



**Auditor of State  
Betty Montgomery**

**CITY OF UPPER ARLINGTON  
PERFORMANCE MANAGEMENT PROJECT**

AUGUST 25, 2005



**Auditor of State  
Betty Montgomery**

To the Citizens, Officials, and Project Team of the City of Upper Arlington:

The City of Upper Arlington (the City) and six other local governments were invited to participate in a Performance Management Project (the Project) because each was identified as a leader in financial reporting by professional organizations. This project was designed to enhance the City's public reporting process by assembling requested information in a user friendly manner. The seven entities participating in the Project include one county, four cities, one library, and one special district.

The mission of the Project is to provide citizens, officials, and employees with comprehensive and easily accessible indicators to assess the performance and enhance the planning process of the affected government entity. The report for the City contains socioeconomic indicators, key financial ratios, and a performance measurement exercise for two selected areas.

Reporting of socioeconomic conditions is important in the long-range planning process of an entity because it allows policies to be enacted within the parameters of the quantifiable resources and needs of the community. Reporting of key financial ratios is important to the strategic planning and budgeting processes. By using financial ratios, the entity can develop financial policies that help to define the amount of service available in a given time. Performance measurement allows the entity to determine the efficiency and effectiveness of an activity. This information can then be used to further enhance the strategic planning process and ensure the effective use of public dollars.

This report includes the following sections: project introduction; socioeconomic indicators; financial ratios; and performance management exercise. This report has been provided to the Council, City Manager, Finance Director, and the Project Team of Upper Arlington, and its contents have been discussed with the City Council, City Manager, Finance Director.

Additional copies of this report can be requested by calling the Clerk of the Bureau's office at (614) 466-2310 or toll free at (800) 282-0370. In addition, this report can be accessed online through the Auditor of State of Ohio website at <http://www.auditor.state.oh.us/>, by choosing the "On-Line Audit Search" option.

Sincerely,

A handwritten signature in black ink that reads "Betty Montgomery".

BETTY MONTGOMERY  
AUDITOR OF STATE

August 25, 2005

## Table of Contents

### **INTRODUCTION**

Background on Performance Management	1
Project Description	1
Background on City of Upper Arlington	2

### **SOCIOECONOMIC INDICATORS**

Background	3
Population and Demography Narrative	4
Population and Demography Charts	6
Housing and Geography Narrative	10
Housing and Geography Charts	11
Public Safety Narrative	14
Public Safety Charts	15
Property Tax Narrative	17
Property Tax Charts	18
Business Climate Narrative	20
Business Climate Charts	21
Personal Finance Narrative	22
Personal Finance Charts	24

### **FINANCIAL RATIOS**

Introduction	28
Financial Performance Ratios	29
Liquidity Ratios	31
Solvency Ratios	32
Fiscal Capacity Ratios	34
Risk Ratios	35
Operational Efficiency Ratio	36

### **PERFORMANCE MEASUREMENT EXERCISE**

Background	37
Purchasing Department Assessment Tool	38
EMS Billing Assessment Tool	44

## **Background on Performance Management**

Any organization requires reliable data to make informed decisions. Recent advances in information technology have made it possible to efficiently gather, sort and store data on internal and external factors impacting organizations. These repositories of data enable managers to analyze strengths, weaknesses, opportunities and threats to their organization like never before to benefit their consumers.

As citizens continually demand more responsive and competitive government, public officials are increasingly collecting data to assess external socioeconomic indicators for planning services and measure the performance of those services. Other states and national researchers have labeled Ohio a forerunner in collecting elementary and secondary education data through the Educational Management Information System (EMIS), which contains more than 200 data elements. This data is constantly analyzed by educators, researchers, the media, policymakers and citizens to measure the efficiency and effectiveness of education in Ohio.

Nonetheless, there are thousands of other local governments in Ohio that do not have such an effective tool to analyze data for planning and measuring their services. They must use websites of various state, federal and private agencies to search databases on the information they desire on external factors in their communities. In addition, many local governments do not consistently collect and maintain data to measure performance and manage their operations effectively. While the implementation of the Governmental Accounting Standard Board's Statement No. 34 will make government financial data much easier to analyze for policy purposes, many officials may not understand how to use this data to its full potential.

## **Brief Project Description**

The Performance Management Project (PMP) attempts to transfer knowledge and information, enabling local governments in Ohio to better serve citizens in an increasingly efficient and effective manner. It envisions a comprehensive portal system of data-sharing among Ohio's counties, municipalities, townships, libraries and other special districts. This network would offer a broad base of performance measures, both financial and socioeconomic, to help guide operating and policy decisions. It would also present an Internet class designed by academic experts to help local officials establish performance-based organizations. Site information could be tailored to the user profile.

This project takes into account that most organizations, government and non-government, go through cycles of high and low performance. Unlike many performance assessment programs, it does not attempt to institutionalize a methodology of performance management on any one or a group of governments. Rather, it provides a tool for all governments to use as they progress through the cycles.

This project is currently being piloted among several high-performing local governments, as defined by their financial reporting practices, including the cities of Brecksville, Upper Arlington, Westlake and Sydney; the Wayne County library system; Lake Metroparks; and Richland County. Each partner government is financially contributing to develop pilot performance measures in the areas of socioeconomic indicators, financial ratios, and operating performance measures.

Each partner will have a project team comprised of legislative, executive and operational members of the entity as well as one or more citizens. Team members involved with the PMP project for the City of Upper Arlington included:

<u>Name</u>	<u>Title</u>
Teri Kennedy	Management Assistant, Team Leader
Virginia Barney	City Manager
Cathe Armstrong	Finance Director
Debra Miller	Finance Administrator
Barbara Podnar	Purchasing Administrator
Mitch Ross	Fire Chief
Marvin Founds	Citizen, Upper Arlington Schools Treasurer

This report concludes Phase I of the PMP project, and details the selection of performance measures and the tools necessary to develop a performance driven organization. Key objectives and action plans for approaching Phase II of the project include:

- 10-15 socioeconomic indicators to assist in high-level, long-term policy analysis.
- 16 financial ratios providing a deeper analysis of government finances to help guide policy in the short-term.
- An exercise to develop objectives, performance measures and a self-assessment for two operational areas.

## **Background on City of Upper Arlington**

The city of Upper Arlington is a first-ring suburb of Columbus, Ohio. While it is one of the wealthiest cities in Franklin County in terms of median income and property valuation, it is also landlocked at 9.7 square miles and built out. This is especially evident in the lack of available space for commercial businesses experiencing growth, as some businesses are choosing to relocate. Partly as a result of this condition, the valuation of business property as a percentage of all valuation is steadily dropping.

The city is also experiencing an overall decline in population and persons per household, while seeing an increase in median age. Consequently, the city will need to continue focusing on the special service demands and the impact on revenues of this growing aged population.

The city has a long history of progressive financial management, particularly in its planning functions. City leaders hope to use data generated from this project to augment these planning efforts.

## **Socioeconomic Indicators**

Socioeconomic indicators encompass economic and demographic characteristics of the community, including population, income levels, age distribution, property values, employment, and business activities, etc. They allow a government analyst to focus on external opportunities (e.g, new revenue sources) and threats (e.g, increasing service demands).

For this project section, AOS mined databases from numerous state, federal and private organizations to develop potential socioeconomic indicators. It categorized hundreds of indicators into the following groups:

- Geography and housing,
- Environment,
- Public safety,
- Local business climate,
- Local labor market,
- Personal finance,
- Property taxes,
- Sales taxes,
- Income taxes,
- Other taxes,
- Abatements, and
- Local government fund.

In addition, clients could request analysis of specific socioeconomic indicators. After assessing the options, the Upper Arlington team chose to have the AOS populate the following indicators:

1. Demographic statistics and projections, including mortality rates and focus on senior population;
2. Housing indicators, including age of unit, tenure of householder, home valuation, and indicators on housing costs for the senior population;
3. Fire department statistics, including EMS and fire runs per capita, actual fire incidents, and department staffing (sworn vs. civilian) per capita;
4. Full-time police department employees (sworn vs. civilian) per capita;
5. Assessed value of all business property (real and tangible);

6. Major business expansions and attractions in Franklin County; and
7. Measurements of income (from Census Bureau and income tax returns).

#### *A. General Population and Demography*

##### Issues to Look For

Studying changes in population helps governments assess how well they have adjusted service levels. The team also stated this demographic data would be useful in planning for required services and for projecting revenue streams.

An aging population will require more specific services, such as retirees looking for recreation opportunities and increasing health care needs. Medical needs and EMS usage will be especially amplified in the oldest age bracket. An aging population can also impact revenue streams as workers retire and begin living on fixed incomes. Demographic trends among senior women living alone should especially be studied, since this population is generally in more need of services.

AOS was unable to locate data on population projections beyond the county level.

##### Observations

- The declining population indicates an aging, built-out community. Property values in the city compared to neighboring municipalities may also contribute to the population decline, pricing out younger families (page 6).
- If the population continues the trend of decreasing 0.3 percent each year, it will drop to 32,675 by 2010 and 31,664 by 2020 (page 6).
- The senior population as a whole remained stable from 1990 to 2000, but increased in the highest age cohorts. For example, the age group 75-84 increased by 15.2 percent and the age group 85 plus increased 19.7 percent (page 6).
- The population most at risk is senior women living alone, who comprise 22.8 percent of all seniors in households (page 7). This group had a median income that was 47.0 percent less than elderly men living alone in 1999 (page 25). Given the larger population of senior women in Upper Arlington (page 6), and the increased life expectancy of women over men (page 9), the number of elderly women living alone could likely increase.
- The following factors indicate the senior population in Upper Arlington may continue to increase:
  1. Increasing life expectancies, especially for women who comprised 59 percent of the senior population in 2000 (page 9),

2. A city mortality rate that, with the exception of one year (1998), declined between 1995 and 2000 (page 8), and
  3. A general projected increase in the number of seniors age 80 and above migrating into Ohio (page 8). A 2003 Census report entitled *Internal Migration of the Older Population: 1995-2000*, documented at advanced ages, health concerns may force some people to move closer to or in with their children, to assisted-care facilities, or to nursing homes in their home states.
- The number of residents relocating upon retirement could materially impact the growth of Upper Arlington's senior population. For example, page 6 indicates the 55-64 age cohort in 1990 decreased by 25 percent when it reached the 65-74 group in 2000.

## POPULATION AND DEMOGRAPHY

### TOTAL CITY POPULATION

Year	Total	Male	Female	Total Population Percent Change
1990	34,128	15,873	18,255	N/A
2000	33,686	15,884	17,802	-5.5%
2003 <sup>1</sup>	32,406	N/A	N/A	-9.1%

Source: U.S. Census

<sup>1</sup> Reflects official Census population estimate

### 2000 NEAR-SENIOR AND SENIOR CITIZEN POPULATION

	Total	Male	Female
Persons 55 to 64 years	3,439	1,629	1,810
Persons 65 to 74 years	3,018	1,348	1,670
Persons 74 to 84 years	2,414	977	1,437
Persons 85 years and over	822	236	586
Total persons 65 years +	6,254	2,561	3,693
Seniors as percent of total population	18.6%	16.1%	20.7%

Source: U.S. Census

### 1990 NEAR SENIOR AND SENIOR CITIZEN POPULATION

	Total	Male	Female
Persons 55 to 64 years	4,002	1,866	2,136
Persons 65 to 74 years	3,586	1,533	2,053
Persons 75 to 84 years	2,095	775	1,321
Persons 85 years and over	687	166	521
Total persons 65 years +	6,369	2,474	3,895
Percent change, 65+, 1990-00	-1.8%	3.5%	-5.2%
Seniors as percent of total population	18.7%	15.6%	21.3%

Source: U.S. Census

**HOUSEHOLD TYPE BY RELATIONSHIP FOR SENIORS <sup>1</sup>**

2000	
Seniors in households	5,989
In family households <sup>2</sup>	4,125
Householder	2,248
Male householder	1,874
Female householder	374
Spouse	1,663
Parent	89
Other relatives	120
Nonrelatives	5
Seniors in nonfamily households <sup>3</sup>	1,864
Male householder	385
Living alone	367
Not living alone	18
Female householder	1,456
Living alone	1,424
Not living alone	32
Nonrelatives	23
Seniors in institutional group quarters <sup>4</sup>	248

1990	
Seniors in households	6,100
In family households	4,197
Householder	2,278
Male householder	N/A
Female householder	N/A
Spouse	1,638
Parent	N/A
Other relatives	246
Nonrelatives	35
Seniors in nonfamily households	1,903
Male householder	263
Living alone	253
Not living alone	10
Female householder	1,605
Living alone	1,569
Not living alone	36
Nonrelatives	35
Seniors in institutional group quarters	270

Source: U.S. Census Bureau

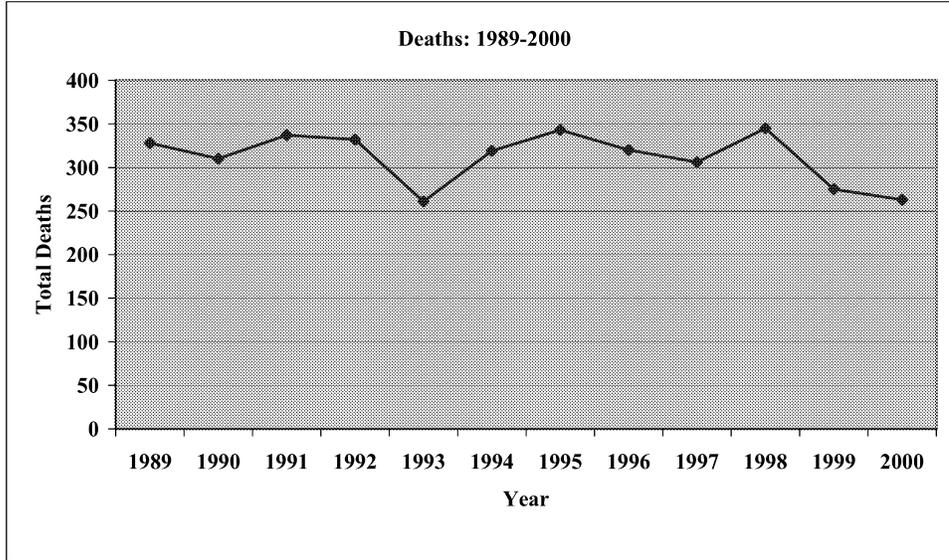
<sup>1</sup> A household includes all people who occupy a housing unit as their usual place of residence.

<sup>2</sup> A family includes a householder (person in whose name home is owned or rented) and one or more people living in the same household who are related to the householder by birth, marriage or adoption.

<sup>3</sup> A nonfamily household comprises a group of unrelated people or one person living alone.

<sup>4</sup> Institutional group quarters include nursing homes and similar facilities that are not housing units.

