Retail Market Analysis, Medina Ohio

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CENTER FOR URBAN AND REGIONAL ANALYSIS

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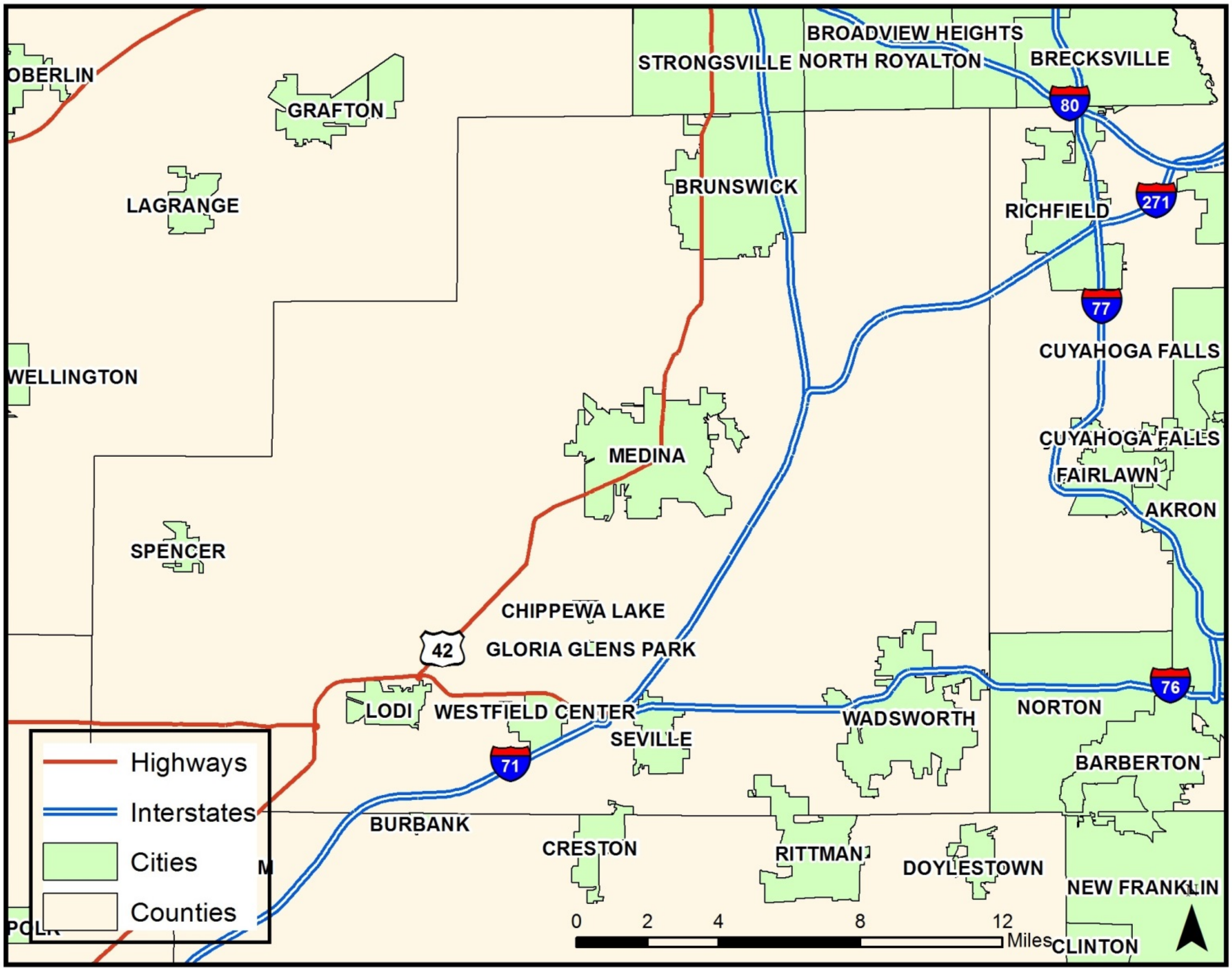
Preface

The retail market analysis for the City of Medina, Ohio compares this city to its broader market region (center of Map 1). This regional approach is used to understand the Medina retail economy. Recognizing that the residents of Medina purchase retail goods in retail centers other than Medina, a larger market region was developed.

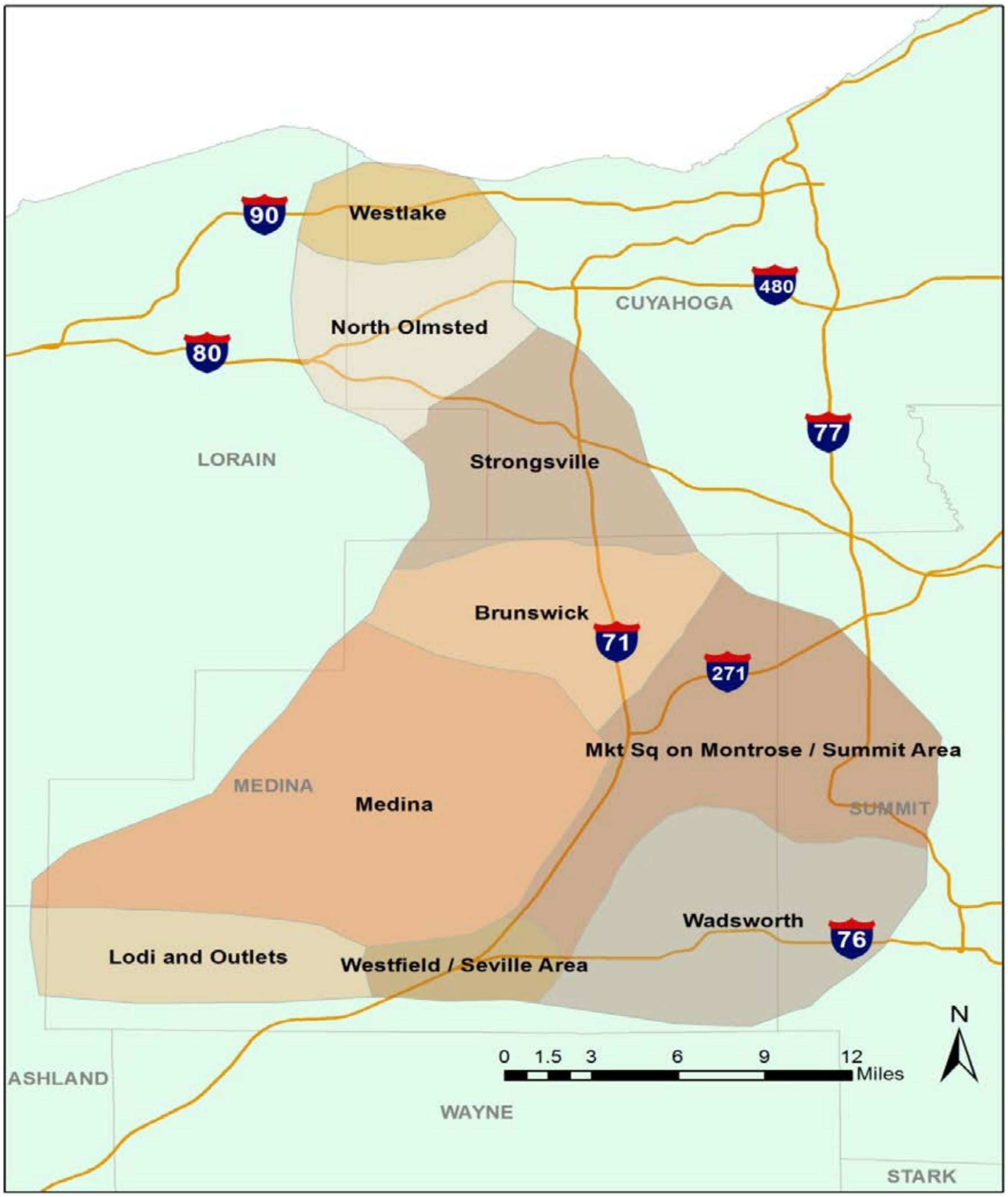
Map 1 Medina Area Reference Map



The larger market region extends (Map 2 below) into Brunswick, Lodi and Outlets, Market Square in Montrose/Summit Mall Area, North Olmsted, Strongsville, Westfield/Seville Area, Westlake and Wadsworth. Map 2 shows the entire market region, the study cities and their competing market centers.

