Hobby, Book, and Music Stores
Adams	4,891.42	(1,639.53)	(2,746.38)	(2,540.76)	(6,973.11)	(2,181.30)	7,382.65	(4,476.93)	(1,758.44)
Ashland	10,228.45	(2,211.99)	(1,969.23)	4,828.78	6,250.07	(1,564.05)	2,160.35	581.87	(906.49)
Barron	39,245.01	(1,780.70)	172.95	50,284.87	6,787.76	(485.25)	10,553.66	(4,370.48)	1,319.69
Bayfield	2,295.00	(2,397.75)	(2,134.60)	7,446.20	2,764.95	(1,695.39)	2,356.42	(1,928.47)	(974.28)
Buffalo	3,786.83	(2,371.60)	817.84	58.33	(5,360.67)	(1,676.91)	(3,813.74)	(3,709.91)	(808.03)
Burnett	2,360.96	(2,331.12)	(798.81)	4,604.68	(5,269.17)	(1,648.28)	(3,748.64)	(3,093.06)	(174.43)
Chippewa	74,399.60	(3,165.19)	10,909.85	(7,161.35)	7,309.94	(2,371.47)	11,691.56	(11,754.73)	9,990.74
Clark	16,916.22	(1,413.16)	9,038.83	6,599.11	(3,246.73)	(3,599.37)	6,701.28	(7,386.17)	(3,082.81)
Columbia	56,286.90	(1,532.57)	(3,501.24)	(8,435.38)	1,190.50	344.28	26,702.99	(9,553.81)	(5,098.01)
Crawford	7,048.84	461.56	(2,165.62)	(2,714.69)	1,724.72	(1,720.03)	(3,911.82)	(557.86)	(2,128.76)
Dane	238,345.59	126,129.72	57,391.97	112,867.18	173,699.53	69,717.39	(22,423.94)	136,405.94	86,739.22
Dodge	52,707.69	869.40	(7,541.43)	5,366.69	(1,284.43)	(1,534.88)	18,978.26	(18,953.97)	3,576.39
Door	38,378.09	4,604.74	(813.61)	13,610.31	14,593.12	38.17	6,296.52	10,410.17	3,733.33
Douglas	15,992.59	(2,387.07)	(1,807.36)	36,070.50	5,999.33	(4,541.96)	14,582.36	(7,649.46)	621.01
Dunn	23,115.80	(1,696.44)	84.49	(5,734.22)	1,159.30	(431.73)	11,346.50	(6,800.18)	1,486.86
Eau Claire	44,592.20	1,810.31	65,167.18	131,540.40	1,626.34	5,308.78	2,565.34	41,931.97	60,410.26
Florence	(346.99)	(719.68)	(640.69)	(2,941.22)	(1,626.73)	(508.87)	(1,157.31)	(1,224.18)	(629.79)
Fond du Lac	12,271.18	11,647.42	8,005.95	24,590.35	14,425.78	5,120.41	13,382.47	(1,805.87)	(1,151.89)
Forest	9,367.91	(1,264.45)	(1,125.67)	6,672.13	(2,858.10)	(894.06)	(2,033.34)	(1,333.49)	(1,106.52)
Grant	25,661.28	(5,180.23)	(3,830.72)	46,659.05	1,609.49	(965.26)	7,487.24	(6,328.92)	(1,303.32)
Green	29,097.54	790.25	(1,441.67)	8,861.99	3,504.53	(960.27)	(2,158.13)	(6,113.33)	(3,034.80)
Green Lake	15,610.71	3,311.61	(994.35)	989.06	(7,426.41)	(2,323.10)	(5,283.36)	(4,041.66)	926.59
Iowa	18,984.45	520.28	20.94	6,273.85	(2,098.23)	(2,859.46)	6,526.73	(5,632.63)	(2,540.04)
Iron	(462.73)	(1,111.74)	(989.73)	(514.41)	(2,512.94)	(786.09)	(1,787.78)	(1,891.09)	(972.89)
Jackson	12,560.87	(2,651.75)	(1,255.94)	(3,258.74)	(1,098.68)	(2,397.91)	(5,453.51)	(4,808.89)	(2,394.07)
