



Miami Valley Commercial Development Assessment 2008



Miami Valley Regional Planning Commission



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For More Information

Please visit www.mvrpc.org for a copy of this report. Questions or comments should be directed to Martin Kim, Director of Regional Planning, at mkim@mvrpc.org

MVRPC is a voluntary association of governmental and non-governmental organizations serving as a forum and resource where regional partners identify priorities, develop public policy, and implement strategies to improve the quality of life and economic vitality throughout the Miami Valley Region.

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Introduction

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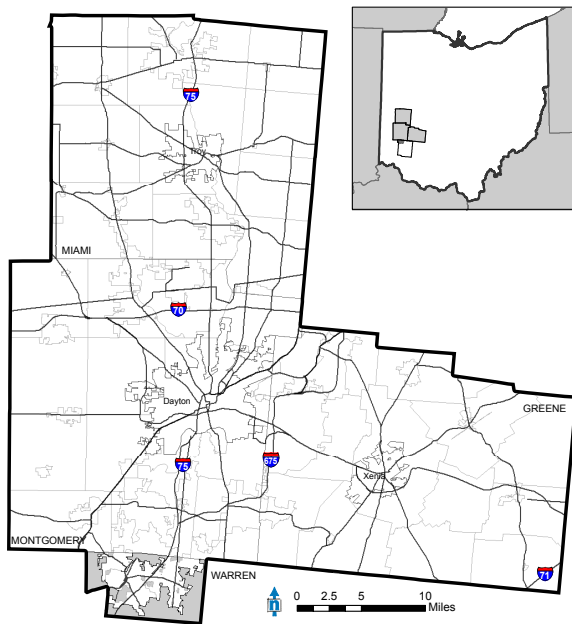
Purpose

The commercial landscape of the Miami Valley Region has experienced a transformation over the past several decades. While commercial activity was once confined to a few downtown areas, the increased ease of transportation has allowed commercial development to spread across a vast network of suburban areas. The shift in the local economy from a manufacturing base to more of a service base has also contributed to the increase in commercial land across the Region. However, this growth has been coupled with a rise in the amount of vacant commercial space in the Region. This expansion has also coincided with a slight decline in population, resulting in an ever-increasing amount of commercial space per capita. This notion is reaffirmed in a 2003 U.S. retail study, published by the International Council of Shopping Centers, which identifies this area as having the 5th largest amount of retail space per capita in the country.

The Miami Valley Regional Planning Commission (MVRPC) conducted the Miami Valley Commercial Development Assessment as a part of the existing conditions assessment phase of “Going Places: An Integrated Land Use Vision for the Miami Valley Region.” The main purpose of this assessment is to

measure the existing condition of commercial development throughout the Miami Valley by analyzing the building space and land use inventory and to identify how future development planning might appropriately compliment the needs and resources of the Region. The data and analytical methods in this assessment are intended to help local officials make development decisions that make sense in a regional context.

Figure 1. Study Area



Study Area

The study area covers a three county region in the Dayton Metropolitan area, along with three cities in northern Warren County, located in southwest Ohio (Figure 1). It includes Greene, Miami, and Montgomery counties along with the cities of Carlisle, Franklin, and Springboro in Warren County, covering approximately 1,313 square miles with three interstates, I-70, I-75, and I-675.

Report Structure

This report begins with the definition of commercial land use used in this assessment and descriptions of the data sources and general data analysis methodology used. The evaluation of the current status of commercial development includes analyses of the Region’s commercial land, gross leasable area (GLA), and sub-market assessments for the office and retail sectors, vacancy, and employment. This is followed by a discussion of the future of commercial development in the Region.

Acknowledgements

The study was made possible by datasets that were made available by various agencies listed throughout the report. MVRPC is grateful for this data and would like to thank those Federal, State, and local agencies for making the data available.

Methodology

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Definition

Commercial land is defined as “the land and improvements to land which are owned or occupied for general commercial and income producing purposes and where production of income is a factor to be considered in arriving at true value” (State of Ohio Classification of Real Property). However, some properties were excluded because their use is not commercial in nature. In addition, some properties that are classified as tax exempt are included in this assessment because they represent a commercial use of land. See Appendix A for a complete list of land use categories included in the study.

For this report, commercial land has been divided into seven categories:

- Lodging
- Healthcare
- Restaurants
- Retail
- Office
- Vacant – Unbuilt: These parcels are defined by the Auditor’s database as being commercial land that is currently undeveloped. It should be noted that these parcels are not included in any assessment of vacant commercial GLA.
- Unclassified: These are parcels that are generally recognized as commercial, but either have no specific land use information, or have a mix of commercial uses.

Data Sources and Analysis Framework

The data used for this study includes both spatial and non-spatial commercial land use and socio-economic data. In addition, commercial land use data was broken down spatially by various geographic levels, including: regional, county, market-area, and Traffic Analysis Zone (TAZ).

The primary source of data for the commercial development assessment is the parcel-level data obtained from each of the county auditor’s offices during the summer of 2007.

The data used to assess the condition of vacant commercial property came from the Department of Housing and Urban Development and the Gem Real Estate Group.

Employment data were organized by Standard Industrial Classification (SIC) codes. The Wholesale Trade, Retail Trade, Finance/Insurance/Real Estate, and Services codes were combined to form a total commercial employment number. Commercial employment forecasts were developed by MVRPC using data from the State of Ohio’s Quarterly Census of Employment and Wages, Woods & Poole Economics, Inc., and the Ohio Department of Job and Family Services’ *Job Outlook to 2014* report.

Prior to technical data analysis, some data modification was necessary to develop a regional dataset, mainly due to the differences in the definitions used in parcel data between the counties.

The data in this report are examined geographically, graphically, and in tabular form. Tabular and graphic analyses occurred at the regional and county levels, while geographic analyses were conducted at both the parcel and TAZ levels. The analyses are both land-based and building-based.

Regional Overview

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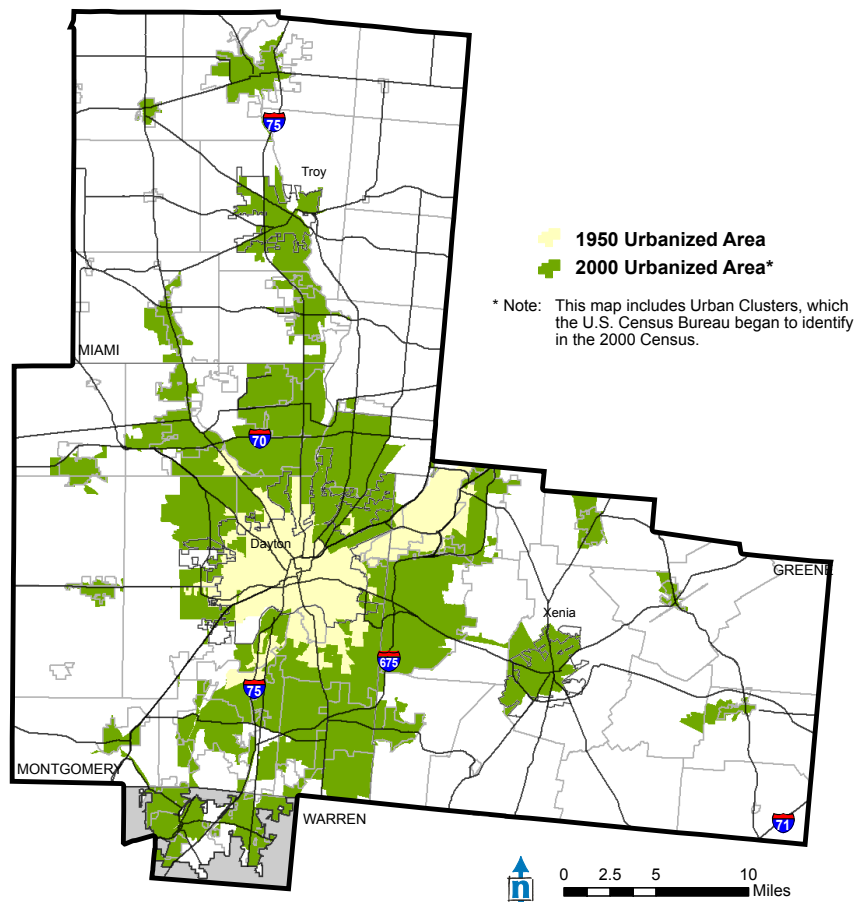
Historic Commercial Land Use

Commercial development in the Miami Valley Region has experienced a substantial shift over the past several decades. This shift has taken place in employment share, from manufacturing to service, and in the geographical redistribution of commercial land from the Region's core to its suburbs and along interstate highways. Figure 2 shows the urbanization trends in the Region from 1950 to 2000.

Regional commercial land increased nearly 150% between 1975 and 2000, while non-commercial land has only increased by 53.2% (Table 1). Commercial and non-commercial development in Miami County has outpaced the rest of the Region, as both commercial land and non-commercial land increased over 100%. More specifically, land used for commercial purposes increased 183.3% from 930.5 acres in 1975 to 2,636.4 in 2000, while non-commercial land increased by 118.1% from 10,374.6 acres to 22,622.5 between 1975 and 2000. Commercial development also stands out in Montgomery County, where land increased over 160%, despite the fact that non-commercial development only increased by 25.2%.

While a review of these figures can be used to identify general trends in development, because the older land use data is based on aerial photos and not on parcel boundaries, the figures from 1975-2000 are not comparable to the 2007 parcel data on which the majority of this assessment is based.

Figure 2. Urbanization Trends from 1950 to 2000



Source: U.S. Census Bureau, 1950 and 2000

Table 1. Historic Land Use (in acres) for 1975 and 2000

Region	Commercial Land			Non-Commercial Land		
	1975	2000	% Change	1975	2000	% Change
Region	9,310.6	23,099.3	148.1%	101,474.8	155,436.6	53.2%
Greene	1,883.5	3,502.0	85.9%	26,648.6	52,092.5	95.5%
Miami	930.5	2,636.4	183.3%	10,374.6	22,622.5	118.1%
Montgomery	6,496.5	16,960.9	161.1%	64,451.6	80,721.6	25.2%

Source: ODNR, MVRPC

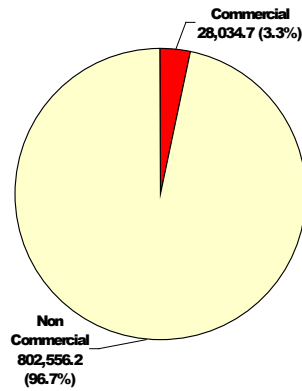
Note: Warren County data are not shown because they are not available

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Current Commercial Land Use and Gross Leasable Area

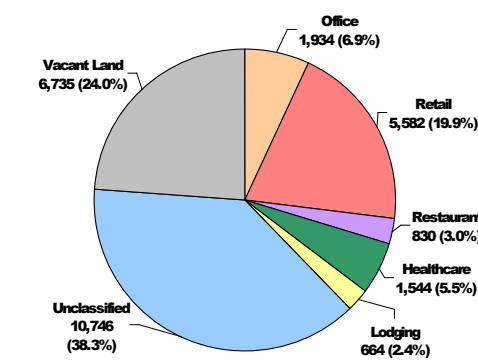
Commercial land makes up 3.3% of the total land in the Region (Figure 3). The majority (62%) of the commercial land in the Region is either unclassified or vacant (Figure 4). The retail category consumes the next largest amount with a 20% share of regional commercial land, while office land accounts for only 6.9% of commercial land. However, in terms of commercial GLA, retail and office account for nearly 60% of the Region's inventory (Figure 5).

