

# TENNESSEE MUNICIPAL BENCHMARKING PROJECT

## FY 2007 ANNUAL REPORT

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**MTAS**

**Municipal Technical  
Advisory Service**

*In cooperation with the  
Tennessee Municipal League*



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**TENNESSEE MUNICIPAL BENCHMARKING PROJECT**  
**FY 2007 ANNUAL REPORT**

**Introduction**

This report marks the sixth year of the Tennessee Municipal Benchmarking Project (TMBP). The performance and financial data covers the period July 1, 2006 through June 30, 2007. There are three services measured and benchmarked in this report: residential refuse collection and disposal, police services, and fire services. A statistical summary of select financial and performance data is also provided for each departmental service. The presentation of benchmarks begins with a description of how the service is provided in each participating city, and is followed by a graph comparing each city to the benchmark, or average, for all participating cities.

Nine cities participated in this project. They are:

<b>City</b>	<b>Population</b>	<b>City Area</b>
Athens	13,334	15 sq. mi.
Bartlett	46,954	23 sq. mi.
Brentwood	35,262	41 sq. mi.
Chattanooga	155,554	144 sq. mi.
Clarksville	103,455	100 sq. mi.
Cleveland	37,311	26 sq. mi.
Collierville	41,923	29 sq. mi.
Franklin	49,412	41 sq. mi.
Murfreesboro	81,393	52 sq. mi.

For the first time, this FY 2007 report contains trend analysis of several benchmark measures. Of particular note, per capita average costs of providing police, fire and residential refuse services are presented. There are additional trends for each of the service types using measures unique to the service, e.g. average fire response times, over the four-year period from FY 2004 to FY 2007.

## Determining Service Levels and Costs

The members of the TMBP steering and service committees worked diligently to ensure that the benchmarks presented here are based on accurate and complete cost and service data. However, every city faces a different service environment. The job of cities is to be responsive to the service demands of their citizens, not strive for comparability with other cities. We have made every attempt to account for the differences in service delivery systems among our participating cities, but variations remain. Users of this information should review the description of the service that accompanies each city's benchmark data to put the information into the proper context. The graphs should be interpreted in light of the narrative descriptions of the services in each city.

Similarly, we made every effort to ensure the completeness and accuracy of the cost data used in calculating the benchmarks. There are different kinds of costs and endless ways to group elements of those costs. We selected four primary kinds of cost – personal services, direct operating expenses, indirect operating expenses and depreciation expenses. Personal service costs include the salaries and benefits paid to those who provide the service. Direct operating costs are generally those appearing in the service department's budget for the year ended June 30, 2007.

Indirect costs, sometimes called overhead, may be budgeted in another department and must be allocated to the service department. For example, the city's administrative services department might budget for insurance for city vehicles. Even though police cruisers and other vehicles may represent a significant portion of the city's vehicle insurance, the insurance costs may not appear in the police budget. We would separate the insurance cost of police vehicles from the rest of the city's fleet and report them as an indirect cost for the police department.

Not all indirect costs are so easily allocated, and this is where slight variation in cost structure is most likely to appear. In each case, the steering committee tried to make allocations based on the most appropriate method for the cost to be allocated. For common support costs like data processing, accounts payable and purchasing, the usual allocation method was the number of the service department employees divided by the total number of city employees, multiplied by the total operating cost of the support department. The resulting cost is then allocated to the service department.

Depreciation costs capture the loss of value to the department from the aging of their buildings, equipment and other capital assets. It is calculated just as the private sector does, typically allocating an equal portion of the acquisition cost of the asset over the useful life of the asset. For example, if a municipality buys a front loader for \$150,000 that is expected to last for 15 years, the annual depreciation cost would be \$10,000 per year. Depreciation is an indirect cost of service delivery, but is separated from other indirect costs for our purposes.

The appendix contains the cost calculation worksheet used for each of the three benchmarked services.

## The TMBP Steering and Service Committees

Preparing the data for presentation in this report was relatively easy. The hard work of selecting the appropriate measures and defining and refining costs was done by the members of the steering committee and service department committees. There were three service department committees – one for each benchmarked service – comprised of members representing the participating cities. These members actually delivered the services and knew what aspects of service performance should and should not be included for analysis.

The steering committee is primarily comprised of city representatives with a finance background, often at the executive level. They are in the best position to decide what should and should not constitute a cost and what costs should and should not be considered as a part of the department service cost structure. After making these decisions, the steering committee participated in a data auditing session to review their own cost data and that of the other participants, looking for situations where cost might have been mis-specified or inappropriately classified. At the conclusion of the data auditing session, the steering committee members reviewed the final numbers from their cities and submitted them for the report.