For the purpose of this report, competing Market Centers were defined as retail centers that were identified by the City of Medina Economic Development Director and the Main Street Medina Executive Director. The area around the center from which that center "pulls" its customers is referred to as the retail Market Area. The larger Market Region is comprised of Market Areas and Market Centers which compete with Medina. Finally, sales are examined in downtown Medina to provide a picture of the contribution of the central business district to the larger Medina market area.

Map 2 Competing Market Areas of the Medina Market Region



I. Introduction

Retail market analysis is a tool for identifying retail market trends within a local community. While the analysis focuses specifically on the performance of local retail markets, information on the broader demographic and economic trends within the region is critical to understanding current and future changes in these retail markets. Changes in population, the age and income distributions of the population, and the number of people employed by different industrial sectors will change the demand for retail goods within a local community and therefore are important factors to be considered in an analysis of retail market trends.

Of primary importance is an understanding of the pattern of retail spending within the local community relative to spending in neighboring areas. *Retail sales leakages* could reflect that the local demand for a particular product is not being met within the local community, whereas *retail sales surpluses* may indicate that the local community serves a regional market that pulls consumers in from outside the local area. Estimation of retail surpluses and leakages by specific retail sectors provides a means to identify the relative strengths and weaknesses of an area's retail markets and thereby inform economic development strategies for local communities. A retail market analysis is not a detailed plan of action, but rather provides facts and analysis for input into the community's decision-making process about future economic development[1].

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Important Note: This report centers on presenting findings. The report presents a very limited interpretation of the findings in the form of bulleted items. The interpretation provided serves as an example of the type of analysis that could be conducted with the findings.

1 This report uses a number of project-specific terms, including market area, potential sales and retail sales surplus and leakage. For definitions of these terms please see Section V.

II. Demographics and Economic Trends

Consumer characteristics influence consumers' lifestyles and their demand for different retail goods. For example, characteristics such as age, income, and family structure provide insights on consumers' stage of life and therefore into local shopping habits. For example, young, single people are more focused on non-durable goods such as clothing and entertainment, while married couples with young children are focused more on durable goods such as furniture and home furnishings. For a market area overall, population and income are the two major factors that drive retail demand/purchasing power. Income is highly correlated with age and education. Furthermore, the movement of people from places of work to residences greatly affects the probability of "out shopping", meaning the probability for residents to shop outside of their market area.

The following are several key economic and demographic indicators derived from Tables 1-4 that demonstrate notable trends in the Medina Retail Market Area.

- The population for the expanded Region (incl. Wadsworth) has grown dramatically between 2000 and 2010. In 2000 the population was 330,880 and in 2010 the population was 444,708, an increase of 113,828 individuals, or a growth rate of 26%.
- In 2010, home ownership rates in the Medina Market Area (73%) were higher than State of Ohio's average of 67.9%. High rates of home ownership are a positive force in increasing retail health.
- Median household income in the Medina Market Area experienced a rapid increase between 2000 and 2006 (20%), and this increase was higher than the Market Region as a whole (18%). However, between 2006 and 2010, the trend was reversed to indicate a slight decrease in Medina (0.007%) as well as in the entire Market Region (0.025%).
- Medina has a greater percentage of High School Graduates (32%) than the Overall Market Region (28%). Yet the Region as a whole shares similar graduation rates for post-secondary education (66%).
- Medina has a higher percentage of family households (73%) than the Market Region (69%), which may indicate stronger demand for certain stores within retail sectors, such as home goods or children stores, as families tend to spend more within the retail sector.
- Medina has a slightly higher percentage of population ranging from 25 to 44 (26%) than the entire Market Region (25%). Individuals within this age range have a higher demand for shopping at retail sectors, as they move from young adulthood to establishing a family.
- The 2010 Market Region includes a new market area, Wadsworth. This inclusion accounts for some of the growth of population and other summarized socio-economic statistics, such as families and housing units. As the statistical region is expanded, comparing variables with previous years should be approached with necessary caution.
- The core data for Medina as a component of the region is on a comparable basis over the period.

Tables 1, 2, 3, and 4 detail the population, income, housing trends, and commuting patterns in the Medina Market Area and the Market Region.

Table 1 Socio-Economic Trends 2000, 2006, 2010

	2000		***2006***		***2010 (2013 report)***	
	Medina	***Region***	***Medina***	***Region***	***Medina***	***Region***
Population	47,547	330,880	55,174	350,821	55,222	444,708
Households	17,296	125,701	20,493	135,107	21,079	175,007
Average Household Size	2.70	2.58	2.65	2.54	2.58	2.52
Families	13,067	90,623	15,214	95,690	15,418	121,355
Average Family Size	3.19	3.12	3.11	3.07	3.00	3.00
Housing Units	18,209	131,309	21,659	142,439	22,449	186,052
Owner Occupied Housing Units	73%	76%	74%	77%	73%	75%
Renter Occupied Housing Units	22%	20%	20%	18%	21%	19%
Vacant Housing Units	5%	4%	5%	5%	6%	6%
Median Household Income	$55,225	$57,374	$66,399	$67,786	$65,925	$66,079
Median Home Value	$148,936	$149,591	$195,403	$191,449	$196,140	$185,680
Per Capital Income	$24,558	$27,339	$30,316	$33,583	$31,120	$31,943

	2000		***2006***		***2010 (2013 report)***	
	Medina	***Region***	***Medina***	***Region***	***Medina***	***Region***
Household Income Base	17,287	125,831	20,490	135,107	21,079	175,007
< $15,000	8%	7%	6%	6%	8%	7%
$15,000 - $24,999	9%	8%	7%	7%	9%	8%
$25,000 - $34,999	12%	10%	8%	8%	8%	9%
$35,000 - $49,999	15%	16%	14%	14%	13%	13%
$50,000 - $74,999	24%	24%	23%	22%	19%	20%
$75,000 - $99,999	16%	16%	16%	16%	16%	15%
$100,000 - $149,999	12%	12%	19%	18%	17%	17%
$150,000 - $199,999	2%	3%	4%	5%	6%	6%
$200,000+	2%	3%	4%	5%	4%	5%
Average Household Income	***$66,025***	***$71,092***	***$80,888***	***$86,474***	***$80,259***	***$81,034***
* Statistics of 2000 and 2006 are based on Medina Business Market Analysis Report 2008.						

Table 2 Socio Economic Trends 2000, 2006, 2010						
	2000		***2006***		***2010 (2013 report)***	
	Medina	***Region***	***Medina***	***Region***	***Medina***	***Region***
Median Age	**36**	**39**	**37**	**41**	**41**	**43**
	2000		***2006***		***2010 (2013 report)***	
Population by Age	***Medina***	***Region***	***Medina***	***Region***	***Medina***	***Region***
Total	***47,547***	***330,878***	***55,176***	***350,821***	***55,222***	***444,708***
0-4	8%	6%	8%	6%	7%	5%
5-9	8%	7%	7%	6%	7%	6%
10-14	8%	7%	8%	7%	8%	7%
15-24	11%	12%	12%	12%	12%	11%
25-34	14%	12%	12%	10%	11%	11%
35-44	18%	17%	16%	15%	15%	14%
45-54	15%	16%	15%	16%	16%	16%
55-64	8%	10%	12%	13%	13%	14%
65-74	5%	7%	5%	7%	7%	8%
75-84	4%	5%	4%	5%	4%	5%
85+	1%	2%	2%	2%	2%	2%
18+	***72%***	***75%***	***73%***	***77%***	***74%***	***77%***

	2000		***2010 (2013 report)***	
Household by Type	***Medina***	***Region***	***Medina***	***Region***
Total	17,296	125,701	21,079	175,007
Family Households	76%	72%	73%	69%
Married-couple Family	64%	61%	60%	58%
With Relate Children	33%	29%	34%	30%
Nonfamily Households	25%	28%	27%	31%
Householder living alone	20%	24%	22%	26%
Households with Persons 65+	19%	23%	22%	27%
* Statistics of 2000 and 2006 are based on Medina Business Market Analysis Report 2008.				