Jefferson	47,060.20	2,134.28	(5,687.25)	27,894.09	(778.65)	3,461.31	21,675.67	48,122.27	(3,741.61)
Juneau	22,244.21	(2,282.15)	(1,877.68)	(3,063.05)	1,068.42	1,148.82	23,209.60	(5,215.89)	(951.78)
Kenosha	51,760.88	11,869.00	13,407.44	11,878.53	43,817.99	18,735.16	10,803.55	138,575.24	23,823.20
La Crosse	72,244.59	7,839.07	60,669.85	103,951.99	36,483.43	7,549.26	44,919.48	43,010.08	22,206.16
Lafayette	14,726.54	(1,915.39)	(2,513.26)	(263.75)	(6,381.20)	(1,996.14)	(4,539.77)	(4,304.47)	(2,470.49)
Langlade	24,635.82	193.61	(2,724.09)	25,029.91	(320.26)	(2,163.60)	2,890.19	(3,218.68)	925.62
Lincoln	33,227.30	749.71	4,908.79	(908.01)	5,518.35	345.16	7,388.79	(6,099.21)	3,574.28
Marathon	109,973.70	13,914.22	14,429.62	104,790.51	(79.77)	1,988.65	22,005.31	21,147.73	20,729.25
Marinette	38,575.92	(2,416.03)	1,367.64	32,200.33	16,600.76	(401.72)	6,772.08	(5,715.01)	1,437.89
Marquette	14,099.42	(484.77)	1,596.59	(3,816.62)	912.29	(1,510.37)	3,770.66	(3,633.48)	(1,869.28)
Milwaukee	170,684.53	70,357.17	31,832.22	(97,596.11)	195,574.83	128,456.54	(20,226.21)	255,564.91	18,937.52
Monroe	36,241.51	(2,706.30)	(913.69)	5,742.44	(1,828.12)	(1,581.34)	25,348.17	(7,485.38)	(1,886.30)
Oconto	26,480.17	(2,951.12)	(1,400.77)	(1,303.07)	(1,824.74)	(4,208.75)	8,080.12	(9,126.83)	(2,158.00)
Oneida	51,513.06	9,096.83	6,669.35	69,411.91	22,851.15	2,746.53	(819.05)	1,223.04	7,696.54
Ozaukee	6,769.70	14,907.25	1,461.49	(24,460.39)	3,010.60	3,565.60	(10,263.53)	(11,008.83)	(515.50)
Pepin	4,817.91	(1,216.28)	(1,082.79)	4,328.58	(2,749.22)	(860.00)	(1,955.88)	(2,068.90)	(1,064.36)
Pierce	(480.82)	(3,379.72)	(2,838.66)	(7,033.08)	2,403.30	(3,850.74)	6,122.97	(8,014.39)	(2,816.85)
Polk	10,672.72	1,187.93	(1,808.62)	46,669.93	7,868.91	(3,278.07)	4,401.22	(9,981.02)	(1,335.66)
Portage	62,749.93	9,170.19	12,545.46	46,027.71	7,605.12	986.64	21,836.29	(1,026.90)	6,934.50
Price	9,005.65	(247.48)	(1,924.04)	2,490.13	(4,885.18)	(1,528.16)	4,054.62	(2,966.13)	(320.99)
Richland	12,854.54	(1,054.95)	(19.69)	(3,110.43)	(327.19)	(1,900.67)	5,721.28	(3,170.94)	(926.34)
Rock	111,769.81	1,232.02	11,677.53	64,538.35	52,609.33	7,496.68	36,345.66	6,791.73	14,198.86
Rusk	8,705.53	(1,919.02)	(1,708.41)	7,052.13	2,502.13	(1,356.90)	(3,085.95)	(2,605.94)	(1,679.33)
Sauk	58,023.57	5,700.62	(3,120.20)	102,724.02	2,654.58	11,611.29	14,342.23	57,322.02	12,512.47
Sawyer	26,303.35	3,154.99	(2,295.07)	15,061.96	1,670.82	(1,822.84)	(4,145.65)	778.41	813.23
Shawano	41,058.17	(3,784.05)	(309.26)	3,616.15	440.30	(4,347.50)	2,797.18	(6,290.88)	(2,472.36)