Figure 3. Regional Commercial Land Share (in acres) for 2007



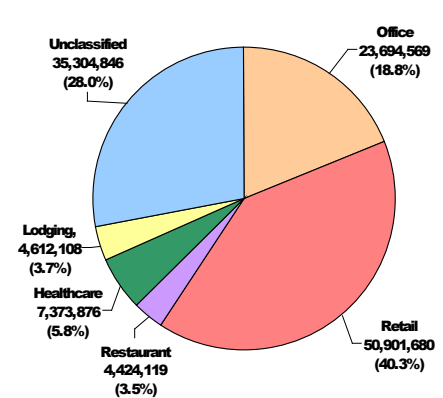
Source: Greene, Miami, Montgomery, and Warren counties, 2007

Figure 4. Commercial Land by Category (in acres) for 2007



Source: Greene, Miami, Montgomery, and Warren counties, 2007

Figure 5. Commercial GLA by Category (in square feet) for 2007



Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007

Montgomery County and the northern part of Warren County have the highest percentages of commercial land in the Region, with 5.8% and 8.2% respectively (Table 2). However, because the Warren County figures only pertain to the three cities of Carlisle, Franklin, and Springboro, they cannot be fairly compared to the county totals of the rest of the Region. Another observation from the current land inventory is that, despite the previously cited development that has taken place in Miami County, commercial land only accounts for 1.7% of the County's total land.

Table 2 also corresponds with Figure 6, showing the amount and location of commercial and non-commercial land in the Region for 2007. The table shows the amount of commercial land in each county, and the map confirms that most of it is in Montgomery County. The map also shows that most of the commercial land is located along the Region's major highways, with clusters surrounding the most significant interchanges.

Table 2. Commercial Land in 2007 by County (in acres)

Region	Commercial	Non-Commercial	Total
Region	28,034.7 (3.3%)	810,915.0 (96.7%)	838,949.8
Greene	5,284.4 (2.0%)	260,904.8 (98.0%)	266,189.2
Miami	4,501.6 (1.7%)	257,862.2 (98.3%)	262,363.8
Montgomery	17,165.1 (5.8%)	280,090.1 (94.2%)	297,255.2
Warren*	1,083.6 (8.2%)	12,057.9 (91.8%)	13,141.6

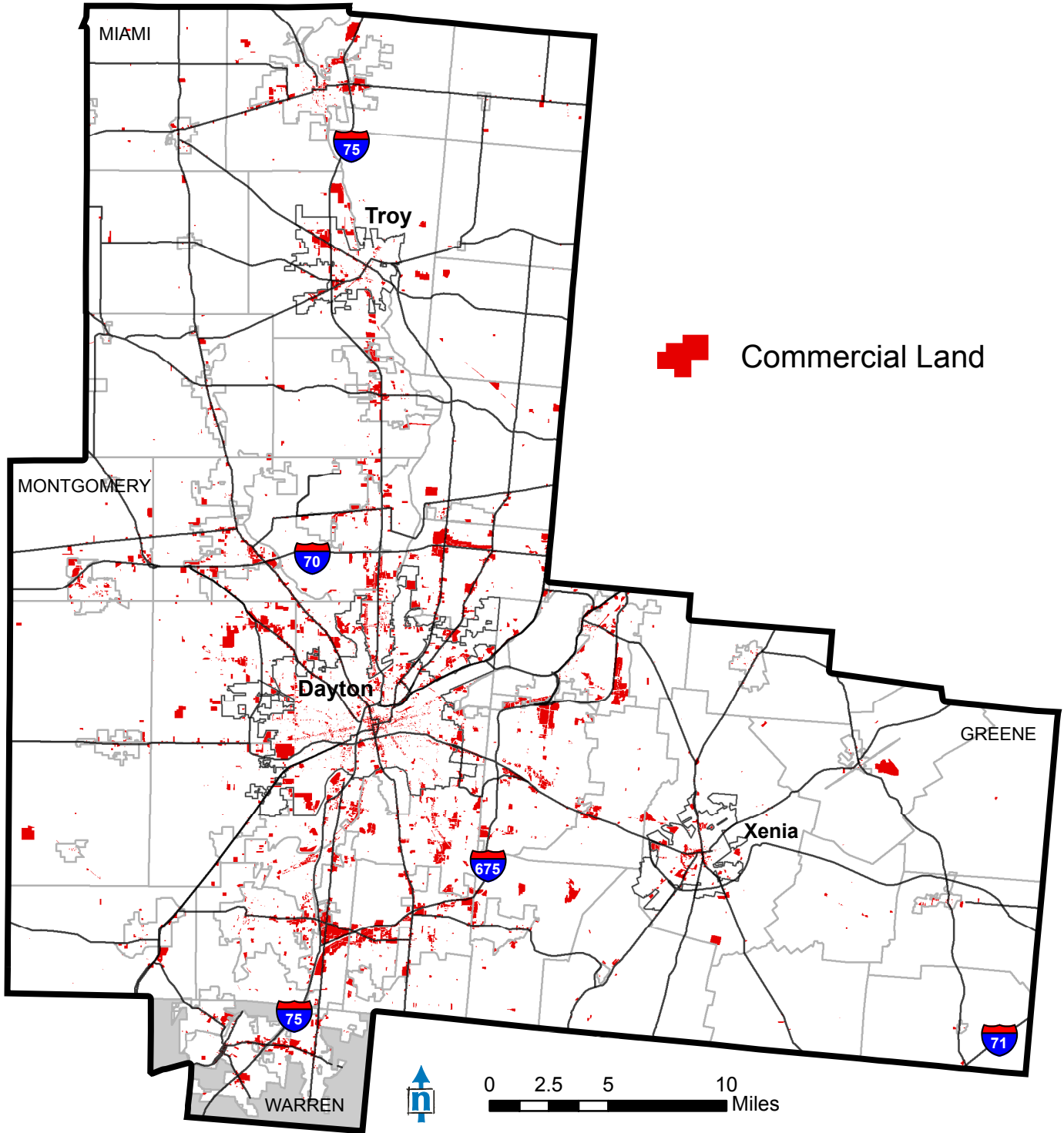
Source: Greene, Miami, Montgomery, and Warren counties, 2007

Note: *Warren County includes only the cities of Carlisle, Franklin, and Springboro

Regional Overview

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Figure 6. Commercial Land in the Miami Valley Region in 2007

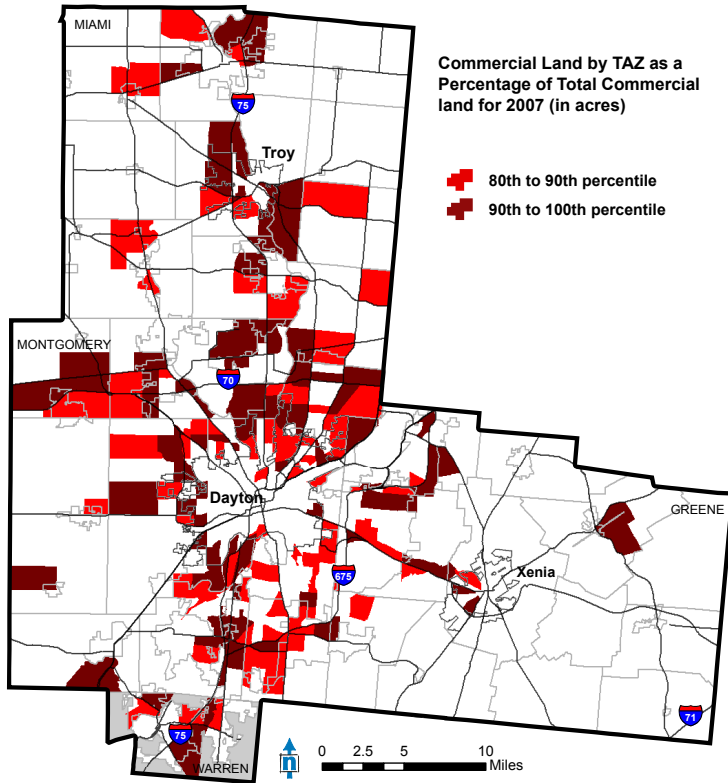


Source: Greene, Miami, Montgomery, and Warren counties, 2007

Regional Overview

Miami Valley Commercial Development Assessment

Figure 7. Commercial Land Concentrations for 2007



The map in Figure 7 shows the areas in the Region where the largest percentages of land are used for commercial purposes. The dark red represents the most concentrated areas of commercial land in the Region.

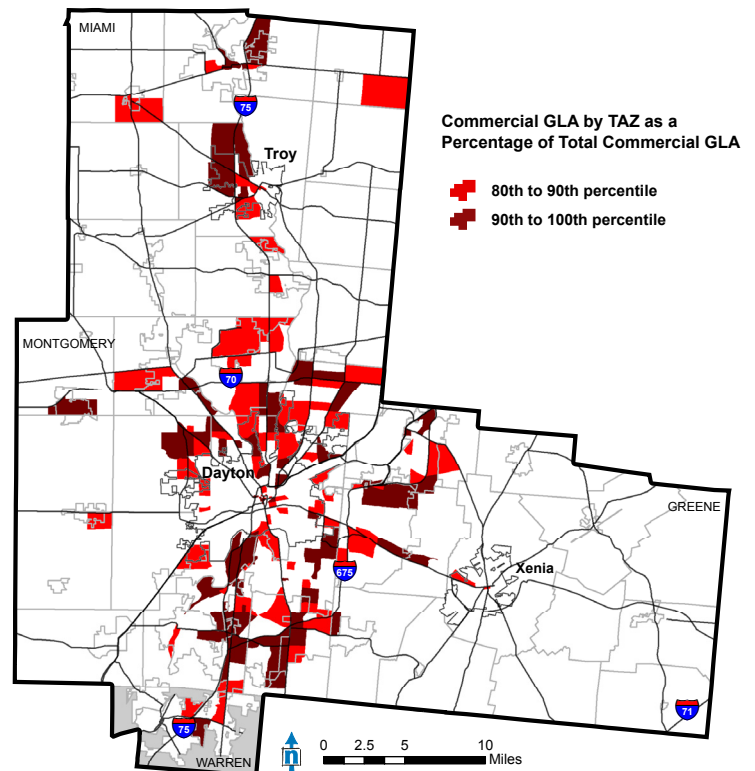
Areas with high concentrations of commercial land are located along major highways, such as I-675, I-75, I-70, and US-35. More specifically, areas with high concentration were found in northern Montgomery County along I-70 and near the I-75/I-675 interchange. In Greene County, high concentrations were found along I-675 and US-35. In Miami County, areas along I-75 have high commercial land concentrations.