UPPER ARLINGTON MORTALITY STATISTICS



Source: Franklin County Health Department

STATE OF OHIO, PROJECTED MIGRATION PERCENTAGE BY AGE AND SEX: 2005-2030

AGE COHORTS	2000-2005		2005-2010		2010-2015		2015-2020		2020-2025		2025-2030	
	MIGRATION RATE		MIGRATION RATE		MIGRATION RATE		MIGRATION RATE		MIGRATION RATE		MIGRATION RATE	
	MALE	FEMALE										
0-4	-0.3%	-0.2%	-0.3%	-0.2%	-0.3%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%	-0.1%
5-9	3.0%	3.1%	3.5%	3.6%	3.6%	3.7%	3.9%	4.0%	3.8%	3.8%	4.0%	4.1%
10-14	6.5%	6.0%	7.8%	7.3%	7.9%	7.4%	8.9%	8.3%	8.7%	7.5%	9.2%	8.6%
15-19	-4.3%	-4.0%	-3.4%	-3.2%	-3.6%	-3.4%	-3.2%	-3.0%	-3.3%	-3.2%	-2.8%	-2.7%
20-24	-15.4%	-7.8%	-12.3%	-6.3%	-11.8%	-6.0%	-10.6%	-5.4%	-11.0%	-5.8%	-9.6%	-4.9%
25-29	-5.7%	2.2%	-4.8%	2.5%	-4.5%	2.4%	-3.6%	2.4%	-3.9%	2.3%	-3.4%	2.7%
30-34	7.0%	4.4%	9.1%	5.3%	9.1%	5.3%	9.1%	5.4%	8.4%	5.1%	9.3%	5.6%
35-39	5.0%	2.6%	5.8%	3.0%	6.5%	3.1%	7.1%	3.4%	6.4%	3.3%	6.5%	3.3%
40-44	2.7%	-0.1%	3.4%	-0.1%	3.4%	-0.1%	4.1%	-0.1%	4.0%	-0.1%	4.0%	-0.1%
45-49	1.1%	-0.9%	1.3%	-0.8%	1.4%	-0.9%	1.5%	-0.8%	1.6%	-0.8%	1.8%	-0.7%
50-54	0.4%	-1.8%	0.4%	-1.4%	0.4%	-1.5%	0.5%	-1.4%	0.5%	-1.5%	0.6%	-1.3%
55-59	-2.0%	-2.7%	-1.5%	-2.0%	-1.4%	-1.9%	-1.2%	-1.7%	-1.4%	-1.8%	-1.2%	-1.7%
60-64	-2.2%	-2.8%	-1.5%	-1.9%	-1.3%	-1.7%	-1.1%	-1.4%	-1.1%	-1.4%	-1.0%	-1.4%
65-69	-3.9%	-3.1%	-2.9%	-2.4%	-2.3%	-1.9%	-1.8%	-1.5%	-1.7%	-1.6%	-1.5%	-1.3%
70-74	-5.0%	-2.8%	-4.2%	-2.3%	-3.7%	-2.1%	-2.5%	-1.5%	-2.3%	-1.5%	-1.8%	-1.1%
75-79	-3.7%	-2.3%	-3.5%	-2.1%	-3.5%	-2.1%	-2.7%	-1.7%	-2.1%	-1.7%	-1.6%	-1.0%
80-84	1.6%	1.0%	1.9%	1.3%	2.2%	1.4%	2.4%	1.5%	2.0%	1.5%	1.7%	1.1%
85+	19.0%	7.8%	18.8%	8.1%	18.1%	7.9%	21.0%	9.1%	21.0%	8.2%	21.0%	9.3%
SUBTOTAL	-0.4%	-0.3%	0.3%	0.2%	0.3%	0.2%	0.7%	0.5%	0.6%	0.4%	1.0%	0.7%
TOTAL		-0.3%		0.3%		0.2%		0.6%		0.5%		0.9%

Source: Ohio Department of Development, Office of Strategic Research

**Table 28. Life expectancy at birth, at 65 years of age, and at 75 years of age, according to race and sex: United States, selected years 1900–2000**

[Data are based on death certificates]

Specified age and year	All races			White			Black <sup>1</sup>		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Remaining life expectancy in years									
At birth									
1900 <sup>2,3</sup>	47.3	46.3	48.3	47.6	46.6	48.7	33.0	32.5	33.5
1950 <sup>3</sup>	68.2	65.6	71.1	69.1	66.5	72.2	60.8	59.1	62.9
1960 <sup>3</sup>	69.7	66.6	73.1	70.6	67.4	74.1	63.6	61.1	66.3
1970	70.8	67.1	74.7	71.7	68.0	75.6	64.1	60.0	68.3
1980	73.7	70.0	77.4	74.4	70.7	78.1	68.1	63.8	72.5
1985	74.7	71.1	78.2	75.3	71.8	78.7	69.3	65.0	73.4
1990	75.4	71.8	78.8	76.1	72.7	79.4	69.1	64.5	73.6
1991	75.5	72.0	78.9	76.3	72.9	79.6	69.3	64.6	73.8
1992	75.8	72.3	79.1	76.5	73.2	79.8	69.6	65.0	73.9
1993	75.5	72.2	78.8	76.3	73.1	79.5	69.2	64.6	73.7
1994	75.7	72.4	79.0	76.5	73.3	79.6	69.5	64.9	73.9
1995	75.8	72.5	78.9	76.5	73.4	79.6	69.6	65.2	73.9
1996	76.1	73.1	79.1	76.8	73.9	79.7	70.2	66.1	74.2
1997	76.5	73.6	79.4	77.1	74.3	79.9	71.1	67.2	74.7
1998	76.7	73.8	79.5	77.3	74.5	80.0	71.3	67.6	74.8
1999	76.7	73.9	79.4	77.3	74.6	79.9	71.4	67.8	74.7
2000	76.9	74.1	79.5	77.4	74.8	80.0	71.7	68.2	74.9
At 65 years									
1950 <sup>2</sup>	13.9	12.8	15.0	---	12.8	15.1	13.9	12.9	14.9
1960 <sup>2</sup>	14.3	12.8	15.8	14.4	12.9	15.9	13.9	12.7	15.1
1970	15.2	13.1	17.0	15.2	13.1	17.1	14.2	12.5	15.7
1980	16.4	14.1	18.3	16.5	14.2	18.4	15.1	13.0	16.8
1985	16.7	14.5	18.5	16.8	14.5	18.7	15.2	13.0	16.9
1990	17.2	15.1	18.9	17.3	15.2	19.1	15.4	13.2	17.2
1991	17.4	15.3	19.1	17.5	15.4	19.2	15.5	13.4	17.2
1992	17.5	15.4	19.2	17.6	15.5	19.3	15.7	13.5	17.4
1993	17.3	15.3	18.9	17.4	15.4	19.0	15.5	13.4	17.1
1994	17.4	15.5	19.0	17.5	15.6	19.1	15.7	13.6	17.2
1995	17.4	15.6	18.9	17.6	15.7	19.1	15.6	13.6	17.1
1996	17.5	15.7	19.0	17.6	15.8	19.1	15.8	13.9	17.2
1997	17.7	15.9	19.2	17.8	16.0	19.3	16.1	14.2	17.6
1998	17.8	16.0	19.2	17.8	16.1	19.3	16.1	14.3	17.4
1999	17.7	16.1	19.1	17.8	16.1	19.2	16.0	14.3	17.3
2000	17.9	16.3	19.2	17.9	16.3	19.2	16.2	14.5	17.4
At 75 years									
1980	10.4	8.8	11.5	10.4	8.8	11.5	9.7	8.3	10.7
1985	10.6	9.0	11.7	10.6	9.0	11.7	10.1	8.7	11.1
1990	10.9	9.4	12.0	11.0	9.4	12.0	10.2	8.6	11.2
1991	11.1	9.5	12.1	11.1	9.5	12.1	10.2	8.7	11.2
1992	11.2	9.6	12.2	11.2	9.6	12.2	10.4	8.9	11.4
1993	10.9	9.5	11.9	11.0	9.5	12.0	10.2	8.7	11.1
1994	11.0	9.6	12.0	11.1	9.6	12.0	10.3	8.9	11.2
1995	11.0	9.7	11.9	11.1	9.7	12.0	10.2	8.8	11.1
1996	11.1	9.8	12.0	11.1	9.8	12.0	10.3	9.0	11.2
1997	11.2	9.9	12.1	11.2	9.9	12.1	10.7	9.3	11.5
1998	11.3	10.0	12.2	11.3	10.0	12.2	10.5	9.2	11.3
1999	11.2	10.0	12.1	11.2	10.0	12.1	10.4	9.2	11.1
2000	11.3	10.1	12.1	11.3	10.1	12.1	10.5	9.4	11.2

<sup>1</sup>Data shown for 1900–60 are for the nonwhite population.

<sup>2</sup>Death registration area only. The death registration area increased from 10 States and the District of Columbia in 1900 to the coterminous United States in 1933.

<sup>3</sup>Includes deaths of persons who were not residents of the 50 States and the District of Columbia.

NOTES: Beginning in 1997 life table methodology was revised to construct complete life tables by single years of age that extend to age 100. (Anderson RN. Method for Constructing Complete Annual U.S. Life Tables. National Center for Health Statistics. Vital Health Stat 2(129). 1999.) Previously abridged life tables were constructed for 5-year age groups ending with the age group 85 years and over. Data for additional years are available (see Appendix III).

SOURCES: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System; Grove RD and Hetzel AM. Vital Statistics Rates in the United States, 1940–1960. DHEW Pub. No. (PHS) 1677. Public Health Service. Washington: U.S. Government Printing Office, 1968; life expectancy trend data available at [www.cdc.gov/nchs/about/major/dvs/mortdata.htm](http://www.cdc.gov/nchs/about/major/dvs/mortdata.htm); Minino AM, Arias E, Kochanek KD, Murphy SL, Smith BL. Deaths: Final data for 2000. National vital statistics reports. vol 50 no 15. Hyattsville, Maryland: National Center for Health Statistics. 2002.

## *B. Housing and Geography*

### Issues to Look For

Studying housing structure age could indicate maintenance needs, while examining the year a householder moved into a unit helps define the stability of a community. Studying housing values can indicate potential revenue sources and trends in the condition of housing stock. It could also lead to potential adjustments in development policies. In addition, reviewing trends in monthly owner costs for unmortgaged homes can help indicate the potential burden of housing costs on the senior population.

### Observations

- There has been little new construction since the 1980s, indicating that the city is built out. Sixty percent of homes are 40 years and older, so there will be maintenance needs to consider (page 11).
- Although Upper Arlington is a mature community, 37.2 percent of householders moved into their homes between 1995 and 2000 (page 11). This could be linked to several factors, such as the large number of residents apparently relocating out of the city in the 55-64 age cohort (page 6).
- Median property values increased 19.5 percent between 1990 and 2000, discounting inflation (page 11).
- Monthly owner costs without mortgage increased 34.6 percent between 1990 and 2000, discounting inflation. These rising costs could particularly impact the elderly on fixed incomes and those suffering severe financial losses during the recession (page 12).
- In 2000, close to half of homeowners without mortgages reported monthly owner costs less than 10 percent of household income – a positive indicator. However, 8 percent of residents reported owner costs at or above 35 percent household income – doubling the 1990 rate (page 13). Furthermore, the rate of seniors with owner costs at or above 35 percent of household income for mortgaged houses increased 87.5 percent between 1990 and 2000. This represents approximately 10.2 percent of senior householders in Upper Arlington (page 13).

## HOUSING AND GEOGRAPHY

### AGE OF HOUSING UNITS

Structure Built	Number	Percentage
1999 to March 2000	25	0.2%
1995 to 1998	66	0.5%
1990 to 1994	160	1.1%
1980 to 1989	625	4.3%
1970 to 1979	1,781	12.3%
1960 to 1969	3,270	22.7%
1940 to 1959	6,855	47.5%
1939 or earlier	1,646	11.4%
<b>Totals</b>	<b>14,428</b>	<b>100.0%</b>

Source: U.S. Census Bureau

### YEAR HOUSEHOLDER MOVED INTO UNIT

	Number	Percentage
1999 to March 2000	1,701	12.2%
1995 to 1998	3,493	25.0%
1990 to 1994	2,207	15.8%
1980 to 1989	2,784	19.9%
1970 to 1979	1,855	13.3%
1969 or earlier	1,939	13.9%
<b>Totals</b>	<b>13,979</b>	<b>100%</b>

Source: U.S. Census Bureau

### MEDIAN HOME VALUES

	Value
2000	\$214,700
1990 (inflated)	\$179,363
Percent change, 1990-2000	19.50%

Source: U.S. Census Bureau

**HOME VALUE BY PRICE CATEGORY**

<b>VALUE</b>	<b>Number</b>	<b>Percentage</b>
Less than \$50,000	19	0.2%
\$50,000 to \$99,999	429	4.1%
\$100,000 to \$149,999	1,731	16.3%
\$150,000 to \$199,999	2,533	23.9%
\$200,000 to \$299,999	3,277	31.0%
\$300,000 to \$499,999	1,914	18.1%
\$500,000 to \$999,999	550	5.2%
\$1,000,000 or more	135	1.3%
<b>Total</b>	<b>10,588</b>	<b>100.0%</b>

Source: U.S. Census Bureau

**MONTHLY OWNER COSTS WITHOUT A MORTGAGE**

<b>Owner costs, 2000</b>	<b>Number</b>	<b>Percentage</b>
Less than \$100	6	0.2%
\$100 to \$149	0	0.0%
\$150 to \$199	14	0.4%
\$200 to \$249	48	1.4%
\$250 to \$299	107	3.2%
\$300 to \$399	418	12.5%
\$400 to \$499	819	24.5%
\$500 to \$699	1,128	33.7%
\$700 or more	808	24.1%
<b>Median (dollars)</b>	537	
<b>Not mortgaged, 2000</b>	3,348	31.6%
<b>Not mortgaged, 1990</b>	3,503	33.2%
<b>Percent change, 1990-2000</b>	-4.4%	
<b>Median cost, 2000</b>	\$537	
<b>Median cost, 1990 (inflated)</b>	\$399	
<b>Percent change</b>	34.60%	

Source: U.S. Census Bureau

**MORTGAGE STATUS AND SELECTED MONTHLY OWNER COSTS  
AS A PERCENTAGE OF HOUSEHOLD INCOME, HOMES WITHOUT A MORTGAGE**

<b>2000</b>	<b>Homes</b>
Not mortgaged	3,348
Less than 10 percent	1,558
10 to 14 percent	698
15 to 19 percent	395
20 to 24 percent	152
25 to 29 percent	155
30 to 34 percent	104
35 to 39 percent	89
40 to 49 percent	64
50 percent or more	115
Not computed	18
Median percentage	10.8%

<b>1990</b>	<b>Homes</b>
Not mortgaged	3,503
Less than 20 percent	2,963
20 to 24 percent	188
25 to 29 percent	116
30 to 34 percent	49
35 percent or more	133
Not computed	54
Median percentage	11.6%

Source: U.S. Census Bureau

**AGE OF HOUSEHOLDER BY SELECTED MONTHLY OWNER  
COSTS AS A PERCENTAGE OF HOUSEHOLD INCOME (MORTGAGED AND  
UNMORTGAGED)**

<b>HOUSEHOLDER 65 PLUS</b>	
<b>2000 Total</b>	
Less than 20 percent	2,016
20 to 24 percent	189
25 to 29 percent	209
30 to 34 percent	146
35 percent or more	422
Not computed	12

<b>HOUSEHOLDER 65 PLUS</b>	
<b>1990 Total</b>	
Less than 20 percent	2,159
20 to 24 percent	262
25 to 29 percent	130
30 to 34 percent	73
35 percent or more	225
Not computed	29

Source: U.S. Census Bureau

## *C. Public Safety*

### Issues to Look For

Upper Arlington has regional coverage agreements with surrounding townships and municipalities, which include EMS services. Adjoining departments can cross corporation lines to service non-residents if the their unit is located closest to the service call address, or to assist if a department's units are servicing other residents. Given that these regional runs occur so frequently, and there are no defined coverage areas in these regional agreements, it is not possible to obtain coverage population figures to calculate a per capita ratio. Therefore, this project will only report total runs, although the department should consider attempting to geographically plot out average run areas outside the city so that it could develop per capita ratios. Fire/EMS calls should be studied in conjunction with historical department staffing per 1,000 residents to ensure adequate staff is available to meet service demands. Actual fire incidents can be another indicator to determine if sufficient resources are being allocated for fire protection, including prevention programs. These statistics also include fire incidents serviced by Upper Arlington outside the city limits. Consequently, reviewing fire incidents can also help the city reassess the effectiveness of its response agreements with other communities.

