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**Development Strategy for  
Job Sites & Growth Corridors  
Phase 1: Summary of Economic Trends and Land Utilization**

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**February, 2006**

# Table of Contents

<b>Introduction .....</b>	<b>1</b>
<b>Economic Trends .....</b>	<b>2</b>
Columbus Region Compared to Other U.S. Regions .....	2
City of Columbus and Regional Growth Trends .....	5
Columbus Compared to Other Cities Within the Region .....	11
Employment Growth Since 2000 .....	14
Real Estate Market Overview .....	18
Summary .....	22
<b>Fiscal Implications of Economic Trends.....</b>	<b>23</b>
Income Tax Revenues .....	23
Income Tax from Jobs by Land Use.....	25
Land Use Implications: Residential Versus Commercial Land Uses .....	26
<b>Commercial Development Potential .....</b>	<b>28</b>
Overview of Job Sites and Growth Corridors .....	28
Underutilized Land Analysis .....	28
<b>Economic Development Initiatives .....</b>	<b>30</b>
Logistics and Distribution .....	30
Medical/Life/Bio-Sciences .....	31
Hospitality, Entertainment, Retail, and Tourism .....	33
Information/ Professional and Business Services/ Finance & Insurance .....	34
Next Steps: Implications of Industry Clusters for Job Sites .....	34
<b>Appendix A: Advisory Committee .....</b>	<b>35</b>

## Introduction

The City of Columbus along with regional economic development stakeholders, has embarked on a series of initiatives to reposition the mid-Ohio economy for 21<sup>st</sup> century growth. Through the City of Columbus's 21<sup>st</sup> Century Growth Team process, the Mid-Ohio Planning Commission's Regional Connections process, and other related initiatives, central Ohio is seeking ways to collaboratively strengthen the area's economy and land use patterns..

As part of this process, the City's Department of Development has commissioned this Development Strategy for Job Sites and Growth Corridors. The Strategy's goal is to identify and evaluate suitable sites and zones for job growth within the City and/or in partnership with its neighboring communities, in order to target job creation and accommodate a range of employers.

The City faces several simultaneous challenges, including maintaining a citywide competitive position with respect to economic development, strengthening its fiscal base to further take advantage of its personal income tax, identifying sites suitable for 21<sup>st</sup> century commercial users, and implementing several target industry initiatives "on the ground" in partnership with neighboring communities.

To accomplish the City's objectives for the Strategy, it will follow a three-phase process structured to provide a strong framework and policy basis for site evaluation and implementation.

- **Phase I: Summary of Economic Trends and Land Utilization** – This phase summarizes other studies and incorporates updated economic trends data in order to identify key target industry clusters and their typologies of land/development requirements. This phase also provides a market overview of office and industrial markets by subarea for the City of Columbus, identifies competitive strengths and weaknesses, and relates economic development to land use decision-making.
- **Phase II: Site Identification and Selection** – In this phase, a range of high priority underutilized sites/zones will be identified based on sets of criteria for each type of land use and related to target industry needs. The team will consult with city staff and advisory group to select sites to serve as prototypes for further evaluation.
- **Phase III: Prototype Development Schemes and Evaluation** – This phase will further evaluate key sites serving as prototypes, and provide an evaluation of next steps to create an inventory of Job Growth Sites and Zones.

To obtain input from stakeholders, the City created an Advisory Committee comprised of local government staff and department directors, representatives of elected officials, and directors of non-profit organizations dedicated to economic development. A complete list of the Advisory Committee is provided in Appendix A.

## Economic Trends

This chapter summarizes extensive data analysis of Columbus, Mid-Ohio, and related economic trends. It is important to note that some of the following discussion is based on newly-obtained employment data, and may contradict anecdotal views of recent economic trends impacting central Ohio. It should be noted that the following discussion uses a common definition of the central Ohio region, as defined by the U.S. Census to include the counties of Franklin, Delaware, Fairfield, Licking, Madison, Morrow, Pickaway, and Union. Together, these eight counties are defined as the Columbus Metropolitan Statistical Area (MSA), a Census category describing U.S. urbanized regions.

### Columbus Region Compared to Other U.S. Regions

The economy of the City of Columbus is part of the region when considered from an economic development perspective. To first evaluate how the Columbus MSA performed during the 1990s, this section compares the Columbus Metropolitan Statistical Area or MSA (considered the Columbus region) to other regions in the U.S. perceived to be competing for job growth and economic development.

Table 1 analyzes population and job growth trends during the 1990s for the Columbus Metropolitan Statistical Area (MSA) and selected other U.S. regions. Educational attainment at the bachelor's degree or higher, an indicator of a skilled labor force and important to many high wage employers, along with median home value<sup>1</sup>, an indicator to employers of the workforce's ability to have a good quality of life, are also included in the table for comparison purposes. Both of these demographic factors are often important to companies when comparing regions during location decision processes.

As shown, the Columbus MSA outperformed the other largest regions in Ohio during the 1990s; both Cleveland's and Cincinnati's MSAs had slower rates of growth in population and jobs. The Columbus MSA population grew 12.2 percent for the decade, compared with 8.9 percent for the Cincinnati MSA and 3.0 percent for Cleveland. Jobs grew at an even faster rate in the Columbus region than population, with a total increase of 19.5 percent, compared to about 13.7 percent for Cincinnati's region and 8.6 percent for Cleveland. It is important to note that all three major regions in Ohio created jobs at a faster rate than population growth, indicating an underlying vitality within each region's economic base.

The Indianapolis MSA, often cited as an example of successful economic development, showed more rapid population growth than the Columbus region (16.4 percent compared to 12.2 percent), but slower job growth than the Columbus region (16.7 percent compared to 19.5 percent).

In contrast to these moderately growing regions, the Pittsburg region experienced an absolute numerical decline during the decade, for both population and jobs.

The remaining regions shown on Table 1, including Charlotte, Nashville, Raleigh, Atlanta, and Phoenix, all experienced substantial growth in population and jobs for the decade, ranging from 25 to

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<sup>1</sup> Note: These home values are "self-reported" and do not reflect the actual market performance in 2000.

over 40 percent increases. The emergence of these regions as strong national employment centers should be considered carefully, however. Each of these fast-growing regions is unique in terms of its economic base and competitive characteristics, and most of the employment growth is generated by local population shifts and resulting services for the expanded resident population.

One of the most important factors to consider in competing regions, particularly for higher wage jobs demanding high levels of skill, is the educational attainment of the labor force. As shown in Table 1, the Columbus region commenced the decade with a highly educated labor force; more than 23 percent of the Columbus region's adult population had attained a bachelor's degree or higher in 1990, exceeded only by Raleigh and Atlanta among the areas analyzed. By 2000, the Columbus region's adult population had increased its educational level substantially, rising to over 29 percent with a bachelor's degree or higher, again only exceeded by Raleigh and Atlanta. The Columbus region's strong educational attainment is a strong competitive advantage to many potential and existing employers.

Reported home values among the regions analyzed also show that central Ohio was relatively competitive, with a median reported value of \$120,000 in 2000, roughly comparable to Charlotte and Nashville, and more affordable than the fast-growing regions of Raleigh and Atlanta. While all of the selected regions in this analysis have roughly similar median home values, it is important to note that many other regions of the U.S. have more expensive housing markets, resulting in substantially higher median home values, creating other challenges for economic developers in those areas and employers concerned with their workers' quality of life.

These two indicators – education and housing prices – represent strong underlying competitive advantages of the Columbus region when compared to other fast-growing regions of the U.S..

**Table 1: Columbus Region Compared to Selected Other U.S. Regions, 1990 - 2000**

	Population			Jobs			% with Bachelor's Degree Or Higher			2000 Median Home Value ©
	1990	2000	Change	1990	2000	Change	1990	2000	Change	
<b>Columbus MSA</b>	1,373,199	1,540,157	12.2%	685,583	819,410	19.5%	23.3%	29.1%	24.9%	\$120,900
<b>Cincinnati MSA</b>	1,817,571	1,979,202	8.9%	845,199	961,155	13.7%	19.7%	25.0%	27.0%	\$116,500
<b>Cleveland MSA</b>	2,859,644	2,945,831	3.0%	1,305,721	1,417,750	8.6%	18.7%	23.5%	25.8%	\$117,900
<b>Indianapolis MSA</b>	1,380,491	1,607,486	16.4%	704,116	821,895	16.7%	20.2%	25.8%	27.9%	\$111,200
<b>Pittsburgh MSA</b>	2,394,811	2,358,695	-1.5%	1,088,750	1,076,045	-1.2%	18.7%	23.8%	27.5%	\$86,100
<b>Charlotte MSA</b>	1,162,093	1,499,293	29.0%	634,924	793,495	25.0%	19.6%	26.5%	35.1%	\$123,300
<b>Nashville</b>	985,026	1,231,311	25.0%	514,845	660,200	28.2%	21.4%	26.9%	25.5%	\$123,600
<b>Raleigh MSA</b>	855,545	1,187,941	38.9%	479,846	653,075	36.1%	31.7%	38.9%	22.8%	\$146,800
<b>Atlanta MSA</b>	2,959,950	4,112,198	38.9%	1,583,146	2,120,885	34.0%	26.1%	32.0%	22.7%	\$135,300
<b>Phoenix MSA</b>	2,238,480	3,251,876	45.3%	1,035,518	1,469,560	41.9%	21.4%	25.1%	17.0%	\$127,900

Notes:

(a) MSAs and CMSAs based on 2000 Census standards; 1990 MSA and CMSA data adjusted to reflect 2000 Census definitions.

(b) Persons 25 years of age or older.

(c) Specified owner-occupied units, occupant's estimate of value. Includes only single family homes on less than 10 acres.

Sources: 1990 & 2000 U.S. Census; 1990 & 2000 Census Transportation Planning Package; BAE, 2006.

## **City of Columbus and Regional Growth Trends**

In economic development planning for Columbus, it is also important to understand how the City has grown relative to the region surrounding it. Tables 2 through 6 profile the City of Columbus and the region, compared to the State and the nation, across the demographic indicators of population, household, and job growth from 1990 to 2000, along with a summary of the distribution of age, educational attainment, and household income.

### ***Population, Households, and Job Trends***

As shown in Table 2, Columbus and the region (e.g. the Columbus MSA) experienced strong growth during the 1990s relative to the State of Ohio. Population growth within the region grew more than 12 percent, outpacing Ohio's population growth rate of just under 5 percent for the same period.

The City of Columbus registered a slightly higher rate of population growth, at 12.4 percent, than the region overall, at 12.2 percent. The number of households, a key driver of housing demand, increased even more rapidly than population growth in Columbus and the region during the 1990s, at roughly 17 percent.

These data for Columbus compare favorably with the U.S., which experienced a population rise of 13 percent and a household rise of just under 15 percent for the same period.

Job growth during the 1990s in Columbus and the region was also relatively strong, compared to the State. In Columbus, more than 50,000 new jobs were added during the decade, a 12.5 percent growth rate for the period. Within the region, almost 134,000 jobs were added, translating into just under 20 percent employment growth during the 1990s. These rates of job growth exceeded the U.S. (11.4 percent increase), and rapidly outpaced the State of Ohio, with just a 9.5 percent job growth during the decade.