Surplus or Leakage (000\$)

	Motor Vehicle and Parts Dealers	Furniture and Home Furnishings Stores	Electronics and Appliance Stores	Building Material and Garden Equipment and Supplies Dealers	Food and Beverage Stores	Health and Personal Care Stores	Gasoline Stations	Clothing and Clothing Accessories Stores	Sporting Goods, Hobby, Book, and Music Stores
St. Croix	22,155.15	(3,805.89)	(5,424.70)	61,061.04	16,294.60	(2,442.00)	31,000.16	(16,188.98)	(3,857.64)
Taylor	16,632.64	(1,145.59)	4,554.93	9,463.13	(6,371.62)	(1,993.14)	3,773.72	(3,554.03)	(394.33)
Trempealeau	13,491.66	13,223.77	379.99	7,484.55	(3,432.43)	(2,872.98)	13,497.64	(6,662.52)	(2,087.94)
Vernon	21,479.81	(1,049.74)	973.03	(4,093.31)	(9,768.14)	(3,055.63)	5,513.04	(5,673.06)	(1,894.48)
Vilas	28,164.55	8,152.90	5,557.87	9,626.31	15,266.16	(2,573.08)	8,038.69	(2,301.03)	4,854.28
Walworth	78,062.61	4,999.92	10,221.17	45,624.37	4,059.01	3,788.23	21,089.55	(665.11)	1,644.13
Washburn	22,189.47	(326.42)	(531.23)	10,818.51	5,005.32	(1,793.03)	4,519.75	(2,363.88)	3,211.62
Washington	73,705.30	13,071.92	(7,819.33)	58,825.36	10,100.38	7,513.53	13,044.04	(12,539.97)	(1,618.47)
Waupaca	36,593.94	(1,966.21)	(663.03)	(15,641.55)	8,763.87	3,113.35	14,502.92	(10,006.85)	(3,470.73)
Waushara	14,559.76	470.47	(2,015.84)	(5,555.99)	1,124.64	(2,512.78)	5,155.46	(5,147.21)	(97.76)
Wood	54,906.69	7,831.29	(1,579.57)	12,666.50	11,097.80	188.87	10,394.96	(10,205.44)	953.65

Surplus or Leakage (000\$)