Source: Greene, Miami, Montgomery, and Warren counties, 2007

Figure 8 presents areas with high concentrations of commercial space. Similar to commercial land concentration, GLA concentrations exist along the major interstate highways of the Region.

There are a few areas of commercial land concentration where there is little or no concentration of commercial GLA. These areas are located in rural parts of Miami County, and Montgomery County. Another observation from comparing these two maps is that while downtown Dayton does not represent a large amount of commercial land, it does represent a significant amount of commercial GLA. This is most likely due to its higher development density.

Figure 8. Commercial GLA Concentrations for 2007



Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007

At the regional level, there is one tenth of an acre of commercial land for every commercial employee (Table 3). Comparisons at the county level revealed that Miami County has the largest amount of land per employee. Montgomery County has less land per employee than the Regional average.

Table 3. Commercial Land Per Employee (in acres)

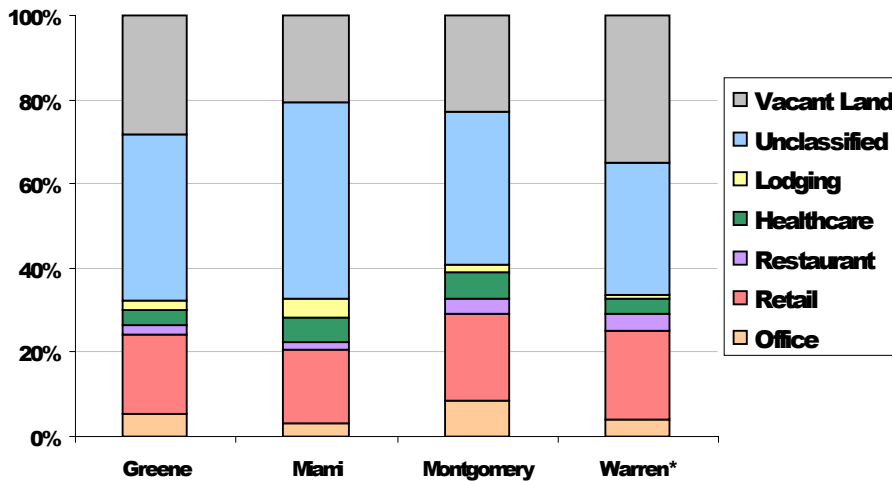
Region	Land	Employees	Land Per Employee
Region	28,034.7	293,494	0.10
Greene	5,284.4	46,740	0.11
Miami	4,501.6	29,021	0.16
Montgomery	17,165.1	209,607	0.08
Warren*	1,083.6	8,126	0.13

Source: Greene, Miami, Montgomery, and Warren counties, 2007; MVRPC, 2008
 Note: *This table compares 2005 employment data with 2007 land use data

The full-page map (Figure 10) on the next page shows the commercial land in the Region by category. This map points out that the most significant retail development in the Region is along I-675 in Greene and Montgomery counties, and that the largest pieces of commercial land are outside of the Regions' core. Additionally, the most significant clusters of retail development in the Region are located around the Fairfield Commons Mall, the Dayton Mall, and the I-70/SR 202 interchange.

Table 4 (page 9) is a breakdown of commercial land by category and by county. A comparison of commercial land by counties shows that Montgomery County possesses the highest share among all categories of commercial land, especially among land for offices, restaurants, and healthcare use, with 76.2%, 69.6%, and 69.8%, respectively. However, Miami County and Greene County combined contain over half of the Region's lodging land.

Figure 9. County Percent Distribution of Commercial Land by Category for 2007



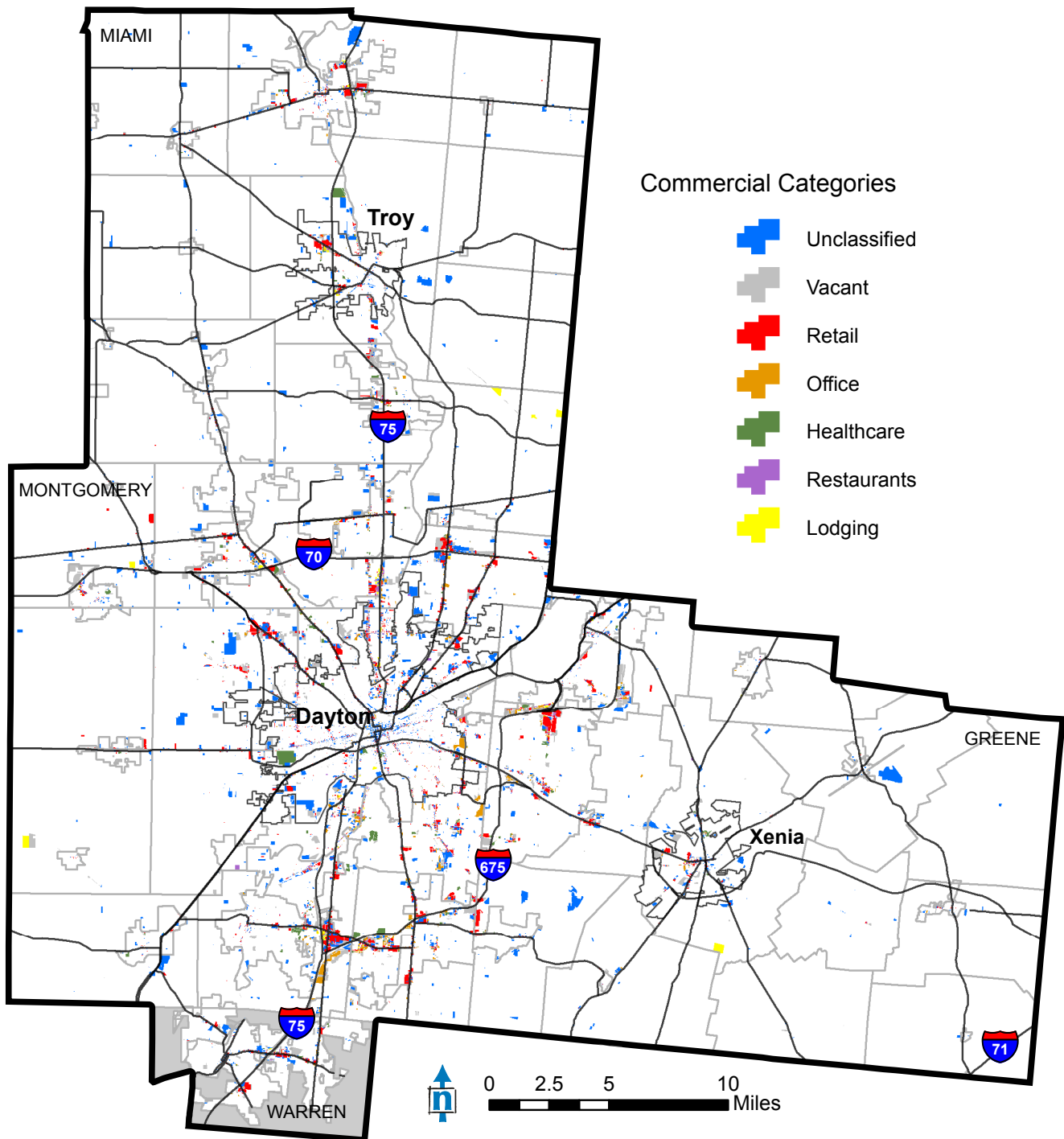
Source: Greene, Miami, Montgomery, and Warren counties, 2007;
 Note: *Warren County only includes cities of Carlisle, Franklin, and Springboro

The percent distribution of commercial land by categories are very similar between counties (Figure 9). Vacant and unclassified land account for about two thirds of each county's commercial land. The share of land for office use in Montgomery County is larger than that of the other counties. In Miami County, the shares of land for lodging and healthcare are larger than the other counties. Although the Warren County figures only represent the cities of Carlisle, Franklin, and Springboro, that area has a larger share of restaurant land compared to the other counties.

Land-Based Analysis

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Figure 10. Distribution of Commercial Land by Category for 2007



Source: Greene, Miami, Montgomery, and Warren counties, 2007

Table 4. Commercial Land by Category by County for 2007 (in acres)

	Greene	Miami	Montgomery	Warren*	Region
Total Commercial Land	5,284.4	4,501.6	17,165.1	1,083.6	28,034.7
% Share of Regional Commercial Land	18.8%	16.1%	61.2%	3.9%	100.0%
Office	284.5	133.4	1,473.9	41.7	1,933.5
% Share of County Commercial Land	5.4%	3.0%	8.6%	3.8%	6.9%
% Share of Regional Category Land	14.7%	6.9%	76.2%	2.2%	100.0%
Retail	985.4	799.4	3,565.6	232.0	5,582.4
% Share of County Commercial Land	18.6%	17.8%	20.8%	21.4%	19.9%
% Share of Regional Category Land	17.7%	14.3%	63.9%	4.2%	100.0%
Restaurant	125.4	84.2	577.6	42.5	829.7
% Share of County Commercial Land	2.4%	1.9%	3.4%	3.9%	3.0%
% Share of Regional Category Land	15.1%	10.1%	69.6%	5.1%	100.0%
Healthcare	183.2	246.1	1,077.1	37.4	1,543.8
% Share of County Commercial Land	3.5%	5.5%	6.3%	3.5%	5.5%
% Share of Regional Category Land	11.9%	15.9%	69.8%	2.4%	100.0%
Lodging	138.6	209.9	306.3	9.0	663.8
% Share of County Commercial Land	2.6%	4.7%	1.8%	0.8%	2.4%
% Share of Regional Category Land	20.9%	31.6%	46.1%	1.4%	100.0%
Unclassified	2,064.7	2,104.5	6,236.3	340.9	10,746.4
% Share of County Commercial Land	39.1%	46.8%	36.3%	31.5%	38.3%
% Share of Regional Category Land	19.2%	19.6%	58.0%	3.2%	100.0%
Vacant	1,502.5	924.1	3,928.2	380.1	6,734.9
% Share of County Commercial Land	28.4%	20.5%	22.9%	35.1%	24.0%
% Share of Regional Category Land	22.3%	13.7%	58.3%	5.6%	100.0%

Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007
 Note: *Warren County includes only the cities of Carlisle, Franklin, and Springboro

Table 5. Commercial GLA Per Employee (in square feet)