The TMBP steering committee, representing each of the nine participating cities, spent many hours conforming costs as reported by their own internal accounting systems to the agreed-upon definitions of cost selected by consensus of the committee. They devoted hours to consultation with MTAS staff and with each other to resolve problems. They coordinated the service performance data collection as well as the cost data collection. They offered ideas, advice, and encouragement, all in the pursuit of continuous performance improvement in their cities. They are:

Brad Harris	Finance Director	City of Athens
Mark Brown	Finance Director	City of Bartlett
Kirk Bednar	Assistant City Manager	City of Brentwood
Brian Smart	Manager, Financial Operations	City of Chattanooga
Wilbur Berry	Finance Commissioner	City of Clarksville
Mike Keith	Director of Finance	City of Cleveland
David Smoak	Assistant to City Manager	City of Collierville
Russ Truell	Finance Director	City of Franklin
Rob Lyons	Assistant City Manager	City of Murfreesboro

Earlier versions of this report were prepared by Janet Kelly. Without her contribution to this project, there would be no trend data to analyze and few, if any, cities willing to make the sacrifice to contribute their data to the benchmarking project.

We are indebted to Sharon Rollins, Rex Barton and Gary West for contributing their expertise in the services benchmarked to this effort.



## Trend Analysis

Per capita costs for each of the three benchmarking areas have been separated into personal services, operating expenses, indirect costs, and costs of depreciation. To analyze the trends in each of these components, we annualized the growth rates over the four-year period.

(Annualized growth rates of depreciation costs have no relevance as they merely reflect the point of the depreciation cycle, so they are not included.) The table below shows the relatively similar increases in personal services costs in police and fire services while the personal services costs in residential refuse collections have declined over the period.

In all three service types, the growth of indirect costs, e.g. insurance costs, shared building costs and benefits administration costs, has experienced the most rapid expenditure growth. This is probably not a surprise to most city administrators—nationally, the rapid advance of benefits administration costs has been well documented.

Total per capita costs in residential refuse services had declined consistently from FY 2004 to FY 2006. However, a significant increase in personal service costs and operating expenses in FY 2007 reversed the overall downward trend. This observation underscores the fact that these data are quite volatile—many times for reasons outside a city’s control—for instance an increase in landfill fees.

At this stage of the benchmarking program, forecasting future costs or service levels would be tentative at best. As time passes, however, and more data—more consistently collected and presented data—are accumulated, it is quite possible that useful trends can be teased out of the apparent confusion of facts and figures.

**Change in Per Capita Average Service Costs, FY 2004-FY 2007**

	<b>Police FY04-FY07</b>	<b>Fire FY04-FY07</b>	<b>Refuse FY04-FY07</b>
<b>Personal services costs</b>	5.68%	5.56%	-3.41%
<b>Operating expenses</b>	4.54%	0.88%	-2.15%
<b>Indirect costs</b>	18.35%	9.87%	30.15%
<b>Total costs</b>	5.82%	5.52%	0.19%

Per capita costs are easily accessible, consistently applied, and meaningful to the lay person. Each service type is summarized in a table and bar graph showing the relative contribution of the component costs to the per capita total cost of providing that service. In addition to per capita costs, other costs measures unique to each service type are presented.

After cost statistics, there are benchmarking city average performance measures, each measure unique to the type of service analyzed.

## POLICE SERVICES

Police services consist of traditional law enforcement functions, including patrol, investigations, and police administration. These functions encompass preventive patrols, traffic enforcement, responding to calls for service, and investigation of crimes. Specifically excluded from the service definition are: animal control and emergency communications (dispatch). The service definition does include all support personnel and services, except those relating to animal control and emergency communications.

### Definitions of Terms Used

**TIBRS A & B Crimes** – The Tennessee Incident-Based Reporting System is now the standard statewide system for reporting crimes in Tennessee. Part A Crimes consist of 22 specific serious crimes, including arson, assault, burglary, homicide, kidnapping, larceny/theft, fraud, drug crimes and sex crimes. Part B Crimes include 11 less serious categories of crimes such as bad checks, loitering and vagrancy, DUI, disorderly conduct, non-violent family offenses, liquor law violations, and trespassing.