	General Merchandise Stores	Miscellaneous Store Retailers	Nonstore Retailers	Arts, Entertainment, and Recreation Total	Accommodation	Food Services and Drinking Places	Repair and Maintenance	Personal and Laundry Services
Adams	(10,312.95)	2,391.70	5,540.10	(2,662.64)	37,398.81	(4,482.80)	2,456.25	(503.74)
Ashland	23,784.31	2,365.19	2,197.37	(1,909.18)	3,632.42	6,633.28	1,080.95	2,646.27
Barron	63,005.57	34,608.12	9,983.70	1,025.77	(464.60)	5,970.77	3,604.78	8,994.20
Bayfield	(11,376.13)	187.67	691.37	2,227.10	7,571.05	3,581.24	1,326.29	(903.82)
Buffalo	(12,039.90)	(532.70)	374.94	(2,046.94)	(3,656.28)	(2,958.75)	(901.40)	(1,348.56)
Burnett	(6,530.55)	2,621.99	881.33	(2,012.00)	750.94	5,389.43	3,153.71	(1,036.02)
Chippewa	33,216.53	33,607.18	3,804.34	(2,038.63)	(6,371.13)	1,613.75	11,313.59	2,791.20
Clark	(22,491.83)	4,294.89	1,664.52	(4,393.63)	(7,847.97)	(10,573.13)	2,273.56	(2,474.06)
Columbia	(6,263.84)	14,067.96	3,113.11	7,726.00	5,991.42	8,903.64	4,837.07	5,765.16
Crawford	32,605.85	6,946.80	33,001.04	593.74	4,714.37	6,460.07	1,573.32	2,116.68
Dane	134,942.46	173,180.27	79,925.76	(19,110.55)	70,746.05	315,641.55	23,469.76	57,881.87
Dodge	2,463.96	10,715.45	6,325.87	(1,854.30)	(15,799.36)	(18,856.89)	2,853.98	(974.56)
Door	21,839.49	28,542.63	2,010.38	7,132.44	67,918.15	43,687.47	934.44	9,648.92
Douglas	38,041.64	14,162.45	673.44	(1,949.12)	270.78	30,829.41	13,125.23	7,219.23
Dunn	25,809.11	11,448.78	623.15	(1,073.60)	(4,597.60)	3,329.11	2,757.93	(639.65)
Eau Claire	109,585.90	59,350.13	3,350.65	9,384.95	(3,971.24)	65,131.16	22,156.86	2,121.92
Florence	(4,104.47)	(768.55)	678.22	(621.16)	(1,109.52)	1,553.13	(1,034.52)	(983.12)
Fond du Lac	49,200.12	6,639.12	983.55	7,192.84	(8,319.18)	16,320.94	15,832.02	(90.33)
Forest	(7,211.38)	303.20	1,623.83	(1,091.35)	(143.18)	(544.88)	106.34	(721.82)
Grant	709.90	7,118.54	(823.98)	(3,410.99)	(8,665.03)	(3,664.62)	13,031.16	(881.86)
Green	3,607.63	12,151.07	3,777.18	(1,535.40)	(5,282.46)	(5,007.91)	3,452.61	3,114.44
Green Lake	5,128.69	2,737.05	(596.87)	(410.68)	4,109.65	(4,223.66)	(243.99)	(213.24)
Iowa	6,029.22	(1,422.40)	12,298.65	(1,830.99)	(492.16)	(134.28)	5,364.42	(2,517.04)
Iron	(6,340.50)	1,137.73	176.30	(959.55)	2,566.85	5,181.93	(36.34)	(479.09)
Jackson	23,106.38	1,762.86	(561.51)	(2,927.05)	2,502.49	483.24	237.79	(9.28)
Jefferson	13,819.04	11,796.31	2,936.27	375.28	(12,311.82)	17,874.44	12,457.09	1,304.19
Juneau	(8,321.79)	1,262.70	1,108.48	(1,338.35)	3,167.14	3,320.41	4,640.14	1,468.24
Kenosha	70,027.39	16,689.45	6,070.06	17,232.03	(28,353.56)	91,444.93	12,586.28	46,830.97
La Crosse	153,314.36	84,199.05	7,811.52	3,613.15	9,107.18	89,774.39	20,981.35	10,730.52
Lafayette	(8,268.96)	(2,574.48)	(557.12)	(2,436.63)	(3,951.07)	(7,134.30)	(677.74)	466.37
Langlade	38,397.99	(853.50)	1,856.21	(2,641.03)	(2,778.44)	5,269.54	5,429.24	(565.92)
Lincoln	3,419.55	447.81	6,310.08	379.86	(4,145.86)	2,276.24	4,751.60	(1,091.48)
Marathon	134,623.75	38,692.56	7,572.47	4,519.70	(158.59)	34,599.84	21,105.57	2,888.27
Marinette	23,587.22	14,087.07	723.49	(2,579.84)	1,723.27	8,625.34	4,552.15	11,457.23
Marquette	(10,179.28)	1,951.29	615.45	(1,843.66)	816.68	(1,634.97)	2,370.48	(138.50)
Milwaukee	223,871.63	158,110.34	37,695.40	153,755.80	46,622.18	578,649.50	38,549.70	152,981.73
Monroe	50,789.99	5,963.12	2,802.98	(2,802.90)	4,784.89	11,128.07	2,776.97	3,117.41
Oconto	(26,485.39)	(5,193.15)	1,966.10	(1,165.18)	(6,453.38)	(5,630.69)	(2,401.76)	(2,683.67)
Oneida	65,891.53	11,905.16	6,256.15	8,368.69	13,483.74	21,782.97	7,626.24	75.65
Ozaukee	9,665.51	(6,281.05)	(2,397.36)	781.68	(24,260.09)	(27,500.74)	(1,563.86)	29,488.95
Pepin	(6,936.66)	4,714.93	146.30	(1,049.78)	(1,875.13)	1,135.68	1,046.79	(332.52)
Pierce	(31,790.26)	2,247.98	639.50	(3,429.73)	(10,150.31)	(7,505.26)	(1,924.77)	357.99
Polk	15,116.98	5,850.17	1,844.72	207.61	(6,752.89)	482.17	6,875.08	(2,649.82)
Portage	45,237.58	14,254.52	41,660.44	(1,457.23)	1,804.70	30,433.55	8,089.16	986.80
Price	(6,323.32)	2,929.73	818.96	(1,865.38)	738.00	(1,923.68)	3,207.48	1,952.46
Richland	23,654.89	2,749.73	(669.91)	(2,320.08)	(2,374.75)	(5,880.14)	1,242.56	(1,516.76)
Rock	96,937.64	34,747.76	7,448.18	46,442.24	(7,543.35)	74,279.55	10,970.54	3,827.52
Rusk	9,639.60	7,515.04	492.02	(1,656.32)	1,993.44	(2,476.41)	1,776.41	(884.55)
Sauk	62,738.48	19,912.00	13,991.33	30,688.34	248,948.68	141,884.16	4,266.57	13,827.13
Sawyer	41,225.55	3,866.25	538.14	1,296.27	16,887.32	14,292.74	4,645.66	84.47
Shawano	16,756.92	7,838.18	(839.12)	(975.73)	(3,611.57)	4,663.55	3,593.28	(1,786.10)