Region	GLA	Employees	GLA Per Employee
Region	126,311,198	293,494	430.4
Greene	20,331,522	46,740	435.0
Miami	12,829,501	29,021	442.1
Montgomery	90,629,535	209,607	432.4
Warren*	2,520,640	8,126	310.2

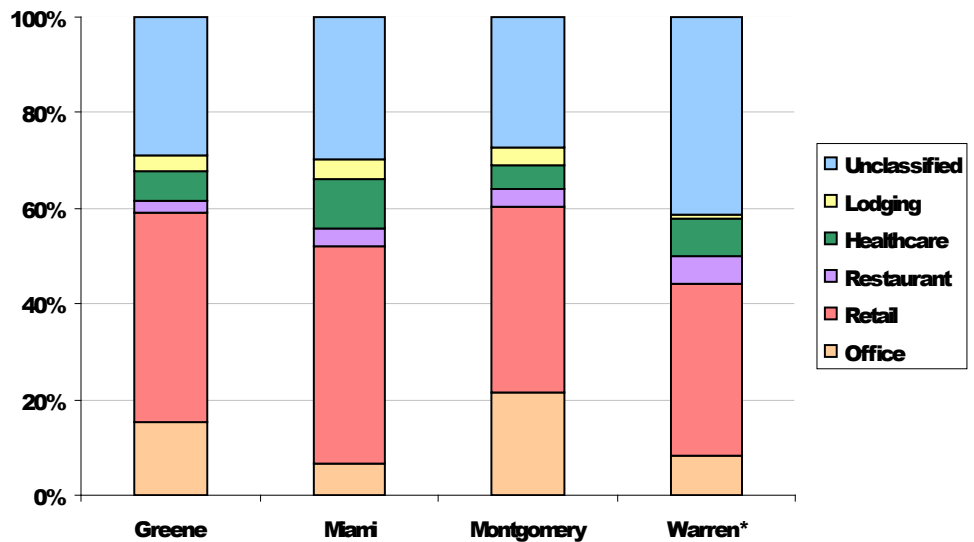
Source: Greene, Miami, Montgomery, and Warren counties, 2007; MVRPC, 2008
 Note: *Warren County only includes the cities of Carlisle, Franklin, and Springboro

At the regional level, there are over 126 million square feet of commercial GLA with nearly 300,000 employees, which translates to 430.4 square feet of commercial GLA per employee (Table 5). Montgomery County, even though it has the most GLA in the Region, with over 90 million square feet of GLA, has the least amount of GLA per employee. On the other hand, Miami County has the least amount of commercial GLA, but its GLA per employee is the largest between the four counties.

Montgomery County possesses the largest share of commercial GLA between the four counties, followed by Greene and Miami counties (Table 6). Over 70% of the Region’s commercial GLA is located in Montgomery County, including 82.4% of all office GLA. In addition, at least 60% of the Region’s commercial GLA in every category is located in Montgomery County. Retail and healthcare are the two largest categories in terms of regional percent share in Greene County, at 17.4% and 17.1% respectively. Miami County has its largest regional percent share in healthcare at 18.0%.

The retail category accounts for the largest share of every county’s commercial GLA (Figure 11). The office share of commercial land within Montgomery County (21.5%) is greater than that of any other county, followed by Greene County. Compared to other counties, Miami County has larger shares of retail and healthcare GLA. Miami County also has the smallest share of office GLA of all four counties. Warren County has the highest share of unclassified and restaurant GLA.

Figure 11. County Percent Distribution of Commercial GLA by Category for 2007



Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007
 Note: *Warren County only includes the cities of Carlisle, Franklin, and Springboro

Table 6. Commercial GLA by Category by County for 2007 (in square feet)

	Greene	Miami	Montgomery	Warren*	Region
Total Commercial GLA	20,331,522	12,829,501	90,629,535	2,520,640	126,311,198
% Share of Regional Commercial GLA	16.1%	10.2%	71.8%	2.0%	100.0%
Office	3,100,948	872,885	19,514,687	206,049	23,694,569
% Share of County Commercial GLA	15.3%	6.8%	21.5%	8.2%	18.8%
% Share of Regional Category GLA	13.1%	3.7%	82.4%	0.9%	100.0%
Retail	8,876,104	5,828,743	35,292,386	904,447	50,901,680
% Share of County Commercial GLA	43.7%	45.4%	38.9%	35.9%	40.3%
% Share of Regional Category GLA	17.4%	11.5%	69.3%	1.8%	100.0%
Restaurant	556,773	436,045	3,282,974	148,327	4,424,119
% Share of County Commercial GLA	2.7%	3.4%	3.6%	5.9%	3.5%
% Share of Regional Category GLA	12.6%	9.9%	74.2%	3.4%	100.0%
Healthcare	1,259,530	1,325,537	4,589,156	199,653	7,373,876
% Share of County Commercial GLA	6.2%	10.3%	5.1%	7.9%	5.8%
% Share of Regional Category GLA	17.1%	18.0%	62.2%	2.7%	100.0%
Lodging	672,574	534,228	3,387,119	18,187	4,612,108
% Share of County Commercial GLA	3.3%	4.2%	3.7%	0.7%	3.7%
% Share of Regional Category GLA	14.6%	11.6%	73.4%	0.4%	100.0%
Unclassified	5,865,593	3,832,063	24,563,213	1,043,977	35,304,846
% Share of County Commercial GLA	28.8%	29.9%	27.1%	41.4%	28.0%
% Share of Regional Category GLA	16.6%	10.9%	69.6%	3.0%	100.0%

Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007

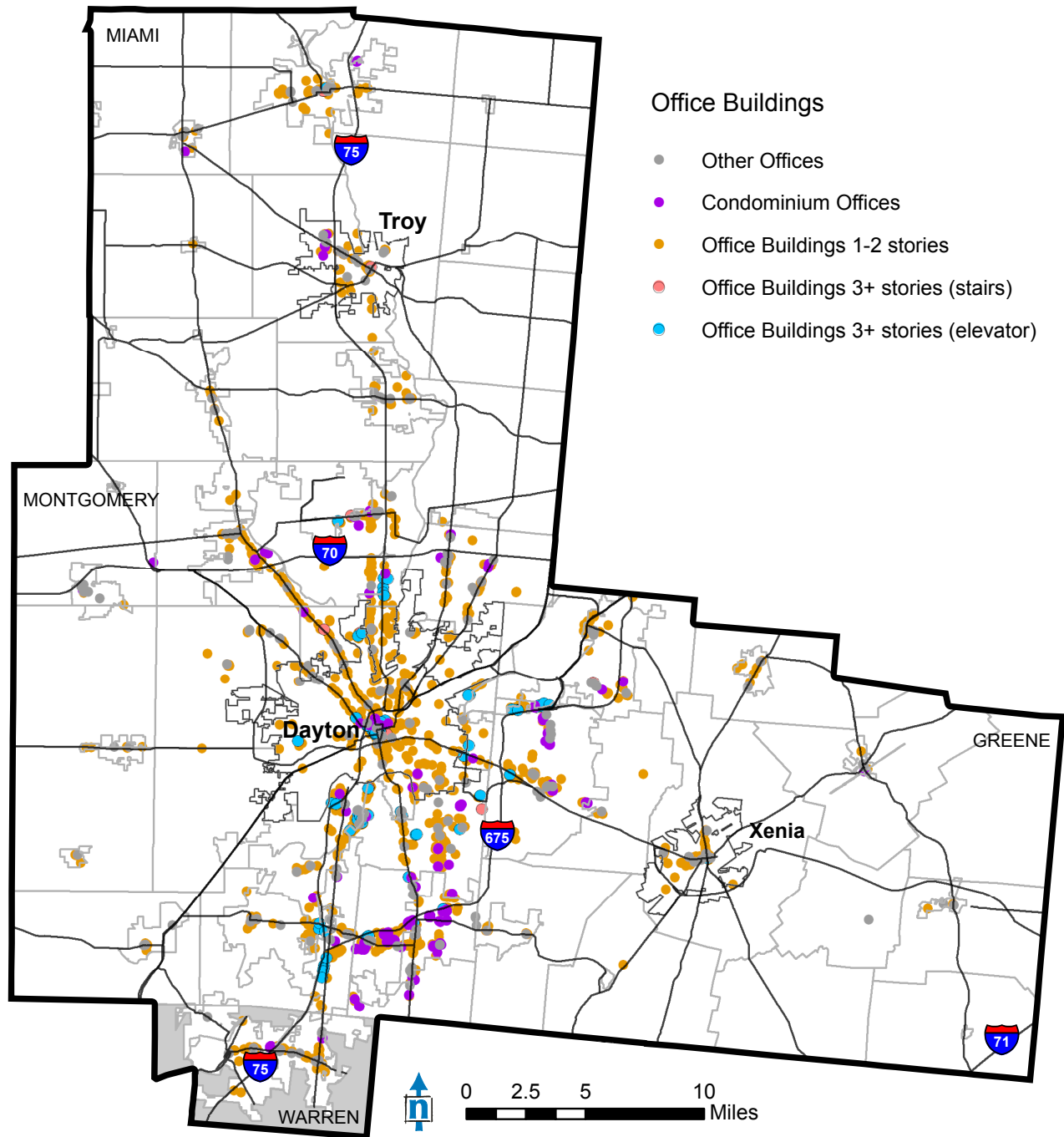
Note: *Warren County only includes the cities of Carlisle, Franklin, and Springboro

Market Assessment - Office

Miami Valley Commercial Development Assessment

Figure 12 illustrates the spatial distribution of land for office use, classified by building characteristics. As shown in the map, the majority of office land is consumed by office buildings of one to two stories, which are spread mostly throughout the regional core and south suburbs. Office buildings of three or more stories are located in smaller clusters near the major interchanges.