**Dispatched Calls** – Calls that result in a response from a Police Patrol unit. Some cities may have a “teleserve” program, where low priority requests for service are handled via telephone, with no officer dispatched, which may be a factor in reducing the number of dispatched calls. Officer-initiated calls are included in dispatched calls.

**FTE Positions** – Number of hours worked in police patrol converted to “Full Time Equivalent” positions at 2,080 hours per year, where those figures were available. Because a standard work year is used, this figure may not correspond to the number of positions budgeted in the patrol function. For some cities, the number of FTE’s may be a budgeted figure, rather than actual hours worked, which could result in either understating or overstating the actual hours worked.

**Police Services Performance Measures Comparison  
Fiscal Year 2007**

	Athens	Bartlett	Brentwood	Chattanooga	Clarksville
2007 Certified population	13,334	46,954	35,262	155,554	103,455
Centerline road miles	146	221	225	1,100	638
Calls for service	35,766	50,754	31,772	381,962	151,798
TIBRS Type A crimes	2,342	2,852	1,084	24,945	12,669
TIBRS Type B crimes	295	1,497	197	3,290	1,574
Number of FTEs	35.0	108.0	58.4	N/A	302.0
Budgeted positions	31	100	57	471	240
Support personnel	2	8	4	130	54
Total accidents	835	1,336	976	12,142	6,693
Public property accidents	566	1,192	888	N/A	3,310
Injury accidents	160	228	227	N/A	1,676
Police vehicles	24	75	65	529	328
Alarm calls	1,092	4,360	3,326	N/A	9,169
Total cost	\$2,179,362	\$9,667,612	\$5,846,402	\$40,042,610	\$18,773,004
TIBRS A&B per 1000 pop	198	93	36	182	138
Calls for service per 1000 pop	2682	1081	901	2455	1467
Police FTE per 1000 pop	2.6	2.3	1.7	N/A	2.9
Police cost per FTE	\$62,267	\$89,515	\$100,110	N/A	\$62,162
Total accidents per 1000 pop	62.6	28.5	27.7	78.1	64.7
Public prop accidents per 1000 pop	42.4	25.4	25.2	N/A	32.0
Injury accidents per 1000 pop	12.0	4.9	6.4	N/A	16.2
Injuries per public property traffic accident	0.28	0.19	0.26	N/A	0.51
Cost per call for service	\$61	\$190	\$184	\$105	\$124
Dispatched calls per FTE	1,022	470	544	N/A	503
Police cost per 1000 pop	\$163,444	\$205,895	\$165,799	\$257,419	\$181,461
Calls per sworn position	1,154	508	557	811	632
Public property traffic accidents per road mile	3.9	5.4	3.9	N/A	5.2

**Police Services Performance Measures Comparison  
Fiscal Year 2007**

	Cleveland	Collierville	Franklin	Murfreesboro	Average
2007 Certified population	37,311	41,923	49,412	81,393	62,733
Centerline road miles	268	221	290	485	399
Calls for service	59,703	39,416	55,765	87,275	99,357
TIBRS Type A crimes	5,296	2,085	3,022	11,217	7,279
TIBRS Type B crimes	1,854	1,072	447	4,382	1,623
Number of FTEs	104.0	132.0	142.8	231.0	139.2
Budgeted positions	92	92	136	187	156
Support personnel	27	29	29	47	37
Total accidents	2,982	1,209	1,917	5,620	3,746
Public property accidents	1,948	939	1,917	4,559	1,915
Injury accidents	274	270	372	1,115	540
Police vehicles	103	65	156	171	168
Alarm calls	3,052	2,874	3,238	6,380	4,186
Total cost	\$8,135,607	\$7,904,513	\$13,673,957	\$18,144,629	\$13,818,633
TIBRS A&B per 1000 pop	192	75	70	192	131
Calls for service per 1000 pop	1600	940	1129	1072	1481
Police FTE per 1000 pop	2.8	3.1	2.9	2.8	2.6
Police cost per FTE	\$78,227	\$59,883	\$95,756	\$78,548	\$78,309
Total accidents per 1000 pop	79.9	28.8	38.8	69.0	53.1
Public prop accidents per 1000 pop	52.2	22.4	38.8	56.0	36.8
Injury accidents per 1000 pop	7.3	6.4	7.5	13.7	9.3
Injuries per public property traffic accident	0.14	0.29	0.19	0.24	0.26
Cost per call for service	\$136	\$201	\$245	\$208	\$162
Dispatched calls per FTE	574	299	391	378	522
Police cost per 1000 pop	\$218,048	\$188,548	\$276,734	\$222,926	\$208,919
Calls per sworn position	649	428	410	467	624
Public property traffic accidents per road mile	7.3	4.2	6.6	9.4	5.7