The result of these job growth patterns is compelling; the Columbus region increased its share of the State's total jobs during the period by 1.3 percentage points, rising to a share of 15.4 percent by 2000. At the same time, Ohio retained its share of total U.S. jobs (4.2 percent in both 1990 and 2000).

Since 2000, estimated population and household data indicate that growth in the City of Columbus and the region have continued, with particularly rapid growth occurring outside of Columbus in surrounding areas. As shown in Table 2, the City experienced an estimated 3.1 percent rise in population between 2000 and 2005, keeping pace with national trends (up 4.9 percent for the same period). The region grew much more rapidly than the City during the same period, at a rate of over 10 percent. In contrast, the State of Ohio registered a slight increase of just over 1 percent during the same five years. Job data for are not yet available for the entire 2005 calendar year for all three geographies, and are therefore not shown in Table 2, but similar job data for a period covering 2000 to 2004 are analyzed in a subsequent section of this report.

These statistics suggest that both Columbus and the region have been performing at or better than overall national trends for most of the past 15 years, and have performed differently than overall Ohio trends.

**Table 2: Population, Household, and Job Growth 1990 - 2005**

<u>City of Columbus</u>	<u>1990</u>	<u>2000</u>	<u>% Change 1990-2000</u>	<u>2005 (est.)</u>	<u>% Change 2000-2005</u>
<b>Population</b>	632,910	711,470	12.4%	733,424	3.1%
<b>Households</b>	256,996	301,534	17.3%	314,268	4.2%
<b>Jobs (b)</b>	400,419	450,605	12.5%		
<u><b>Columbus MSA (a)</b></u>					
<b>Population</b>	1,373,199	1,540,157	12.2%	1,701,266	10.5%
<b>Households</b>	523,154	610,757	16.7%	677,826	11.0%
<b>Jobs (b)</b>	685,583	819,410	19.5%		
<i>Jobs as Share of State</i>	<i>14.1%</i>	<i>15.4%</i>			
<u><b>State of Ohio</b></u>					
<b>Population</b>	10,847,115	11,353,140	4.7%	11,476,038	1.1%
<b>Households</b>	4,087,546	4,445,773	8.8%	4,546,265	2.3%
<b>Jobs (b)</b>	4,869,217	5,333,620	9.5%		
<i>Jobs as Share of U.S.</i>	<i>4.2%</i>	<i>4.2%</i>			
<u><b>United States</b></u>					
<b>Population</b>	248,709,873	281,421,906	13.2%	295,140,073	4.9%
<b>Households</b>	91,947,410	105,480,101	14.7%	111,006,738	5.2%
<b>Jobs (b)</b>	115,003,157	128,168,928	11.4%		

Notes:

a) The Columbus MSA consists of Delaware, Fairfield, Franklin, Licking, Madison, Morrow, Pickaway, and Union Counties

b) Number of workers by place of work from CTPP Part II.

Sources: 1990 & 2000 U.S. Census; 1990 & 2000 Census Transportation Planning Package; Claritas, 2005; BAE 2006.

### *Age Distribution*

As shown on Table 3, as of the 2000 Census, the City of Columbus's population was relatively young, with a median age of 32.5 compared to the region's median of 34.8 and the country's 36.2 years. Columbus and the region had a substantial proportion of children, with more than one-fifth of total population under the age of 15 in both geographies. Interestingly, among youth aged 15 to 20, Columbus had a slightly lower concentration than the region, state, or nation, despite the large 18 to 20 student population residing at Ohio State University (counted in the Census).

Columbus exceeded the region, state, and nation significantly among the young adult (age 21 to 34) population, with 25.4 percent of the City in this category, compared to 21 percent or below for the other geographies. This concentration indicates a large workforce of young adults, an attractive feature for many employers. This age cohort also represents a strong segment for household formation, and resulting retail purchasing power for durable goods such as major appliances and automobiles. At the other end of the age spectrum, Columbus has a smaller proportion of seniors age 65 and over (8.9 percent), compared to the region (10.2 percent), state (13.5 percent), or nation (12.5) percent.

**Table 3: Age Distribution 2005 (Estimated)**

<b>Age</b>	<b>City of Columbus</b>		<b>Columbus MSA</b>		<b>State of Ohio</b>		<b>United States</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
Under 15	156,603	21.4%	357,482	21.0%	2,295,911	20.0%	60,711,647	20.6%
15 to 20	59,509	8.1%	144,523	8.5%	1,002,169	8.7%	25,646,578	8.7%
21 to 24	43,997	6.0%	93,153	5.5%	618,370	5.4%	16,310,587	5.5%
25 to 34	142,034	19.4%	259,579	15.3%	1,453,771	12.7%	39,740,446	13.5%
35 to 44	116,159	15.8%	267,816	15.7%	1,662,726	14.5%	43,859,406	14.9%
45 to 54	91,688	12.5%	242,327	14.2%	1,698,111	14.8%	42,012,547	14.2%
55 to 64	58,410	8.0%	161,761	9.5%	1,200,247	10.5%	29,803,019	10.1%
65 to 74	33,730	4.6%	93,836	5.5%	777,456	6.8%	19,027,935	6.4%
75 to 84	22,591	3.1%	59,539	3.5%	559,019	4.9%	13,013,745	4.4%
85 +	8,703	1.2%	21,250	1.2%	208,258	1.8%	5,014,163	1.7%
<b>Total</b>	<b>733,424</b>	<b>100.0%</b>	<b>1,701,266</b>	<b>100.0%</b>	<b>11,476,038</b>	<b>100.0%</b>	<b>295,140,073</b>	<b>100.0%</b>
<b>Median Age</b>	<b>32.5</b>		<b>34.8</b>		<b>37.2</b>		<b>36.2</b>	

Sources: Claritas, 2005; Bay Area Economics, 2005.

***Educational Attainment***

Table 4 shows a detailed breakdown of educational levels for Columbus and the other areas analyzed. Both the City and the region have highly educated workforces compared to the state or the nation. For example, when considering the total proportion of adults who have not advanced beyond a high school diploma, Columbus has 43.6 percent of adult residents in this category compared to 53.2 percent for the State and 48.2 percent for the U.S. At the other end of the spectrum, more than 29 percent of adults residing in both Columbus and the region overall have achieved a bachelor’s degree or higher, including rates of 9 to almost 10 percent achieving graduate or professional degrees. In contrast, just 21 percent of the state’s population and 24 percent of the nation’s population have attained a bachelor’s degree or higher, and the proportion of those with graduate or professional degrees is also lower.

**Table 4: Educational Attainment, Adults Age 25 and Over, 2000**

<b>Education Level</b>	<b>City of Columbus</b>		<b>Columbus MSA</b>		<b>State of Ohio</b>		<b>U.S.</b>
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Percent</b>
Less than 9th Grade	17,011	3.9%	32,825	3.3%	331,801	4.5%	7.5%
9th to 12th Grade, No Diploma	54,600	12.4%	106,748	10.9%	930,284	12.6%	12.1%
High School Graduate	120,348	27.3%	296,418	30.1%	2,674,551	36.1%	28.6%
Some College, No Degree	96,217	21.8%	205,409	20.9%	1,471,964	19.9%	21.0%
Associate Degree	24,753	5.6%	56,542	5.7%	439,608	5.9%	6.3%
Bachelor's Degree	87,624	19.9%	191,614	19.5%	1,016,256	13.7%	15.5%
Graduate or Prof. Degree	40,434	9.2%	94,209	9.6%	547,276	7.4%	8.9%
<b>Total</b>	<b>440,987</b>	<b>100.0%</b>	<b>983,765</b>	<b>100.0%</b>	<b>7,411,740</b>	<b>100.0%</b>	<b>100.0%</b>

Sources: 2000 U.S. Census; Bay Area Economics, 2005.

### ***Household Income Distribution***

Table 5 provides the 2005 estimated household income distribution, and shows that the median household income of \$43,500 for Columbus is slightly lower than the region's almost \$51,000. This difference in median can be partially explained by the lower median age in Columbus as well as the large student and young adult populations.

Although the distribution of Columbus's household incomes indicates a slightly higher proportion of those earning \$25,000 and below, one of the most distinct differences is at the highest end of the income spectrum. The City of Columbus had an estimated 3.2 percent of all households earning \$150,000 or more in 2005, compared with a national proportion of 6.3 percent. Both the region and the state fall below the national level as well, but both have higher proportions than Columbus.

**Table 5: Household Income Distribution, 2005 (Estimated)**

<b>Estimated Income</b>	<b>City of Columbus</b>		<b>Columbus MSA</b>		<b>State of Ohio</b>		<b>United States</b>	
	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>	<b>Number</b>	<b>Percent</b>
<b>Less than \$15,000</b>	47,157	15.0%	77,894	11.5%	618,079	13.6%	15,186,131	13.7%
<b>\$15,000 to \$24,999</b>	37,483	11.9%	67,898	10.0%	536,172	11.8%	12,484,979	11.2%
<b>\$25,000 to \$34,999</b>	41,046	13.1%	76,836	11.3%	556,785	12.2%	12,755,353	11.5%
<b>\$35,000 to \$49,999</b>	55,270	17.6%	110,706	16.3%	765,934	16.8%	17,616,827	15.9%
<b>\$50,000 to \$74,999</b>	63,749	20.3%	140,217	20.7%	918,232	20.2%	21,421,848	19.3%
<b>\$75,000 to \$99,999</b>	34,127	10.9%	86,405	12.7%	518,898	11.4%	12,767,566	11.5%
<b>\$100,000 to \$149,999</b>	25,405	8.1%	78,084	11.5%	425,871	9.4%	11,807,676	10.6%
<b>\$150,000 to \$249,999</b>	7,556	2.4%	28,696	4.2%	146,785	3.2%	4,858,640	4.4%
<b>\$250,000 to \$499,999</b>	1,958	0.6%	8,027	1.2%	42,422	0.9%	1,443,159	1.3%
<b>\$500,000 and over</b>	517	0.2%	3,063	0.5%	17,087	0.4%	664,559	0.6%
<b>Total</b>	314,268	100%	677,826	100%	4,546,265	100%	111,006,738	100%
<b>Median Household Income</b>	<b>\$43,535</b>		<b>\$50,995</b>		<b>\$46,008</b>		<b>\$47,837</b>	

Sources: Claritas, 2005; Bay Area Economics, 2005.

***Place of Work***

Table 6 shows the number of Columbus residents who worked throughout the region in 2000, by location of their job. Columbus had a total of 450,434 adult residents who worked in 2000, of which 56.5 percent, or 254,520 of these residents, held jobs located within the City. When viewed from another perspective, of all the jobs located within the City at that time, 56.5 were held by residents of Columbus, while 43.5 percent of jobs in the City drew in-commuters living outside city boundaries.