Figure 12. Office Land Distribution by Type for 2007

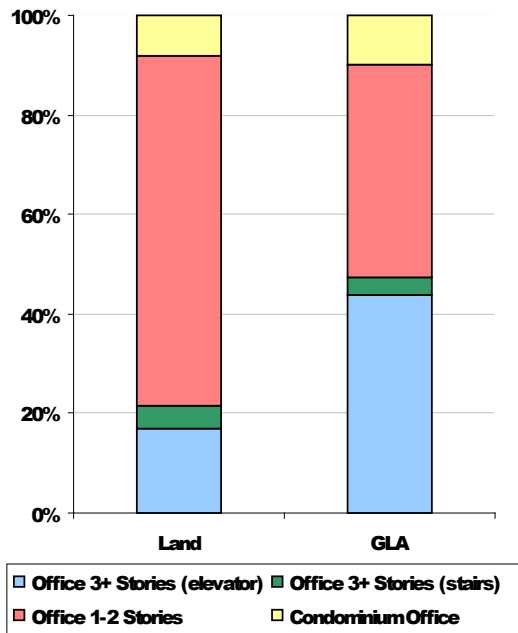


Source: Greene, Miami, Montgomery, and Warren counties, 2007

Market Assessment - Office

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Figure 13. Percent Distribution of Office Land and GLA by Type for 2007



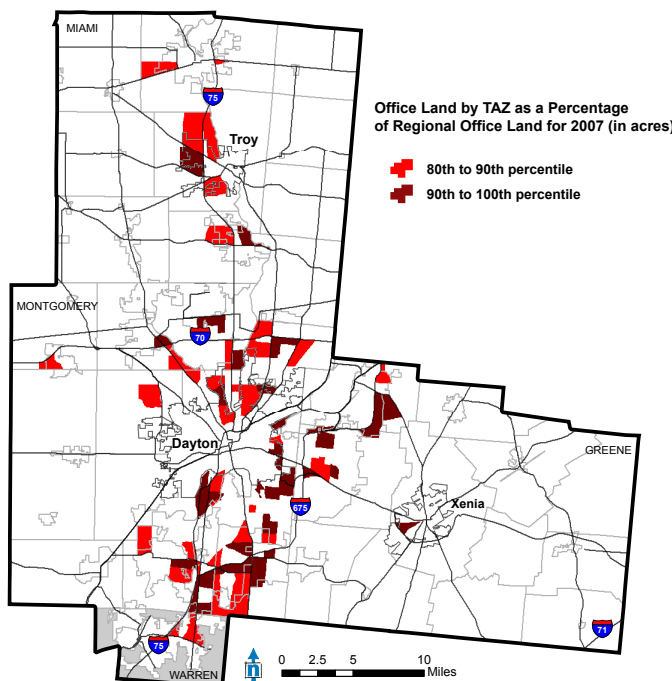
Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007

Office development is the most dense commercial category in the Region. While office land only accounts for 6.9% of regional commercial land, office GLA accounts for 18.8% of all commercial GLA.

The two most common types of office buildings in the Region are one or two stories, and three or more story buildings with elevators (Figure 13). As one might expect, office buildings of three or more stories have a greater share of office GLA than land. By contrast, one to two story office buildings consume the majority of office land, yet make up less than half of the Region's office GLA. This is an example of how increased density through vertical construction requires less land for development.

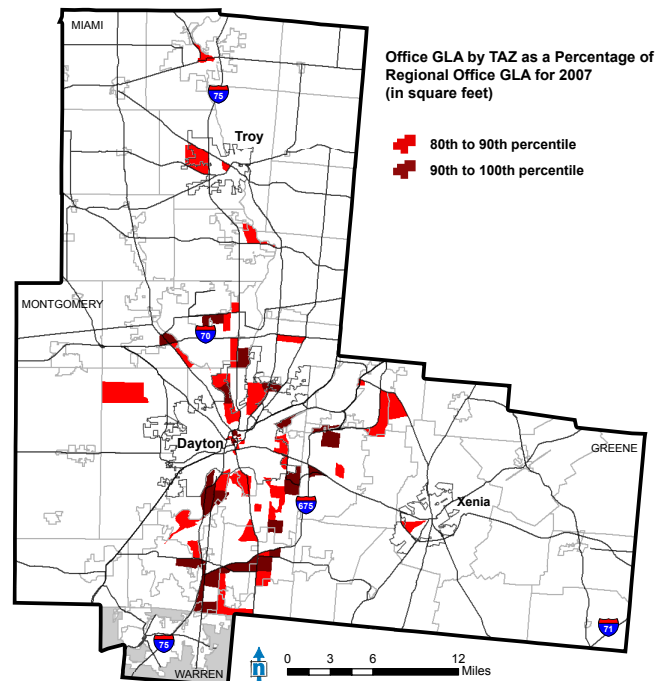
The maps below show the concentrations of office land and GLA in the Region (Figures 14 and 15). In each map there is a ribbon of office concentration along I-675, as well as a cluster of development in northeast Montgomery County. However, while there are significant amounts of office land along I-75 in Miami County, there are less significant amounts of office GLA in those same areas. Conversely, while downtown Dayton does not possess a significant concentration of office land, it does possess high concentrations of GLA because of the density of office development there.

Figure 14. Office Land Concentrations for 2007



Source: Greene, Miami, Montgomery, and Warren counties, 2007

Figure 15. Office GLA Concentrations for 2007



Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007

Market Assessment - Office

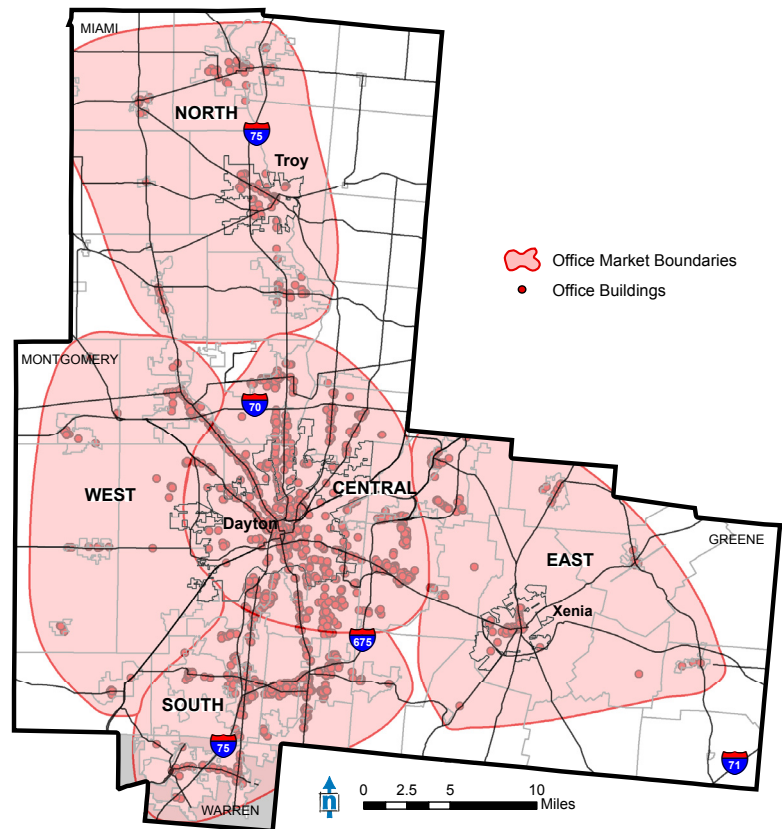
Miami Valley Commercial Development Assessment

Five regional sub-markets were derived from the distribution of office clusters (Figure 16). These markets were evaluated and compared based on their office land and building area totals, as well as employment.

The Central market contains the largest share of the Region's office employees and also has the majority of the Region's office land and GLA (Table 7). The Central market also has the largest amount of office GLA per employee, indicating that it might have the capacity for more employment.

Although the South market contains considerably fewer employees than the Central Market, it has the largest amount of office land per 1,000 employees, as well as the second highest GLA per employee. These figures show that the South market also may have space for additional office employment.

Figure 16. Office Market Areas



Source: Greene, Miami, Montgomery, and Warren counties, 2007

Table 7. Office Market Statistics for 2007

	North	East	South	West	Central	Region
Market Land Area (Acres)	152,098.0	148,038.0	84,782.4	121,449.0	117,970.0	624,337.4
Office Employees	16,926	14,285	34,675	7,274	111,088	184,248
Finance, Insurance, Real Estate Employees	1,636	976	6,556	765	12,634	22,567
Service Employees	15,290	13,309	28,119	6,509	98,454	161,681
Office Land (Acres)	131.9	110.4	615.6	84.6	990.7	1,933.3
% Share of Office Land	6.8%	5.7%	31.8%	4.4%	51.3%	100.0%
Office Land per 1,000 Employees (Acres)	7.8	7.7	17.8	11.6	8.9	10.5
Office GLA (Square Feet)	862,745	960,400	4,963,710	652,831	16,254,900	23,694,586
% Share of Office GLA	3.6%	4.1%	20.9%	2.8%	68.6%	100.0%
Office GLA per Employee (Square Feet)	51.0	67.2	143.1	89.7	146.3	128.6
Floor-Area Ratio (FAR)	0.196	0.203	0.222	0.195	0.436	0.328

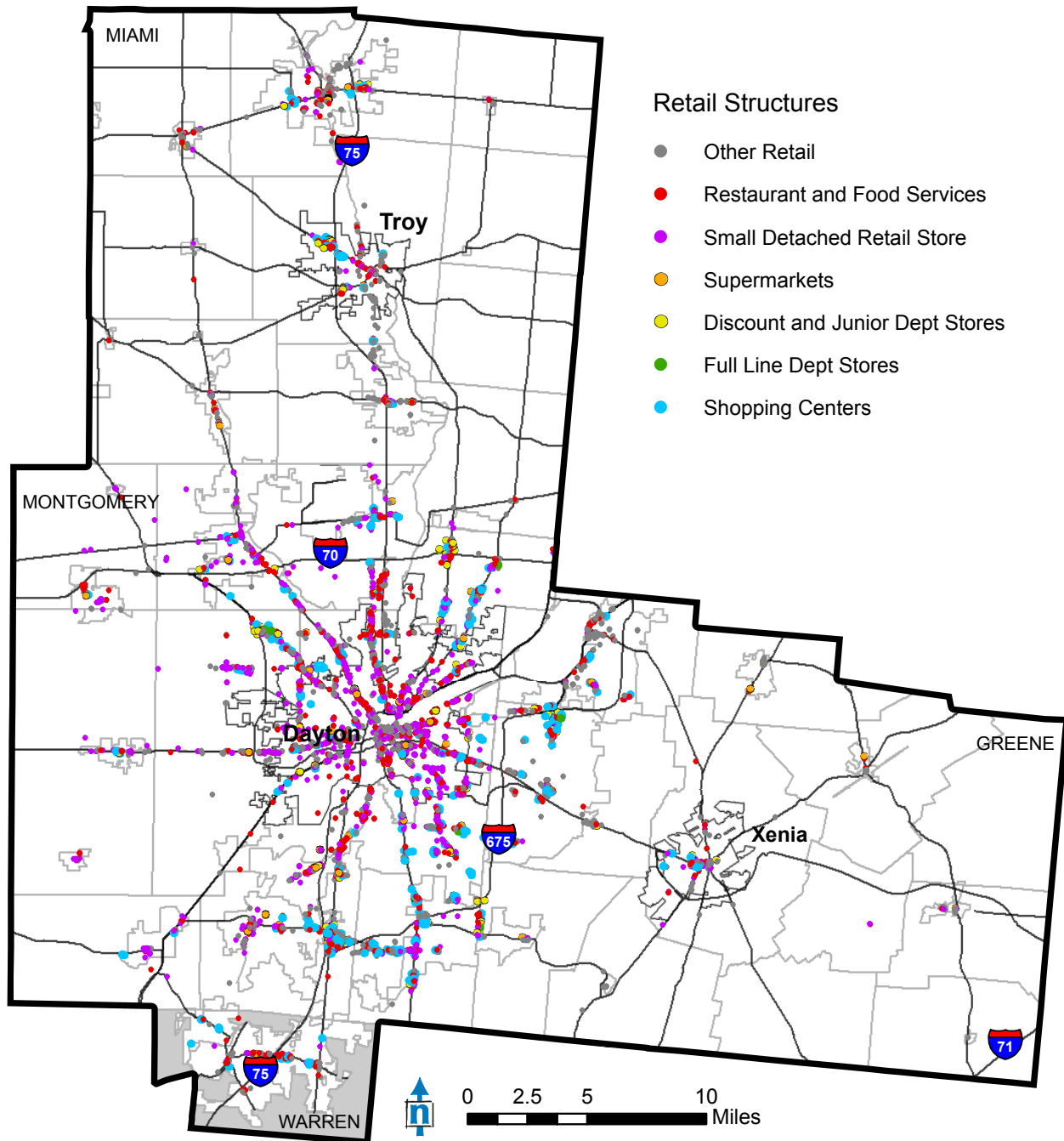
Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007; MVRPC, 2008; Ohio-Kentucky-Indiana Council of Governments, 2008
 Note: Warren County data only includes cities of Carlisle, Franklin, and Springboro

Market Assessment - Retail

Miami Valley Commercial Development Assessment

Figure 17 presents the spatial distribution of retail land by type. The concentrations of retail land are generally located adjacent to major highways in the Region. Shopping Centers appear to be the most concentrated type of retail land, appearing in clusters adjacent to the interstates, while restaurants are spread across the Region mostly along major and minor arterial roads.