Table 3 Socio Economic Trends 2000, 2006, 2010

Pop. 25+ by Educational Attainment	***2000***		***2010 (2013 report)***	
	Medina	***Region***	***Medina***	***Region***
Total	**30,905**	**224,358**	**36,978**	**309,880**
Less Than 9th Grade	2%	2%	2%	2%
9th to 12th Grade	8%	7%	5%	5%
High School Graduate	33%	30%	32%	28%
College, No Degree	21%	22%	22%	22%
Associate Degree	6%	6%	8%	8%
Bachelor's Degree	22%	21%	22%	23%
Master's/Prof/Doctorate Degree	8%	11%	10%	13%

Pop.16+ by Employment Status	***2000***		***2010 (2013 report)***	
	Medina	***Region***	***Medina***	***Region***
Total	***35,631***	***257,686***	***42,651***	***353,699***
In Labor Force	71%	69%	69%	68%
Civilian Employed	70%	67%	65%	63%
Civilian Unemployed	2%	2%	4%	5%
In Armed Forces	0.1%	0.1%	0.0%	0.1%
Not In Labor Force	28%	31%	31%	32%

Civilian Pop. 16+ in Labor Force	***2006***		***2010 (2013 report)***	
	Medina	***Region***	***Medina***	***Region***
Civilian Employed	96%	96%	94%	93%
Civilian Unemployed	4%	4%	6%	7%

Employed Pop.16+ by Occupation	***2010 (2013 report)***	
	Medina	***Region***
Total	***27,680***	***224,562***
Management/Business/Science/Arts	39%	42%
Service	14%	14%
Sales/Office	24%	26%
Natural Resources/Construction/Maintenance	10%	7%
Production/Transportation/Material Moving	13%	11%

Employed Population 16+ by Industry	***2006***		***2010 (2013 report)***	
	Medina	***Region***	***Medina***	***Region***
Total	***26,333***	***170,863***	***27,680***	***224,562***
Agriculture/Mining	1%	0%	1%	0%
Construction	6%	6%	6%	5%
Manufacturing	16%	13%	16%	14%
Wholesale Trade	5%	4%	4%	4%
Retail Trade	11%	11%	11%	11%
Transportation/Warehousing**	5%	5%	5%	5%
Information	2%	2%	2%	2%
Finance/Insurance/Real Estate	7%	9%	9%	8%
Other Services***	45%	46%	43%	46%
Public Administration	4%	4%	3%	4%
* Statistics of 2000 and 2006 are based on Medina Business Market Analysis Report 2008.				
** In 2008 report, this category is Transportation/Utilities				
*** In 2010 (2013 report) data, this category combines four categories: (1) Professional/Scientific/Administrative Services; (2) Education/Health/Social Assistance; (3) Education/Health/Social Assistance; (4) Other (Except Public Administration). The details of these categories are listed below				

	2010 (2013 report)	
	Medina	
Professional/Scientific/Administrative Services	10%	10%
Education/Health/Social Assistance	21%	21%
Arts/Entertainment/Rec./Accommodation/Food	8%	8%
Other (Except Public Administration)	4%	4%

Table 4 Commuting Patterns 1990, 2000, 2010

Commuting Patterns	1990	2000	2010	%Change 1990-2000	%Change 2000-2010
Total Workers	**59,385**	**75,977**	**84,729**	**28%**	**12%**
Commuting Out of County (Total)	31,630	40,293	46,270	27%	15%
%Commuting Out of County	53%	53%	55%	0%	3%
Largest Destination (2010): Cuyahoga County*	20,872	26,572	28,550	27%	7%

	1990	2000	2010	%Change 1990-2000	%Change 2000-2010
Commuting from other Counties into Medina County	11,325	19,256	21,370	70%	11%
Largest Contributor (2010): Summit County	3,307	5,248	5,546	59%	6%
* The top 4 counties to which Medina County sends commuters are Cuyahoga, Summit, Lorain and Wayne. These four account for 42,571. All other counties account for a total of less than four thousand commuters.					

III. Estimated Surplus/Leakage Results for the Medina, Ohio Market Area and Competing Areas

The Medina Market Region is comprised of businesses located within the City of Medina and surrounding areas including**:** Brunswick, Lodi and Outlets, Market Square on Montrose/Summit Mall Area, North Olmsted, Strongsville, Westfield/Seville Area, Wadsworth, and Westlake **(Map 2).** This Market Region was determined by local leaders who provided input regarding the average maximum distance traveled by local residents for retail shopping. For the purpose of this report, competing Market Centers are defined as retail centers identified by Representatives from the City of Medina. The area around the center from which that center "pulls" its customers is that center's retail Market Area. **Table 5 below** illustrates the differences in estimated Market Area population and per capita income. Again, population and income are the two most important indicators of retail demand.

Table 5 Estimated Market Area Population and Per Capita Income in 2010

	Population	***Average Per capita income***
Brunswick	49,740	$28,419
Lodi and Outlets	6,205	$23,027
Medina	55,222	$31,120
Market Square on Montrose/ Summit Area	47,503	$42,280
North Olmsted	89,556	$29,660
Strongsville	93,861	$31,631
Wadsworth	51,370	$29,594
West Lake	47,811	$40,985
Westfield / Seville Area	3,441	$30,772
Total	**444,708**	**$31,943**

Retail Sales by Market Area (Table 6 and 6A below):

Of the nine Market Areas in the Market Region, The Market Square at Montrose Market Area ranked highest in estimated retail sales per person ($41,373), Per Capita Surplus ($15,437) and number of surplus sectors (28 out of 42). At 160% of potential retail sales in the Market Region, the Market Square at Montrose Market Area represents the greatest surplus of retail spending. This is a strong indication that this market area has been the most successful at attracting retail shoppers from outside its market area. Medina compares very favorably at 119% of potential retail sales, ranking second in the region in drawing retail shoppers.

A key indicator of retail health is the diversity of retail sectors recording a surplus. Local economies which enjoy a large number of surplus sectors may be more stable in terms of dealing with fluctuations in the local and national economies. For example, a community with a large aggregate retail sales surplus that is based primarily in motor vehicle sales would be much more sensitive to a national decline in auto sales than a community with a smaller aggregate surplus that was distributed across many retail sectors.

- Of 42 retail sectors studied, Medina contained 12 sectors with a retail sales surplus. Four other Market Areas (Brunswick, Lodi, Wadsworth, Westfield/Seville) had a lower number of sectors with a retail sales surplus while four Market Areas (Market Square on Montrose, North Olmsted, Strongsville, and Westlake) had a greater number of sectors with retail sales surplus than Medina.

- Medina's market area represents 37 out of 42 active retail sectors. The only non-active sectors are recreational vehicle dealers, women's accessories and specialty stores, drapery curtain and upholstery stores, record and pre-recorded tape stores, and camera and photographic supply stores, sectors that are considered not essential to the daily shopping needs of residents.

- The Medina Market Area accounted for 14% of the total actual retail sales per person in the Market Region, reflecting an increase in spending of 5% since 2006.