Surplus or Leakage (000\$)

	General Merchandise Stores	Miscellaneous Store Retailers	Nonstore Retailers	Arts, Entertainment, and Recreation Total	Accommodation	Food Services and Drinking Places	Repair and Maintenance	Personal and Laundry Services
St. Croix	23,101.82	12,670.62	5,384.52	8,182.78	(12,987.49)	19,889.38	7,486.02	500.93
Taylor	16,374.78	(1,882.01)	596.92	(288.11)	(3,057.56)	(3,310.03)	3,478.83	(1,202.18)
Trempealeau	(20,143.90)	11,755.93	2,551.18	(4,173.81)	(4,837.77)	(1,734.24)	2,949.27	1,247.66
Vernon	7,068.70	4,058.31	8,280.41	(1,765.32)	(3,513.68)	(6,587.26)	1,278.27	(606.95)
Vilas	(16,266.46)	9,632.16	1,837.66	8,498.68	22,771.21	21,931.82	5,144.66	2,592.16
Walworth	57,358.89	13,174.23	4,869.52	6,635.21	93,896.29	85,522.46	7,244.02	22,826.27
Washburn	(10,654.11)	10,455.95	2,526.61	(2,188.70)	729.54	3,641.77	1,555.06	412.98
Washington	38,216.83	33,307.93	57,611.80	2,321.06	(28,260.10)	14,943.90	32,306.53	6,155.03
Waupaca	(4,330.44)	15,309.15	2,508.54	3,471.46	(2,395.65)	3,299.03	2,976.87	(1,050.50)
Waushara	(18,045.77)	5,594.66	(320.74)	2,776.70	1,482.83	(2,642.11)	4,214.04	(15.86)
Wood	53,918.20	38,081.14	13,686.61	(2,844.23)	(4,497.62)	11,911.26	28,325.76	(3,129.46)