Figure 17. Retail Land Distribution by Type

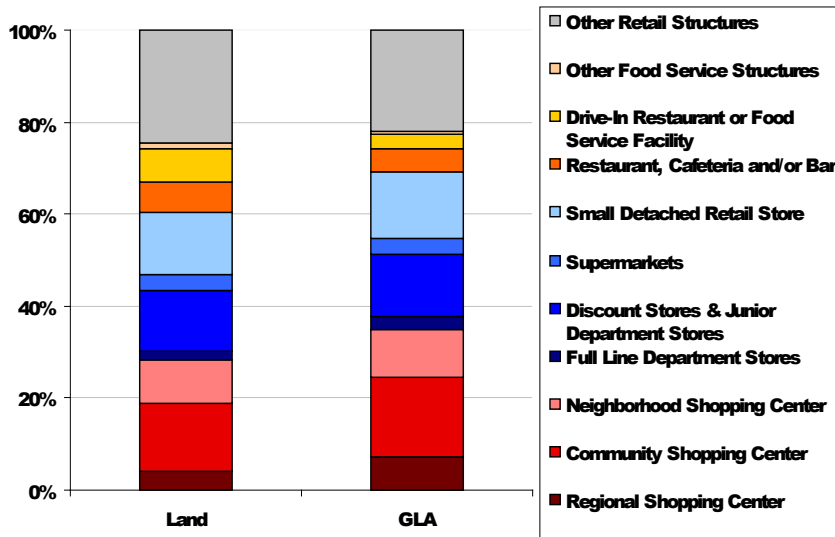


Source: Greene, Miami, Montgomery, and Warren counties, 2007

Market Assessment - Retail

Miami Valley Commercial Development Assessment

Figure 18. Percent Distribution of Retail Land and GLA by Type for 2007

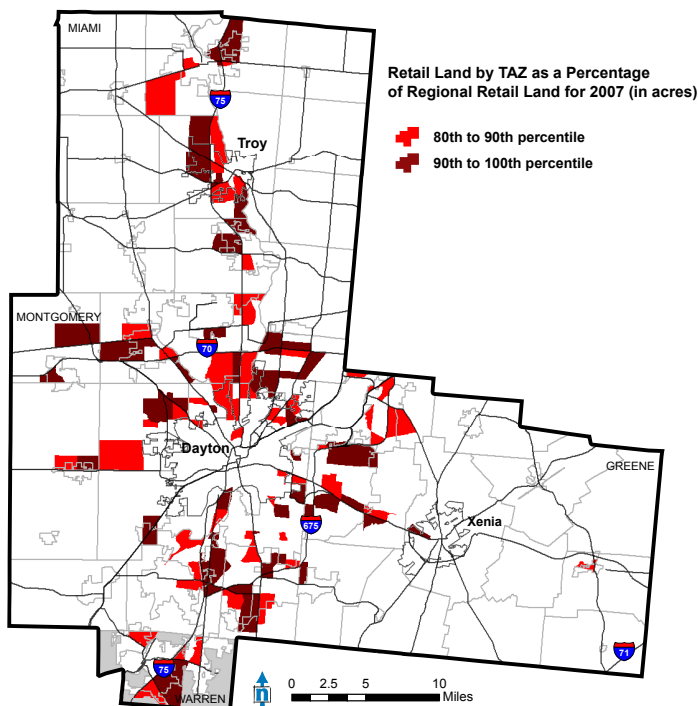


The proportions of land and GLA for each type of retail are similar (Figure 18). However, shopping centers, in particular, account for a greater percentage of regional GLA than land. In contrast, restaurants consume a greater share of land than GLA.

The concentrations of retail land and GLA mimic one another, similar to the office land and GLA (Figures 19 and 20). There are clear concentrations along I-75 through Miami and Montgomery counties. There are also high concentrations of retail development along I-70 in Montgomery County, I-675 in western Greene County, and southeast Montgomery County.

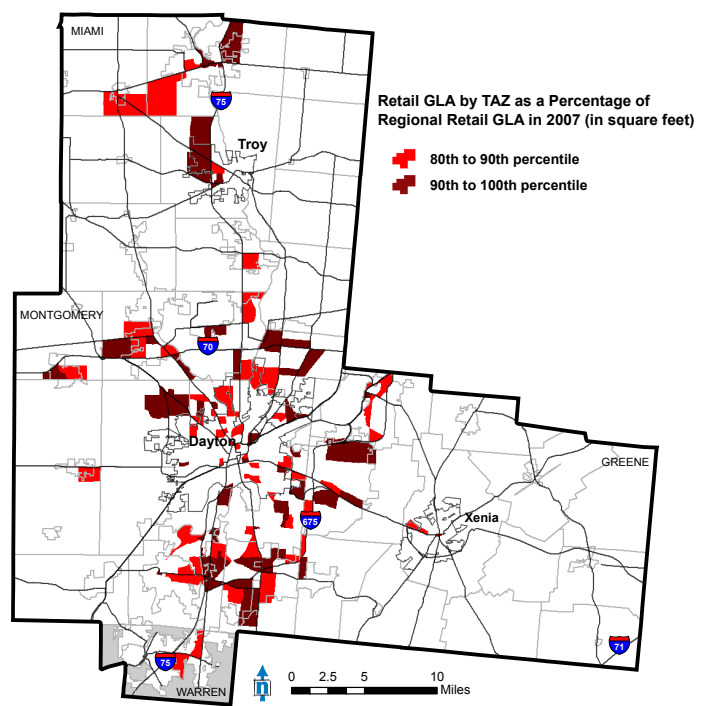
However there are some differences between the concentrations of land and GLA, particularly in downtown Dayton and in northern Warren County. Although Dayton does not possess a regionally significant amount of retail land, it does possess a significant amount of retail GLA because of the density of development. Conversely, northern Warren County includes a large concentration of retail land, but has a smaller concentration of retail GLA.

Figure 19. Retail Land Concentrations for 2007



Source: Greene, Miami, Montgomery, and Warren counties, 2007

Figure 20. Retail GLA Concentrations for 2007

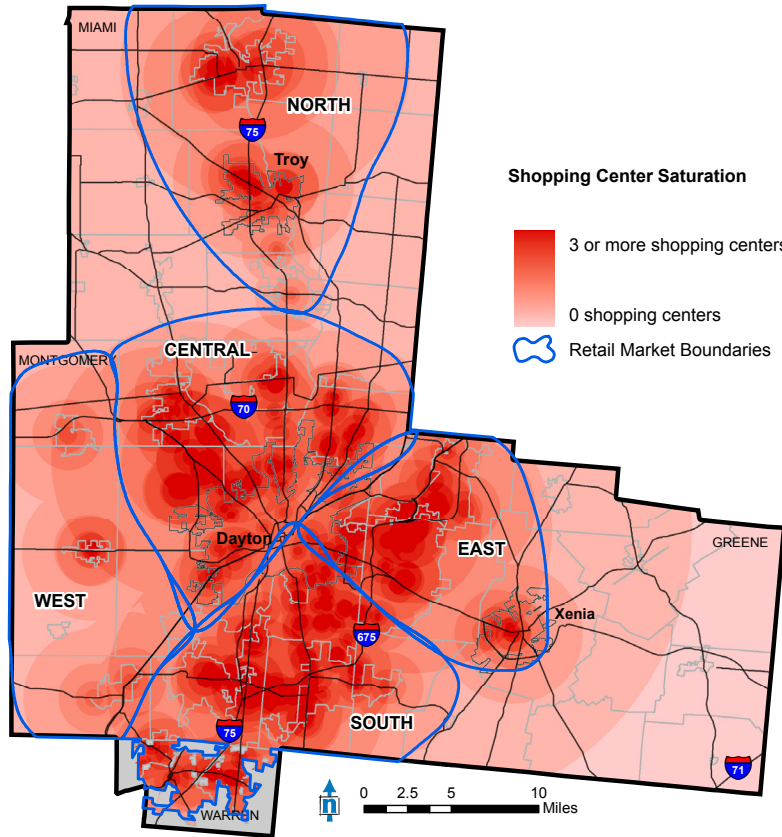


Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007

Market Assessment - Retail

Miami Valley Commercial Development Assessment

Figure 21. Retail Market Areas



Similar to the office market analysis, five regional retail markets were identified through an analysis of neighborhood, community, and regional shopping center trade areas, as illustrated in Figure 21. In this map, the dark red represents places that are within the trade area of at least one of each type of shopping center. For further explanation on how the map was created, see Appendix B.

The South and Central markets possess the two largest shares of the regional retail land and GLA (Table 8). However, the North market has the most retail land and GLA per capita, while the West market has the highest GLA per retail employee. Despite having the highest population per square mile, the East market is tied for the least amount of retail land per capita, and has the least amount of retail GLA per employee.