Studying historical fire and police staffing per 1,000 residents helps ensure adequate staff are available to meet changing service demands. However, this data could be studied in conjunction with the volume of calls and uniform crime reports to fully assess staffing adequacy. This should also include a study of sworn vs. civilian staff to ensure effective and efficient deployment. Lastly, benchmarking staffing and operational statistics to similar cities and industry standards would further aid the city in allocating sufficient police and fire staffing levels.

### Observations

- Though the number of EMS calls fell 10 percent between 2002 and 2004 (page 15), this trend may not continue long-term given the city's aging population (page 6). The number of calls for active fires has remained fairly constant (page 15).
- The number of structure fires reported to the state Fire Marshal's Office in 2004 increased by 21 percent over the prior year, but remained slightly below 2002 levels. The city should investigate the degree to which the increase in structure fires involves at-risk populations, such as seniors, who might benefit from additional preventive programming (page 15). The increased number of structure fires in 2004 likely contributed to a 34.3 percent increase in total losses from the prior year, though these losses remained 28.8 percent below 2002 levels.
- Fire and police staffing levels per 1,000 residents increased slightly from 2000 to 2003, excluding the significant increase (23.3 percent) in police civilian staffing levels. As a result, the city should further investigate the increase in police civilian staff (page 16). Furthermore, increased EMS demand could require more fire department staffing in the future.

## PUBLIC SAFETY INDICATORS

### SERVICE CALLS <sup>1</sup>

	EMS	Fire	Hazardous Condition <sup>2</sup>	Other <sup>3</sup>
2004	1,247	125	240	1,748
2003	1,341	126	253	1,709
2002	1,385	123	223	1,869
Percent change, 2002-04	-10.0%	1.6%	7.6%	-6.5%

Source: Ohio Department of Commerce, State Fire Marshal's Office

<sup>1</sup> Calls reflect both Upper Arlington and adjacent city/township areas served by mutual agreement with adjoining departments.

<sup>2</sup> Represents non-fire overheating, overpressure ruptures, gas leaks, electrical problem, chemical spill, etc.

<sup>3</sup> Other categories include overheating (no fire), hazardous conditions, service and good intent calls, false alarms, severe weather and unclassified incidents.

### OHIO FIRE INCIDENT REPORTING SYSTEM <sup>1</sup>

#### STRUCTURE FIRES

2004	40
2003	33
2002	41

Source: Ohio Department of Commerce, State Fire Marshal's Office

<sup>1</sup> This data may involve incidents in areas outside city limits served

#### VEHICLE FIRES

2004	5
2003	13
2002	10

Source: Ohio Department of Commerce, State Fire Marshal's Office

#### OTHER FIRES <sup>1</sup>

2004	80
2003	80
2002	72

Source: Ohio Department of Commerce, State Fire Marshal's Office

<sup>1</sup> Includes contained fires in kitchen

#### TOTAL FIRE LOSSES

2004	\$309,535
2003	\$230,540
2002	\$434,310

Source: Ohio Department of Commerce, State Fire Marshal's Office

## PUBLIC SAFETY STAFFING

### POLICE DEPARTMENT STAFF PER 1,000 RESIDENTS OFFICERS

2003	1.48
Percent change, 2000-2003	3.5%
Percent change, 1990-2003	-2.6%

Source: Upper Arlington Police Department, U.S. Census Bureau

### CIVILIAN EMPLOYEES

2003	0.37
Percent change, 2000-2003	23.3%
Percent change, 1990-2003	27.6%

Source: Upper Arlington Police Department, U.S. Census Bureau

### TOTAL EMPLOYEES

2003	1.85
Percent change, 2000-2003	7.6%
Percent change, 1990-2003	2.2%

Source: Upper Arlington Police Department, U.S. Census Bureau

### FIRE DEPARTMENT STAFF PER 1,000 RESIDENTS SWORN PERSONNEL

2003	1.88
Percent change, 2000-03	5.6%
Percent change, 1990-2003	-1.6%

Source: Upper Arlington Fire Department

### CIVILIAN PERSONNEL

2003	0.12
Percent change, 2000-03	0.0%
Percent change, 1990-2003	0.0%

Source: Upper Arlington Fire Department

### TOTAL PERSONNEL

2003	2.0
Percent change, 2000-03	5.3%
Percent change, 1990-2003	0.0%

Source: Upper Arlington Fire Department

#### *D. Property Taxes*

##### Issues to Look For

Trends in property valuation are good indicators of the local tax base, economy and employment opportunities. Comparing trends in business valuation against residential valuation helps indicate what will drive future revenue streams.

An over-reliance on any one sector, whether business, residential or components of business, could lead to revenue issues if that source were to suddenly decline. For example, State legislative actions have led to declines in public utility and business personal property taxes that have significantly impacted the revenues of several governments.

Upper Arlington has no property zoned for industrial usage. Also, it has limited space for commercial development due to its being built-out.

##### Observations

- Total business valuation was less in 2003 than 1996. As a percentage of total assessed value, it decreased in 1999 and 2003 (page 18).
- Losses in tangible personal property are eclipsing growth in real commercial property (page 18 and 19). This trend was accelerated in 2003 due to action by the State Legislature to speed the phase-out of the inventory tax on tangible property, as well as the lack of space for new commercial development (page 19).
- Public utility personal property valuation has likewise fallen by 30.5 percent since 1996 due to deregulation of utilities by the State Legislature (page 19). However, 2003 valuation increased slightly over 2002 levels.

## BUSINESS PROPERTY TAXES

### ASSESSED VALUE OF ALL BUSINESS PROPERTY (REAL AND TANGIBLE)

<b>2003</b>	\$150,171,000
<b>1999</b>	\$155,549,346
<b>1996</b>	\$151,843,775
<b>Percent change, 1999-03</b>	-3.5%
<b>Percent change, 1996-03</b>	-1.1%
<b>As a percentage of total assessed value, 2003</b>	11.7%
<b>As a percentage of total assessed value, 1999</b>	14.2%
<b>As a percentage of total assessed value, 1996</b>	15.3%

Source: Ohio Department of Taxation, Tax Analysis Division

### ASSESSED VALUE COMMERCIAL PROPERTY <sup>1</sup>

<b>2003</b>	\$115,315,000
<b>1999</b>	\$102,124,920
<b>1996</b>	\$90,906,960
<b>Percent change, 1999-03</b>	12.9%
<b>Percent change, 1996-03</b>	26.8%
<b>As a percentage of total assessed business value, 2003</b>	76.8%
<b>As a percentage of total assessed business value, 1999</b>	65.7%
<b>As a percentage of total assessed business value, 1996</b>	59.9%

Source: Ohio Department of Taxation, Tax Analysis Division

<sup>1</sup> Includes the real estate portion of public utility property.

**ASSESSED VALUE OF TANGIBLE PERSONAL PROPERTY <sup>1</sup>**

<b>2003</b>	\$17,665,845
<b>1999</b>	\$31,589,426
<b>1996</b>	\$36,197,015
<b>Percent change, 1999-03</b>	-44.1%
<b>Percent change, 1996-03</b>	-51.2%
<b>As a percentage of total assessed business value, 2003</b>	11.8%
<b>As a percentage of total assessed business value, 1999</b>	20.3%
<b>As a percentage of total assessed business value, 1996</b>	23.8%

Source: Ohio Department of Taxation, Tax Analysis Division

<sup>1</sup> Figures are after deduction of the \$10,00 exemption granted each taxpayer.

**ASSESSED VALUE, PUBLIC UTILITY TANGIBLE PROPERTY**

<b>2003</b>	\$17,190,000
<b>1999</b>	\$21,835,000
<b>1996</b>	\$24,739,800
<b>Percent change, 1999-03</b>	-21.3%
<b>Percent change, 1996-03</b>	-30.5%
<b>As a percentage of total assessed business value, 2003</b>	11.4%
<b>As a percentage of total assessed business value, 1999</b>	14.0%
<b>As a percentage of total assessed business value, 1996</b>	16.3%

Source: Ohio Department of Taxation, Tax Analysis Division

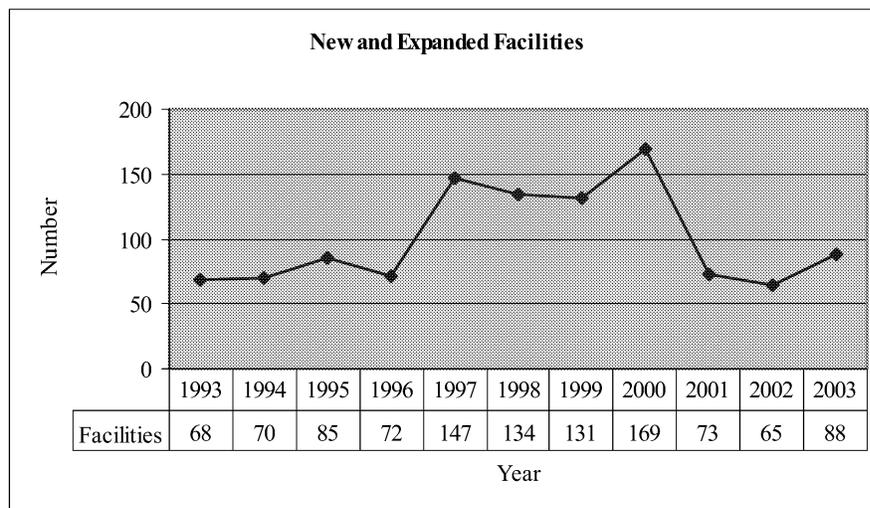
E. Business Climate

Issues to Look For

Business starts and active businesses are key indicators of economic health and revenue trends. Even though most data is only available at the Franklin County level, it is nonetheless important to review since most Upper Arlington residents work outside the city limits. New and expanding facilities are key indicators of business growth and revenue streams. Data gathered from the Ohio Department of Development includes private projects with at least \$1 million in investment, an addition of 20,000 square feet of space, or 50 new jobs. Projects are restricted to manufacturing, distribution, office, hotel, or research and development.

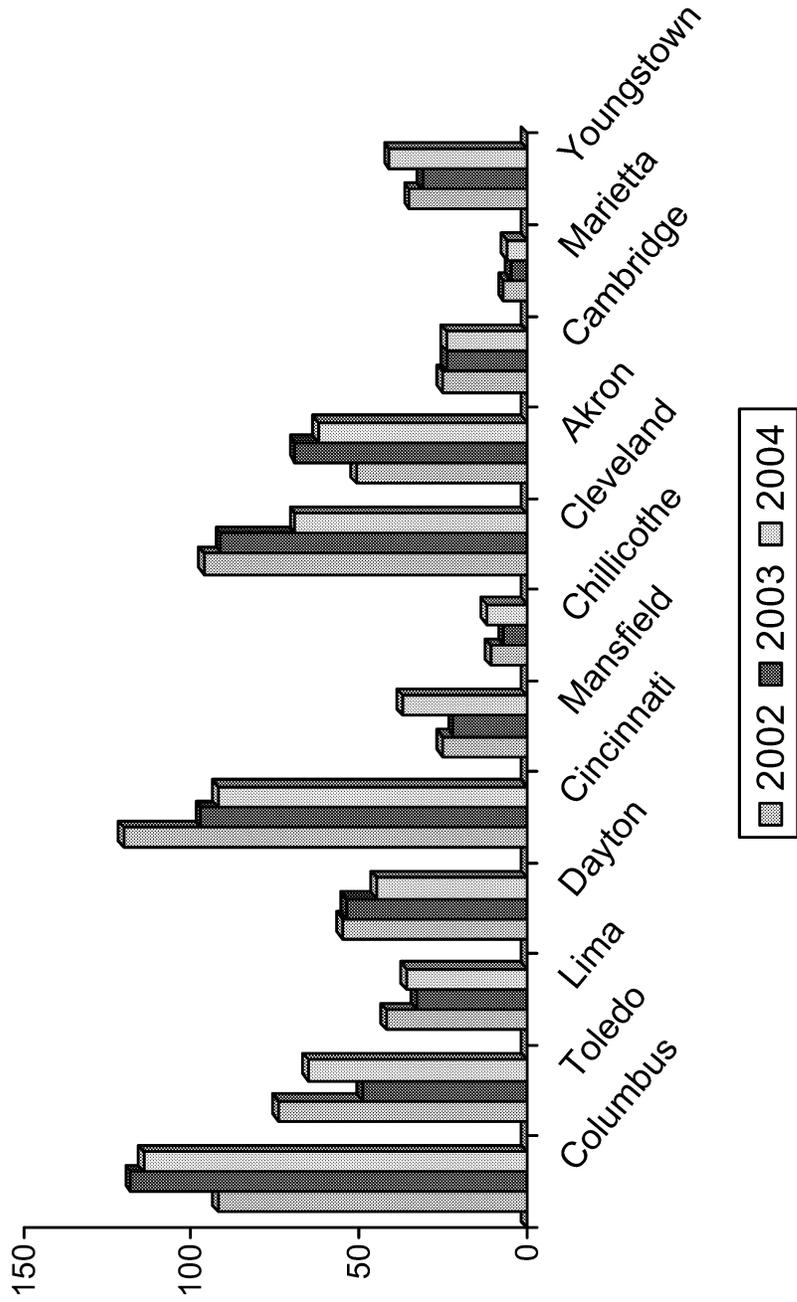
Observations

- The Columbus region led the state in new investment projects in 2003 and 2004 (page 21).
- Based on city-specific data from 2000-2003, businesses have made two major investments in Upper Arlington. Projects announced include:
  - \$7 million investment in new office space (Daimler Group) in 2004;
  - \$5 million investment in new office space (Bedrock Group) in 2003;
  - \$1 million investment for call center expansion (America Online) in 2002, creating 165 new jobs; and
  - \$16.5 million office expansion investment (CompuServe) in 2000, creating 55 new jobs.
- The number of new and expanded facilities announced in Franklin County fell 61.5 percent from 2000 to 2002. However, 2003 announcements increased 35 percent over the prior year.



Source: Ohio Department of Development, Office of Strategic Research

# Investment Projects by Region, 2002 - 2004



Source: Ohio Department of Development, Office of Strategic Research

## F. Personal Finance

### Issues to Look For

Tracking personal income helps gauge potential revenues or service demands. This is especially true when tracking income levels by age groups, such as seniors, who may demand more services but have a limited ability to assume new tax burdens. Analyzing income according to families, households and per capita also helps tell how fast incomes are rising in comparison to overall population growth.

The report looks at two measurements of income: the Census Bureau's measure of money income and the Federal Adjusted Gross Income from filers in the Upper Arlington City School District. The Ohio Department of Taxation does not track filers by municipal boundaries.