Table 6 Retail Sales by Market Area:

AREA	Stores	ACTUAL SALES	Per Capita Sales	SURPLUS	Per Capita Surplus (+)	PERCENTAGE OF POTENTIAL	SURPLUS SECTORS 2013	Population
Brunswick	224	$514,089,000	$10,336	-$353,030,908	-$7,098	59%	7	49740
Lodi and Outlets	25	$47,463,000	$7,649	-$40,185,961	-$6,476	54%	6	6205
Medina	333	$1,254,230,000	$22,713	$200,048,621	$3,623	119%	12	55222
Mkt Sq on Montrose / Summit Area	461	$1,965,319,000	$41,373	$733,295,787	$15,437	160%	28	47503
North Olmsted	584	$1,667,916,000	$18,624	$38,497,591	$430	102%	25	89556
Strongsville	694	$1,916,270,000	$20,416	$95,027,097	$1,012	105%	28	93861
Wadsworth	213	$712,091,000	$13,862	-$220,483,324	-$4,292	76%	8	51370
West Lake	334	$788,154,000	$16,485	-$413,884,855	-$8,657	66%	14	47811
Westfield / Seville Area	29	$25,670,000	$7,460	-$39,284,258	-$11,416	40%	7	3441
Regional	2897	$8,891,202,000				100%		444708

SOURCE

Stores from INFO USA geocoded data
Actual sales from INFO USA geocoded data through 2013
Potential sales from model with control total to mirror actual regional total
Percentage of potential = (Actual / Potential) as a percentage, so > 100% means actual exceeds potential

NOTES

Excludes gasoline sales
Answers here are consistent with previous detail
Per capita sales is found by dividing actual market area sales by local population
Regional potential sales are the sum of the sales in each of the sectors.
Sectorial potential sales = (POP SHARE * INCOME CORRECTION * TOTAL SALES) modified to ensure that the sum is the same.
for both the actual and the potential regional total
Surplus = actual - potential (positive if more local sales)

Table 6A Retail Sales by Market Area

Market Area	TOTAL OBSERVED RETAIL SALES (2013)	STORES	NUMBER OF ACTIVE SECTORS (FROM A MAX OF 42)	SECTORS ABOVE POTENTIAL	Percentage of active sectors above potential	Range of service from max of 42: closer to 100 is better	POTENTIAL SALES
Brunswick	$514,089,000	224	33	7	21.21	78.57	$ 867,119,908
Lodi and Outlets	$ 47,463,000	25	13	6	46.15	30.95	$ 87,648,961
Medina	**$1,254,230,000**	**333**	**37**	**12**	**32.43**	**88.10**	**$ 1,054,181,379**
Mkt Sq on Montrose / Summit Area	$1,965,319,000	461	39	28	71.79	92.86	$1,232,023,213
North Olmsted	$1,667,916,000	584	40	25	62.50	95.24	$1,629,418,409
Strongsville	$1,916,270,000	694	40	28	70.00	95.24	$1,821,242,903
Wadsworth	$ 712,091,000	213	34	8	23.53	80.95	$ 932,574,324
West Lake	$ 788,154,000	334	38	14	36.84	90.48	$1,202,038,855
Westfield / Seville Area	$ 25,670,000	29	12	7	58.33	28.57	$ 64,954,258
Regional Total	$8,891,202,000	2897	42				$8,891,202,209

Estimated Retail Sales Surplus/Leakage (Table 7 below):

Retail sales surpluses and leakages were estimated for each retail sector for each Market Area by comparing the actual retail sales in that sector with "potential" sales. Potential sales are estimated based on the population of the Market Area and the per capita income of the residents living in the Market Area relative to the whole region. Potential sales are the annual sales that a Market Area could achieve if all the residents shopped locally. A surplus results if actual sales are greater than potential sales, and vice versa, a leakage results if actual sales are less than potential sales. The total actual sales for Medina is ***$1,254,230,000*** while the potential sales are ***$1,054,181,379***, meaning that Medina has a combined ***overall surplus of retail sales***. By summing all surpluses and leakages across all retail sectors, a total retail sales surplus/leakage estimate is calculated. This number indicates if there is a net surplus or leakage of total retail dollars for each of the Market Areas. For Medina:

- Sectors with the greatest retail sales surplus were: Drug Stores (+334%), Hardware Stores (+299%), and Liquor stores (+120%).
- Sectors with the greatest retail sales leakages were: Bookstores (-92%), Household Appliance Stores (-85%), and Apparel & Accessory Stores (-81%).

Table 7: Surplus/Leakage for Medina Market Area

Original	Detail	POTENTIAL SALES	ACTUAL SALES (Medina)	Surplus or Leakage (D - C)	% Surplus [as a % of potential]	Number of markets with surplus (from 9)
5211 Total	Lumber and Other Building Materials Dealers	$141,082,568	$104,013,000	-$37,069,568	-26%	1
5251 Total	Hardware Stores	$6,886,229	$27,446,000	$20,559,771	299%	1
5261 Total	Retail Nurseries, Lawn and Garden Supply Stores	$25,490,549	$28,685,000	$3,194,451	13%	4
5311 Total	Department Stores	$121,407,018	$141,175,000	$19,767,982	16%	4
5331 Total	Variety Stores	$5,732,952	$4,582,000	-$1,150,952	-20%	6
5411 Total	Grocery Stores	$141,153,233	$118,000,000	-$23,153,233	-16%	4
5441 Total	Candy, Nut, and Confectionery Stores	$4,729,896	$1,939,000	-$2,790,896	-59%	3
5461 Total	Retail Bakeries	$2,259,248	$1,452,000	-$807,248	-36%	3
5511 Total	Motor Vehicle Dealers (New and Used)	$169,943,789	$113,729,000	-$56,214,789	-33%	3
5561 Total	Recreational Vehicle Dealers	$2,992,451		-$2,992,451	-100%	1
5599 Total	Automotive Dealers, Not Elsewhere Classified	$5,714,930	$6,962,000	$1,247,070	22%	3
5611 Total	Men's and Boys' Clothing and Accessory Stores	$2,032,196	$485,000	-$1,547,196	-76%	3
5621 Total	Women's Clothing Stores	$14,959,527	$10,112,000	-$4,847,527	-32%	1
5632 Total	Women's Accessory and Specialty Stores	$2,536,214		-$2,536,214	-100%	3
5641 Total	Children's and Infants' Wear Stores	$4,832,691	$2,270,000	-$2,562,691	-53%	4
5651 Total	Family Clothing Stores	$29,615,172	$5,547,000	-$24,068,172	-81%	3
5661 Total	Shoe Stores	$6,485,955	$2,492,000	-$3,993,955	-62%	3
5699 Total	Miscellaneous Apparel and Accessory Stores	$2,664,975	$505,000	-$2,159,975	-81%	5
5712 Total	Furniture Stores	$14,987,508	$18,884,000	$3,896,492	26%	3
5713 Total	Floor Covering Stores	$3,601,873	$5,665,000	$2,063,127	57%	4
5714 Total	Drapery, Curtain, and Upholstery Stores	$199,544		-$199,544	-100%	3
5719 Total	Miscellaneous home furnishings Stores	$6,037,070	$5,899,000	-$138,070	-2%	2
5722 Total	Household Appliance Stores	$3,604,837	$543,000	-$3,061,837	-85%	4
5731 Total	Radio, Television, and Consumer Electronics Stores	$11,754,727	$5,123,000	-$6,631,727	-56%	3
5734 Total	Computer and Computer Software Stores	$19,115,688	$10,770,000	-$8,345,688	-44%	3
5735 Total	Record and Prerecorded Tape Stores	$740,317		-$740,317	-100%	2
5736 Total	Musical Instrument Stores	$2,339,279	$538,000	-$1,801,279	-77%	2
5812 Total	Eating Places	$90,023,811	$78,997,000	-$11,026,811	-12%	4
5813 Total	Drinking Places (alcoholic Beverages)	$2,804,644	$966,000	-$1,838,644	-66%	3
5912 Total	Drug Stores and Proprietary Stores	$107,757,511	$468,074,000	$360,316,489	334%	3
5921 Total	Liquor Stores	$3,051,614	$6,716,000	$3,664,386	120%	4
5932 Total	Used Merchandise Stores	$2,627,509	$4,316,000	$1,688,491	64%	5
5941 Total	Sporting Goods Stores and Bicycle Shops	$14,482,897	$7,272,000	-$7,210,897	-50%	4
5942 Total	Book Stores	$4,903,000	$387,000	-$4,516,000	-92%	3
5943 Total	Stationery Stores	$11,886,926	$7,712,000	-$4,174,926	-35%	2
5944 Total	Jewelry Stores	$8,073,179	$6,337,000	-$1,736,179	-22%	3
5945 Total	Hobby, Toy, and Game Shops	$5,757,495	$6,649,000	$891,505	15%	3
5946 Total	Camera and Photographic Supply Stores	$456,948		-$456,948	-100%	3
5947 Total	Gift, Novelty, and Souvenir Shops	$4,901,696	$2,184,000	-$2,717,696	-55%	3
5992 Total	Florists	$2,105,114	$1,086,000	-$1,019,114	-48%	5
5995 Total	Optical Goods Stores	$3,499,077	$3,860,000	$360,923	10%	4
5999 Total	Miscellaneous Retail Stores, Not Elsewhere Classified	$38,949,522	$42,858,000	$3,908,478	10%	4
	Totals	$1,054,181,379	$1,254,230,000			

Retail Hierarchy of the Medina Market Area (Figure 1 below)

Figure 1 lists the retail sectors that are analyzed in this report according to their place in the hierarchy of retail goods from convenience to specialty sectors and sales. The items at the bottom of the hierarchy are labeled convenience or "everyday" items that people buy frequently and that they are most likely to buy locally. Stores that sell these items, including grocery stores and gas stations, are found in almost all towns. As Figure 1 indicates, towns with only these basic retail services are labeled minimum convenience places. On the other hand, the items at the top of the hierarchy are specialty items that are not bought on a frequent basis, including hobby goods, optical goods, books, and cameras. Stores specializing in goods such as these are usually found in larger towns and cities. A complete shopping place is one that has all of the retail sectors considered here.