Source: Greene, Miami, Montgomery, and Warren counties, 2007

Table 8. Retail Market Statistics for 2007

	North	East	South	West	Central	Region
Market Land Area (Acres)	127,517.1	87,146.8	109,719.3	104,670.6	131,403.0	560,456.7
Population	72,143	162,472	286,763	31,204	258,579	811,161
Population per Square Mile	362	1,193	1,673	191	1,259	926
Retail Employees	8,218	16,339	33,508	1,425	23,193	82,683
Retail Land Area (Acres)	719.7	964.9	1,704.7	255.0	1,794.9	5,439.3
% Share of Retail Land	13.2%	17.7%	31.3%	4.7%	33.0%	100.0%
Retail Land per 1,000 Employees (Acres)	87.6	59.1	50.9	179.0	77.4	65.8
Retail Land per 1,000 Persons (Acres)	10.0	5.9	5.9	8.2	6.9	6.7
Retail GLA (Square Feet)	5,459,667	9,260,481	19,167,299	1,190,428	16,388,532	51,466,407
% Share of Retail GLA	10.6%	18.0%	37.2%	2.3%	31.8%	100.0%
Retail GLA per Employee (Square Feet)	664.4	566.8	572.0	835.4	706.6	622.5
Retail GLA per Person (Square Feet)	75.7	57.0	66.8	38.1	63.4	63.4
Floor-Area Ratio (FAR)	0.198	0.233	0.274	0.110	0.237	0.238

Source: Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007; MVRPC, 2008; Ohio-Kentucky-Indiana Council of Governments, 2008
 Note: Warren County data only includes cities of Carlisle, Franklin, and Springboro

Table 9. Business Vacancy Rate by County - March 2008

	Greene	Miami	Montgomery	Warren*	Region
Businesses	6,028	3,151	19,543	1,264	29,986
Vacant Businesses	491	389	2,430	81	3,391
Vacancy Rate	8.1%	12.3%	12.4%	6.4%	11.3%

Source: Department of Housing and Urban Development, 2008
 Note: *Warren County includes only the cities of Carlisle, Franklin, and Springboro

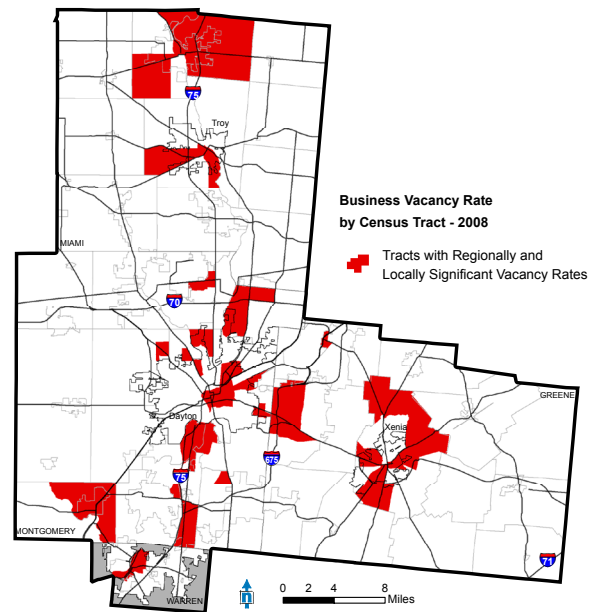
Table 9 shows vacant business address data, originally from the United States Postal Service, obtained from the Department of Housing and Urban Development for the county level. Even though this data pertains to total business vacancies, it illustrates that the vacancy rates of Montgomery and Miami counties are the highest in the Region.

Figure 22 highlights those areas which have higher than average tract-level vacancy rates (tract-level number of vacancies divided by the total number of business within that tract) and the tracts with higher than average regional vacancy rates (tract-level number of business vacancies divided by the total number of businesses in the Region). Although this data includes industrial businesses which are not part of this assessment, the data still provides an idea of where commercial vacancies exist as well. Most of the tracts with regionally and locally significant vacancy rates seem to be located near to the Region's major highways, especially along I-75.

Table 10 illustrates the estimated amount of vacant commercial GLA that exists in the Region. The vacancy rates of 12.7% and 18.2% from the Gem Real Estate Group's Retail and Office studies were applied to the total retail and office GLA in the MVRPC commercial inventory. This resulted in an estimated amount of vacant retail and office GLA of 7,026,376 and 4,312,412, respectively. The aggregated amount of vacant retail and office GLA (5,480,944) from the Gem Real Estate Group's studies was then divided by the total GLA surveyed for the study (36,566,327) in order to arrive at an average vacancy rate of 15%, which was then applied to the other commercial GLA in the MVRPC inventory. This calculation provides an estimated total of 18,432,413 square feet of vacant commercial GLA in the Region.

Increased vacancy throughout the Region and State has become a popular topic in news media lately, especially due to the rise in residential foreclosures. However, commercial vacancies have been less examined and publicized.

Figure 22. Census Tracts with High Vacancy Rates - March 2008



Source: Department of Housing and Urban Development, 2008

Table 10. Regional Estimate of Vacant Commercial GLA (in square feet)

	Gem Survey	MVRPC Estimate
Retail GLA	21,532,864	55,325,799
Retail Vacant	2,744,533	7,026,376
Vacancy %	12.7%	12.7%
Office GLA	15,033,463	23,694,569
Office Vacant	2,736,411	4,312,412
Vacancy %	18.2%	18.2%
Other GLA	-	47,290,830
Other Vacant	-	7,093,625
Vacancy %	-	15.0%
Total Vacant	5,480,944	18,432,413

Source: Gem Real Estate Group, 2007; Greene, Miami, Montgomery, and Warren counties, 2007; cities of Carlisle, Franklin, and Springboro, 2007

In the period from 1980 to 2005, every county in the Region had an increase in commercial employment (Table 11). However, although Montgomery County had the largest total increase in employment, Greene County employment increased over 150% during that 25-year period from 18,581 in 1980 to 46,740 in 2005. Employment in Miami County also increased significantly during the same period. Between the years of 2000 and 2005, the employment in the northern portion of Warren County increased by nearly 20%, which was the largest growth rate in the Region for that period.

The adjacent map (Figure 23) shows where the concentrations of commercial employment exist. This map illustrates commercial employment share in comparison to total employment.

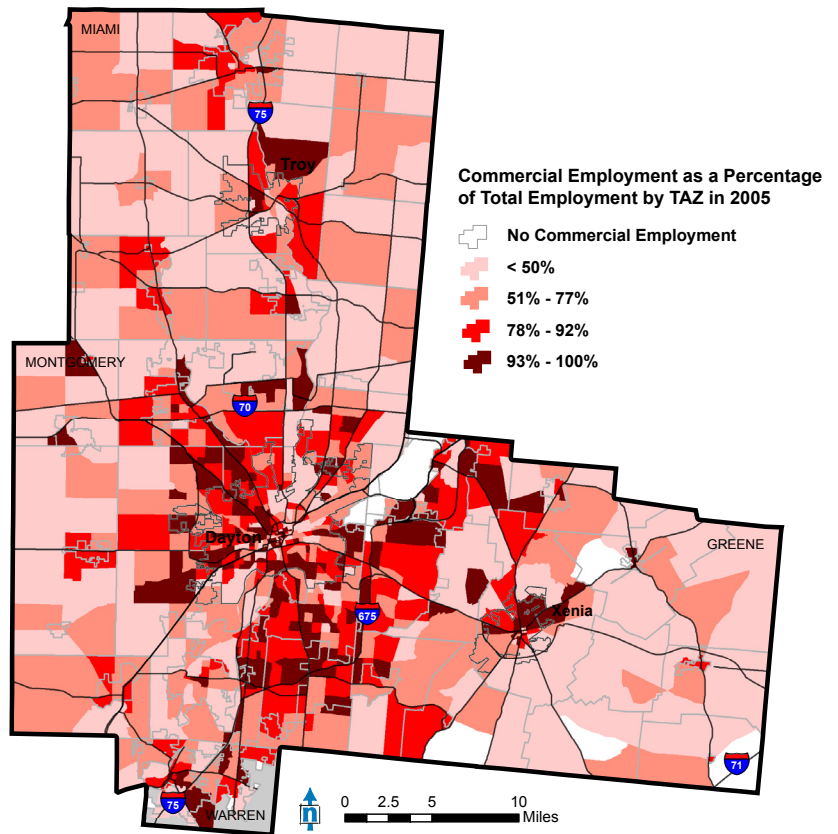
Reflecting the commercial land and GLA maps presented and discussed previously, employment concentrations are located in northwestern Greene County, northeastern Montgomery County, and along I-75 in Miami and Warren counties. Higher percentages of commercial employment are noticeable along major arterial roadways throughout the Region. It is also clear that there are very few areas with no employment, showing how scattered commercial employment is in the Region. Some parts of the I-75 corridor in Montgomery County appear to have little commercial employment concentration, due to the fact that those areas have such heavy concentrations of manufacturing employment.

Table 11. Commercial Employment from 1980 to 2005

	1980	1990	2000	2005
Greene	18,581	29,302	41,890	46,740
Miami	15,254	20,059	27,727	29,021
Montgomery	135,722	172,138	203,542	209,607
Warren*			6,856	8,126
Regional Total**	169,557	221,499	273,159	285,368

Source: MVRPC, 2008; Ohio-Kentucky-Indiana Council of Governments, 2008
 Note: * No data available for Carlisle, Franklin, and Springboro for 1980 and 1990
 ** The 2000 and 2005 regional total does not include data from Warren County

Figure 23. Commercial Employment Concentrations for 2005

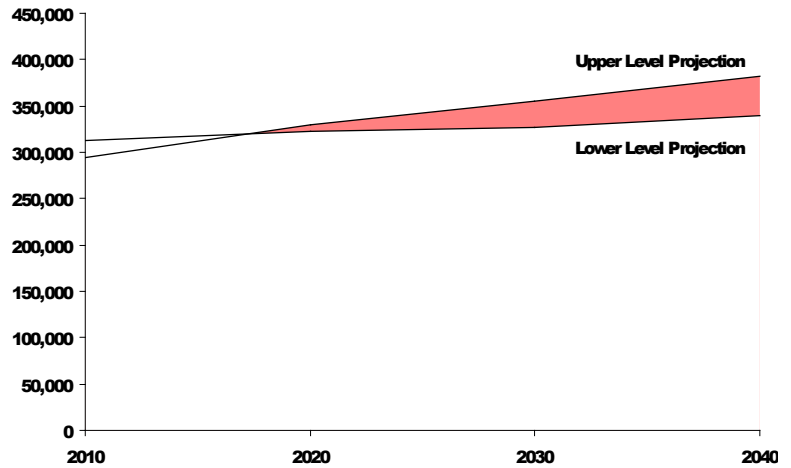


Source: MVRPC, 2008; Ohio-Kentucky-Indiana Council of Governments, 2008

MVRPC staff have developed commercial sector employment projections to 2040 (Figure 24). In doing so, MVRPC staff developed upper and lower level projections in order to provide insight as to what the commercial employment range could be in the future. In both cases, regional commercial employment is projected to increase between 2010 and 2040.

The projections show that the growth in commercial employment will be slight to moderate (Tables 12 and 13). The projections for employment in the year 2040 range from approximately 340,000 to 380,000 employees.