Money income consists of income in cash and its equivalents that is received by individuals, and it excludes employer contributions to government employee retirement plans and to private health and pension funds, lump-sum payments except those received as part of earnings, certain in-kind transfer payments (e.g., Medicaid, Medicare, and food stamps), and imputed income. Money income includes personal contributions for insurance, retirement income from government employee retirement plans and from private pensions and annuities, and income from interpersonal transfers (e.g., child support).

Adjusted gross income consists of the taxable income of individuals who filed a federal income tax return. It includes, while personal income excludes, personal contributions for insurance, gains and losses on the sale of assets, and retirement income from government employee retirement plans and from private pensions and annuities. Adjusted gross income excludes, while personal income includes, the income of the recipients of taxable incomes who, legally or illegally, did not file an individual tax return.

### Observations

- Household, family and per capita money income all appreciated from 1989 to 1999, between 5 to 11 percent beyond the rate of inflation. The large percentage of senior householders, especially women living alone, likely contributed to the lower household increase (page 24).
- There is significant income in the 35-64 range. If these cohorts are setting aside sufficient funds for retirement, this could help ease some of the service demands of the aging population in future years (page 25).
- The median income for senior female householders living alone is only \$28,333, which is nearly one-third less than senior men living alone. Given the large population in this cohort and the increasing homeowner costs for seniors, service demands for this population could increase (page 25).

- Twenty-eight percent of senior householders reported incomes under \$30,000, and 35.3 percent of householders over 75 reported incomes under \$30,000 (page 26).
- Even though the population is aging, households drawing retirement and Social Security income are actually less than 1990. This may indicate people are waiting longer to retire. They may be working longer than expected due to the recent economic downturn (page 27).
- Total and average federal adjusted gross income (FAGI) for school district filers increased 7.3 percent and 9.9 percent, respectively, from 2001 to 2002. This followed declines of 10.0 percent and 7.2 percent, respectively, from 2000 to 2001 (page 27).
- Since 1999, average FAGI has increased 5.9 percent while total FAGI has increased only 0.3 percent when adjusted for inflation because the number of returns has drastically fallen (page 27).
- Despite year-to-year fluctuations, the Upper Arlington School District's rank for average FAGI among all Ohio school districts has steadily increased from 1999 to 2002 (page 27).

## PERSONAL FINANCE

### CENSUS MONEY INCOME INDICATORS -- MEDIAN INCOME <sup>1</sup> HOUSEHOLD INCOME <sup>2</sup>

1999		1989		Percent change	
Total households	1999 median income	Total households	1989 median income (inflated)	Total households	Median income
14,002	\$72,116	14,028	\$68,968	-0.2%	4.6%

Source: Ohio Department of Development, Office of Strategic Research

<sup>1</sup>The median represents the middle value in an ordered list of data values. This differs from measurements of average income (page 27), which is the sum of values divided by the number of values.

<sup>2</sup>A household includes all the persons who occupy a housing unit.

### FAMILY INCOME <sup>1</sup>

1999		1989		Percent change	
Total families	1999 median income	Total families	1989 median income (inflated)	Total families	Median income
9,552	\$90,208	10,096	\$81,489	-5.4%	10.7%

Source: Ohio Department of Development, Office of Strategic Research

<sup>1</sup> A family is a group of two or more people (one of whom is the householder) related by birth, marriage or adoption and living together.

### PER CAPITA INCOME

1999	1989 (Inflated)	Percent change	Ratio of female to male earnings (full-time)
\$42,025	\$39,439	6.6%	0.62

Source: Ohio Department of Development, Office of Strategic Research

## CENSUS MONEY INCOME INDICATORS

### MEDIAN HOUSEHOLD INCOME IN 1999

<b>Total</b>	\$72,116
<b>Householder <sup>1</sup> under 25 years</b>	\$24,583
<b>Householder 25 to 34 years</b>	\$66,352
<b>Householder 35 to 44 years</b>	\$84,980
<b>Householder 45 to 54 years</b>	\$95,611
<b>Householder 55 to 64 years</b>	\$84,511
<b>Householder 65 to 74 years</b>	\$63,860
<b>Householder 75 years and over</b>	\$43,056

Source: U.S. Census Bureau

<sup>1</sup> A householder is the person, or one of the people, in whose name the home is owned or rented.

### MEDIAN INCOME IN 1999 BY SELECTED CHARACTERISTICS

<b>Families</b>	<b>\$90,208</b>
<b>With own children under 18 years</b>	\$96,790
<b>No own children under 18 years</b>	\$81,996
<b>Married-couple families</b>	\$97,687
<b>With own children under 18 years</b>	\$105,660
<b>No own children under 18 years</b>	\$90,282
<b>Female householder, no husband present</b>	\$44,917
<b>With own children under 18 years</b>	\$45,089
<b>No own children under 18 years</b>	\$44,766
<b>Nonfamily households</b>	<b>\$43,220</b>
<b>Male householder</b>	\$52,731
<b>Male householder living alone</b>	\$44,010
<b>Male householder 65 and over living alone</b>	\$41,648
<b>Female householder</b>	\$40,827
<b>Female householder living alone</b>	\$39,320
<b>Female householder 65 and over living alone</b>	\$28,333

Source: U.S. Census Bureau

**AGE OF HOUSEHOLDER BY HOUSEHOLD INCOME 1999  
SENIOR POPULATION**

**HOUSEHOLDER 65 TO 74 YEARS**

<b>Total Householders</b>	1,951
<b>Less than \$10,000</b>	33
<b>\$10,000 to \$14,999</b>	86
<b>\$15,000 to \$19,999</b>	54
<b>\$20,000 to \$24,999</b>	141
<b>\$25,000 to \$29,999</b>	80
<b>\$30,000 to \$34,999</b>	47
<b>\$35,000 to \$39,999</b>	92
<b>\$40,000 to \$44,999</b>	117
<b>\$45,000 to \$49,999</b>	66
<b>\$50,000 to \$59,999</b>	205
<b>\$60,000 to \$74,999</b>	279
<b>\$75,000 to \$99,999</b>	269
<b>\$100,000 to \$124,999</b>	135
<b>\$125,000 to \$149,999</b>	157
<b>\$150,000 to \$199,999</b>	72
<b>\$200,000 or more</b>	118

Source: U.S. Census Bureau

**HOUSEHOLDER 75 YEARS AND OVER**

<b>Total Householders</b>	2,138
<b>Less than \$10,000</b>	108
<b>\$10,000 to \$14,999</b>	159
<b>\$15,000 to \$19,999</b>	109
<b>\$20,000 to \$24,999</b>	183
<b>\$25,000 to \$29,999</b>	196
<b>\$30,000 to \$34,999</b>	93
<b>\$35,000 to \$39,999</b>	125
<b>\$40,000 to \$44,999</b>	145
<b>\$45,000 to \$49,999</b>	86
<b>\$50,000 to \$59,999</b>	202
<b>\$60,000 to \$74,999</b>	256
<b>\$75,000 to \$99,999</b>	178
<b>\$100,000 to \$124,999</b>	133
<b>\$125,000 to \$149,999</b>	38
<b>\$150,000 to \$199,999</b>	61
<b>\$200,000 or more</b>	66

Source: U.S. Census Bureau

**EARNINGS AND SPECIAL INCOME INDICATORS**

	1999		1989	
	Number	Percent	Number	Percent
<b>With earnings<sup>1</sup></b>	11,253	80.40%	11,212	79.90%
<b>Average household earnings</b>	\$95,410	N/A	N/A	N/A
<b>With Social Security income</b>	4,023	28.70%	4,298	30.60%
<b>Average Social Security income</b>	\$13,344	N/A	N/A	N/A
<b>With Supplemental Security Income</b>	169	1.20%	N/A	N/A
<b>Average Supplemental Security Income</b>	\$8,876	N/A	N/A	N/A
<b>With public assistance income</b>	26	0.20%	254	1.80%
<b>Average public assistance income</b>	\$6,208	N/A	N/A	N/A
<b>With retirement income</b>	3,100	22.10%	3,111	22.20%
<b>Average retirement income</b>	\$26,563	N/A	N/A	N/A

Source: U.S. Census Bureau

<sup>1</sup> Earnings is defined as the algebraic sum of wage or salary income and net income from self-employment. Earnings represent the amount of income received regularly before deductions for personal income taxes, Social Security, bond purchases, union dues, Medicare deductions, etc.

**FEDERAL ADJUSTED GROSS INCOME, UPPER ARLINGTON SCHOOL DISTRICT (FAGI)<sup>1</sup>**

Year	Number of income tax returns	Total FAGI	Average FAGI	State ranking
<b>2002</b>	17,422	\$1,870,003,454	\$107,336	8
<b>2001</b>	17,837	\$1,742,775,492	\$97,706	9
<b>2000</b>	18,427	\$1,941,844,191	\$105,380	10
<b>1999</b>	18,392	\$1,863,516,957	\$101,322	14

Source: Ohio Department of Taxation, Division of Tax Analysis

<sup>1</sup> Figures adjusted for inflation to 2002 dollars.

## Financial Ratios

The new financial reporting model known as GASB Statement No. 34 is the most sweeping accounting reform in the history of government accounting. Under the new standard, anyone with an interest in public finance—citizens, the media, bond raters, creditors, legislators, and others—will have more and easier-to-understand information about their governments.

The PMP complemented this innovation by developing 16 ratios, many of which are based on the new GASB statements, to measure financial performance. These ratios fall under the following general categories:

- Financial performance,
- Liquidity,
- Solvency,
- Fiscal capacity,
- Risk, and
- Operational efficiency.

The following charts demonstrate these 16 ratios for Upper Arlington and the cities of Brecksville, Sidney, and Westlake (including the average ratios of these three cities), for 2003. All of the cities report using the new financial model and have investment grade ratings without bond insurance of A or better from one or more of the bond rating agencies. While these cities may differ in demographics, geographies and services/activities (e.g., Brecksville has no business type activities), the following data and charts can assist the City of Upper Arlington in developing financial policies for desired ranges of financial ratios using the new accounting model.

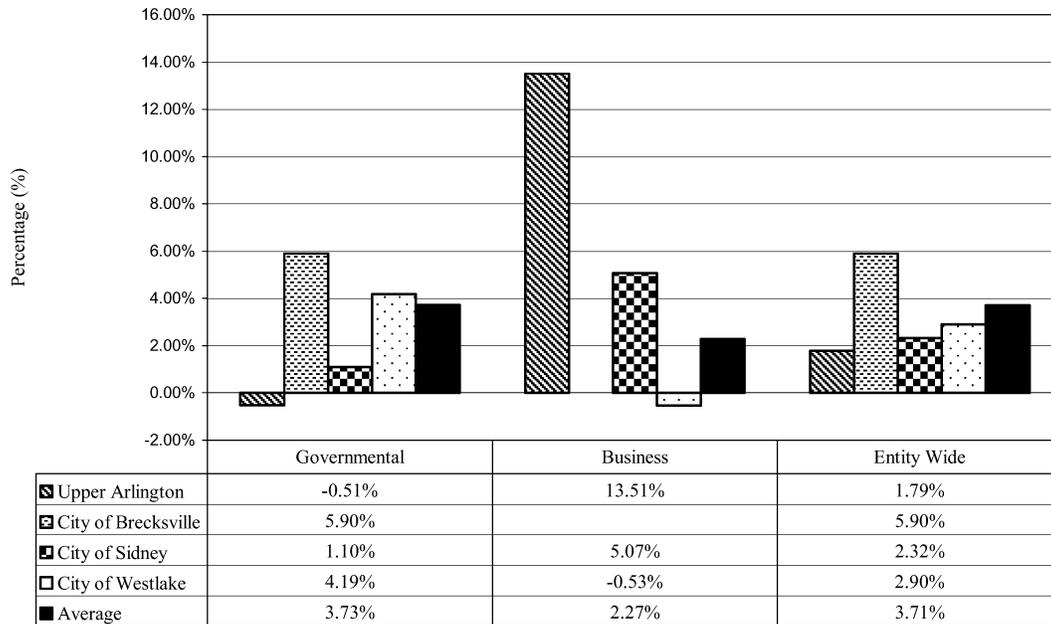
*Recommended Budget Practices: A Framework For Improved State and Local Government Budgeting* (1998) published by the Government Finance Officers Association provides a framework for financial management. More specifically, it recommends that an entity adopt financial policies in numerous areas encompassed by the PMP's 16 ratios, including the following:

- Stabilization of funds...Chart 8
- Fees and charges...Chart 15
- Debt issuance and management...Charts 6, 7, 9, 10, 11
- Debt level capacity...Charts 12, 13
- One-time revenues and revenue diversification...Charts 3, 14
- Balancing the operating budget and contingency planning...Charts 1, 2, 5

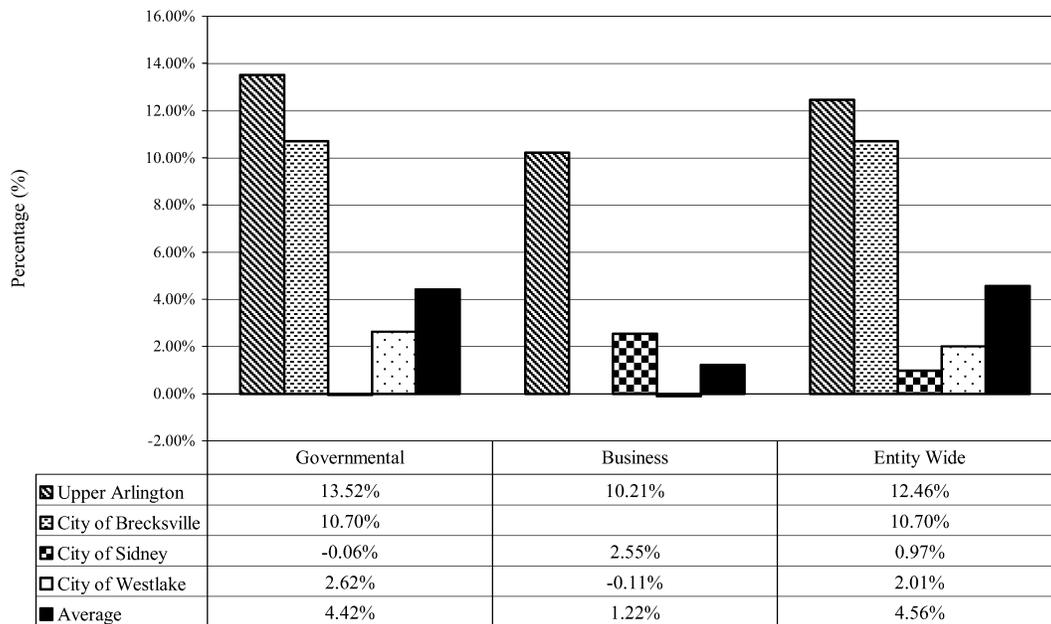
This publication also recommends that entities monitor, measure, and evaluate their financial condition, as well as evaluate the use of unpredictable revenues. In addition to performing these general activities, the City of Upper Arlington should consider using the ensuing data and charts to help in developing financial policies and practices consistent with the needs of its citizens.