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**Table 6: Columbus Residents by Place of Work, 2000**

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<b>Place of Work</b>	<b>Number</b>	<b>Percent</b>
Employed Columbus Residents Working in Columbus	254,520	56.5%
Employed Columbus Residents Working Elsewhere	195,934	43.5%
Total Columbus Employed Residents (a)	450,454	100.0%
Total Jobs in Columbus	450,605	
Share of Columbus Jobs Held By Columbus Residents	56.5%	

Notes:

(a) Does not include Columbus residents that work outside of Ohio.

Sources: 2000 U.S. Census, CTPP Part 3; Bay Area Economics, 2006.

## **Columbus Compared to Other Cities Within the Region**

As household and job growth occurred throughout the Columbus region during the 1990s, the pace of each of these factors, and their impact on jobs/housing balance varied greatly. Table 7 presents an analysis of the change in households and jobs during the decade, as well as the beginning and end of period jobs/housing balance. The ratio of jobs to housing is a common method of measuring the mix of land uses from a planning perspective, with the goal of most policy makers to achieve at least one job or more per household to minimize commuting and traffic congestion. For the Columbus region overall, the beginning and end of the decade indicated a jobs/housing balance of 1.3, meaning that the region contained 1.3 jobs for every household.

Table 7 shows several interesting findings regarding Columbus and surrounding cities within the region. Of the 87,600 households added to the region from 1990 to 2000, Columbus captured 44,538, or 50.8 percent of regional household growth. At the same time, of the 133,827 jobs added to the region, Columbus captured almost 50,200, a capture rate of 37.5 percent of all regional job growth. These changes during the decade meant that in 1990, Columbus had a jobs/housing balance of a healthy 1.6, which declined by the end of the decade slightly to 1.5.

Using another way to measure these trends, if Columbus had maintained its starting share of the job base in the region (e.g., 58.9 percent of total), it would have captured an additional almost 28,000 jobs as part of the region's growth during the decade.

Table 7 profiles these same shifts for 21 additional cities within the region. These 21 cities captured a total of 30,537 households, or 34.9 percent of regional growth. At the same time, these 21 cities captured 53,600 jobs, or 44.5 percent of regional growth. Other communities and unincorporated areas captured the remaining 12,500 households (14.3 percent of regional household growth) and 24,000 jobs (18.0 percent of regional growth).

Among the cities analyzed, Dublin captured the highest share of job growth following Columbus. Dublin added 14,400 jobs during the decade, or 10.8 percent of regional job growth. However, it is important to note that Dublin also added more than 5,600 households during the same period, representing 6.5 percent of regional household growth. These patterns meant that Dublin started the decade with a very job-rich jobs/housing balance of 3.1, but actually experienced a decline during the decade to a jobs/housing balance by 2000 of 2.8.

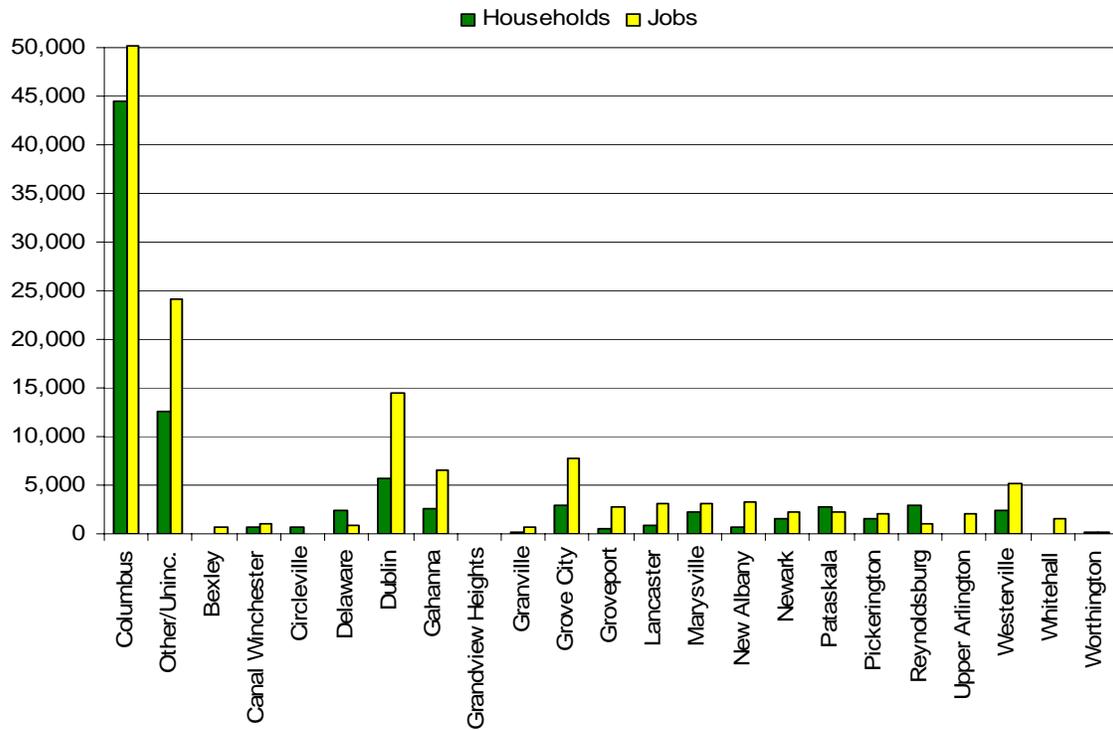
Gove City captured the third largest share of regional job growth, adding more than 7,700 jobs, or 5.8 percent of growth regionwide. At the same time, Grove City added almost 2,900 households, a 3.3 percent share of the region's household increase. This trend resulted in an improved jobs/housing balance for Grove City, which started the decade with a balance of 0.9, and ended the decade at 1.4.

Other communities which improved their jobs/housing balance substantially include Gahanna, which added more than 6,500 jobs and just 2,500 households, resulting in a rise of the jobs/housing balance from a relatively low 0.7 to 1.1. Groveport, which started the decade with a strong jobs/housing balance of 2.2, added many more jobs than households to its mix, ending the decade with a very strong balance of 3.3. Two other traditionally job-rich cities, Worthington and Granville, each experienced

very limited growth in jobs and housing, meaning that these two cities started and ended the decade with their same relatively high jobs/housing balance unchanged (at 2.6 and 3.2 respectively).

Several communities lost ground in their jobs/housing balance, by adding more households than jobs during the decade. In addition to Dublin and Columbus, the cities with declining jobs/housing balances included Canal Winchester, Circleville, Delaware, Marysville, and Reynoldsburg, although many of these cities still had relatively strong balances at the end of the decade.

### Capture of Regional Growth 1990 - 2000 Households & Jobs



**Table 7: Comparison of Columbus to Other Mid-Ohio Cities, 1990 - 2000**

	Households				Jobs				Jobs/Housing Balance		
	1990	2000	Change	% Regional Chg	1990	2000	Change	% Regional Chg	1990	2000	Change
<b>Columbus MSA</b>	<b>523,154</b>	<b>610,757</b>	<b>87,603</b>		<b>685,583</b>	<b>819,410</b>	<b>133,827</b>		<b>1.3</b>	<b>1.3</b>	<b>0.0</b>
<b>Columbus</b>	<b>256,996</b>	<b>301,534</b>	<b>44,538</b>	<b>50.8%</b>	<b>400,419</b>	<b>450,605</b>	<b>50,186</b>	<b>37.5%</b>	<b>1.6</b>	<b>1.5</b>	<b>-0.1</b>
Bexley	4,753	4,705	-48	-0.1%	3,306	4,045	739	0.6%	0.7	0.9	0.2
Canal Winchester	957	1,664	707	0.8%	2,293	3380	1,087	0.8%	2.4	2.0	-0.4
Circleville	4,621	5,378	757	0.9%	6,718	6550	-168	-0.1%	1.5	1.2	-0.2
Delaware	7,137	9,520	2,383	2.7%	11,630	12455	825	0.6%	1.6	1.3	-0.3
Dublin	5,522	11,209	5,687	6.5%	17,345	31,780	14,435	10.8%	3.1	2.8	-0.3
Gahanna	9,453	11,990	2,537	2.9%	6,883	13,425	6,542	4.9%	0.7	1.1	0.4
Grandview Heights	2,895	2,953	58	0.1%	4,472	3430	-1,042	-0.8%	1.5	1.2	-0.4
Granville	1,060	1,309	249	0.3%	2,723	3375	652	0.5%	2.6	2.6	0.0
Grove City	7,382	10,265	2,883	3.3%	6,925	14645	7,720	5.8%	0.9	1.4	0.5
Groveport	1,101	1,575	474	0.5%	2,410	5220	2,810	2.1%	2.2	3.3	1.1
Lancaster	13,981	14,852	871	1.0%	17,238	20355	3,117	2.3%	1.2	1.4	0.1
Marysville	3,269	5,563	2,294	2.6%	6,718	9785	3,067	2.3%	2.1	1.8	-0.3
New Albany (a)	600	1,263	663	0.8%	0	3,360	3,360	2.5%	0.0	2.7	2.7
Newark	17,802	19,312	1,510	1.7%	21,238	23440	2,202	1.6%	1.2	1.2	0.0
Pataskala	1,204	3,922	2,718	3.1%	855	3020	2,165	1.6%	0.7	0.8	0.1
Pickerington	1,886	3,468	1,582	1.8%	1,587	3585	1,998	1.5%	0.8	1.0	0.2
Reynoldsburg	9,981	12,849	2,868	3.3%	7,443	8,545	1,102	0.8%	0.7	0.7	-0.1
Upper Arlington	13,956	13,985	29	0.0%	7,962	10,045	2,083	1.6%	0.6	0.7	0.1
Westerville	10,178	12,663	2,485	2.8%	16,177	21,395	5,218	3.9%	1.6	1.7	0.1
Whitehall	8,635	8,343	-292	-0.3%	13,498	15005	1,507	1.1%	1.6	1.8	0.2
Worthington	5,570	5,692	122	0.1%	17,995	18,132	137	0.1%	3.2	3.2	0.0
<b>Subtotal Other Cities</b>	<b>131,943</b>	<b>162,480</b>	<b>30,537</b>	<b>34.9%</b>	<b>175,416</b>	<b>234,972</b>	<b>59,556</b>	<b>44.5%</b>	<b>1.3</b>	<b>1.4</b>	<b>0.1</b>
Other/Unincorporated	134,215	146,743	12,528	14.3%	109,748	133,833	24,085	18.0%	0.8	0.9	0.1

Note: (a) Job count for New Albany not available for 1990.

Sources: 1990 & 2000 U.S. Census; 1990 & 2000 Census Transportation Planning Package; Claritas 2005; BAE, 2006.

## Employment Growth Since 2000

Table 8 presents a detailed analysis of job growth in the City of Columbus, the region, and the State of Ohio for the period from 2001 through 2004 by industry sector. The various industry sectors have been grouped together on Table 8 to also enable assessment of interrelated sectors that tend to support each other. These data are based on confidential firm-by-firm reporting of jobs each quarter to state and federal unemployment agencies, and the data set is known as ES202. It is important to note that the data shown for Columbus was obtained by BAE from the State Division of Labor Market Information (LMI), which has not previously analyzed the City of Columbus apart from the region. To conduct the analysis, BAE utilized GIS to geo-code the address location of each reporting firm, in order to determine actual location inside or beyond Columbus's boundaries<sup>2</sup>. Because the data set is reported quarterly firm by firm, the BAE analysis uses the 3<sup>rd</sup> quarter of each year reported to conduct this analysis, based on the assumption that this quarter is least likely to be influenced by seasonal fluctuations.