- Of the minimum convenience sectors, only Grocery Stores have a retail sales leakage of approximately 23.2 million in potential sales. It should be noted that drug stores today ***have a surplus*** of $360 million compared to the 2008 report when the sector had a ***retail leakage*** of 6.5 million. Due to the appeal that these sectors have to local shoppers, they may be of a higher priority than sales leakages in sectors that are more essential to a complete market (Sectors higher in Figure 1).
- Of the full convenience sectors (excluding the minimum convenience), the greatest retail sales leakages are from: Motor Vehicle Dealers ($56 million), Eating places ($11 million), Stationary Stores ($4.2 million), Drinking Places ($1.8 million), Variety Stores ($1.1 million), and Retail Bakeries ($0.8 million). Compared to the 2008 report, most of these numbers decreased significantly, indicating recent development and investment in these sectors brought back local consumers. Of the six sectors with leakages, Eating Places had the most significant decrease in leakage (43%).
- Of the partial shopping sectors (excluding the previous sectors), Lumber and Other Building Materials Dealers had the largest ***leakage*** ($37 million) compared to the 2008 report when this sector had a ***surplus*** of $7 million.
- Of the complete shopping market sectors (excluding the previous sectors), retail leakages were found at Sporting Goods Stores and Bicycle Shops ($7.2 million), Book Stores ($4.5 million), Recreational Vehicle Dealers ($3.0 million), and Candy, Nut, and Confectionery Stores ($2.8 million). Of these four sectors, it should be noted that Recreational Vehicles had a drastic change compared to the 2008 report when it had a ***retail surplus*** of 7.1 million.

Figure 1. Hierarchy of Retail Sales for Medina Market Area

Minimum Convienence

Full Convienence Market Center

Partial Shopping Market Center

Complete Shopping Market Center

Retail Sector	Actual Sales	Surplus/Leakage *
Optical Goods Stores	$ 3,860,000	$ 360,923
Hobby, Toy, and Game Shops	$ 6,649,000	$ 891,505
Book Stores	$ 387,000	$ (4,516,000)
Recreational Vehicle Dealers		$ (2,992,451)
Camera and Photographic Supply Stores		$ (456,948)
Candy, Nut, and Confectionery Stores	$ 1,939,000	$ (2,790,896)
Sporting Goods Stores and Bicycle Shops	$ 7,272,000	$ (7,210,897)
Jewelry Stores	$ 6,337,000	$ (1,736,179)
Florists	$ 1,086,000	$ (1,019,114)
Gift, Novelty, and Souvenir Shops	$ 2,184,000	$ (2,717,696)
Shoe Stores	$ 2,492,000	$ (3,993,955)
Men's and Boys' Clothing and Accessory Stores	$ 485,000	$ (1,547,196)
Women's Clothing Stores	$ 10,112,000	$ (4,847,527)
Women's Accessory and Specialty Stores		$ (2,536,214)
Children's and Infants' Wear Stores	$ 2,270,000	$ (2,562,691)
Family Clothing Stores	$ 5,547,000	$ (24,068,172)
Miscellaneous Apparel and Accessory Stores	$ 505,000	$ (2,159,975)
Lumber and Other Building Materials Dealers	$ 104,013,000	$ (37,069,568)
Department Stores	$ 141,175,000	$ 19,767,982
Radio, Television, and Consumer Electronics Stores	$ 5,123,000	$ (6,631,727)
Computer and Computer Software Stores	$ 10,770,000	$ (8,345,688)
Record and Prerecorded Tape Stores		$ (740,317)
Musical Instrument Stores	$ 538,000	$ (1,801,279)
Retail Nurseries, Lawn and Garden Supply Stores	$ 28,685,000	$ 3,194,451
Furniture Stores	$ 18,884,000	$ 3,896,492
Miscellaneous home furnishings Stores	$ 5,899,000	$ (138,070)
Floor Covering Stores	$ 5,665,000	$ 2,063,127
Drapery, Curtain, and Upholstery Stores		$ (199,544)
Household Appliance Stores	$ 543,000	$ (3,061,837)
Motor Vehicle Dealers (New and Used)	$ 113,729,000	$ (56,214,789)
Automotive Dealers, Not Elsewhere Classified	$ 6,962,000	$ 1,247,070
Retail Bakeries	$ 1,452,000	$ (807,248)
Used Merchandise Stores	$ 4,316,000	$ 1,688,491
Miscellaneous Retail Stores, Not Elsewhere Classified	$ 42,858,000	$ 3,908,478
Variety Stores	$ 4,582,000	$ (1,150,952)
Stationery Stores	$ 7,712,000	$ (4,174,926)
Liquor Stores	$ 6,716,000	$ 3,664,386
Drinking Places (alcoholic Beverages)	$ 966,000	$ (1,838,644)
Eating Places	$ 78,997,000	$ (11,026,811)
Hardware Stores	$ 27,446,000	$ 20,559,771
Drug Stores and Proprietary Stores	$ 468,074,000	$ 360,316,489
Grocery Stores	$ 118,000,000	$ (23,153,233)

Indicates that all goods are sold at this retail center level

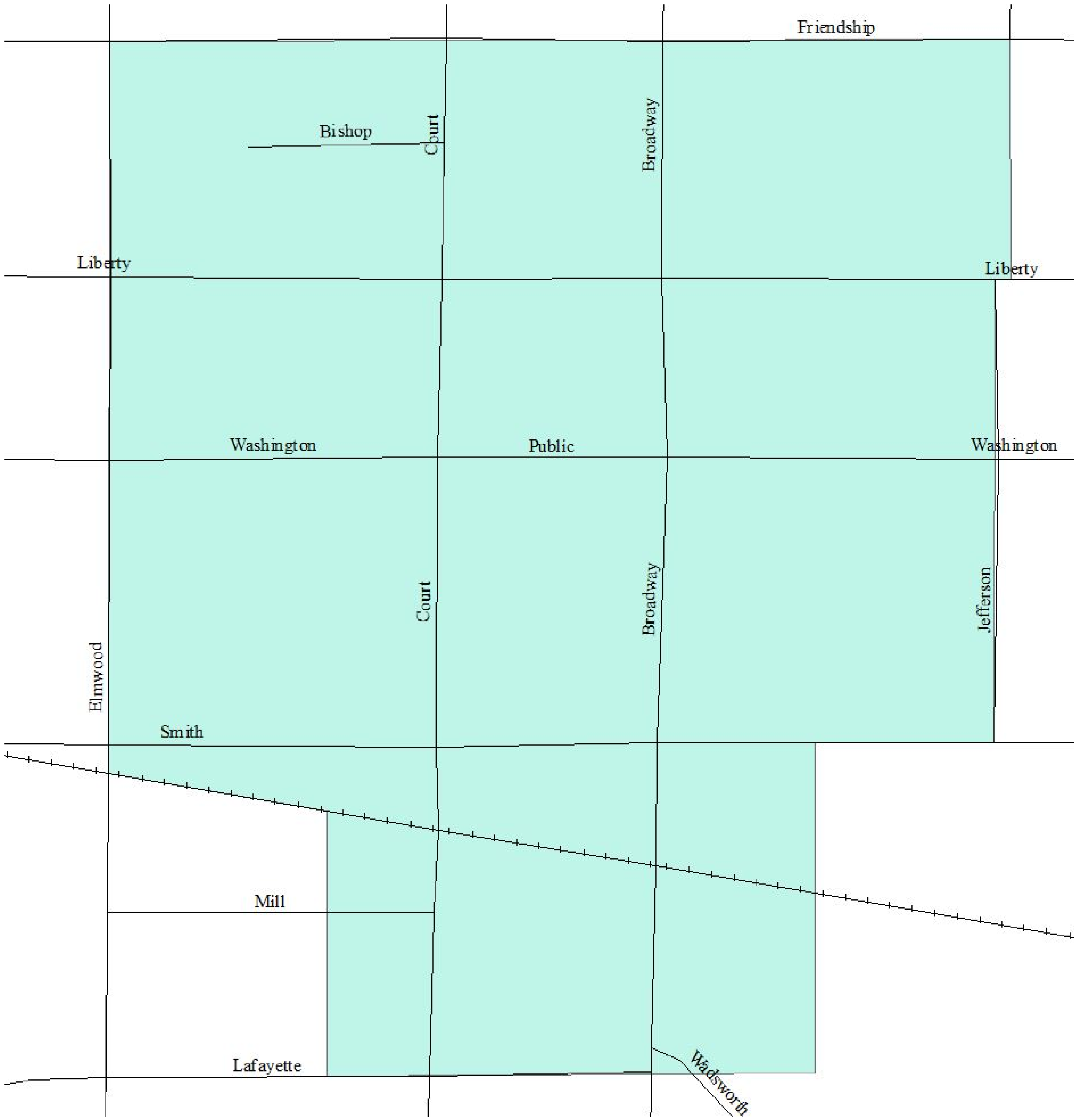
Indicates that some goods are sold at this retail center level