## A. Financial Performance

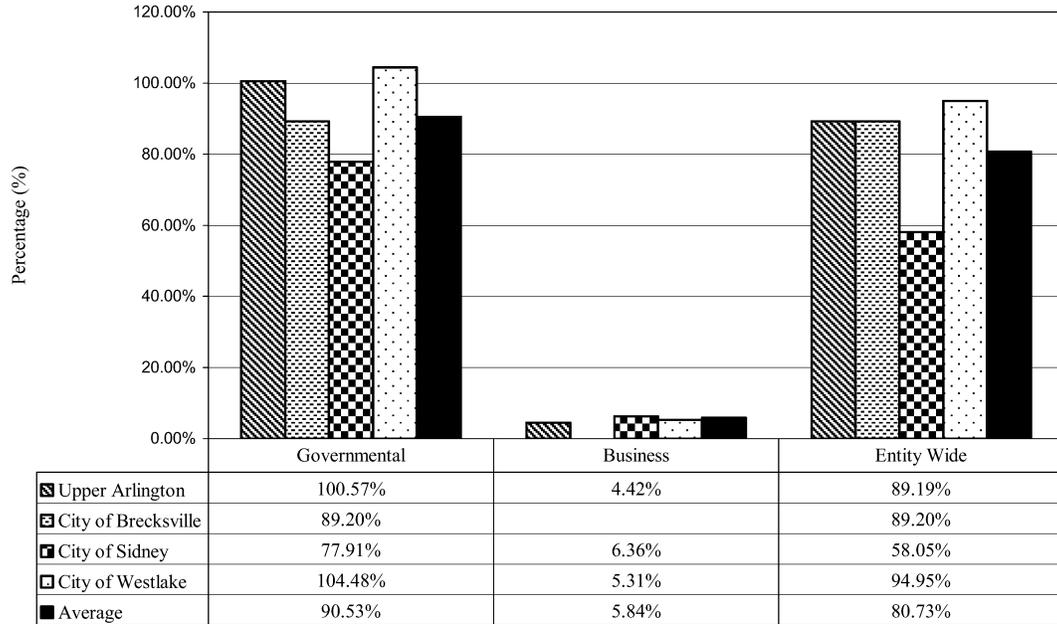
**Return on Net Assets - Chart 1** (Indicates if government is providing for future generations, remaining neutral in providing resources, or spending resources of future and/or past generations)



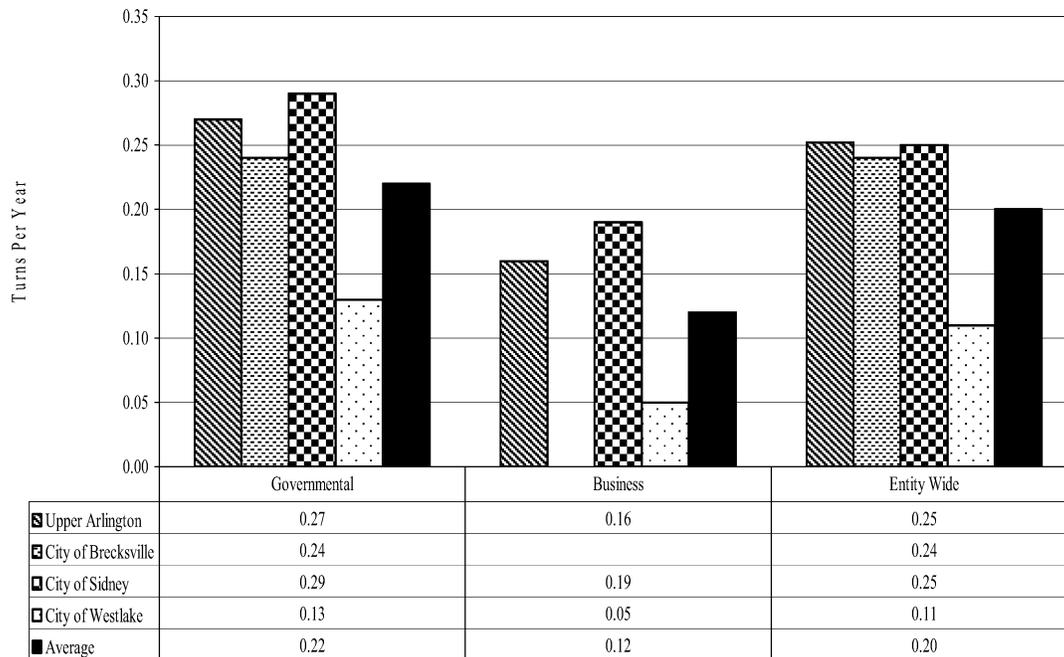
**Change in Capital Assets - Chart 2** (Indicates if government is financially maintaining equipment and infrastructure)



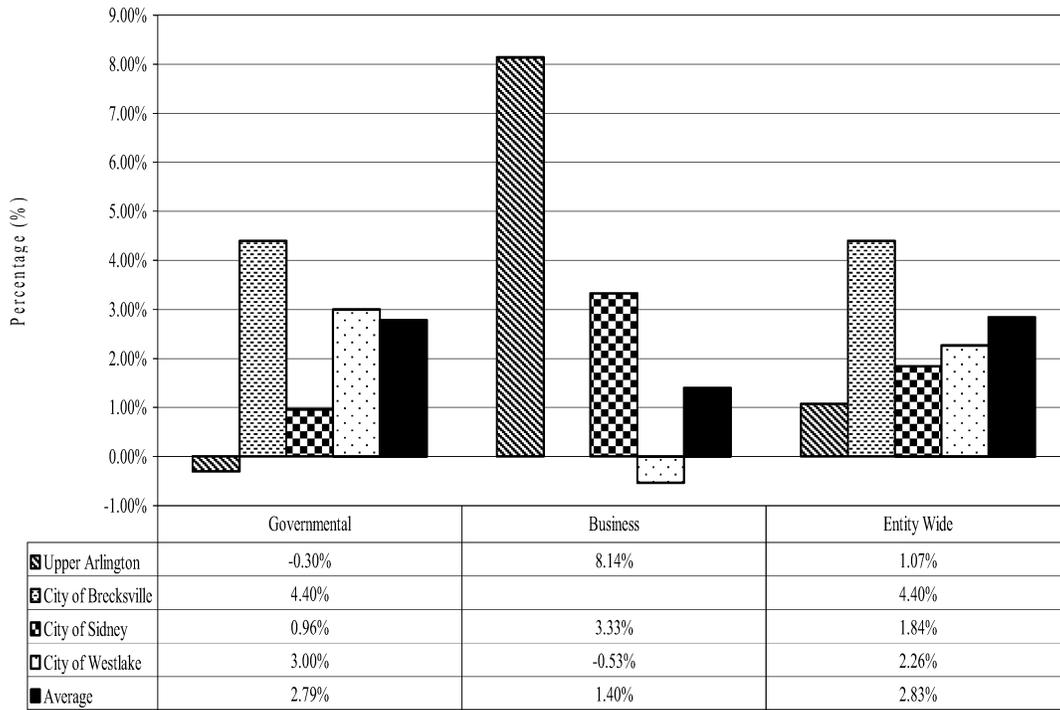
**General Support Rate - Chart 3** (Indicates the dependency on state/federal revenues to deliver services. Percentages reflect the amount of local taxes collected divided by expenses)