At the same time that BAE commenced its data analysis in late fall of 2005, the state LMI completed a similar analysis for the City of Columbus for the first quarter of 2005, on a preliminary basis, and BAE worked closely with state staff to utilize some of the same geo-coding classifications<sup>3</sup>.

### ***Total Jobs***

As shown on Table 8, Columbus's overall employment base lost slight ground during the four-year period, in keeping with overall state and national downturns in the economic cycle. However, Columbus's net job loss of just 2,772 jobs, or 1 percent, compares favorably with the region's net jobs loss of 7,000, which was also a 1 percent decline for the period. Both Columbus and the region compare favorably to the State of Ohio, which lost 2 percent of its job base during the same period.

Moreover, Columbus's share of the region's job total remained unchanged, at 50 percent, throughout the period, demonstrating the City's ability to retain jobs in the face of suburban competition and simultaneous economic downturns.

### ***Manufacturing***

One of the hardest-hit sectors from 2001 through 2004 in Columbus was manufacturing, which lost more than 8,500 jobs in four years, a drop of 23 percent for the period. Regionally, this sector lost 13,100 jobs, a drop of 14 percent, while statewide, this sector lost 13 percent of its total. The more dramatic decline in this sector for the City of Columbus meant that its share of regional employment in manufacturing also declined, from 40 percent in 2001 to just 35 percent in 2004.

This decline in manufacturing jobs echoes national and regional trends throughout much of the U.S., which experienced a drop in this sector after the economic expansion of the late 1990s. Many

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<sup>2</sup> In ES 202 data, companies often report a Columbus mailing address even though they are physically located outside city boundaries in surrounding communities. Thus, this analysis requires both locating and refining the data set to accurately measure true location by firm.

<sup>3</sup> Since LMI published its 1<sup>st</sup> quarter 2005 information in early 2006, it has continued to refine its data analysis and geo-coding; the BAE work represents a subsequent level of refined analysis, and as such, is not directly comparable to recently published LMI reports.

economists have been predicting this decline for years, as the entire U.S. struggles to compete with inexpensive labor costs in other parts of the world. Because this is a nationally declining sector, many cities across the U.S. have therefore shifted their economic development strategies to retrain workforces and seek job expansion and attraction in other, more vital sectors.

### ***Entertainment, Dining, Lodging, and Retail***

These sectors are grouped together because they are inter-related in terms of serving visitors and residents, and also because they tend to typically follow similar economic cycles.

This group of industries showed strength in Columbus during the period analyzed, with an overall rise in jobs of 1,941, including a dramatic increase of more than 5,700 jobs in Lodging & Dining. Overall, this group of industry sectors increased 2 percent in Columbus, while dropping by -3 percent in the region and -2 percent at the statewide level. The strong decline across all three areas in the retail component of this group is expected, due to the general economic slowdown occurring at that time.

### ***Government***

This group of sectors shows several interesting trends for Columbus. In keeping with its role as the state capitol, state government employment increased in Columbus by more than 2,200 jobs during the period, but this rise was off-set by cuts in local government (e.g., City of Columbus) employment, resulting in no measurable overall change in total government employment. In contrast, the region overall increased by 4,700 jobs in government, primarily in the category of local government, resulting in a rise of 3 percent. The State of Ohio increased at a rate of 1 percent for the period.

### ***Construction & Real Estate***

Within the City of Columbus, this group of industries experienced a modest decline of 7 percent, a net loss of almost 2,000 jobs. Within the region, however, this industry group declined less significantly, and most of the decline is due to the Columbus loss. Statewide trends followed regional trends for this industry group, declining by 3 percent during the period.

### ***Education***

Education employment, which tends to follow population growth but is also influenced by the decisions of individual school districts and higher education institutions, grew at a relatively rapid rate for the region, adding 2,100 jobs for a rise of 22 percent. Columbus added a modest 741 jobs in this sector, for an increase of 16 percent for the period. a limited amount considering its economy as strongly focused on higher education.

### ***Health Care and Social Assistance***

This sector has show strong growth nationally, due in part to increased demands for health services. In Columbus, with a strong focus in health care, almost 6,500 jobs were added to this sector, an increase of 13 percent. In comparison, the region grew by 10 percent (with almost all the jobs attributable to the Columbus portion), while the State grew at a slower rate of 7 percent. It is also interesting to note that the growth in this sector plus lodging and dining services more than off-set the decline in manufacturing jobs in Columbus.

### ***Technology and Business Services***

This group of industries combines the inter-related sectors of Information, Administrative Support, Management of Companies, Professional and Technical Services, Finance and Insurance, and Other Services. In combination for the period, the City of Columbus showed a modest 1 percent increase in employment within this group, relative to a flat situation in the region and a decline of 1 percent at the state level. This group of industries represented 28 percent of all City of Columbus employment by 2004, a substantially higher concentration than for state overall (22 percent).

Within this group of industries, Management of Companies, Professional and Technical Services, and “Other Services” represented bright spots of strong growth for the period, adding a total of 2,500 jobs from these three sectors.

### ***Logistics and Utilities***

This group of industries has long been considered a key sector of Columbus’s and the region’s economy, enhanced by central Ohio’s strategic location along transportation routes and within convenient trucking distances to large population centers. However, it should be noted that while warehousing and distribution are vital industries, their characteristics result in small numbers of jobs per acre of land used to house them, and the rate of logistics jobs per typical facility tends to fall over time as automation and other technology replaces labor.

In Columbus during the period analyzed, this group of industries experienced a net job loss of over 2,100 jobs, for a drop of 6 percent during the period. In contrast, the region as a whole gained 200 jobs, meaning that other communities within the Columbus MSA actually gained 2,300 jobs to offset the loss in the City. Similar rates of overall decline to the City were echoed by a state decline of 5 percent.

While some of the drop in logistics and utilities industries may be attributable to overall slowdowns in the larger economy, these findings indicate the need for further analysis to understand the impact of logistics and utilities on the City’s economic base.

**Table 8: Employment by Industry, 2001 -2004**

Employment by Industry (a)	City of Columbus (b)				Columbus MSA (c)				State of Ohio (c)			
	2001	2004	Change	% Change	2001	2004	Change	% Change	2001	2004	Change	% Change
<b>Manufacturing</b>	<b>37,579</b>	<b>29,011</b>	<b>(8,568)</b>	<b>-23%</b>	<b>95,100</b>	<b>82,000</b>	<b>(13,100)</b>	<b>-14%</b>	<b>953,000</b>	<b>824,500</b>	<b>(128,500)</b>	<b>-13%</b>
<i>Columbus Share of Region</i>	<i>40%</i>	<i>35%</i>										
<b>Entertainment, Dining, Lodging, and Retail</b>												
Arts, Entertainment, and Recreation	4,931	5,418	487	10%	11,100	11,900	800	7%	68,600	68,100	(500)	-1%
Accommodation and Food Services	35,186	40,909	5,723	16%	70,200	74,900	4,700	7%	413,000	427,200	14,200	3%
Retail Trade	53,818	49,549	(4,269)	-8%	120,100	108,500	(11,600)	-10%	657,500	621,600	(35,900)	-5%
<b>Subtotal</b>	<b>93,935</b>	<b>95,876</b>	<b>1,941</b>	<b>2%</b>	<b>201,400</b>	<b>195,300</b>	<b>(6,100)</b>	<b>-3%</b>	<b>1,139,100</b>	<b>1,116,900</b>	<b>(22,200)</b>	<b>-2%</b>
<i>Columbus Share of Region</i>	<i>47%</i>	<i>49%</i>										
<b>Government</b>												
Federal Government	4,700	4,559	(141)	-3%	13,900	13,100	(800)	-6%	82,600	78,200	(4,400)	-5%
State Government	44,825	47,031	2,206	5%	60,200	61,300	1,100	2%	165,100	166,200	1,100	1%
Local Government	33,063	30,822	(2,241)	-7%	74,200	78,600	4,400	6%	546,300	557,400	11,100	2%
<b>Subtotal</b>	<b>82,588</b>	<b>82,412</b>	<b>(176)</b>	<b>0%</b>	<b>148,300</b>	<b>153,000</b>	<b>4,700</b>	<b>3%</b>	<b>794,000</b>	<b>801,800</b>	<b>7,800</b>	<b>1%</b>
<i>Columbus Share of Region</i>	<i>56%</i>	<i>54%</i>										
<b>Construction &amp; Real Estate</b>												
Real Estate and Rental and Leasing	9,160	9,585	425	5%	15,500	15,100	(400)	-3%	72,800	70,400	(2,400)	-3%
Construction, Mining and Natural Resources (d)	19,754	17,537	(2,217)	-11%	42,200	40,900	(1,300)	-3%	253,400	246,700	(6,700)	-3%
<b>Subtotal</b>	<b>28,402</b>	<b>26,408</b>	<b>(1,994)</b>	<b>-7%</b>	<b>57,700</b>	<b>56,000</b>	<b>(1,700)</b>	<b>-3%</b>	<b>326,200</b>	<b>317,100</b>	<b>(9,100)</b>	<b>-3%</b>
<i>Columbus Share of Region</i>	<i>49%</i>	<i>47%</i>										
<b>Educational Services</b>	<b>5,065</b>	<b>5,806</b>	<b>741</b>	<b>15%</b>	<b>9,600</b>	<b>11,700</b>	<b>2,100</b>	<b>22%</b>	<b>83,600</b>	<b>92,600</b>	<b>9,000</b>	<b>11%</b>
<i>Columbus Share of Region</i>	<i>53%</i>	<i>50%</i>										
<b>Health Care and Social Assistance</b>	<b>48,408</b>	<b>54,886</b>	<b>6,478</b>	<b>13%</b>	<b>81,200</b>	<b>89,000</b>	<b>7,800</b>	<b>10%</b>	<b>610,400.0</b>	<b>651,600.0</b>	<b>41,200</b>	<b>7%</b>
<i>Columbus Share of Region</i>	<i>60%</i>	<i>62%</i>										
<b>Technology &amp; Business Services</b>												
Information	11,111	10,402	(709)	-6%	22,500	19,700	(2,800)	-12%	106,300	92,900	(13,400)	-13%
Administrative, Support, and Waste Services	37,059	35,972	(1,087)	-3%	63,800	62,500	(1,300)	-2%	310,100	306,100	(4,000)	-1%
Management of Companies and Enterprises	10,388	10,896	508	5%	14,600	17,800	3,200	22%	83,000	93,900	10,900	13%
Professional and Technical Services	29,813	30,426	613	2%	53,800	52,600	(1,200)	-2%	235,900	224,400	(11,500)	-5%
Finance and Insurance	22,626	22,621	(5)	0%	61,500	59,400	(2,100)	-3%	234,500	242,100	7,600	3%
Other Services	15,965	17,420	1,455	9%	35,300	38,600	3,300	9%	228,100	227,200	(900)	0%
<b>Subtotal</b>	<b>126,962</b>	<b>127,737</b>	<b>775</b>	<b>1%</b>	<b>251,500</b>	<b>250,600</b>	<b>(900)</b>	<b>0%</b>	<b>1,197,900</b>	<b>1,186,600</b>	<b>(11,300)</b>	<b>-1%</b>
<i>Columbus Share of Region</i>	<i>50%</i>	<i>51%</i>										
<b>Logistics &amp; Utilities</b>												
Wholesale Trade	18,194	17,188	(1,006)	-6%	39,700	37,000	(2,700)	-7%	246,600	231,300	(15,300)	-6%
Transportation, Warehousing, and Utilities	20,435	19,279	(1,156)	-6%	35,500	38,400	2,900	8%	191,700	184,700	(7,000)	-4%
<b>Subtotal</b>	<b>38,629</b>	<b>36,467</b>	<b>(2,162)</b>	<b>-6%</b>	<b>75,200</b>	<b>75,400</b>	<b>200</b>	<b>0%</b>	<b>438,300</b>	<b>416,000</b>	<b>(22,300)</b>	<b>-5%</b>
<i>Columbus Share of Region</i>	<i>51%</i>	<i>48%</i>										
<b>Total</b>	<b>462,089</b>	<b>459,317</b>	<b>(2,772)</b>	<b>-1%</b>	<b>920,000</b>	<b>913,000</b>	<b>(7,000)</b>	<b>-1%</b>	<b>5,542,500</b>	<b>5,407,100</b>	<b>(135,400)</b>	<b>-2%</b>
<i>Columbus Share of Region</i>	<i>50%</i>	<i>50%</i>										