Figure 24. Commercial Employment Projection Range



Source: MVRPC, 2008; Ohio-Kentucky-Indiana Council of Governments, 2008

The upper level projection has a regional growth rate of 30.1%, while the lower level has a regional growth rate of 8.4%. However different rates of growth are expected among the four counties.

Table 12. Upper Level Commercial Employment Projections

	2010	2020	2030	2040
Greene	49,737	62,054	71,269	84,427
Miami	30,709	35,458	38,805	43,099
Montgomery	204,819	222,399	234,444	243,531
Warren*	8,823	9,958	10,672	11,667
Regional Total	294,088	329,870	355,190	382,724

Source: MVRPC, 2008; Ohio-Kentucky-Indiana Council of Governments, 2008
 Note: * Warren County includes only the cities of Carlisle, Franklin, and Springboro

Table 13. Lower Level Commercial Employment Projections

	2010	2020	2030	2040
Greene	53,099	60,566	65,421	74,540
Miami	32,786	34,607	35,620	38,052
Montgomery	218,666	217,065	215,204	215,013
Warren*	8,823	9,958	10,672	11,667
Regional Total	313,374	322,197	326,917	339,272

Source: MVRPC, 2008; Ohio-Kentucky-Indiana Council of Governments, 2008
 Note: * Warren County includes only the cities of Carlisle, Franklin, and Springboro

Greene County employment is expected to increase by the highest rate. According to the upper level projection, the county's commercial employment could grow nearly 70% between 2010 and 2040.

Miami County is also expected to see relatively significant commercial employment growth. In both upper level and lower level projections, commercial employment in Miami County is expected to grow steadily (16%-40%) between 2010 and 2040.

Montgomery County is projected to experience the lowest rate of commercial employment growth. In the upper level projection it is anticipated that there will be an increase from 204,819 in 2010 to 243,531 in 2040. In contrast, the lower level projection predicts a steady decline in commercial employment from 2010 to 2040.

Conclusion

Miami Valley Commercial Development Assessment

In an effort to better assess the commercial development in the Miami Valley Region, this study examined the historical commercial development trends in comparison to other land uses, and presented a snap shot of commercial land use for the year 2007 using regional datasets.

Highlights of this assessment include:

- Regional commercial land increased by 148.1% from 1975 to 2000, while non-commercial land only increased by 53.2% during that same period, and population decreased by 1.2% between the years of 1970 and 2000.
- Commercial land makes up 3.3% of the Region's total land and nearly one quarter of the Region's commercial land is undeveloped.
- The retail category represents 40% of the Region's commercial GLA, with the office category representing 20%.
- The majority of commercial land and GLA is found along major highways, such as I-675, I-75, I-70, and US-35.
- While Montgomery County contains 61.2% of the Region's commercial land, and 71.8% of its GLA, commercial land in Miami County has had the highest rate of growth at 183.3%.
- The South and West markets have the most office land per 1,000 employees, while the South and Central markets have the most office GLA per employee. The North and East markets have the least amount of office land per 1,000 employees and GLA per employee.
- The North and West markets have the most retail land per 1,000 employees and the West and Central markets have the most GLA per employee. The East and South markets have the least amount of retail land per 1,000 employees and the East and West markets have the least amount of retail GLA per employee.
- The Region has an estimated 18.4 million square feet of vacant commercial GLA, which is the equivalent of 310 football fields worth of floor space.
- Commercial employment is expected to increase by as much as 30% in the Region over the next 30 years, with the highest rates of growth to occur in Greene and Warren counties.

Based on the findings presented throughout the report, several conclusions can be drawn pertaining to the commercial development in the Miami Valley Region. One important observation is how automobile-dependent the commercial development in the Region has become. While a recent rise in fuel cost has illuminated this problem, the fundamental concern with such development is the disproportionate allocation of land. These findings also indicate a duplication of effort and investment throughout the Region, and while competition in the market can produce quality options, the result has been a general lowering of value as vacancy has increased. Therefore, much of the future demand for commercial space is already in place and ready for redevelopment. The Region must re-evaluate the viability of existing infrastructure so that it can continue to offer the accessibility, character, and choices that will make our Region an attractive place in which to live, work, and do business.

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Lodging	Office
Commercial Camp Grounds	Condominium Office Units
Hotels	Full Service Banks
Motels & Tourist Cabins	Office Buildings- 1 & 2 stories
Healthcare	Office Buildings- 3 or more stories, elevator
Charitable Exemptions- Hospitals, Homes for Aged, etc.	Office Buildings- 3 or more stories, stairs
Exempt Property Owned by a Municipality	Savings & Loans
Exempt Property Owned by the State of Ohio	Vacant-Unbuilt
Medical Clinics & Offices	Vacant Land
Nursing Homes & Private Hospitals	Unclassified
Office Buildings- 3 or more stories	Bowling Alleys
Other Commercial Structures	Commercial Truck Terminals
Vacant Land	Commercial Warehouses
Restaurants	Community Reinvestment Area Tax Abatements
Drive-In Restaurant or Food Service	Community urban redevelopment corporation tax abatements
Other Food Service Structures	Drive-In Theaters
Restaurant, Cafeteria, and/or Bar	Funeral Homes
Retail	Golf Courses
Automotive Car Sales & Services	Golf Driving Ranges & Miniature Golf Courses
Automotive Service Stations	Lodge Halls & Amusement Parks
Car Washes	Marine Service Facilities
Commercial Garages	Other Commercial Structures
Community Shopping Centers	Parking Garages, Structures, and Lots
Discount Stores & Junior Department Stores	Theaters
Dry Cleaning Plants & Laundries	Undefined
Full Line Department Stores	
Neighborhood Shopping Centers	
Other Retail Structures	
Regional Shopping Centers	
Small (< 10,000 sf) Detached Retail	
Supermarkets	

Source: Greene, Miami, Montgomery, and Warren Counties, 2007; Cities of Carlisle, Franklin, and Springboro, 2007

The retail market trade areas analysis on page 17 was performed using the parcel data with land use codes of 425, 426, and 427, which represent neighborhood, community, and regional shopping centers. Each type of shopping center was assigned a different series of buffers, intended to represent the influence that each shopping center has based on its size and surrounding context. The table below shows the buffer distances and score applied to the areas within each buffer for each type of shopping center. The composite layer was created by adding the scores of each layer of shopping center buffers. While the buffers differ according to shopping center type, the consistency in the scoring was maintained in order to emphasize the equivalent value among the transportation modes of walking, biking, and driving. Although it appears in the map that eastern Greene County is the only place in the Region that does not have any shopping center coverage, it should be noted that an outlet mall just east of the Greene County border was not included in the analysis because of the study boundaries. However, this shows that shopping centers in bordering counties can represent further market saturation in this Region.

Shopping Center	LU Code	Buffer Distance	Score
Neighborhood	425	1/4 mile	4
		1/2 mile	3
		1 mile	2
		2 miles	1
Community	426	1/2 mile	4
		1 mile	3
		2 miles	2
		4 miles	1
Regional	427	2 miles	4
		4 miles	3
		8 miles	2
		16 miles	1
Composite Score Range		Low: 0 High: 12	

Greene County Land and GLA by Jurisdiction

	Land (acres)	GLA (square feet)
Bath Twp	200.1	251,019
Beavercreek	1,409.1	7,309,685
Beavercreek Twp	241.7	737,608
Bellbrook	71.1	329,251
Bowersville	3.0	7,290
Caesarscreek Twp	14.2	23,808
Cedarville	27.0	182,366
Cedarville Twp	327.4	32,036
Clifton	5.3	40,557
Fairborn	1,063.6	5,569,675
Jamestown	52.2	300,747
Jefferson Twp	28.8	41,659
Miami Twp	7.1	9,306
New Jasper Twp	33.8	19,881
Ross Twp	7.1	33,906
Silvercreek Twp	38.8	46,865
Spring Valley	4.4	58,441
Spring Valley Twp	70.7	160,917
Sugarcreek Twp	510.4	1,528,499
WPAFB	17.9	26,329
Xenia	687.1	2,928,624
Xenia Twp	421.9	328,881
Yellow Springs	41.8	364,172

Source: Greene County, 2007

Miami County Land and GLA by Jurisdiction

	Land (acres)	GLA (square feet)
Bethel Twp	386.8	234,420
Bradford	7.5	50,171
Brown Twp	92.9	291,536
Butler Twp	0.8	8,260
Casstown	593.4	1,232,192
Concord Twp	82.6	502,245
Covington	81.9	37,638
Elizabeth Twp	4.5	52,088
Fletcher	54.3	21,809
Huber Heights	5.2	37,711
Laura	7.9	8,400
Lostcreek Twp	11.4	14,994
Ludlow Falls	163.2	102,406
Monroe Twp	78.3	66,168
Newberry Twp	69.5	27,137
Newton Twp	761.4	4,125,112
Piqua	4.9	59,662
Pleasant Hill	0.4	3,340
Potsdam	266.2	149,661
Springcreek Twp	162.0	34,400
Staunton Twp	515.2	1,267,122
Tipp City	755.7	3,853,510
Troy	14.6	0
Union	103.7	40,443
Union Twp	166.8	253,215
Washington Twp	110.6	355,861
West Milton	14.1	75,982

Source: Miami County, 2007

Appendix C- Jurisdictional Data

Miami Valley Commercial Development Assessment

Montgomery County Land and GLA by Jurisdiction

	Land (acres)	GLA (square feet)
Brookville	319.3	1,080,624
Butler Twp	573.8	1,809,830
Centerville	657.7	3,585,479
Clay Twp	335.1	298,828
Clayton	272.3	480,136
Dayton	3,388.9	30,051,429
Englewood	649.7	2,888,067
Farmersville	5.9	96,276
German Twp	198.2	37,748
Germantown	84.6	600,193
Harrison Twp	828.7	4,921,130
Huber Heights	1,340.9	5,293,327
Jackson Twp	211.8	37,418
Jefferson Twp	260.7	269,191
Kettering	1,183.2	7,261,860
Miami Twp	1,130.7	6,959,866
Miamisburg	563.0	3,574,653
Monroe Twp	0.0	0
Moraine	684.4	4,196,036
New Lebanon	75.6	416,140
Oakwood	56.5	410,281
Perry Twp	87.3	29,044
Phillipsburg	3.5	41,120
Riverside	574.8	2,305,719
Springboro	36.1	238,866
Trotwood	1,616.5	4,163,888
Union	98.2	160,988
Vandalia	721.4	2,759,645
Washington Twp	894.9	4,842,876
West Carrollton	311.4	1,818,877

Source: Montgomery County, 2007

Warren County Land and GLA by Jurisdiction

	Land (acres)	GLA (square feet)
Carlisle	174.0	132,314
Franklin	395.0	1,038,478
Springboro	514.6	1,349,848

Source: Warren County, 2007; Cities of Carlisle, Franklin, and Springboro, 2007