**Asset Turns Per Year - Chart 4** (Indicates the time to turn assets into goods or services. 100% equals one year)

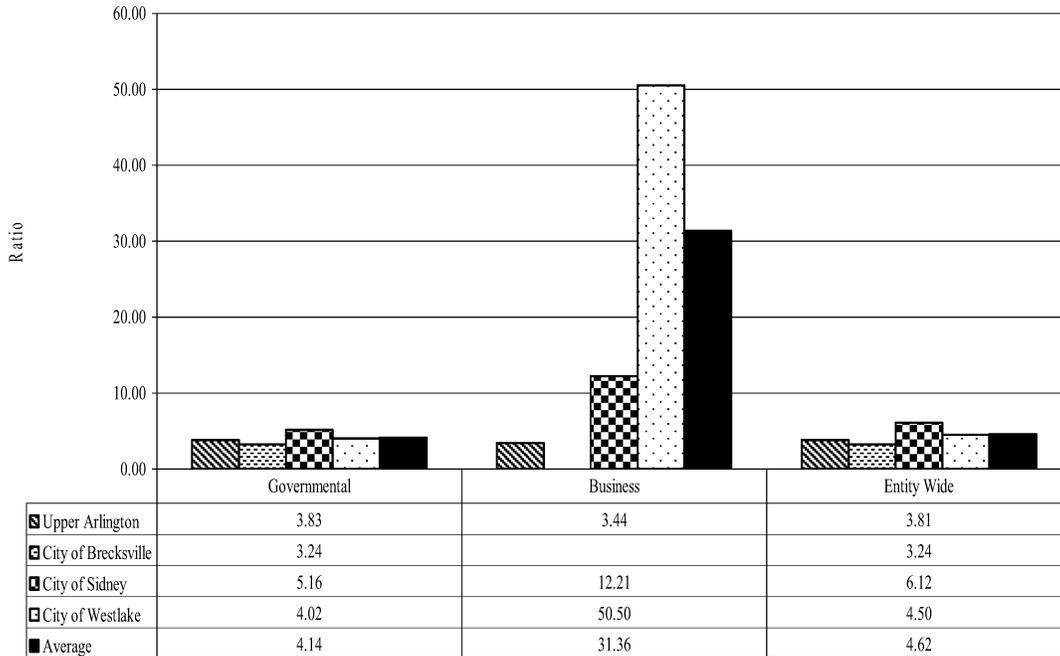


**Return on Assets - Chart 5** (Indicates ability of government to replace assets and/or invest back into operations)

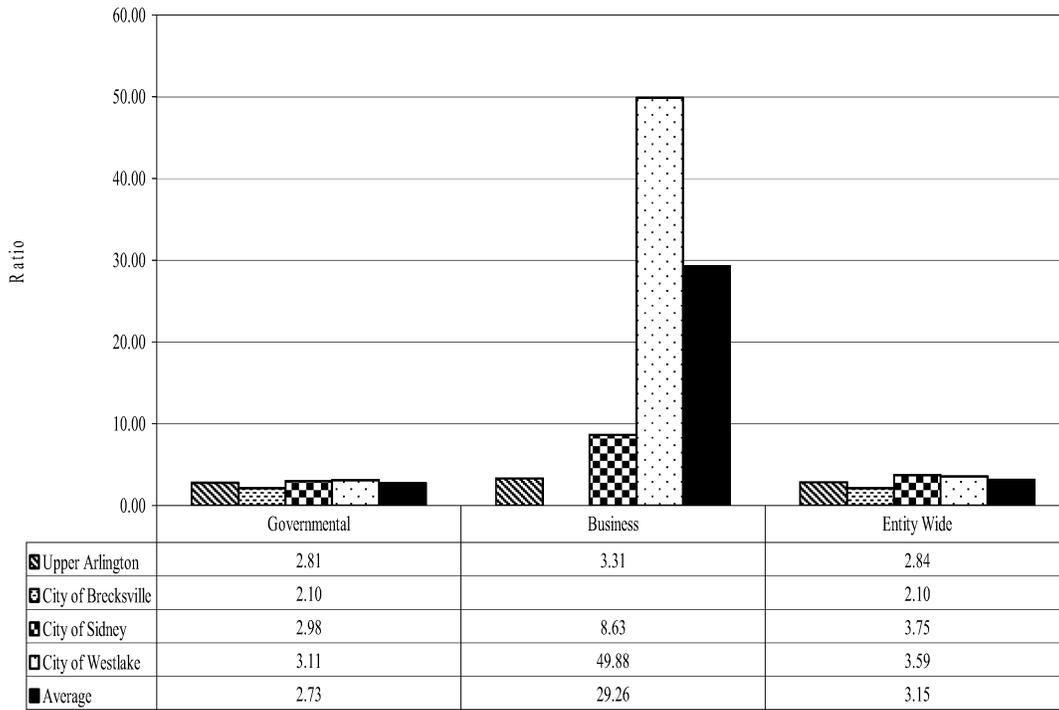


**B. Liquidity**

**Current Ratios - Chart 6** (Indicates ability of governments to pay current liabilities with current assets.)

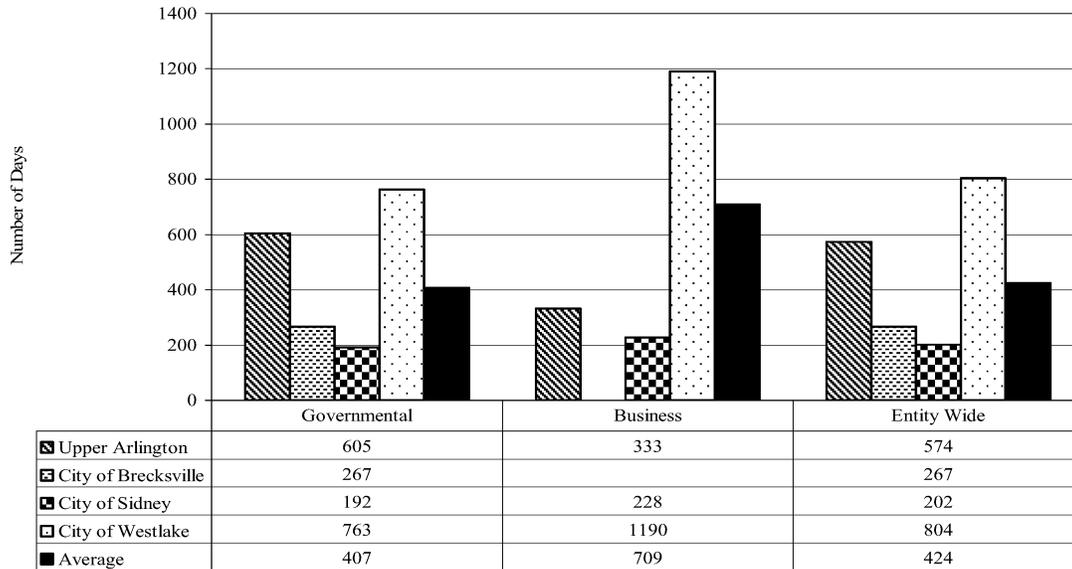


**Quick Ratios - Chart 7** (Indicates ability of government to pay current liabilities with cash and investments.)

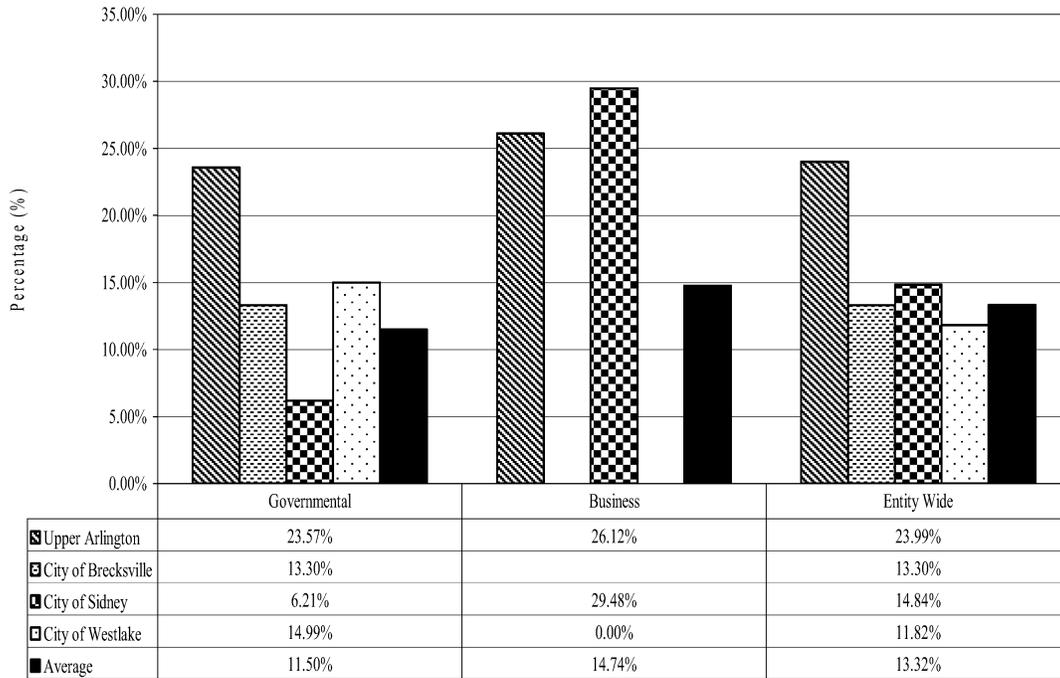


*C. Solvency*

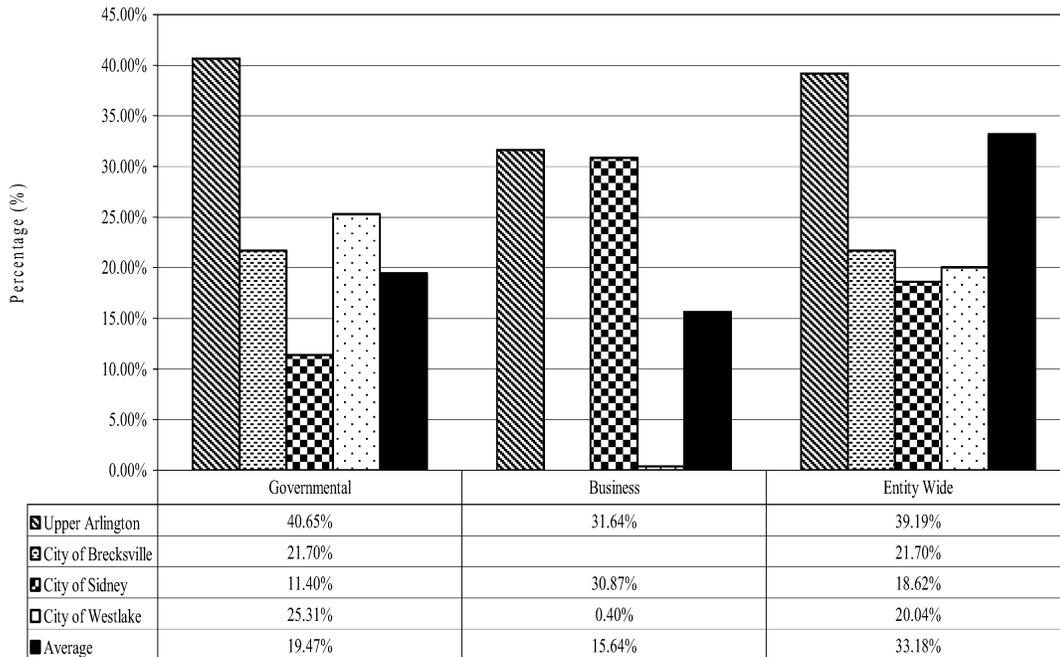
**Days Cash and Investments in Reserve - Chart 8** (Indicates number of days a government could operate with no cash collections.)



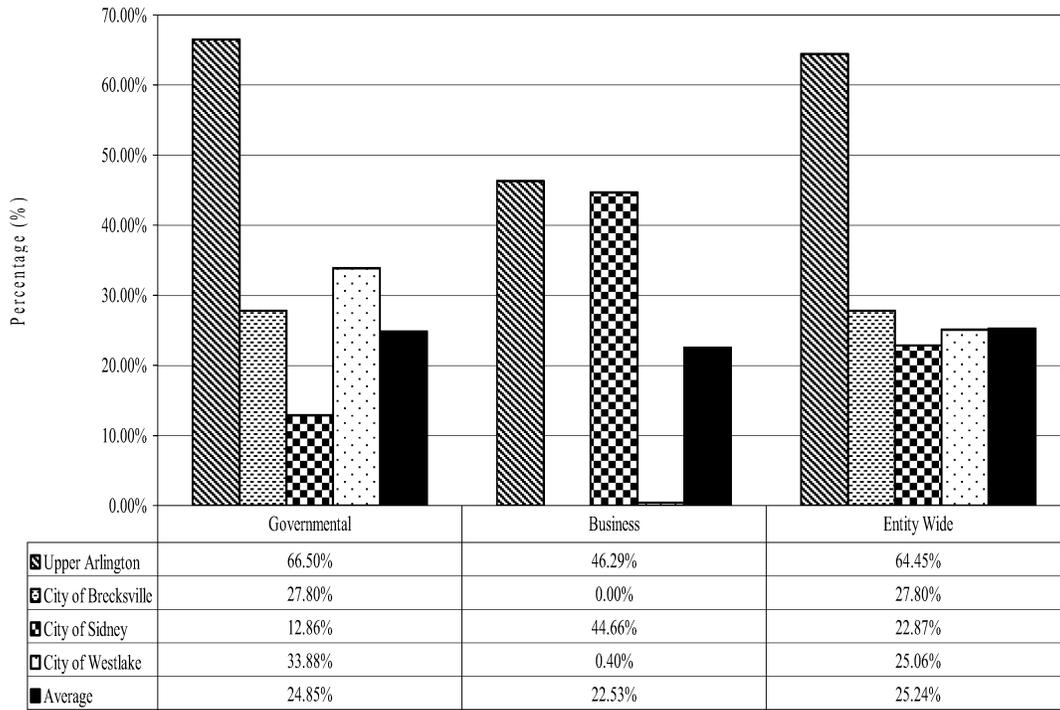
**Debt to Assets - Chart 9** (Indicates the amount of long-term debt compared to total assets.)



**Liabilities to Assets - Chart 10** (Indicates the amount of total debt to total assets.)

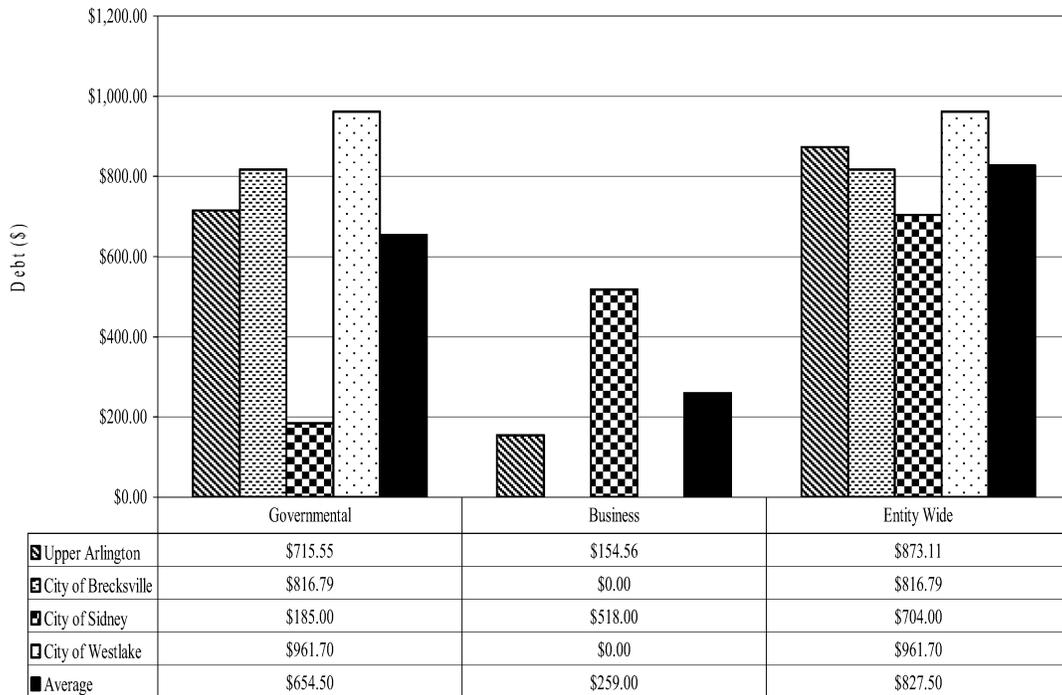


**Liabilities to Net Assets - Chart 11** (Indicates the amount of total liabilities compared to net assets.)

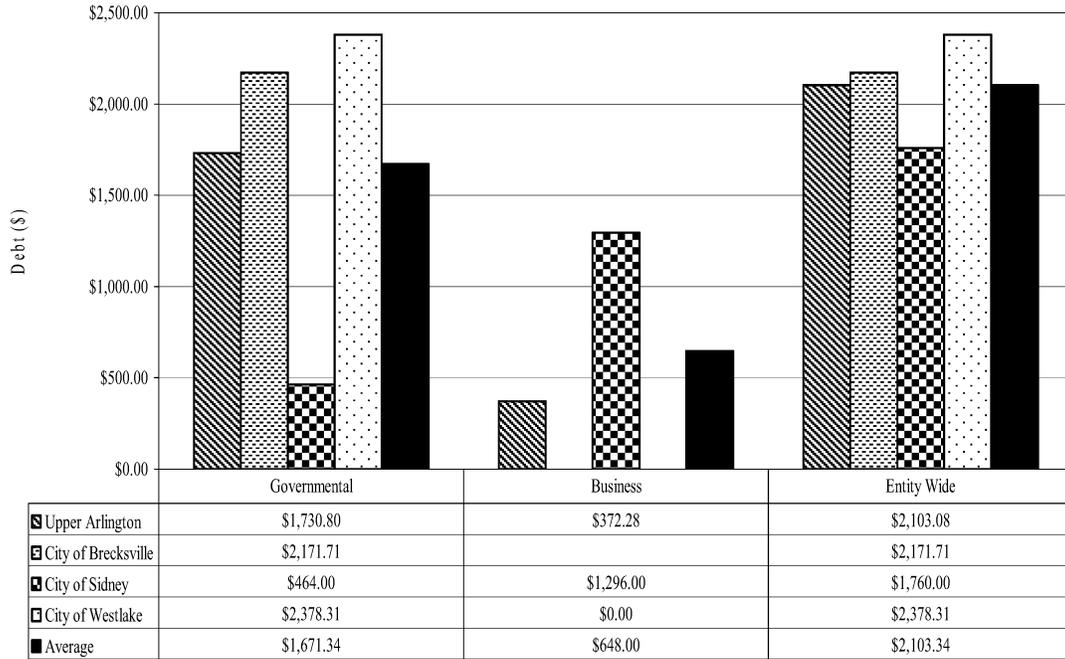


*D. Fiscal Capacity*

**Debt per Capita - Chart 12** (Indicates government debt per person)

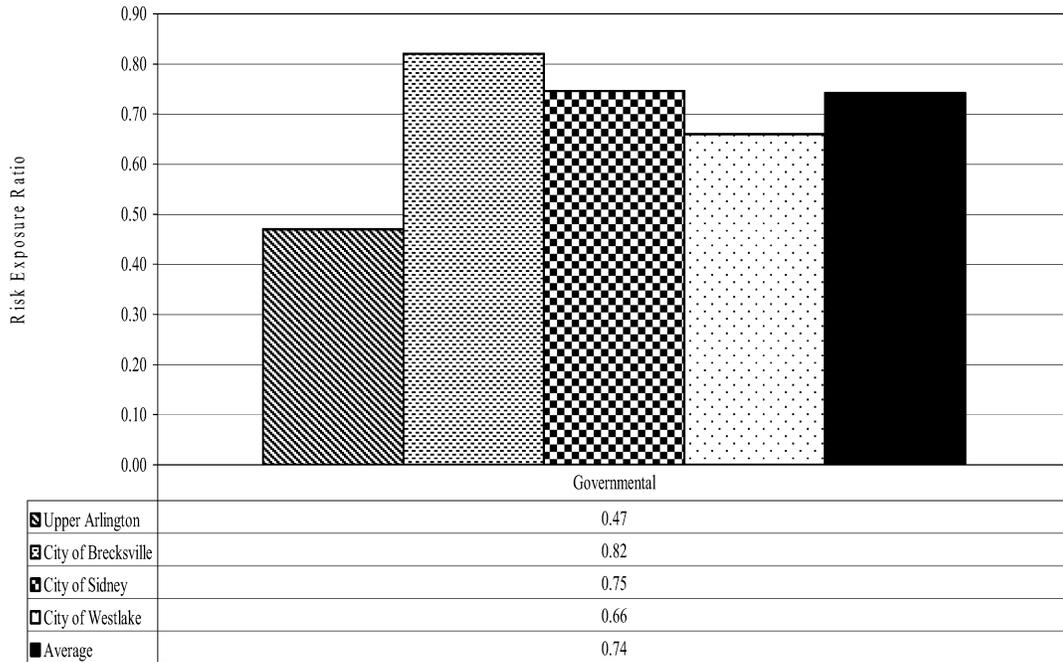


Debt per Household - Chart 13 (Indicates government debt per household)

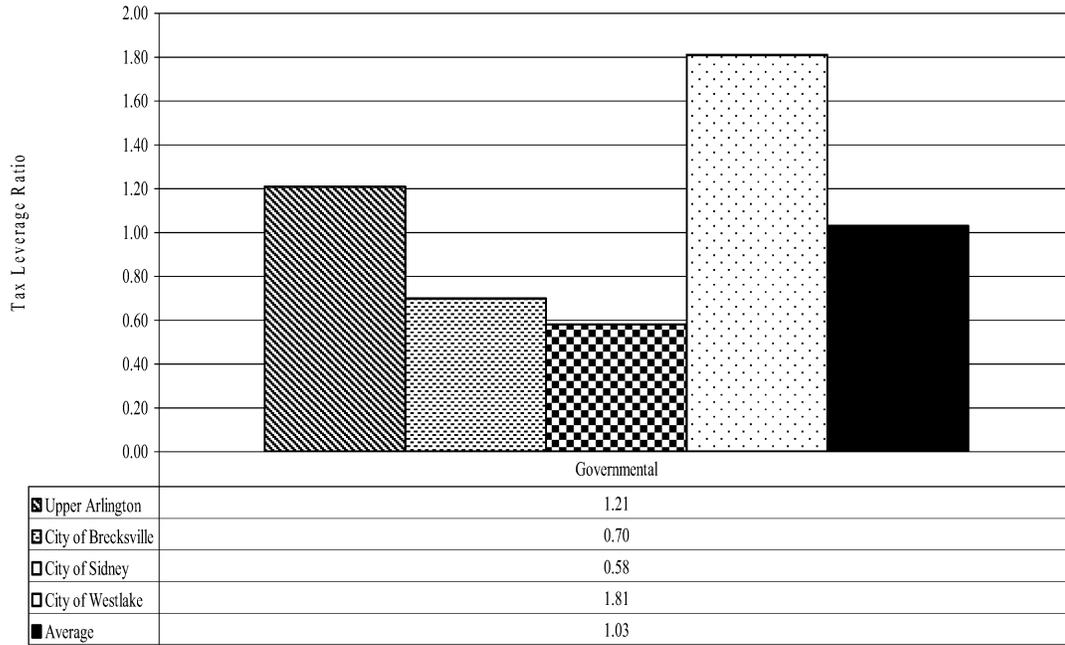


*E. Risk*

Risk Exposure Ratio - Chart 14 (Indicates the component of income tax in the revenue base of investment income, intergovernmental, and income tax revenue.)