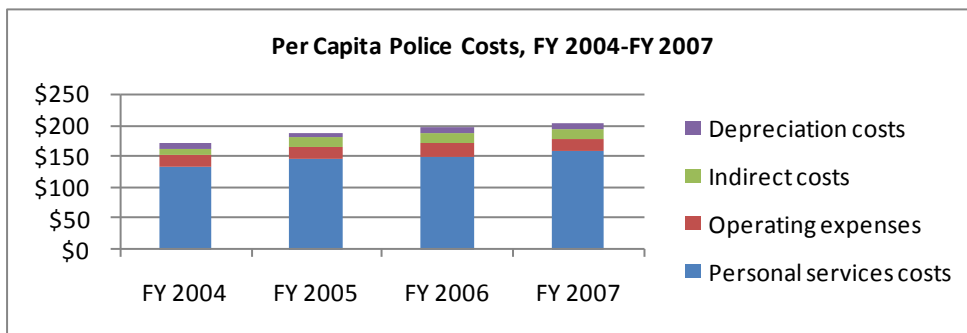
## Service Specific Trends: Police

### Police Costs

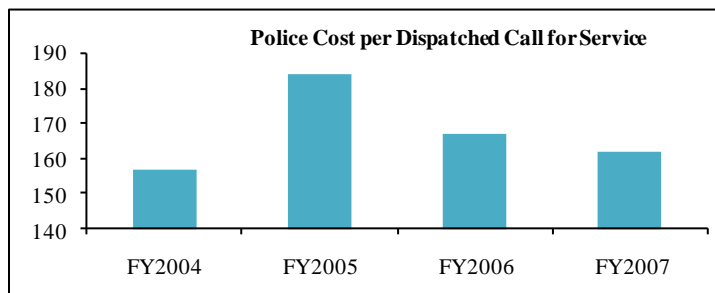
Total police services costs (excluding drug fund expenditure amounts) increased at a rate of a little less than 6% per year over the four-year period. Personal services costs are by far the largest and furthermore the most stable components of police services costs.

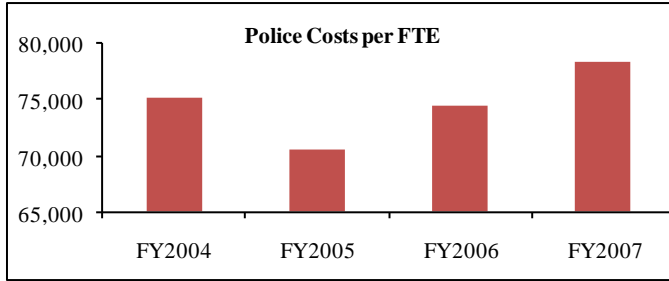
#### Summary of All-City Per Capita Police Costs, FY 2004-FY 2007

Measure	FY 2004	FY 2005	FY 2006	FY 2007
Personal services costs	\$133	\$144	\$148	\$157
Operating expenses	\$19	\$20	\$24	\$21
Indirect costs	\$9	\$15	\$16	\$16
Depreciation costs	\$10	\$8	\$8	\$9
Total costs	\$171	\$187	\$196	\$203



Other than per capita costs, other cost measures include costs per dispatched call and costs per FTE.