**Notes:**

(a) Sums may not add to totals due to rounding.

(b) City of Columbus data is for 1st Quarter of each year shown.

(c) Region and State data are averages for each year shown.

(d) Columbus' Natural Resources and Mining included in this category.

Sources: Ohio Labor Market Info Classic CES Program, 2005; Bay Area Economics, 2006.

## **Real Estate Market Overview**

The real estate market for commercial property is both an overall indicator of general economic conditions, and a part of the equation when local communities compete for employers. This section profiles current real estate market data and trends for office and industrial space in Columbus and the region.

### ***Office Market Overview***

According to published reports by CBRE (national brokerage firm), Columbus's regional office market space inventory totaled over 30 million square feet by the end of 3<sup>rd</sup> quarter 2005. As shown on Table 9, just over one-third of this total inventory was located in downtown Columbus, with the balance distributed across other city and suburban submarkets. Two recently developed concentrations of office space located within the City of Columbus (Polaris and Easton) alone account for an additional 10 percent of the region's inventory, bringing the City of Columbus total office space share up to over 47 percent of the metro area. In the suburban markets, Dublin and its surrounding area contained the largest concentration of office space, with more than 5 million square feet, or 17 percent of the region's total supply, echoing its employment picture.

The most notable feature of the office space market in metropolitan Columbus is the substantial overall vacancy rate, averaging just under 21 percent in downtown Columbus, 17 percent in other Columbus submarkets, and almost 26 percent in suburban submarkets.

Within Columbus, the situation was mixed, showing localized strength despite the overall high vacancy rates. For example, Easton had a healthy vacancy rate of under 9 percent during 3<sup>rd</sup> quarter 2005, as well as the highest asking rental rates of all subareas shown, indicating strong demand and competitive advantages for this type of highly amenitized, contemporary office product within city boundaries. In contrast, the East submarket suffered major challenges, with over one-third of its office space inventory standing vacant, suggesting the need for an intensive reuse/development strategy in this area of the City.

National office vacancy rates were 13 percent in downtown/CBD locations, and 15.1 percent in suburban locations during the same period, indicating that Columbus and its region fared far worse than other parts of the U.S. However, it is important to note that the Columbus region's vacancy rate trended downward since the start of 2005 through 3<sup>rd</sup> quarter (a decline of 3.9 percent), suggesting that the high levels of vacancy may have peaked for this economic cycle.

It should be noted that office space vacancy rates can often overstate actual economic softness and job loss. There are several trends and counter-trends that converge to create a physical image on the ground of empty space, leading many observers to conclude dramatic economic softness even when actual job counts are flat or increasing. For example, real estate development tends to lag economic slowdowns, so that most regions of the U.S. tend to overbuild office space even as employment and demand for such space may be cycling downward. This lag in continued construction during downturns, adding supply at the time it is least demanded, can be as long as two to three years or more in some regions. Other factors also contribute to the perception, such as job gains occurring in different types of spaces other than traditional office buildings (e.g., start ups at place of residence,

education and health job growth in other types of settings, etc.). Another factor affecting perception is the relocation of office users within a local market area, which can occur quite often if new space with better features is constructed and offered to tenants in aging space, at the same or similar rental rates (or with rent concessions to lease up new product). Finally, although difficult to document with current data, there has been a long term trend among traditional office employers to shrink the amount of space per employee, associated with rising operating costs, more compact equipment, and the impacts of computer technology on space.

**Table 9: Columbus and Suburban Office Market Trends, 3rd Quarter 2005**

<b>Area</b>	<b>Total Inventory (Sq. Ft.)</b>	<b>Percent Of Inventory</b>	<b>Vacant Space (Sq. Ft.)</b>	<b>Vacancy Rate</b>	<b>Avg. Asking Lease Rate (a)</b>
<b>Downtown Columbus</b>					
Class A	4,334,588	14.2%	914,598	21.1%	\$20.79
Class B	5,285,777	17.4%	1,078,299	20.4%	\$16.67
Class C	797,396	2.6%	166,656	20.9%	N/A
<i>Subtotal</i>	<i>10,417,761</i>	<i>34.2%</i>	<i>2,159,552</i>	<i>20.7%</i>	<i>\$17.99</i>
<b>Other Columbus</b>					
East	590,276	1.9%	212,499	36.0%	\$11.44
Airport	258,353	0.8%	58,646	22.7%	\$17.40
Polaris	2,018,001	6.6%	310,772	15.4%	\$17.89
Easton	1,128,166	3.7%	98,150	8.7%	\$18.07
<i>Subtotal</i>	<i>3,994,796</i>	<i>13.1%</i>	<i>680,068</i>	<i>17.0%</i>	
<b>Total City of Columbus</b>	<b>14,412,557</b>	<b>47.3%</b>	<b>2,839,620</b>	<b>19.7%</b>	
<b>Suburban Submarkets</b>					
Hilliard	830,478	2.7%	367,902	44.3%	\$15.72
Westerville	2,507,691	8.2%	950,415	37.9%	\$15.94
Worthington	4,033,120	13.2%	1,205,903	29.9%	\$16.49
Gahanna	810,575	2.7%	172,652	21.3%	\$15.52
Dublin/NW	5,175,448	17.0%	1,060,967	20.5%	\$16.75
Grandview	690,109	2.3%	102,136	14.8%	\$16.37
Bethel Rd	1,047,671	3.4%	155,055	14.8%	\$17.09
Upper Arlington	749,189	2.5%	100,391	13.4%	\$14.65
Reynoldsburg	183,085	0.6%	5,493	3.0%	\$11.25
<i>Subtotal</i>	<i>16,027,366</i>	<i>52.7%</i>	<i>4,120,914</i>	<i>25.7%</i>	
<b>Total Metro Columbus</b>	<b>30,439,923</b>	<b>100.0%</b>	<b>6,960,535</b>	<b>22.9%</b>	<b>\$0.00</b>

a) Includes Class A and B space only.

Source: CB Richard Ellis, 2005; BAE, 2006.

With respect to near-term new supply, according to CBRE data, approximately 327,000 square feet of space located in three buildings is currently under construction within the suburban markets of Hilliard and Upper Arlington, including 220,000 square feet in Hilliard to be occupied by BMW Financial Services. Further pressure will be added to the already slack suburban Columbus office market in 2006, as one million square feet of new office space is reportedly planned for delivery.

To augment the data, BAE also interviewed several active office market brokers in the Columbus marketplace. The brokers attributed the relatively high office vacancy rates to visible corporate consolidations over the past three years by companies such as Bank One, Midland Insurance and Nationwide Insurance. Moreover, additions to the inventory were not fully absorbed after the economy slowed in the early part of this decade. Brokers report that business service firms and financial organizations are the most active types of tenants currently seeking space, and most leasing consists of firms relocating around the Columbus region. Easton was considered as the most desirable office submarket within Columbus, based on quality of inventory, close-in amenities such as shopping and dining, and attractive incentive offerings. Other submarkets mentioned as highly desirable based on similar factors included Westerville, New Albany, Dublin, Hilliard and the Arena District.

Brokers noted that typical tenant space requirements have fallen from 20,000 square feet or more five years ago, to smaller amounts of space averaging 10,000 square feet or less today. Brokers also noted that tenant choices between space within Columbus and similar space or land in competing suburban locations were often influenced by available incentives packages. In general, brokers acknowledged that from their point of view, the incentive offerings have improved with respect to Columbus, but that the City could further improve its competitive position by matching competing incentive packages and conducting aggressive outreach. One broker interviewed also suggested that Columbus should focus on its strength in the financial services, professional services, and consulting firms already located in the city. Finally, brokers reported that in general, land values for those developing single user buildings in suburban locations were often valued somewhat higher than similar land within City boundaries, but that again, this was offset by variations in incentive packages.

### ***Industrial Market Overview***

The industrial market in Columbus and outlying areas has a vast amount of existing inventory, making the region the 15<sup>th</sup> largest in the U.S. (according to CBRE). Freeway and rail access, currently being expanded further by a \$60 million multimodal logistics facility under construction at Rickenbacker International Airport, all serve to create a strong competitive advantage in the distribution and logistics portions of this real estate market, despite declining manufacturing employment.

As shown in Table 10, for the 3<sup>rd</sup> quarter of 2005, CBRE tracked nearly 198 million square feet of inventory (includes buildings 10,000 square feet or larger), including roughly 160 million square feet in Columbus and its adjacent suburbs. In contrast to many other regions around the U.S., the central area of Columbus contains a substantial 39 million square feet of industrial space, and experienced a relatively healthy 7 percent vacancy rate during the period shown below.

However, low average asking rates suggest that this inventory is primarily either underutilized or obsolete space. In contrast, the Northeast area commands nearly double the lease rates, and its nearly 14 million square feet of space were also relatively well occupied (vacancy of just 8 percent). Southeast Columbus and adjacent locations suffered the highest vacancy rates, with 7 million of its inventory of almost 35 square feet standing vacant, and low asking rents of \$3.00 per square foot.