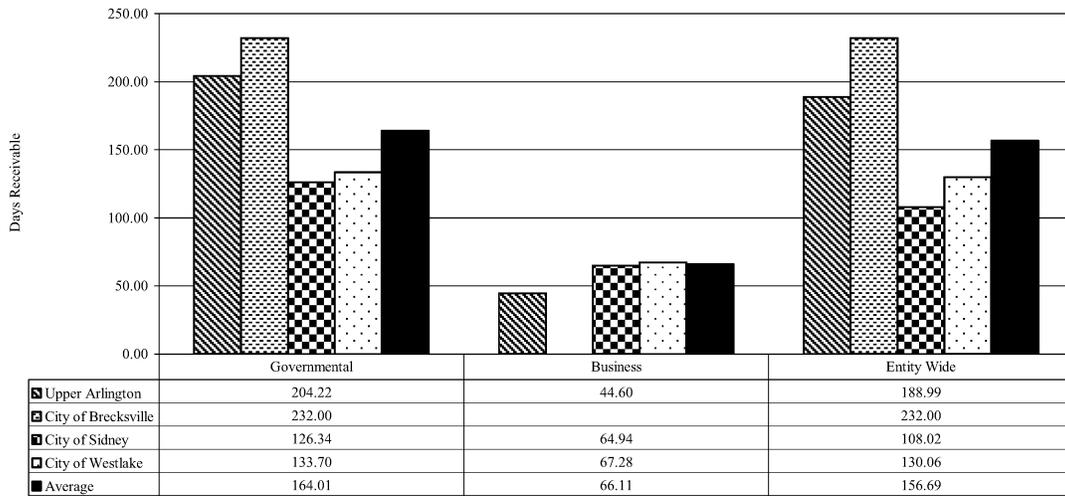


**Tax Leverage Ratio - Chart 15** (Indicates for every dollar that is collected in income tax, an additional cents per dollar of this amount must be generated to support services.)



*D. Operational Efficiency*

**Days Receivable - Chart 16** (indicates the average number of days for the government to collect from customers/taxpayers.)



## Performance Measurement Exercise

The final portion of the pilot project involved the development of performance measurement tools for two operational areas of the city. This self-assessment tool can be employed on a regular basis to determine if established goals and objectives are being met.

An understanding of the following performance measurement terms is critical for employing this tool:

- **Inputs:** Resources (i.e, expenditure or employee time) used to produce outputs and outcomes.
- **Outputs:** Products and services delivered. Output refers to the completed products of the internal activity and the amount of work done within the organization or by its contractors (such as number of miles of road repaired or number of calls answered).
- **Outcomes:** An event, occurrence, or condition that is outside the activity or program itself and that is of direct importance to customers and the public in general. An outcome indicator is a measure of the amount and/or frequency of occurrences. Service quality is also included under this category.
- **Intermediate Outcome:** An outcome that is expected to lead to a desired end but is not an end in itself (such as service response time, which is of concern to the customer making a call but does not tell anything directly about the success of the call). A service may have multiple intermediate outcomes.
- **End Outcomes:** The end result that is sought (such as the community having clean streets or reduced incidence of crime or fires). A service may have more than one end outcome.
- **Efficiency, or Unit-Cost Ratio:** The relationship between the amount of input (usually dollars or employee-years) and the amount of output or outcome of an activity or program. If the indicator uses outputs and not outcomes, a jurisdiction that lowers unit cost may achieve a measured increase in efficiency at the expense of the outcome of the service.
- **Performance Indicator:** A specific numerical measurement for each aspect of performance (e.g., output or outcome) under consideration.

Source: Performance Measurement: Getting Results, Haltry, Harry P. The Urban Institute Press, 2100 M Street, N.W., Washington, DC, 20037.

The Upper Arlington team requested help in developing performance measures for the following operational areas: procurement bidding processes and EMS billing. To help development specific performance measures, AOS conducted multiple interviews with the city's Purchasing Administrator and Fire Chief.

### **Upper Arlington Bidding Process**

As a partial result of a significant compliance issues decades ago, the city has maintained very strict controls over its procurement function. With few exceptions, it requires documented competitive bids for any purchase over \$1,000, and city council must approve any purchase over \$10,000. In contrast, the Ohio Revised Code allows municipal governments to set bidding thresholds as high as \$15,000.

The team requested an assessment tool to help the city truly understand the benefits and costs involved with these controls. It also wished to develop indicators regarding bid cycle time (total days from opening the bidding process to making a purchase order) and quality issues with vendors. The team wished to focus specifically on the results for the lower bid range (\$1,000 - \$10,000) for future policy considerations.

Consequently, AOS and the Purchasing Administrator developed the following three-part outcome statement for the tool. All three outcomes are considered end outcomes.

**To deliver the lowest cost, quality material and services in a timely manner for purchases between \$1,000 and \$10,000. Specifically, the cost of the bidding process will not exceed the savings achieved through the bidding process, 100% of purchase orders will be completed for a valid contract within 30 days, and there will be zero tolerance for vendors in a competitive environment with unresolved quality issues receiving repeat business.**

To efficiently complete the assessment, AOS focused on the 39 competitively bid purchases between \$1,000 and \$3,000 in the first nine months of 2003. These purchase orders did not include sole source bids or straight encumbrances.

## Inputs

The first step in the assessment involves the development of inputs based on purchasing department costs and time allocated to different purchasing functions. AOS was unable to obtain cost and time allocation data from the city's purchasing department to complete this template. Therefore, the Purchasing Administrator should complete the following table with cost and time allocation data for the first nine months of 2003. For purposes of demonstration, AOS assigned fictitious cost and time allocation data, as shown in **Table 1**.

**TABLE 1: EXAMPLE OF INPUTS <sup>1</sup>**

<b>Annual Purchasing Department Costs</b>	
Labor	\$110,000
Supplies and Materials	\$500
Capital Costs	\$5,000
Indirect costs	\$10,000
Total	\$125,500
<b>Prorated to nine months</b>	
Labor	\$82,500
Supplies and Materials	\$375
Capital Costs	\$3,750
Indirect costs	\$7,500
Total	\$94,125
<b>Time spent on purchases by department</b>	
Straight Encumbrances	10%
Bids and Encumbrances \$1,000-\$10,000	30%
Bids and Encumbrances >\$10,000	60%

<sup>1</sup> The cost and time figures are fictitious and meant for demonstration purposes only.

### *Labor Inputs*

The full salary and annual benefits of the city's Purchasing Administrator and assistant should be included as labor inputs. If the Purchasing Assistant serves more than one department, the city will first have to assign the percentage of that individual's salary dedicated to procurement. This test assumes a full labor cost of \$110,000 annually, which prorated for 9 months is \$82,500.

The City and Purchasing Administrator will then need to estimate the annual percentage of time spent on straight encumbrances, bids and encumbrances from \$1,000 to \$10,000, and bids and encumbrances greater than \$10,000. This test assumes the following:

- A. Straight encumbrances – 10 percent
- B. Bids and encumbrances \$1,000 - \$10,000 – 30 percent
- C. Bids and encumbrances over \$10,000 – 60 percent

**Table 2** applies these percentages to each type of cost associated with procurement, including labor cost of the Purchasing Assistant; supplies and materials; direct capital and shared administration; and indirect administrative overhead.

#### *Supplies and Materials Inputs*

This is comprised largely of various paper copies and office supplies, and should be minimal. Regardless, the Purchasing Administrator should determine annual costs. The test assumes an annual supply budget of \$500.

#### *Direct Capital and Administrative Overhead Inputs*

These are the larger fixed costs directly attributable to the purchasing function: computers (including purchase, software, support), utilities, copier maintenance costs, etc. The City will need to determine a total annual cost attributable to the purchasing department. The test assumes an annual cost of \$5,000.

#### *Indirect Inputs*

The City would need to assess if other personnel normally spend time on bids and encumbrances. This could include the requesting department managers, the Finance Director and the City Administrator. The City should develop a time estimate for each impacted employee or officials, likely as a percentage of overall work time. That percentage would be multiplied by annual wages/benefits compensation for each employee, and the results would then be totaled. The test assumes a total indirect input cost of \$10,000.

### **Outputs**

The next step in the assessment is using the input and other data to develop outputs.

#### *Cost of Bidding Process*

This involves the sum of all direct and indirect inputs. **Table 2** shows several outputs related to the total cost of the bidding process, employing the example cost and data inputs from **Table 1**.

**TABLE 2: TOTAL COST OF BIDDING OUTPUTS**

<b>Cost Factor</b>	
Straight Encumbrances	\$9,413
Bids and Encumbrances \$1,000-\$10,000	\$28,238
Bids and Encumbrances >\$10,000	\$56,475
Total	\$94,125
<b>Number of Transactions</b>	
Straight Encumbrances	96
Bids and Encumbrances \$1,000-\$10,000	109
Bids and Encumbrances >\$10,000	63
<b>Cost Per Transaction</b>	
Straight Encumbrances	\$98.05
Bids and Encumbrances \$1,000-\$10,000	\$259.06
Bids and Encumbrances >\$10,000	\$896.43

Using these examples, the cost output for bids and encumbrances between \$1,000 and \$10,000 would be \$28,238. When this number is divided by the total number of bids and encumbrances between \$1,000 and \$10,000, the average cost per transaction is \$259. For straight encumbrances, and bids and encumbrances greater than 10,000, the average cost per transaction is \$98 and \$896, respectively.

#### *Cost Savings Generated by the Bidding Process*

This involves calculating the actual contract cost (accepted bid) minus the average of other qualifying bids including the one accepted (see **Table 3** on next page). The accepted bid is included in the average of the qualifying bids because without bidding the lowest supplier could have been selected by chance. Using actual bid documentation from the purchasing department for the first nine months of 2003, this exercise confirmed an average savings of \$227 for the 39 competitive bids reviewed between \$1,000 and \$3,000.

#### *Average Purchase Order Cycle Time*

Cycle time is defined as the calendar days from the time the Purchasing Administrator sends out bids to actual completion of a purchase order. Based on interviews with the Purchasing Administrator, this assessment will use a 30-day outcome goal. This equals the median cycle time reported by nine similar-size cities in a recent survey conducted by the Center for Advanced Purchasing Studies. The assessment requires the listing of actual cycle time only when the 30-day goal is not met.

Based on the actual data in **Table 3**, Upper Arlington met this goal in 32 out of 39 purchase orders reviewed (82 percent). Moreover, the Purchasing Administrator stated the majority of these purchase orders involved instances where vendors could not provide grounds keeping material samples in a timely manner due to the time of year.

**TABLE 3  
COST SAVINGS GENERATED BY THE BIDDING PROCESS AND CYCLE TIME, FIRST THREE QUARTER OF 2003**

PRODUCT/SERVICE	ACCEPTED BID	QUOTE A	QUOTE B	QUOTE C	QUOTE D	QUOTE E	BIDDER TOTAL	AVERAGE	COST SAVINGS GENERATED BY BIDDING PROCESS	COMPLETED WITHIN 30 DAYS? IF NOT, LIST DAYS
RECONDITION PUMPS	\$2,805.00	\$4,500.00					\$7,305.00	\$3,652.50	(\$847.50)	YES
UA ANNUAL REPORT	\$1,250.00	\$2,905.00					\$4,155.00	\$2,077.50	(\$827.50)	N/A
GAS & WATER LINE HOOK-UP	\$2,975.00	\$3,250.00	\$4,902.00				\$11,127.00	\$3,709.00	(\$734.00)	N/A
POWER WASH POOLS	\$2,275.00	\$4,000.00	\$2,350.00				\$8,625.00	\$2,875.00	(\$600.00)	N/A
STORMWATER UTILITY INVOICES <sup>1</sup>	\$1,526.40		\$2,539.00	\$1,755.00	\$2,657.89		\$8,478.29	\$2,119.57	(\$593.17)	YES
BRONZE PLAQUES	\$2,400.00	\$2,887.00	\$3,500.00				\$8,787.00	\$2,929.00	(\$529.00)	YES
ELLIPTICAL MACHINE <sup>1</sup>	\$1,449.00		\$2,390.00				\$3,839.00	\$1,919.50	(\$470.50)	YES
STORMWATER UTILITY INVOICES	\$1,025.00	\$1,317.65	\$1,329.15	\$1,462.50	\$2,127.90		\$7,262.20	\$1,452.44	(\$427.44)	YES
HARDWOOD MULCH	\$1,350.00	\$1,805.00	\$2,100.00				\$5,255.00	\$1,751.67	(\$401.67)	NO, 44 DAYS
800 WAIT PPG GENERATOR	\$1,810.73	\$2,000.00		\$2,795.00			\$6,605.73	\$2,201.91	(\$391.18)	NO, 44 DAYS
TREADMILL	\$2,794.00	\$3,519.00					\$6,313.00	\$3,156.50	(\$362.50)	YES
GRASS SEED	\$1,417.00	\$1,846.00	\$2,145.00	\$1,651.00	\$1,794.00	\$1,495.00	\$10,348.00	\$1,724.67	(\$307.67)	NO, 40 DAYS
MAIN LINE PACKER	\$1,800.00	\$2,149.00	\$2,195.00				\$6,144.00	\$2,048.00	(\$248.00)	YES
BASES, HOME PLATES <sup>1</sup>	\$1,429.66		\$1,900.00				\$3,329.66	\$1,664.83	(\$235.17)	NO, 33 DAYS
FERTILIZER	\$1,590.00	\$1,756.00	\$1,940.00	\$1,948.00			\$7,234.00	\$1,808.50	(\$218.50)	NO, 36 DAYS
PROJECTOR	\$1,920.00	\$2,098.95	\$2,075.93	\$2,239.95			\$8,334.83	\$2,083.71	(\$163.71)	YES
PRINTING-NEWSLETTER	\$1,167.95	\$1,449.00					\$2,616.95	\$1,308.48	(\$140.53)	YES
SCANNER & KIT	\$2,849.00	\$2,919.27	\$3,195.00				\$8,963.27	\$2,987.76	(\$138.76)	YES
SERVER CABINET	\$2,043.11	\$2,199.00	\$2,244.65				\$6,486.76	\$2,162.25	(\$119.14)	YES
IMMOBILE VAC SYS/BODY MAT	\$1,491.74	\$1,726.36					\$3,218.30	\$1,609.15	(\$117.41)	YES
(6) BENCHES - MILLER PARK	\$1,254.00	\$1,463.68	\$1,350.00	\$1,384.00			\$5,451.68	\$1,362.92	(\$108.92)	YES
4-DRAWER LATERAL FILE	\$1,912.00	\$2,026.68	\$2,112.00				\$6,050.68	\$2,016.89	(\$104.89)	YES
PARKING CITATIONS	\$1,223.77	\$1,427.64					\$2,651.41	\$1,325.71	(\$101.94)	YES
STEEL STOCK <sup>1</sup>	\$2,755.18	\$2,946.00					\$5,701.18	\$2,850.59	(\$95.41)	YES
T-SHIRTS	\$1,175.64	\$1,208.82	\$1,374.99	\$1,194.51	\$1,369.50		\$6,323.46	\$1,264.69	(\$89.05)	YES
INFIELD MATERIAL	\$1,672.25	\$1,768.95	\$1,874.50	\$1,681.25			\$6,996.95	\$1,749.24	(\$76.99)	YES
FOAM PRO PAK	\$1,054.00	\$1,142.75	\$1,183.27				\$3,380.02	\$1,126.67	(\$72.67)	YES
IBM ADVANTAGE SOFTWARE	\$1,342.58	\$1,383.00	\$1,514.41				\$4,239.99	\$1,413.33	(\$70.75)	YES
LASERJET 4200TN	\$1,915.00	\$2,008.00	\$2,067.05	\$1,982.00	\$1,960.00	\$1,928.50	\$11,860.55	\$1,976.76	(\$61.76)	YES
GENERATOR <sup>1</sup>	\$2,233.00	\$1,835.72	\$2,798.00				\$6,866.72	\$2,288.91	(\$53.91)	YES
PRINTER	\$1,365.00	\$1,419.00	\$1,511.00	\$1,399.00	\$1,374.18		\$7,068.18	\$1,413.64	(\$48.64)	YES
ENGINE & MOUNTING KIT	\$1,757.50	\$1,850.00					\$3,607.50	\$1,803.75	(\$46.25)	NO, 33 DAYS
KENNEDY PARTS	\$1,122.00	\$1,178.10					\$2,300.10	\$1,150.05	(\$28.05)	YES
OIL INTERCEPTOR	\$1,070.00	ONLY ONE TO BID					\$1,070.00	\$1,070.00	\$0.00	YES
ELECTRICAL WORK	\$2,467.00	ONLY ONE TO BID					\$2,467.00	\$2,467.00	\$0.00	YES
AED	\$2,610.00	ONLY ONE TO BID					\$2,610.00	\$2,610.00	\$0.00	YES
DRAIN TRENCH SYSTEM	\$2,955.00	ONLY ONE TO BID					\$2,955.00	\$2,955.00	\$0.00	YES
CAULK MAIN POOL	\$2,970.00	ONLY ONE TO BID					\$2,970.00	\$2,970.00	\$0.00	YES
INFIELD MATERIAL <sup>1</sup>	\$2,625.00	OTHER BID DISQUALIFIED					\$2,625.00	\$2,625.00	\$0.00	NO, 6 MONTHS
<b>AVERAGE COST SAVINGS GENERATED BY THE BIDDING PROCESS (ACTUAL CONTRACT COST MINUS THE AVERAGE OF OTHER</b>									<b>(\$226.53)</b>	