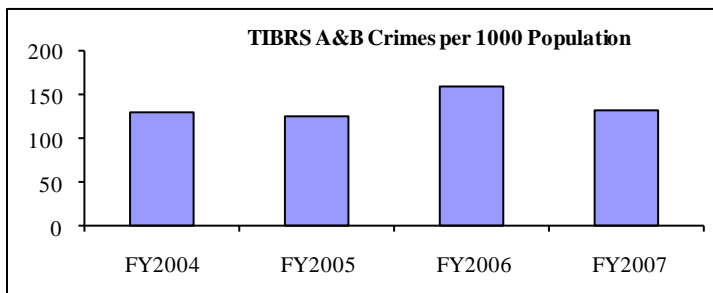
**Police Performance Measures**

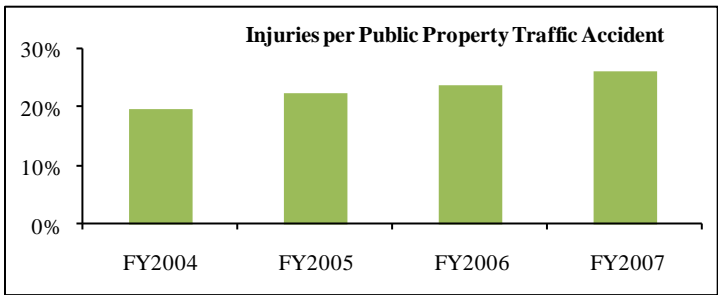
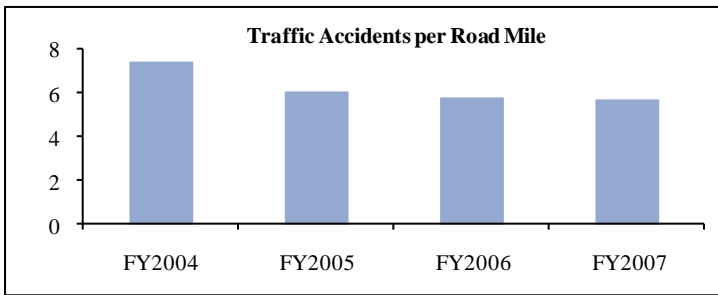
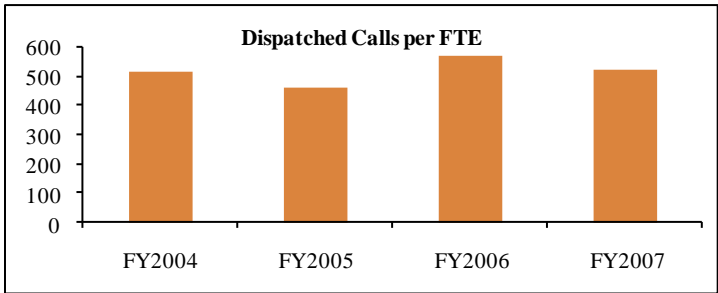
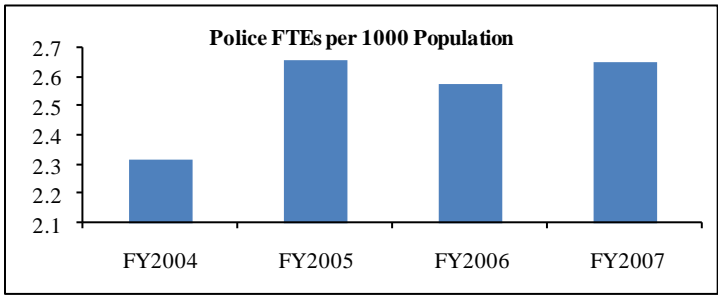
These measures show a reassuring stability in crime and police protection. The only truly volatile component is the number of alarm calls per 1,000 persons. Traffic accidents are a concern for citizens and police forces alike. While traffic accidents per road mile are showing a steady decline, the percentage of injuries has trended upward over the period. With the increased use of red light cameras by Tennessee cities, it will be interesting to note whether traffic accidents, and more importantly, the incidence of injuries shows improvement in the future.

**Summary of All-City Police Measures, FY 2004-FY 2006**

Measure	FY 2004	FY 2005	FY 2006	FY 2007
Calls for service per 1000 population	1288	2313	1365	1481
TIBERS Type A crimes per 1000 population	112	98	114	105
TIBERS Type B crimes per 1000 population	23	35	28	26
Number of FTEs per 1000 population	2.46	2.70	2.86	2.65
Budgeted positions per 1000 population	N/A	N/A	2.55	2.49
Support personnel per 1000 population	0.33	1.48	0.43	0.58
Total accidents per 1000 population	60	42	55	53
Public property accidents per 1000 population	N/A	N/A	41	37
Injury accidents per 1000 population	10.97	9.77	9.65	9.31
Police vehicles per 1000 population	2.53	5.13	2.95	2.67
Alarm calls per 1000 population	93.37	165.46	103.25	81.50

**Police Benchmarks**





## City of Athens

### Profile

Population	13,334
City area (square miles)	15
Calls for service	35,766
TIBRS Type A crimes	2,342
TIBRS Type B crimes	295
Budgeted sworn positions	31
Support (non-sworn) personnel	2
Police vehicles	24
Alarm calls	1,092