*Leakages are shown in parenthese

IV. Downtown Medina

In the analysis thus far, downtown Medina is included in the larger Medina Market Area. The economic interdependence between the downtown and the larger Market Area is significant. However, to better understand the role of Downtown Medina, it can be useful to consider the proportion of retail sales in the Medina Market Area that are attributed to retailers in the downtown. **Map 3** below demonstrates the boundaries in green of the downtown study area. Such an analysis provides an indication of retail activity in the downtown relative to the larger Medina Market Area.

Map 3 Downtown Medina



We would expect the downtown to contain more specialty shops and services than the larger Market Area. As larger retailers have located outside the downtown areas, downtown shopping districts have had to redefine themselves by filling demand niches that are not satisfied by the larger retailers. The larger retailers often have advantages in being able to offer more variety, lower prices, and more parking, but are less likely to offer specialty items or specialized service. In addition, stores that sell bulky or large items (e.g., cars, household appliances) are less likely to locate downtown because the land costs per square footage are higher. To the extent that there is housing in or near the downtown area, we would also expect some sales in basic convenience goods, such as groceries and drug stores.

The following are several key economic trends derived from Table 8 (below) that demonstrate notable developments in downtown Medina.

- The sectors with the greatest percentage of their retail sales from downtown are Musical Instrument Stores (100%), Book Stores (100%), and Retail Floor Covering Stores (45%). It should be noted that Retail Bakeries (11%) and Candy Nut & Confectionery Stores (0%) had 100% of their sales from the Downtown in the 2008 report, but now have diversified their sales throughout the Medina Region.
- Compared to the 2008 report, the total number of establishments in downtown Medina decreased drastically from 67 to 32. The number of establishments in the larger Medina Market area decreased slightly from 351 to 333. This change indicates a loss of retailers in downtown Medina and a potential retail shift to other market areas, which may reduce the attractiveness of the city center.

Table 8: Downtown Medina and Medina Market Area Retail Sales (continues on next page)

Category	Detail	Estab.	Estab.	Sales ($)	Sales ($)	Downtown as a % of market
SIC_4	DESCRIPTIVE LABEL	Downtown	Medina	Downtown	Medina	
5211 Total	Lumber and Other Building Materials Dealers		9		$104,013,000.00	
5251 Total	Hardware Stores	1	4	$609,000	$27,446,000.00	2.22%
5261 Total	Retail Nurseries, Lawn and Garden Supply Stores		13		$28,685,000.00	
5311 Total	Department Stores		6		$141,175,000.00	
5331 Total	Variety Stores		4		$4,582,000.00	
5411 Total	Grocery Stores	2	15	$2,407,000	$118,000,000.00	2.04%
5441 Total	Candy, Nut, and Confectionery Stores		2		$1,939,000.00	
5461 Total	Retail Bakeries	1	6	$166,000	$1,452,000.00	11.43%
5511 Total	Motor Vehicle Dealers (New and Used)		8		$113,729,000.00	
5561 Total	Recreational Vehicle Dealers					
5599 Total	Automotive Dealers, Not Elsewhere Classified		2		$6,962,000.00	
5611 Total	Men's and Boys' Clothing and Accessory Stores		1		$485,000.00	
5621 Total	Women's Clothing Stores	3	7	$630,000	$10,112,000.00	6.23%
5632 Total	Women's Accessory and Specialty Stores					
5641 Total	Children's and Infants' Wear Stores	1	2	$206,000	$2,270,000.00	9.07%
5651 Total	Family Clothing Stores		3		$5,547,000.00	
5661 Total	Shoe Stores		3		$2,492,000.00	
5699 Total	Miscellaneous Apparel and Accessory Stores		2		$505,000.00	
5712 Total	Furniture Stores	1	10	$222,000	$18,884,000.00	1.18%
5713 Total	Floor Covering Stores	1	3	$2,575,000	$5,665,000.00	45.45%
5714 Total	Drapery, Curtain, and Upholstery Stores					
5719 Total	Miscellaneous home furnishings Stores		3		$5,899,000.00	
5722 Total	Household Appliance Stores		1		$543,000.00	
5731 Total	Radio, Television, and Consumer Electronics Stores		6		$5,123,000.00	
5734 Total	Computer and Computer Software Stores		14		$10,770,000.00	
5735 Total	Record and Prerecorded Tape Stores					
5736 Total	Musical Instrument Stores	1	1	$538,000	$538,000.00	100.00%
5812 Total	Eating Places	9	96	$3,299,000	$78,997,000.00	4.18%
5813 Total	Drinking Places (alcoholic Beverages)		6		$966,000.00	
5912 Total	Drug Stores and Proprietary Stores		8		$468,074,000.00	
5921 Total	Liquor Stores		3		$6,716,000.00	
5932 Total	Used Merchandise Stores	4	8	$581,000	$4,316,000.00	13.46%
5941 Total	Sporting Goods Stores and Bicycle Shops	1	12	$846,000	$7,272,000.00	11.63%
5942 Total	Book Stores	1	1	$387,000	$387,000.00	100.00%
5943 Total	Stationery Stores		3		$7,712,000.00	
5944 Total	Jewelry Stores	1	9	$409,000	$6,337,000.00	6.45%

Category	Detail	Estab.	Estab.	Sales ($)	Sales ($)	Downtown as a % of market
5945 Total	Hobby, Toy, and Game Shops	2	9	$1,129,000	$6,649,000.00	16.98%
5946 Total	Camera and Photographic Supply Stores					
5947 Total	Gift, Novelty, and Souvenir Shops	2	11	$182,000	$2,184,000.00	8.33%
5992 Total	Florists		6		$1,086,000.00	
5995 Total	Optical Goods Stores		6		$3,860,000.00	
5999 Total	Miscellaneous Retail Stores, Not Elsewhere Classified	1	30	$210,000	$42,858,000.00	0.49%
	Totals	32		$14,396,000	$1,254,230,000.00	

< 50 quite low as a share of potential
50-100 of potential OK
>50 quite high relative to potential

V. Definition of Terms

Market Center: A downtown or regional shopping district. In the case of the Medina, Ohio retail market analysis, the primary Market Center of interest is Medina, Ohio and the neighboring Market Centers are identified as: Brunswick, Lodi and Outlets, Market Square on Montrose/Summit Mall Area, North Olmsted, Strongsville, Westfield/Seville Area and Westlake. We also include Wadsworth in this updated report.

Market Area: A geographic area that contains most of the customers that primarily shop in the retail center. The local Market Area is defined as the primary area in which the majority of customers live who shop in the local Market Center. The Market Area boundaries are estimated based on the amount of sales in the retail center and distance from this center. See the Methodology section for a more detailed description of this calculation.