**Table 10: Metropolitan Columbus Industrial Market Trends, 3rd Quarter 2005**

<b>Area</b>	<b>Total Inventory (Sq. Ft.)</b>	<b>Percent Of Inventory</b>	<b>Vacant Space (Sq. Ft.)</b>	<b>Vacancy Rate</b>	<b>Avg. Asking Lease Rate</b>
Central	39,081,110	24.7%	2,852,921	7.3%	\$2.86
Northwest	1,735,944	1.1%	144,083	8.3%	\$6.07
Northeast	13,867,847	8.8%	1,248,106	9.0%	\$5.67
East	22,310,053	14.1%	3,502,678	15.7%	\$3.18
Southeast	34,829,610	22.0%	7,000,752	20.1%	\$3.00
Southwest	11,289,100	7.1%	1,106,332	9.8%	\$2.80
West	34,881,621	22.1%	5,371,770	15.4%	\$2.80
<b>Columbus/Suburban</b>	<b>157,995,285</b>	<b>100.0%</b>	<b>21,226,642</b>	<b>13.4%</b>	<b>\$3.00</b>
Outlying	39,765,960		3,459,639	8.7%	\$2.96
<b>Total</b>	<b>197,761,245</b>		<b>24,686,280</b>		

Source: CB Richard Ellis, 2005; BAE, 2006.

To augment the data, BAE interviewed active industrial brokers in the region. Brokers attributed the high vacancy rates in some areas of the Columbus region to several factors, including obsolete product in some areas, speculative building in anticipation of increasing demand in the Southeast/Rickenbacker area, and competing incentive policies and recruitment practices among area communities.

Brokers reported that building size requirements differ according to whether the user is a local wholesaler/manufacturer or regional/national third party logistics company. The interviews indicated that local manufactures and wholesalers tended to seek space smaller than 80,000 square feet, while large distributors and third-party logistics companies tend to seek large buildings with 250,000 square feet or more. Access to rail has become more important over the last two years as fuel prices have dramatically increased. Buildings sized from 100,000 to 250,000, are in less demand. Moreover, demand for “flex space,” which typically drives a more light-industrial oriented economy (e.g., contains a mix of both office and storage/assembly spaces), was not considered strong in the Columbus market.

Brokers highlighted the variations in tax abatement policies between Columbus and surrounding communities as contributing to a competitive disadvantage for Columbus, due both to the lower amount of abatement offered (up to 10 years and 65 percent of tax for Columbus compared to up to 15 years and 100 percent of tax for competing communities). Moreover, competing cities will allow the abatement on a speculative basis, to assist property owners with vacant structures, whereas Columbus tended to grant abatements only when the tenant was identified. It should be noted that the actual frequency of granting the “speculative” abatement is not known, however.

## Summary

In summary, the Columbus economy, as part of the larger region, fared relatively well during the 1990s. Population, households, and jobs for the region grew substantially, outpacing the Cleveland and Cincinnati regions as well as the State of Ohio overall. The City of Columbus added 44,500 households and just over 50,000 jobs during the decade, capturing half of the region's household growth and almost 38 percent of its job growth. This lower rate of job capture relative to Columbus's starting share, meant that by 2000, the City had dropped slightly in its jobs/housing balance, but still maintained a healthy 1.5 jobs per household.

Using another way to measure these trends, if Columbus had maintained its starting (1990) share of the job base in the region, it would have captured an additional almost 28,000 jobs during the decade as part of the region's growth. Instead, a portion of the decade's regional job growth was distributed among surrounding cities and unincorporated areas of the region. This pattern, representing the suburbanization of the region's employment base to an extent, was commonly seen across the U.S. during the same time period. Former bedroom communities with limited numbers of jobs, such as Gahanna, matured and expanded their job base. Overall, from a regional growth and planning perspective, some of these patterns meant that formerly imbalanced communities in terms of jobs/housing improved their balances. Several job-rich cities such as Dublin, while capturing substantial job growth, also grew significantly in housing, leading to a decline in its jobs/housing balance (albeit still a quite strong ratio of jobs to households of 2.8 by the end of the decade).

Since 2000, a detailed analysis of Columbus and regional job growth by industry sector highlights several trends. Columbus experienced a dramatic loss of 8,500 manufacturing jobs in a four year period from 2001 to 2004, a decline echoed regionally, statewide, and nationally to varying degrees. However, job growth in other sectors including Accommodations and Food Services, State Government, Health Care, and to a lesser extent in Educational Services and portions of the Technology and Business Services sectors meant that overall job loss was minimal in the City during the period, a net decline of just 2,800 jobs.

Columbus's economy has long showed strength in these vital sectors, and has competitive advantages including developable land, educated workforce, expanding Fortune 500 companies, and advanced educational institutions conducting R & D.

Columbus's real estate market for office and industrial space suggests a much stronger decline than the job data indicates. These counter-intuitive trends likely reflect a combination of forces, including additions to the pipeline while the economy stalled, relocations within the region (reflected by some of the job data), and shrinking or changing demands for space. The real estate data also suggests portions of Columbus with the highest degree of obsolescence of inability to remain competitive, including the eastern portion of the City for office space, and the "southeast" for industrial space. The emergence of Easton as a strong submarket for office space, however, illustrates the type of space that can meet contemporary needs and compete head-on with suburban communities, despite a location near these declining areas.

# Fiscal Implications of Economic Trends

## Income Tax Revenues

The City of Columbus, similarly to most other municipalities in Ohio, levies an income tax on the earnings of employees working in Columbus and the profits of businesses located in Columbus. The bulk of this revenue stream is derived from a 2.0 percent tax in workers' earnings (including commissions).

As shown on Table 11 below, this revenue source comprised more than 54 percent of the City's General Government funding in 2003 (latest data available). Despite small job losses during this period, income tax revenue from 2000 to 2003 increased by 4.1 percent, falling just short of general inflation for the period (4.9 percent for three year period). It is likely that this pattern is due to rising salaries of Columbus's jobs during the same period. Other revenue sources, including investment income subject to general stock and bond market declines at the time, special assessments, and charges for services, declined during the same period. The total of all revenue sources increased 4.1 percent for the three year period.

According to an interview with the Income Tax Division of the City Auditor's Office, income tax revenues for January of 2005 continued to increase, up 14 percent over January 2004. Recently, the City Auditor has requested City Council to raise the existing income tax rate, although no specific percent increase has been proposed. This rate increase would be subject to voter approval.

**Table 11: Source of General Government Revenue 2000 - 2003**

*(in thousands of dollars)*

	2000	2003	2003 Percent Of Total	Change 2000-2003
Income Taxes	\$ 420,812	\$ 438,993	54.2%	4.1%
Property Taxes	\$ 39,049	\$ 45,660	5.6%	14.5%
Grants & Subsidies	\$ 52,133	\$ 79,588	9.8%	34.5%
Investment Earnings	\$ 36,241	\$ 8,196	1.0%	-342.2%
Special Assessments	\$ 179	\$ 95	0.0%	-88.4%
Licenses & Permits	\$ 18,229	\$ 25,209	3.1%	27.7%
Shared Revenues	\$ 86,455	\$ 81,474	10.1%	-6.1%
Charges for Services	\$ 62,201	\$ 60,787	7.5%	-2.3%
Fines & Forfeits.	\$ 15,196	\$ 21,717	2.7%	30.0%
Misc.	\$ 45,633	\$ 47,545	5.9%	4.0%
<b>Total</b>	\$ 776,128	\$ 809,264	100.0%	4.1%

Sources: City of Columbus, 2005; BAE 2006.

Both the tax revenue benefits, and conversely, the tax revenue losses to the City of Columbus are impacted by the type of jobs attracted or lost in a fiscal year. For example, if one high wage job is lost but replaced two low wage jobs, the net impact to the City can be limited, even though unemployment may be unchanged and job data appears positive.

To illustrate the impacts of shifts in employment on fiscal revenue as the economy changes and firms start up, close down, or relocate, the job changes by industry sector presented earlier in this report for Columbus for 2001 through 2004 were assigned average wage rates based again on the same data source (which reports total payroll and number of employees). As shown below in Table 12, these changes to Columbus's economy in the past few years have likely had a substantial impact on income tax revenues, despite being partially offset by wage rate increases. The loss of more than 8,500 manufacturing jobs, which tend to have high average wages, would have resulted in a loss of \$8.7 million in tax revenue, based on 2004 rates. Offsetting this loss were lower wage jobs in accommodations and food services, along with a small number of job gains in high wage sectors such as Management of Companies. Clearly, expanding jobs in Finance and Insurance, Professional and Technical Services, and Wholesale Trade would also serve to increase tax revenues.

**Table 12: Estimated Revenue Impact of Job Changes, City of Columbus, 2001 – 2004**

*(3rd Quarter Job Data)*

	<b>Job Change</b>	<b>Avg Wage</b>	<b>Income Tax</b>	<b>Total Revenue</b>
	<b>2001-2004</b>	<b>Per Job, 2004 (a)</b>	<b>(Estimated, 2%)</b>	<b>Impact to City</b>
Manufacturing	(8,568)	\$50,598	\$1,012	(\$8,670,474)
Arts, Entertainment, and Recreation	487	\$18,904	\$378	\$184,126
Accommodation and Food Services	5,723	\$14,390	\$288	\$1,647,082
Retail Trade	(4,269)	\$27,127	\$543	(\$2,316,083)
Federal Government	(141)	\$57,885	\$1,158	(\$163,236)
State Government	2,206	\$38,956	\$779	\$1,718,748
Local Government	(2,241)	\$43,625	\$872	(\$1,955,253)
Real Estate and Rental and Leasing	425	\$37,170	\$743	\$315,948
Construction, Mining and Natural Resources	(2,217)	\$46,956	\$939	(\$2,082,010)
Educational Services	741	\$27,802	\$556	\$412,030
Health Care and Social Assistance	6,478	\$35,729	\$715	\$4,628,995
Information	(709)	\$58,351	\$1,167	(\$827,421)
Administrative, Support, and Waste Services	(1,087)	\$24,397	\$488	(\$530,399)
Management of Companies and Enterprises	508	\$86,244	\$1,725	\$876,237
Professional and Technical Services	613	\$61,586	\$1,232	\$755,049
Finance and Insurance	(5)	\$82,665	\$1,653	(\$8,267)
Other Services	1,455	\$29,635	\$593	\$862,368
Wholesale Trade	(1,006)	\$51,592	\$1,032	(\$1,038,032)
Transportation, Warehousing, and Utilities	(1,156)	\$46,704	\$934	(\$1,079,804)
<b>Total</b>	<b>(2,772)</b>			<b>(\$7,270,395)</b>

a) Avg. wage based on 2004 3<sup>rd</sup> Q payroll for industry sector.

Source: BAE, 2006.

## Income Tax from Jobs by Land Use

Due to the functional relationships between various types of employment-generating land uses, wages paid to employees associated with these land uses, and the importance of the resulting tax revenue which flows to the City of Columbus, analysis for this report prepared an estimate of income tax revenue per acre which flows from prototypical development of different types of commercial real estate (see Table 13 below).

The following analysis makes several assumptions to approximate prototypical land use development, the number of employees per acre, and resulting income tax revenues from these employees. As shown, intensely developed urban office buildings housing professional services will yield the highest income tax revenue per acre, followed by contemporary suburban office development. Warehousing and retail, which employ few people per acre of land, yield limited tax revenue per acre of land, despite high wages paid to warehousing employees in Columbus.