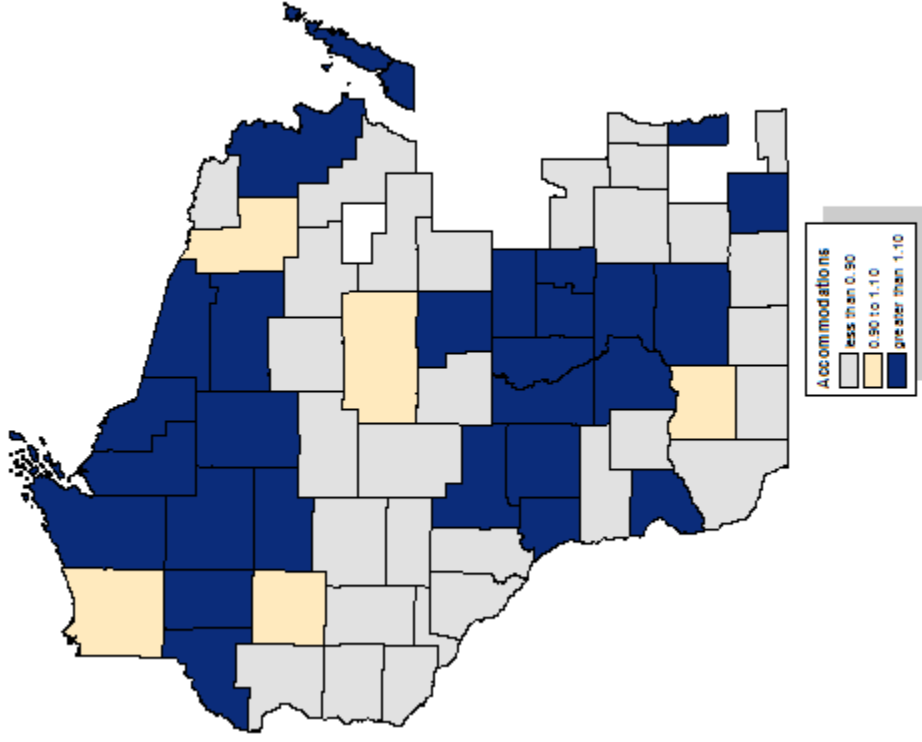




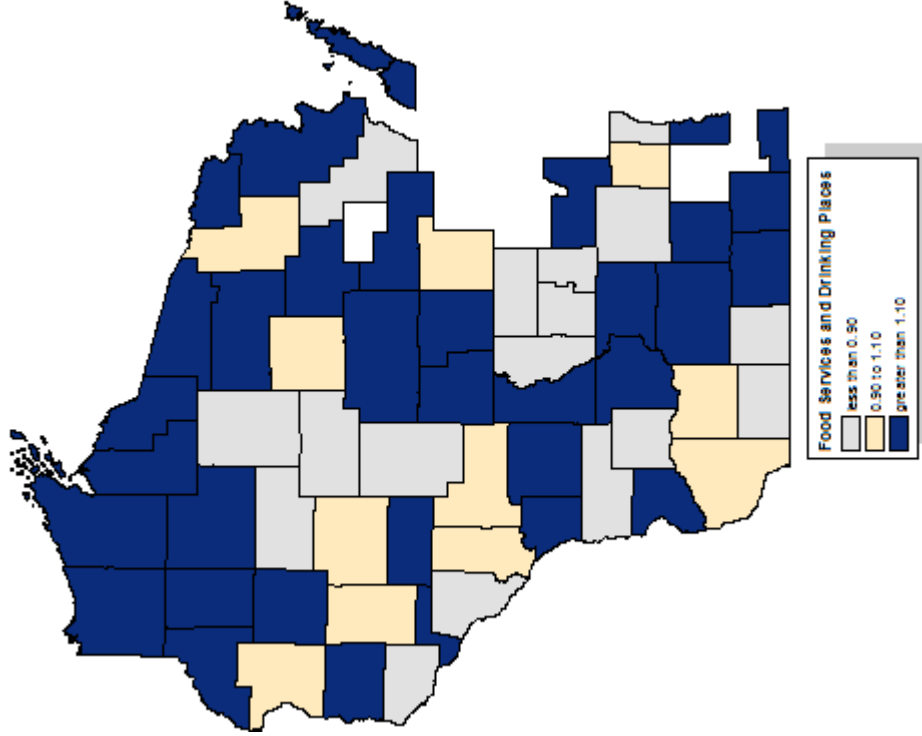




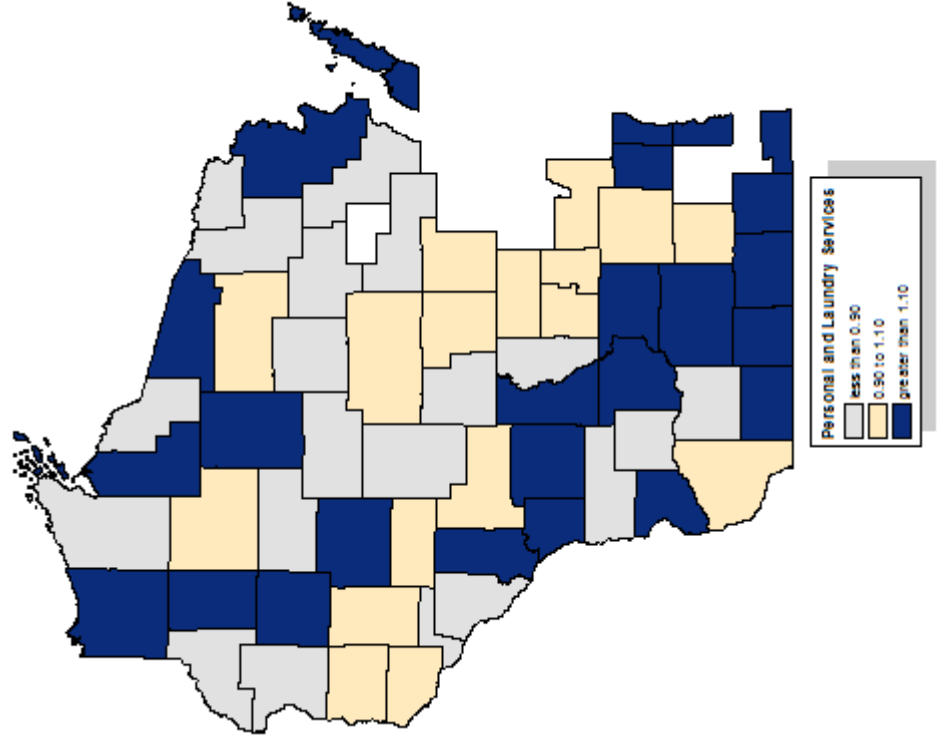
Pull Factor 2015: Accommodations



Pull Factor 2015: Food Services and Drinking Places



Pull Factor 2015: Personal and Laundry Services



Pull Factor 2015: Repair and Maintenance