Market Region: The larger geographic area that includes all the Market Areas of interest (see **Map 2** for an illustration).

Potential sales: An estimate of sales that could be achieved in a Market Area if all the population living within the Market Area shopped within the Market Area. See the Methodology section for a more detailed description of this calculation.

Surplus: The positive difference between actual and potential sales. If actual retail sales within a Market Area are greater than the potential sales, then there is a sales surplus. A surplus implies either that people from outside the Market Area shop there or that people living within the Market Area consume more than the average person living within the region. This number may be expressed either in terms of dollars or as a percentage of potential sales.

Leakage: The negative difference between actual and potential sales. If actual retail sales within a Market Area are less than the potential sales, then there is a sales leakage. A leakage implies either that people living within the Market Area shop outside the Market Area or that people living within the Market Area consume less than the average person living within the region. ***A leakage does not imply that businesses within this sector are failing—on the contrary, these businesses may be doing quite well. A leakage simply means that the total sales within the local area are not as much as they could be based on the local area's population and income. In other words, a leakage suggests that there is a potential opportunity for local businesses to capture additional local retail dollars.***

Estimated Actual Sales vs. Surplus/Leakage of Sales: A Market Area may have a large amount of actual sales within a certain sector, but still experience a leakage. Vice versa, the amount of actual sales of a particular sector may be small, but the Market Area has a surplus of sales. This is because surpluses and leakages take into account the average consumption of shoppers within the region. As a result, if the average consumer buys a large amount and if the population within the Market Area is large, then the potential sales within this sector will be high and may be greater than the actual sales, even if actual sales are high.

VI. Methodology

Determining the Market Region: The definition of the relevant Market Region for each of the study areas is very important in analyzing regional retail market trends. The region should include all surrounding areas that either help (i.e. are complementary) or hinder (i.e. are competitive) retail sales activity within the local Market Areas. The relevant regions shown in **Maps 2 and 3** were identified for this study working with the Medina project leaders and using the 2008 Medina Retail Market Analysis Report. The market region is considered to represent a reasonable distance within which Medina residents would do most of their shopping.

Defining Market Area Boundaries: The boundaries for each of the Market Areas were determined based on three main factors: (1) sales for 2013 in each Market Center, (2) distance to the Market Center, and (3) input from the project officials. In general, the larger the Market Center, the larger the Market Area that corresponds to the center. Initial boundaries are determined using geographic information systems and then are modified according to feedback from the local taskforce.

Calculating Estimated Actual Retail Sales: Data on retail sales is available for all businesses. (See Data Sources.) Once the Market Areas were determined using the procedure outlined above, sales for each retail sector within each Market Area were calculated by summing up the sales for all businesses that fall within that Market Area.

Estimating Surplus/Leakages: Surplus and leakage calculations were performed for each retail sector within each Market Area. For the purposes of this report, potential sales of retail sector R in Market Area A is defined as:

> Potential Sales = (Population of Market Area A) x (Income ratio of Market Area A) x *(Regional per capita consumption of retail good R)*

The income ratio is the ratio of per capita income in Market Area A to the regional per capita income. This ratio gives an indication of the relative spending power of residents in Market Area A. A correction factor was used to ensure potential and actual sales are equal in aggregate for the region.

The regional per capita consumption of retail good R is the total regional sales in retail sector R divided by the population of the region. Because these values are dependent on the geographic extent of the regional boundary, they are relative measures that are specific to each study region*.

Surplus/leakage numbers are reported in dollars as well as in percentage form. The percentage term is the percentage of the potential sales for the Market Area, which indicates the size of actual sales relative to the estimated potential sales. For example, a 50% surplus implies that the actual sales are 50% larger than the estimated potential sales and vice versa, a –50% surplus (i.e. a leakage) implies that actual sales are 50% less than potential sales. A –100% surplus results if actual sales are zero.

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* In other words, the region is defined with the locale of interest as the central point. A study in which one of the other market areas was the focus would generate a different study region with that market area as the Center. As a result, surplus and leakage estimates for the same market area will vary according to the study region that has been defined.

VII. Data Sources

Estimated retail sales data are compiled by InfoUSA, a private market research company that compiles estimates of retail sales data. These data are then geo-coded and extracted using ESRI's ArcMap. These data are estimated for 2013, using one sales quarter in 2013 to estimate for the whole year. Several variables are available, including four digit Standard Industry Codes (SIC) and sales.

1990 and 2000 data on population, housing, income, commuting, and labor force characteristics are from the U.S. Census Bureau's decennial census of housing and population. These data can be accessed at: http://www.census.gov. The 2006 and 2010 estimates are provided by ESRI.

For an explanation of the retail sectors that comprised this study, please visit: http://www.osha.gov/pls/imis/sic_manual.html.

Appendix A: *Total Estimated Retail Surplus/Leakages by Market Area in the Medina, Ohio Market Region*