**Table 13: Prototypical Income Tax Revenue Generated by Land Use, Per Acre**

*Income Tax Rate @ 2% per Employee*

	Sq. Ft. Bldg Per Acre (a)	Employees Per Acre (b)	Avg. Income Per Employee (c)	Income Tax Per Acre
<b>Warehouse</b>	10,890	11	\$51,592	\$11,237
<b>Manufacturing</b>	8,712	17	\$50,598	\$17,632
<b>CBD Office</b>	108,900	484	\$61,586	\$596,156
<b>Contemporary Suburban Office</b>	43,560	174	\$58,351	\$203,343
<b>Retail</b>	17,424	35	\$27,127	\$18,906

<b>Assumptions:</b>		b) Sq.ft. bldg per employee	c) Avg. Wage per employee (see Table 11)	
a) Floor Area Ratio (bdg space)				
Warehouse	0.25	1,000	\$51,592	
Manufacturing	0.20	500	\$50,598	
CBD Office	2.50	225	\$61,586	professional/tech
Contemporary Suburban Office	1.00	250	\$58,351	admin support
Retail	0.40	500	\$27,127	retail

This calculus illustrates the challenge for Columbus and other Ohio cities dependent on income taxes generated by employees. The connection between a strong reliance on a certain type of revenue stream by local governments, and the ways that revenue stream are obtained by changing land use patterns, is known in the public finance arena as the “fiscalization of land use.” In other words, this tendency captures the trends in public policy and decision-making, which can influence the way scarce land is used to benefit public tax revenues. It should be noted that in Columbus’s case, the “fiscalization” of employment-generating land uses lines up well with other policy goals to expand employment for residents of the region, goals which bring substantial economic benefit<sup>4</sup>.

### **Land Use Implications: Residential Versus Commercial Land Uses**

Another consequence of the fiscalization of employment-generating uses is the consideration of net fiscal impact of each new development project on a city’s local finances. In many Ohio cities, policy-makers have grown increasingly concerned that residential development brings a net fiscal cost to their budgets; meaning that the new project will generate less in local public revenue than the cost to provide it with local municipal services (including schools). Thus, as underutilized or undeveloped parcels are considered for development, and the development community proposes new residential development to meet rising demand for new housing units, elected officials often consider the impacts of rezoning land to residential use on their tax revenues and service costs.

The analysis of a project’s fiscal impacts (e.g., local tax revenues less public services) has been conducted for many projects throughout central Ohio. A summary of several recent studies, and their implications in a general sense to local government finances, is presented in the publication “Understanding the Fiscal Impacts of Land Use in Ohio,” prepared by Randall Gross, Development Economics, for MORPC as part of its Regional Connections planning process. This summary of prior location- and project-specific fiscal impact studies concludes:

*In some communities, it is apparent that certain types of residential development can generate a fiscal drain on the annual budgets of local governments....Office and industrial uses, on the other hand, often generate significant positive net gain for municipal governments...Most analyses find that income taxes generated by high-wage office employment drastically outweighs any costs for providing local government services. On average, the example fiscal analyses used in preparing this report show that office generates \$1.34 per square foot in net fiscal benefits, and industrial generates \$0.62 per square foot<sup>5</sup>.*

It is very important to note, however, that none of the fiscal impact studies summarized in the report prepared for MORPC analyzed development projects proposed for the City of Columbus. Since each local government has different municipal service cost structures, and each new development project will be unique in its tax revenue generation as well as its demands for services relative to existing

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<sup>4</sup> In contrast, in other states with a different tax structure, local governments depend on other tax revenues such as sales taxes to fund their operations. For example, cities in California strive to attract “big box” stores, which can boost local tax revenues manifold relative to the population base in small communities. However, this fiscalization of retail land uses can have the unintended consequence of eliminating other local retailers, strongly impacting “Main Streets.”

<sup>5</sup> Page 2, Executive Summary, “Understanding the Fiscal Impacts of Land Use in Ohio,” MORPC, August 2004.

capacity to serve the project, the true marginal cost of each new development project is unique to its specific characteristics, location, and impact on public services. Thus, while it is important to generally focus on primary local revenue generators such as high-wage jobs, it is key to note that each new development project (or redevelopment of underutilized land parcels) will bring its own unique set of impacts and/or benefits to the City of Columbus's balance of revenues and costs.

Since limited analysis of the fiscal impacts of development projects in Columbus has been conducted, it is recommended that this topic be further analyzed for both specific project proposals and for cumulative impacts to future City municipal budgets.

# Commercial Development Potential

## Overview of Job Sites and Growth Corridors

This study was commissioned with a concept of focusing job creation strategies on specific locations within the City of Columbus. A series of job sites and corridors were identified by City staff, elected officials, and advisory groups, based on either the potential for new development opportunities (e.g., vacant land) or the sense that certain parcels or areas may be underutilized and could achieve greater job-generation capacity. The corridors include Neighborhood Commercial Revitalization areas (NCRs) with smaller parcels forming aging business districts, as well as vast tracts of land near freeways, airports, and railyards. The original set of job sites and corridors also included Downtown Columbus.

Excluding Downtown Columbus, the total land area encompassed by the Job Sites and Corridors is approximately 50,000 acres.

## Underutilized Land Analysis

For this report, an initial analysis has been conducted to identify underutilized parcels within the Job Sites and Corridors. As shown on Table 14 on the following page, this analysis was conducted using a technique called Improvement-to-Land Ratio (I/L Ratio), based on available data regarding assessed value of the building improvements to the assessed value of the land itself. According to economic theory, if the building improvements are worth at least as much or more than the underlying land, the parcel is demonstrating minimal ongoing investment. For those cases where the land is not improved (e.g., vacant), or the building's value is less than the underlying land value (I/L ratio of less than 1), this technique identifies the land as "underutilized." Parcels in this category represent locations with the potential for redevelopment to higher economic uses.

For Table 14, all parcels with Improvement-to-Land (I/L) ratios of less than 1 (including vacant land and parcels for which there is no information or no value due to public right-of-way), are summarized and shown as underutilized within the respective job sites and corridors. An overview map depicting the location of each job site and corridor, and the parcels' with identified underutilization, is shown on the following page (map to be provided at presentation of this draft report).

As indicated by this summary table, almost 32,000 acres of land within the job sites/corridors areas (excluding downtown) are considered as underutilized. This finding represents approximately 70 percent of the total area of the combined job sites and corridors. Underutilization based on this economic criteria ranges from zero percent at the Lennox Town Center to 100 percent underutilized for Goudy Field and the Jeffrey site. (Note: Polaris and Short North NCR missing from the database – will be incorporated into the presentation).

**Table 14: Underutilized Land by Job Center Location**

#	Job Center Name	Underutilized Acres (a)	Utilized Acres	Total Acres	Percent Underutilized (a)
2	Lennox Town Center	0	35	35	0%
14	Columbus Coated Fabrics	0	12	12	0%
28	I-670/Taylor Avenue	0	7	7	0%
68	Riverside	4	61	65	6%
42	SciTech	8	93	100	8%
16	Doctors West	1	11	12	8%
13	Graceland Shopping Center	10	92	103	10%
49	Conrail/I-70	28	196	224	12%
4	Northland Park	11	70	81	13%
62	Corporate Exchange	8	49	57	14%
8	Busch Boulevard	14	71	85	16%
41	Mill Run	30	143	173	17%
70	Cleveland/Innis	28	122	149	19%
36	Mount Vernon Avenue NCR Area	4	17	21	21%
7	Indianola Avenue Corridor	158	563	721	22%
29	Hilltop NCR Area	6	19	25	25%
38	Old North Columbus NCR Area	2	6	8	27%
1	Sinclair Road	11	29	40	28%
33	East Main Street NCR Area	20	51	72	28%
20	3rd/5th/King - West of Olentangy Road	35	86	121	29%
31	Parsons Avenue NCR Area	22	51	73	30%
46	Buckeye Railyards/West Belt	534	1,236	1,770	30%
21	Crosswoods	62	140	202	31%
40	Alum Creek South/Consolidated Freight	273	608	881	31%
57	Brice Tussing	194	423	617	31%
61	SR161	52	110	162	32%
53	Holtzman-Main NED	28	54	83	34%
56	Alum Creek North	268	517	786	34%
3	Dublin Road (Downtown to Marble Cliff)	112	202	314	36%
19	Westland	41	69	110	37%
32	Livingston Avenue NCR Area	4	7	11	37%
60	Sawmill/I270	179	273	452	40%
69	Tuttle	67	90	157	43%
43	Georgesville Road Corridor	255	337	593	43%
48	Phillipi/Wilson	267	351	619	43%
52	Marion Road NED	181	229	411	44%
51	Harmon Road NED	171	209	379	45%
9	Eastland (Hamilton Road between I-70 and I-270)	344	412	756	45%
72	University Community Business Association	11	13	25	46%
37	Short North NCR Area	20	24	45	46%
22	Brewery District	35	41	76	46%
27	Marion Road (Parsons to Fairwood)	87	89	176	50%
0	Buckeye Steel	252	234	485	52%
67	OSU	481	443	925	52%
55	Lucent	331	296	626	53%
30	Franklinton NCR Area	45	40	84	53%
35	Long Street NCR Area	5	5	10	53%
11	Easton Area	255	187	443	58%
50	McKinley Avenue NED	467	343	810	58%
54	South Linden NED	659	468	1,127	58%
39	Cleveland Avenue NCR Area	77	53	131	59%

74 US 33/Refugee Road	172	95	267	65%
63 I-670 Corridor	482	214	696	69%
24 Don Scott Field/SR 161	431	167	598	72%
6 Rickenbacker	12,931	4,467	17,397	74%
47 West Edge/Harmon Road	56	19	74	75%
66 West Albany	152	29	181	84%
58 US33/Bixby	237	43	280	85%
71 Bolton Field	820	130	950	86%
12 Fifth Avenue (Cassady to Hamilton Road)	2,552	304	2,856	89%
64 Port Columbus	3,680	270	3,950	93%
65 Hamilton/SR161	509	6	515	99%
25 Corr/Groveport Road (Norfolk Southern Railyards)	240	2	242	99%
5 York Country Club	142	-	142	100%
10 Goudy Field	274	-	274	100%
15 Jeffrey Site	42	-	42	100%
26 Hartman Farms	2,257	-	2,257	100%
45 Wilcox/Avery	707	-	707	100%
73 South Campus Gateway	5	-	5	100%
Total	31,851	15,033	46,885	68%

Notes:

- a) Underutilized land is when the value of improvements (I) is less than the value of the land (L), so that the I to L ratio is less than 1.00. Based on assessed value per City Auditor's database. Underutilized land also includes parcels where assessed value is either unknown (due to recent subdivision) OR not assessed due to public land or rights-of-way)

## Economic Development Initiatives

Both the City of Columbus and the region have recently undertaken a number of studies and initiatives targeting the retention, expansion, and attraction of large or emerging industries. Each of the studies and initiatives takes a slightly different approach to identifying industry clusters, which are “a geographically proximate group of interconnected companies and associated institutions in a particular field, including product producers, service providers, suppliers, universities, and trade associations.”<sup>6</sup>

This section blends key study findings with recent actions or initiatives targeting the industry cluster for local economic development.