Source: Upper Arlington Purchasing Department

<sup>1</sup> Low bid was disqualified due to quality concerns. It was not listed in the table to avoid skewing the cost saving calculation.

### *Quality Issues*

Finally, the assessment applies a three-part test to determine the quality of goods or services purchased. The first outcome involves determining the number of vendors considered in a “competitive” environment, where at least three other vendors offer the same product or service. This list is then narrowed down to competitive vendors with unresolved quality issues, such as valid protests. Finally, the City would check this list against the purchase register to determine if problem vendors have received any repeat business. The Purchasing Administrator stated none of the 39 competitive bids in the sample involved vendors with unresolved quality issues.

### **Efficiency and Effectiveness Tests**

To determine efficiency of the bidding process, the City would divide the actual average cost savings generated by the bidding process (\$227) by the average cost of a purchase order (\$259 using the fictitious examples). If the latter number were actual, the resulting 0.88 ratio would indicate the bidding process for \$1,000 to \$3,000 purchases is slightly inefficient.

If the efficiency factor (bidding savings over bidding expense) were greater than one, this would confirm the financial benefits of bidding and the City could even consider a similar assessment on a lower-dollar range. If it confirmed that bidding costs outweighed savings, the City could conduct a similar assessment on a higher dollar range to determine if this pattern would continue at those levels.

However, the City should weigh certain effectiveness factors achieved through the bidding process. For example, the overwhelming majority of bids were processed within the national standard of 30 days. Several quality issues were also protected by the process. There were no vendors in the sample with unresolved quality issues that received repeat business. Also, seven low bids were disqualified due to quality issues that may not have been detected without a bidding process. Finally, the City should consider the internal control and accountability its bidding structure achieves, especially in light of previous compliance issues.

If the City is concerned with any results from this or future tests, it should consider adjusting its procurement policies and testing its process by using this template the following year. If it is satisfied, it could wait two to three years to retest unless there is sudden high inflation or a severe recession. High inflation is an indicator the City might wish to adjust the bidding threshold upward, while a recession may indicate the need to adjust it downward.

### **EMS Billing Cost Review**

Upper Arlington implemented user fees for emergency medical services (EMS) in July 2004. Previously, the fire division charged neither city residents nor non-residents it served through coverage agreements with adjoining governments.

The socioeconomic section of this report documented an 8 percent increase in EMS services from 2000 to 2002 (page 15). Demand for EMS services will likely rise as the community continues to age and require additional health care.

Currently, the city has not developed a billing program to collect user fees for EMS. As the economy has faltered in recent years, more and more cities across the nation have attempted to recoup at least a portion of their EMS costs by billing third-party health insurance and/or patients. Medicaid, Medicare and insurance companies have stated policies that allow reimbursement for transport vehicle services. A 2002 policy paper surveying 15 large cities that bill for EMS services determined that most recouped more than 50 percent of their operating costs.

The Upper Arlington Performance Management Project team and fire department officials requested help in developing performance measures to ensure public accountability with the program. Subsequently, AOS and the Fire Chief developed three outcomes. Based on further study, the City should determine the percentage benchmark goals against which it will measure annual performance. However, it should always expect 100 percent willingness to use the EMS service and overall satisfaction with the service.

- 1. To achieve a collection rate of (TBD) percent, not including co-pays (Intermediate Outcome) and recover (TBD) percent of the direct costs of actual transports (End Outcome).**
- 2. To ensure (TBD) percent of people normally served by Upper Arlington EMS are aware of the billing program by August 2005 (Intermediate Outcome), and that 100 percent of these people would use the EMS service regardless of ability to pay (End Outcome).**
- 3. To ensure that (TBD) percent of EMS users are satisfied with the billing process (Intermediate Outcome), and that 100 percent are satisfied with the EMS service overall while maintaining customer charges at no more than (TBD) percent of neighboring communities' customer charges (End Outcome).**

The entire assessment tool is contained in Table 4.

**TABLE 4**  
**EMS BILLING PERFORMANCE ASSESSMENT TOOL**

<b>OUTCOME</b>	To achieve a collection rate of (TBD)% <sup>1</sup> , not including co-pays, and recover (TBD)% <sup>1</sup> of the direct costs of actual transports.
<b>OUTCOME</b>	To ensure (TBD)% <sup>1</sup> of people normally served by Upper Arlington EMS are aware of the EMS billing program by August 2005, and ensure that 100% of these people would use the EMS service regardless of ability to pay.
<b>OUTCOME</b>	To ensure (TBD)% <sup>1</sup> of EMS users are satisfied with the billing process, and 100% are satisfied with the EMS service in total while maintaining billing at no more than (TBD)% <sup>1</sup> of neighboring communities.
<b>OUTPUT</b>	Annual collection rate, not including co-pays.
<b>OUTPUT</b>	Number of transports, breaking down Advanced Life Support versus Basic Life Support services
<b>OUTPUT</b> <sup>2</sup>	Average number of days in receivable
<b>OUTPUT</b>	Billing rate of neighboring communities (by BLS, two levels of ALS and mileage rates)
<b>OUTPUT</b> <sup>3</sup>	Number of residents responding to 2005 community survey.
<b>OUTPUT</b>	Number of EMS users responding to survey attached to billing statement.
<b>DIRECT INPUT</b>	
<b>LABOR</b>	Personnel costs for EMS runs (by BLS and two levels of ALS runs)
<b>SUPPLIES AND MATERIALS</b>	Medical equipment and supplies, fuel (by BLS and two levels of ALS runs)
<b>OTHER</b>	Third-party billing costs (by BLS and two levels of ALS if applicable)
<b>DIRECT CAPITAL</b>	Transport vehicle and major equipment costs (depreciated)
<b>SHARED ADMINISTRATION</b>	Not applicable since the outcome involves direct costs
<b>INDIRECT INPUT</b>	
<b>ADMINISTRATIVE OVERHEAD</b>	Not applicable since the outcome involves direct costs
<b>TOTAL COSTS</b>	
<b>DIRECT PROGRAM REVENUE</b> <sup>4</sup>	Annual revenue from EMS billings, breaking out BLS, two levels of ALS and mileage.
<b>NET COST OF PROGRAM</b>	
<b>EFFICIENCY</b>	Average number of days in receivable; maintain billing costs at no more than (TBD)% <sup>1</sup> of neighboring communities
<b>EFFECTIVENESS</b>	Collection rate and recovery of direct costs; all four customer satisfaction measures

<sup>1</sup> Based on further study, the city should determine the proper percentages for populating these percentage outcomes.

<sup>2</sup> If problems arise with billing timeliness, the city could employ two additional outputs to determine source of problem. First, it could measure process time from call completion to receipt at the third-party billing company. Second, it could measure process time from information received by third-party billing company to sending out the bill.

<sup>3</sup> While the customer base extends beyond city borders, a large enough sample is assumed from the city survey to obtain reasonable assurance.

<sup>4</sup> If revenue problems arise, the city could employ additional measures to determine the percentage of patients with insurance by type (Medicare, Medicaid, private insurance) vs. self-pay.

To develop outputs and inputs for the tool, one must first have a basic understanding of EMS functions. EMS services are divided into two general support levels: Basic Life Support (BLS) and Advanced Life Support (ALS). As the terms indicate, ALS services are more complex and consequently more costly. In fact, insurers often break ALS services into two billing categories (ALS1 and ALS2) based on complexity.

## **Inputs**

### *Labor Inputs*

All Upper Arlington sworn personnel are certified to provide BLS, while others have the training and certification to provide ALS services. Often, personnel may arrive first on a fire engine and begin administering services before arrival of a transport vehicle, a process known as first responder. If transport is necessary, paramedic personnel assigned to the engine often ride in the transport vehicle to the hospital providing additional medical assistance. The first responder engine generally follows the transport vehicle to the hospital, where it picks up the paramedic assigned to the engine. Further, each fire engine is equipped with significant ALS equipment and is staffed with at least one paramedic.

Consequently, the department will need to begin tracking all personnel costs involving EMS transports, including breakouts for ALS and BLS services. This should include all directly involved personnel (not including dispatch) documenting the portion of their workday spent delivering EMS services, from dispatch to call completion. This should include the hours of both the transport vehicle and first responder units.

### *Supplies and Material Inputs*

In addition to labor costs, the department will need to track costs for medical supplies and medications used in delivering EMS services. While hospitals have not historically charged the department to restock transport and engine units, they will begin charging if the department implements an in-house billing program. Hospitals will no longer be allowed to bill insurance companies to restock their supplies and medicine if fire departments are also billing the insurance company for supplies and medicine. Similar to labor hours, these costs should be broken out by BLS and the two levels of ALS runs.

### *Capital Inputs*

The department will also have to capture capital costs in terms of the actual ambulance and major equipment on the ambulance, such as heart monitors. With the implementation of the Governmental Accounting Standards Board Statement No. 34, municipal governments must begin to depreciate costs of such major equipment which should be factored into this equation. The city's finance department would be

able to provide data on depreciation costs. Given the multiple uses of fire engines, it would not be possible to include their capital costs in the calculation.

#### *Other Inputs*

Finally, the department will have to capture the costs of administering its billing system for EMS services. During the program's first year, the City contracted with a third-party billing agency. According to interviews with the Fire Chief and information from the policy paper mentioned earlier, most cities have opted for a third-party agency. A company could receive payment based on an agreed-upon percentage of actual collection, or on a per claim basis. The department should also capture any separate billing costs for ALS or BLS billing services, if applicable.

### **Outputs**

#### *Collection Rate*

The City will need to track the annual collection rate for its billings. This should not include co-pays unless it intends to pursue collection from these patients. The City should define a total collection rate, and break out collection rates by BLS, ALS1 and ALS2 services.

#### *Transports*

The City will need to track the number of annual transports, also breaking out BLS, ALS1 and ALS2 services. This is crucial for determining the average revenue and costs per transport.

#### *Days in Receivable*

The City should track the average number of days in receivable to ensure billings are efficiently processed and collected. If the City employs a third-party billing company, it should require in the contract that the company track not only the overall receivable cycle, but also the average process time from call completion to receipt at the billing company; and process time from receipt at the billing company to sending out the bill. Tracking this data could help reduce the City's EMS accounts receivable aging cycle.

#### *Billing Rate of Neighboring Communities*

The final fiscal output involves tracking the billing rates of neighboring communities' EMS services. While Upper Arlington can set its own fees, it should ensure that its customer charges are not significantly higher than adjacent communities. Tracking this figure will help maintain a healthy balance between efficiency and effectiveness in the city's EMS services.

### *Residents Responding to Community Survey*

In addition to fiscal outputs, the City will need to measure outputs related to community awareness and satisfaction with the new program. It should query residents in its annual citizen survey (taken every summer) on their awareness of the EMS program and their willingness to continue using the EMS service regardless of personal ability to pay.

### *EMS Users Responding to Billing Statement Survey*

The City should attempt to track EMS user satisfaction with both the billing program and EMS services overall. Any contract with a third-party billing company should require billing statements mailed to users to include customer surveys with pre-stamped envelopes addressed directly to the fire department.

### **Efficiency and Effectiveness Tests**

Upper Arlington should establish a policy for annual reviews of the program using this tool. The Fire Chief responded that he intends to use the assessment upon completion of the first year of EMS billing in July 2005. This will help ensure fees truly reflect costs and gauge customer satisfaction. “Incorporating an annual review of changes into the budget process will help reduce pressure for blindly raising fees and charges purely for revenue purposes with insufficient information on service demand, equity, and/or social considerations and cost revenue trends.”<sup>1</sup>

To help ensure the efficiency of the program, the city should annually assess whether it is maintaining customer charges at no more than a predetermined percentage of neighboring communities’ customer charges. An intermediate efficiency outcome that may help achieve this goal is tracking the average number of days in receivable. In fact, if payment timeliness is an issue, the city could determine the source of the problem by measuring process time from call completion to receipt at the third-party billing company; and process time from information received by the third-party billing company to sending out the bill.

To measure effectiveness, the city should determine whether the collection rate and recovery of direct costs are meeting percentage outcome goals. It should also assess whether percentage outcome goals have been achieved on the four customer knowledge and satisfaction issues previously discussed.

<sup>1</sup>Source: Glisson, Patrick and Stephen Holley. March 1982. “Developing Local Government User Charges: Technical and Policy Considerations.” Government Finance Review.

## **Conclusion**

This report provides the City of Upper Arlington an opportunity to explore management for results. Its multi-faceted approach allows for high-level, long-term policy analysis through socioeconomic ratios; provides more in-depth financial ratios to assist in shorter-term decisions; and finally, establishes performance measures for the City to annually apply in key operational areas. AOS appreciates the input and cooperation of Upper Arlington officials, employees and community volunteers in assembling this project. These individuals have expressed a true desire to transfer knowledge and information enabling the City to better serve its citizens in an increasingly efficient and effective manner.

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