original	detail	ACTUAL - POTENTIAL > 0 = surplus									
SIC_4	DESCRIPTIVE LABEL	Brunswick	Lodi and Outlets	Medina	Mkt Sq on Montrose / Summit Area	North Olmsted	Strongsville	Wadsworth	West Lake	Westfield / Seville Area	Number of markets with surplus (from 0)
5211 Total	Lumber and Other Building Materials Dealers	$ (69,335,870)	$ (5,267,183)	$ (37,069,568)	$ 561,761,610	$ (156,952,345)	$ (114,760,485)	$ (37,894,726)	$ (131,788,541)	$ (8,692,919)	1
5251 Total	Hardware Stores	$ (2,310,287)	$ (115,549)	$ 20,559,771	$ (1,950,945)	$ (3,940,850)	$ (6,257,905)	$ (145,855)	$ (5,414,079)	$ (424,301)	1
5261 Total	Retail Nurseries, Lawn and Garden Supply Stores	$ 11,988,676	$ (2,119,389)	$ 3,194,451	$ (16,042,839)	$ 665,978	$ 24,442,581	$ (20,654,039)	$ (615,805)	$ (859,621)	4
5311 Total	Department Stores	$ (80,958,690)	$ (10,094,277)	$ 19,767,982	$ 15,724,452	$ 65,923,598	$ 39,104,726	$ 31,717,114	$ (73,704,336)	$ (7,480,594)	4
5331 Total	Variety Stores	$ 1,764,344	$ 313,339	$ (1,150,952)	$ (3,066,109)	$ 4,411,738	$ 1,156,540	$ 2,355,384	$ (6,537,045)	$ 752,759	6
5411 Total	Grocery Stores	$ (12,555,995)	$ 10,659,942	$ (23,153,233)	$ 24,320,024	$ 70,321,431	$ (97,932,568)	$ 55,984,761	$ (26,170,117)	$ (1,474,273)	4
5441 Total	Candy, Nut, and Confectionery Stores	$ (2,782,589)	$ (393,263)	$ (2,790,896)	$ (1,372,835)	$ 4,325,134	$ 969,457	$ (3,353,270)	$ 5,689,698	$ (291,436)	3
5461 Total	Retail Bakeries	$ (30,351)	$ (187,843)	$ (807,248)	$ 2,009,614	$ 743,945	$ 40,840	$ (836,628)	$ (917,125)	$ (15,205)	3
5511 Total	Motor Vehicle Dealers (New and Used)	$ (28,033,749)	$ (13,472,823)	$ (56,214,789)	$ 32,977,463	$ 154,111,681	$ 110,739,799	$ (80,002,607)	$ (109,633,781)	$ (10,471,227)	3
5561 Total	Recreational Vehicle Dealers	$ (2,461,449)	$ (248,805)	$ (2,992,451)	$ 21,741,719	$ (4,625,347)	$ (5,169,869)	$ (2,647,251)	$ (3,412,166)	$ (184,382)	1
5599 Total	Automotive Dealers, Not Elsewhere Classified	$ (4,700,832)	$ (475,163)	$ 1,247,070	$ (6,679,046)	$ (8,833,406)	$ 30,295,675	$ (4,520,674)	$ (6,516,495)	$ 182,870	3
5611 Total	Men's and Boys' Clothing and Accessory Stores	$ (1,671,589)	$ (168,965)	$ (1,547,196)	$ 3,284,969	$ (1,524,109)	$ 1,825,102	$ (1,797,769)	$ 1,724,772	$ (125,215)	3
5621 Total	Women's Clothing Stores	$ (12,305,001)	$ (1,243,796)	$ (4,847,527)	$ (9,903,219)	$ (13,643,518)	$ 62,287,366	$ (13,233,843)	$ (6,188,721)	$ (921,744)	1
5632 Total	Women's Accessory and Specialty Stores	$ (1,704,170)	$ (210,871)	$ (2,536,214)	$ 217,923	$ (355,155)	$ 3,258,342	$ (2,243,645)	$ 3,730,061	$ (156,271)	3
5641 Total	Children's and Infants' Wear Stores	$ (3,975,144)	$ (401,810)	$ (2,562,691)	$ 2,091,027	$ 2,332,246	$ 2,279,863	$ (4,275,207)	$ 4,809,485	$ (297,770)	4
5651 Total	Family Clothing Stores	$ (24,076,045)	$ (2,462,327)	$ (24,068,172)	$ 18,586,708	$ (10,785,336)	$ 41,581,728	$ (25,772,859)	$ 28,821,060	$ (1,824,763)	3
5661 Total	Shoe Stores	$ (5,335,041)	$ (539,269)	$ (3,993,955)	$ 5,163,855	$ 4,377,842	$ 4,440,623	$ (3,659,756)	$ (54,663)	$ (399,637)	3
5699 Total	Miscellaneous Apparel and Accessory Stores	$ 1,598,917	$ (221,577)	$ (2,159,975)	$ 3,328,440	$ 550,823	$ 66,889	$ (2,231,552)	$ (1,652,760)	$ 720,795	5
5712 Total	Furniture Stores	$ (10,107,017)	$ (135,123)	$ 3,896,492	$ 16,031,079	$ 18,604,232	$ (8,565,975)	$ (8,150,596)	$ (10,649,627)	$ (923,468)	3
5713 Total	Floor Covering Stores	$ 899,269	$ (299,474)	$ 2,063,127	$ (1,635,513)	$ 867,687	$ (3,648,729)	$ (1,385,372)	$ 3,360,936	$ (221,932)	4
5714 Total	Drapery, Curtain, and Upholstery Stores	$ (164,136)	$ (16,591)	$ (199,544)	$ (233,208)	$ 186,570	$ 348,260	$ 120,475	$ (29,532)	$ (12,295)	3
5719 Total	Miscellaneous home furnishings Stores	$ (3,414,809)	$ (501,947)	$ (138,070)	$ 9,556,468	$ 139,672	$ (184,866)	$ (2,235,652)	$ (2,848,818)	$ (371,979)	2
5722 Total	Household Appliance Stores	$ 292,831	$ 243,279	$ (3,061,837)	$ 8,546,023	$ 400,106	$ (2,970,850)	$ (2,374,994)	$ (852,444)	$ (222,115)	4
5731 Total	Radio, Television, and Consumer Electronics Stores	$ (9,077,884)	$ (977,336)	$ (6,631,727)	$ 10,111,235	$ 7,850,051	$ 19,903,097	$ (7,837,738)	$ (12,615,422)	$ (724,277)	3
5734 Total	Computer and Computer Software Stores	$ (9,636,664)	$ (652,357)	$ (8,345,688)	$ 20,531,469	$ (18,074,580)	$ 13,897,027	$ (14,570,563)	$ 18,029,181	$ (1,177,829)	3
5735 Total	Record and Prerecorded Tape Stores	$ (210,950)	$ (61,553)	$ (740,317)	$ (865,210)	$ 3,106,713	$ 316,001	$ (654,916)	$ (844,153)	$ (45,615)	2
5736 Total	Musical Instrument Stores	$ (1,029,180)	$ (194,497)	$ (1,801,279)	$ 4,443,082	$ 3,380,243	$ (2,068,425)	$ (1,711,427)	$ (874,381)	$ (144,137)	2
5812 Total	Eating Places	$ (16,750,343)	$ (4,921,949)	$ (11,026,811)	$ 38,264,049	$ (5,905,265)	$ 7,252,520	$ (30,601,947)	$ 20,270,620	$ 3,419,108	4
5813 Total	Drinking Places (alcoholic Beverages)	$ (1,018,968)	$ (95,190)	$ (1,838,644)	$ (2,585,792)	$ 1,061,940	$ 3,776,592	$ (820,109)	$ 1,692,981	$ (172,810)	3
5912 Total	Drug Stores and Proprietary Stores	$ (38,752,249)	$ 1,826,599	$ 360,316,489	$ (101,132,350)	$ (67,331,744)	$ (92,061,879)	$ 14,610,057	$ (72,452,375)	$ (5,022,568)	3
5921 Total	Liquor Stores	$ 6,886	$ (253,724)	$ 3,664,386	$ (1,329,426)	$ (2,758,794)	$ (1,636,082)	$ 938,410	$ 1,556,372	$ (188,028)	4
5932 Total	Used Merchandise Stores	$ (833,265)	$ 113,538	$ 1,688,491	$ 581,227	$ 2,578,733	$ (1,551,382)	$ (581,408)	$ (2,000,038)	$ 4,104	5
5941 Total	Sporting Goods Stores and Bicycle Shops	$ 6,361,052	$ (1,204,167)	$ (7,210,897)	$ 12,513,818	$ 1,807,195	$ (6,244,191)	$ (9,937,196)	$ 4,468,759	$ (554,376)	4
5942 Total	Book Stores	$ (4,032,977)	$ (407,656)	$ (4,516,000)	$ 2,410,857	$ (5,124,429)	$ 12,595,395	$ (4,337,405)	$ 3,714,315	$ (302,102)	3
5943 Total	Stationery Stores	$ (2,065,625)	$ (988,328)	$ (4,174,926)	$ 1,089,733	$ (2,289,286)	$ 18,688,705	$ (6,549,688)	$ (2,978,164)	$ (732,423)	2
5944 Total	Jewelry Stores	$ (3,164,616)	$ (671,237)	$ (1,736,179)	$ 4,675,865	$ 2,039,515	$ 8,544,476	$ (5,096,882)	$ (4,093,508)	$ (497,436)	3
5945 Total	Hobby, Toy, and Game Shops	$ (3,355,844)	$ (478,702)	$ 891,505	$ 7,074,208	$ (618,197)	$ 2,351,138	$ (3,839,328)	$ (1,670,030)	$ (354,753)	3
5946 Total	Camera and Photographic Supply Stores	$ (375,864)	$ (37,993)	$ (456,948)	$ 354,965	$ 479,709	$ (789,440)	$ (404,236)	$ 1,257,962	$ (28,155)	3
5947 Total	Gift, Novelty, and Souvenir Shops	$ (1,663,904)	$ (407,547)	$ (2,717,696)	$ (1,359,618)	$ 4,992,587	$ 545,648	$ 2,950,749	$ (2,038,198)	$ (302,022)	3
5992 Total	Florists	$ (1,224,567)	$ 114,972	$ (1,019,114)	$ (503,249)	$ (1,442,815)	$ 2,742,128	$ 746,726	$ 498,627	$ 87,292	5
5995 Total	Optical Goods Stores	$ (1,384,176)	$ (290,928)	$ 360,923	$ 144,624	$ 2,063,575	$ 3,417,865	$ (2,223,435)	$ (1,872,851)	$ (215,599)	4
5999 Total	Miscellaneous Retail Stores, Not Elsewhere Classified	$ (15,443,041)	$ (3,238,423)	$ 3,908,478	$ 54,418,640	$ (14,620,177)	$ 22,001,359	$ (23,324,428)	$ (25,084,508)	$ 1,382,093	4
	Overall Surplus/Leakage by Market	$ (353,030,908)	$ (40,185,961)	$ 200,048,621	$ 733,295,787	$ 38,497,591	$ 95,027,097	$ (220,483,324)	$ (413,884,855)	$ (39,284,258)	
	Number of sectors in surplus by city:	7	6	12	28	25	28	8	14	7	

NOTES

ACTUAL - POTENTIAL
> 0 = surplus

compare Table 6 or 6a: number of sectors in surplus in each city / market area (check is good)

overall sum close tp zero because unbiased assumption

observed total and total size of potentials sales are the same