### Logistics and Distribution

The Transportation, Distribution and Logistics cluster (TDL) involves the planning, management, and movement of people, materials, and goods by road, pipeline, air, rail, and water. It also encompasses related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance. It encompasses the major career areas of Air/Space Transportation, Rail Transportation, Water Transportation, Road Transportation and Mass Transit Systems.<sup>7</sup>

According to the Bureau of Labor Statistics (BLS), as of 2004, there were approximately 1.9 million persons, nationally, employed within the Trucking Transportation and Warehousing industry. BLS expects that this employment industry segment will grow 14 percent between 2004 and 2014 (slightly less than the expected employment growth rate for all U.S. industries combined during the same period). Growth is expected to track the expanding U.S. economy and also be influenced by manufacturers increased outsourcing of distribution and logistics functions. However, due to technological advances in the logistics segment, employment increases will be modest.

According to an Ohio Department of Development (ODOD) 2005 study, the Columbus MSA Logistics and Distribution cluster employed 21,700 and accounted for \$1.7 billion in output during 2003. Other key findings from the ODOD report indicate that the Columbus region has competitive advantages in its central location with access to 50 percent of the U.S. market within 500 miles (36 hours), good rail and vehicular infrastructure, a well educated workforce, relatively low cost real estate, the largest cargo airport in the world, and a strong Logistics program at OSU (ranked 6<sup>th</sup> nationally). Research capabilities at Battelle for this industry cluster were also noted. The report noted that competitive disadvantages included limited direct air service; lack of freight rail and air hubs, and lack of interdisciplinary university research institute linked to corporate needs.

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<sup>6</sup> Source: Harvard Mapping Project

<sup>7</sup> Source: U.S. Bureau of Labor Statistics, 2004

### ***Economic Development Initiatives***

One of the largest economic development initiatives in this cluster is the redevelopment and reuse of the former Rickenbacker Air Force base as an intermodal industrial facility.

In addition to a host of existing tenants and users, Rickenbacker recently announced a partnership with Norfolk Southern Railroad to develop the Rickenbacker Intermodal Facility on 300 acres south of the airport. Opening in 2007, this intermodal rail/truck facility will further expand capabilities in this industry cluster. The Airport Authority also formed a partnership with Duke Realty Corporation and Capitol Square, Ltd. to develop the Rickenbacker Global Logistics Park, a 1,200 acre industrial park near the intermodal facility, which will eventually contain up to 20 million square feet of space. The park is envisioned as offering four campuses with access to road, rail and air transportation options, Foreign-Trade Zone status. The project will include up to 30 buildings, and the first building is currently under construction.

The Rickenbacker Intermodal Facility is also unique as the location of the first Joint Economic Development District (JEDD) agreement between the City of Columbus and the North Gate Alliance (Harrison Township, the Villages of Ashville and South Bloomfield, and Pickaway County). In exchange for agreeing to not annex 1,000 acres of land south of Rickenbacker for 50 years, all property taxes will accrue to Pickaway County, and an income tax of 2 percent will be levied on workers at site, with half used to finance infrastructure improvements and the balance to be split by all parties to the agreement. Sewer service to the JEDD will be provided by Columbus, water will be provided by Earnhart Hill, and Alum Creek Dr. will be extended to serve the area.

The newly formed Compete Columbus organization is also focusing on this industry cluster, including facilitation of a working group of business owners and a focus on encouraging research at OSU and Battelle on logistics-sensitive manufacturing processes.

### **Medical/Life/Bio-Sciences**

This group of industries is defined differently in various studies, and crosses a range of companies and functions. Assets such as the OSU Medical School, other innovative hospitals, research at Battelle, and the emergence of Cardinal Health as one of the top corporations in this arena have all created a strong foundation for developing these industry clusters in Columbus and the region.

One of the ways Dr. Porter has characterized this sector in the Monitor Report for Compete Columbus is to highlight Personalized Medicine, which uses new methods of molecular analysis to better manage a patient's disease or predisposition toward a disease. The approach seeks to achieve optimal medical outcomes by helping physicians and patients choose the disease management approaches likely to work best in the context of a patient's genetic and environmental profile. Though sometimes described as a phenomenon of the future, personalized medicine is already having an impact on how patients are treated. Molecular testing is being used to identify those breast cancer and colon cancer patients likely to benefit from new treatments, and newly diagnosed patients with early stage invasive breast cancer can now be tested for the likelihood of recurrence. In another example, a genetic test for patients with an inherited cardiac condition can help their physicians determine which course of hypertension treatment to prescribe in order to avoid serious side effects.

Nationally, the relatively new personalized medicine industry cluster (a subset within the broader biotechnology industry) is comprised of pharmaceutical, biotechnology, diagnostics and information technology companies, along with major academic centers and governmental agencies. According to the Biotechnology Industry Organization (BIO), a Washington, D.C. based industry lobbying group, there were 1,473 biotechnology companies in the United States at the close of 2003, employing slightly more than 198,000 persons. A 2004 report prepared for the BIO by Battelle Technology Practice and SSTI estimated 850,000 persons were employed, nationally, in the more broadly-defined biosciences industry cluster, which includes firms in: agricultural feedstock and chemicals, drugs and pharmaceuticals, medical devices and equipment, and research and testing. The U.S. Bureau of Labor Statistics projects employment growth of 16.7 percent in the biosciences from 2004 to 2014 -- 13 percent greater than the average employment growth for the same period.

Omeris's 2005 "Bioscience Growth Report" found nearly 700 bioscience related entities employing 37,000 persons within the State of Ohio. According to the "Regional Economic Strategy for Greater Columbus," prepared by Collaborative Economics in 2001, metropolitan Columbus employed 15,000 persons (excluding hospital employment) within the Life Sciences cluster and grew at an average annual rate of 4.5 percent during the previous five years, which was 80 percent faster than region's employment growth rate.

### ***Economic Development Initiatives***

Research for this study included interviews with several key organizations leading economic development initiatives targeting the biosciences/life sciences industry clusters.

TechColumbus is an umbrella organization created by OSU in 2005 to coordinate several central-Ohio technology-commercialization groups including the Science and Technology Campus Corporation (SciTech), the Business Technology Center (BTC) and the Columbus Technology Council. The Science and Technology Campus Corporation (SciTech), a non-profit organization associated with OSU, oversees the 53-acre SciTech research park located on Kinnear Road on the west campus of OSU. The park was established by OSU for the commercialization of new technologies and to promote research and development with commercial applications. SciTech facilities provide common ground for the interaction of tenant corporations with academic and industrial R & D institutions. According to its Executive Director, TechColumbus has focused on companies which have business applications within the advanced materials, life sciences and electronic sciences fields. SciTech is primarily geared towards helping small, start-up firms and academic researchers with commercialization potential.

Although there is substantial focus on technology transfer, seed funding, and start-up facilities in Columbus, stakeholders interviewed for this report mentioned that actual "deal flow" has been slow, due to a variety of factors. Complex aspects of intellectual property, institutional barriers between OSU and commercial companies, and a lack of entrepreneurial talent in commercialization of technologies were all cited as challenges to be improved.

Another exciting venture currently underway to foster Columbus's bioscience and life science/medical clusters is the 315 Tech Corridor project, which envisions a technology area similar to Route 128 in

Boston or Research Triangle Park in Raleigh-Durham, North Carolina paralleling Highway 315. Currently under study by the planning firm of O'Brien/Atkins, in conjunction with the Tech Corridor Advisory Committee, the Corridor study will catalog physical assets such as hospitals, educational institutions, and private businesses; analyze land uses to identify developable parcels, and recommend coordination of master plans between the major landowners such as OSU, Battelle, and the City of Columbus.

Finally, research for this report included an interview with a representative of Battelle, one of the world's premier R & D institutions. Battelle focuses its core research competencies on technologies where the organization can add value, and that demonstrate significant economic and innovative impacts. Battelle considers its location in Columbus to be a competitive advantage, with access to a diverse technology base, a young and talented workforce of more than 100,000 college students within a 15-mile radius, and a superior quality of life in a low cost-of-living environment.

One of the interesting aspects of Battelle's work is that it creates spin-out companies, but locates these ventures with an "agnostic policy" that does not always favor Columbus or the region. Several spin-out companies created by Battelle's research success in the past few years have located in Boston, Maryland, and the Northwest, due to a variety of factors such as living preferences of the CEO. Spin-out companies that stayed in the Columbus area were retained by their need for proximity to institutional research assets at Battelle, OSU and Children's Hospital. Most recently, Battelle has participated in the creation of the Center for Innovation in Dublin, a contemporary research and business park with connectivity to Dublin's fiber network, and under-construction improved access to U.S. 33 via an improved interchange.

### **Hospitality, Entertainment, Retail, and Tourism**

BLS reports approximately 12.5 million persons were employed within the U.S. Leisure and Hospitality industry cluster at the close of 2004. BLS projects employment growth of 17.7 percent from 2004 to 2014. The Monitor study found that while overall metro area employment grew 27 percent faster than U.S. average employment growth between 1990-2001, the Columbus metropolitan area Leisure and Hospitality cluster grew an impressive 52 percent faster than U.S. average employment growth during the same period. This pattern was confirmed by the more recent employment data profiled previously in this report.

Several other studies have noted the strong presence of retailers in Columbus, including several large national corporations as well as associated "creative" sectors such as advertising and design/marketing. The Monitor report prepared for Compete Columbus calls out the marketing/design/retail subcluster as a targeted group for further economic development.

### ***Economic Development Initiatives***

With the redevelopment of the Arena District in downtown Columbus, as well as the continued strength of local performance venues, restaurants, clubs, and the arts, Columbus has emerged as a strong destination for tourism, conventions, meetings, dining, and museums. Recent strategic planning to further enhance downtown Columbus's attraction of spending for retail, tourism, lodging and the arts all serve to differentiate Columbus as the cultural center of the region.

## **Information/ Professional and Business Services/ Finance & Insurance**

These industry clusters have been combined here and in the employment data presented previously because many of the clusters' space needs and location criteria are inter-related. Although maintaining a relatively flat growth pattern in recent years, these sectors form one of the backbones of the Columbus and regional economy, and have created visible shifts in office occupancy throughout the region.

### ***Economic Development Initiatives***

The recently completed deal with Grange Insurance Company exemplifies Columbus's retention of a major firm in this industry cluster. The 640-employee Columbus firm was aggressively courted by suburban communities armed with stronger incentive offerings than Columbus. In order to retain Grange, Columbus provided its first ever Large Office Employer Incentive outside of the downtown; this incentive has traditionally been reserved for office employers relocating to or expanding downtown. The incentive program rebates 50 percent of the income taxes to Grange that would otherwise be due to the City of Columbus.

### **Next Steps: Implications of Industry Clusters for Job Sites**

Phase II of this study will match the underutilized land identified in this report with the key industry clusters to identify potential job generation strategies. Phase II will match industries' locational criteria and development needs with and the job sites/corridors, leading to examples of prototypical development projects and related strategies for job retention, expansion, and attraction within the City of Columbus.

## Appendix A: Advisory Committee