### Service Level and Delivery

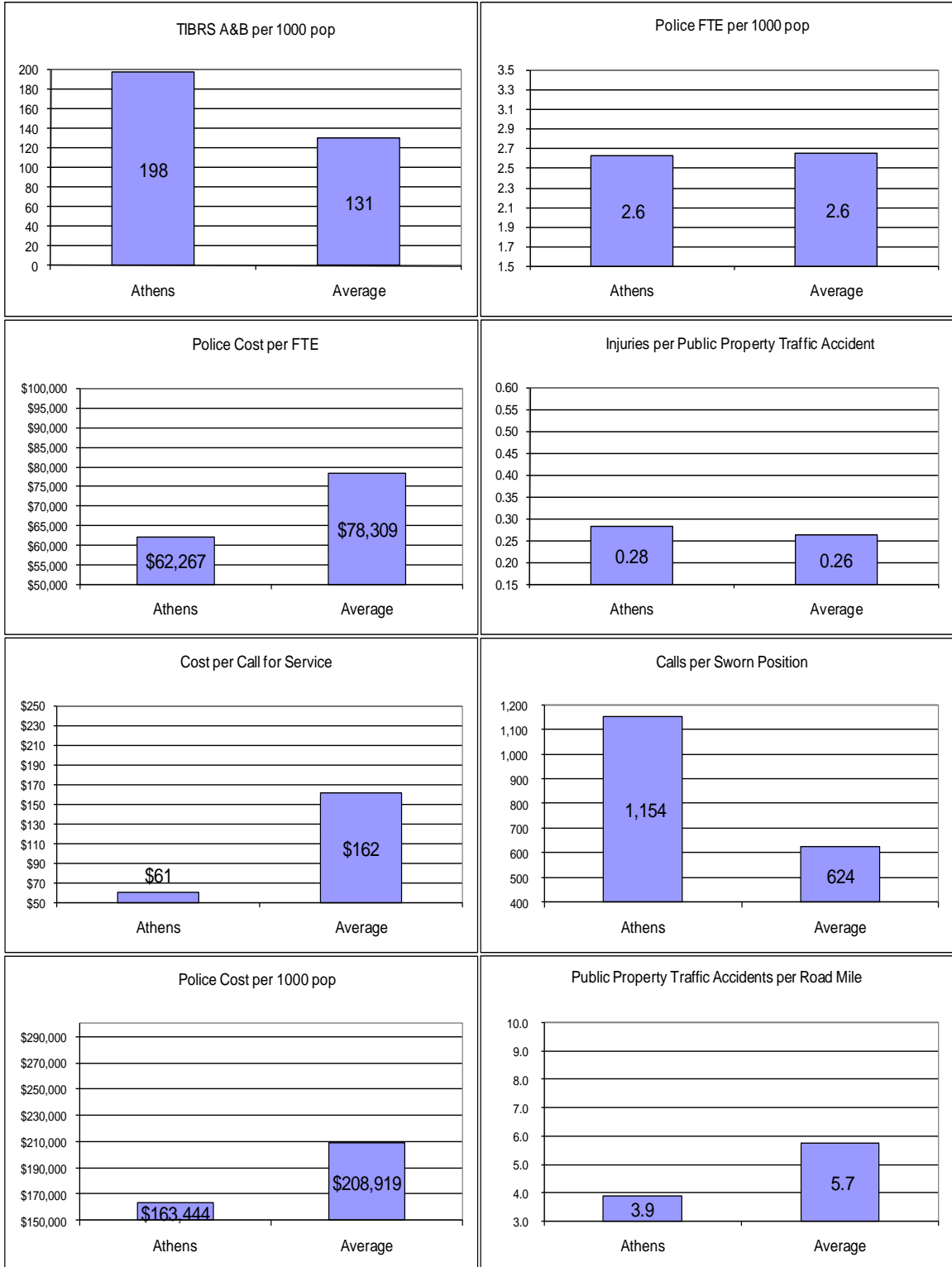
- Athens operates a full-service police department including community service programs. They do not have school resource officers or drug dogs.
- For the purpose of this report, the police department includes administration, patrol and criminal investigations. The police department headquarters is housed in the city's municipal building.
- Officers work eight hour shifts and are generally scheduled to work 40 hours per week. Court appearances are extra work often beyond the 40-hour workweek.
- The department does not have a "take-home" car program.

### Conditions Affecting Service Performance and Cost

- The police department has a policy to engage the public. Their dispatched calls include officer initiated contacts.



## City of Athens Police Benchmarks



## City of Bartlett

### Profile

Population	46,954
City area (square miles)	23
Calls for service	50,754
TIBRS Type A crimes	2,852
TIBRS Type B crimes	1,497
Budgeted sworn positions	100
Support (non-sworn) personnel	8
Police vehicles	75
Alarm calls	4,360

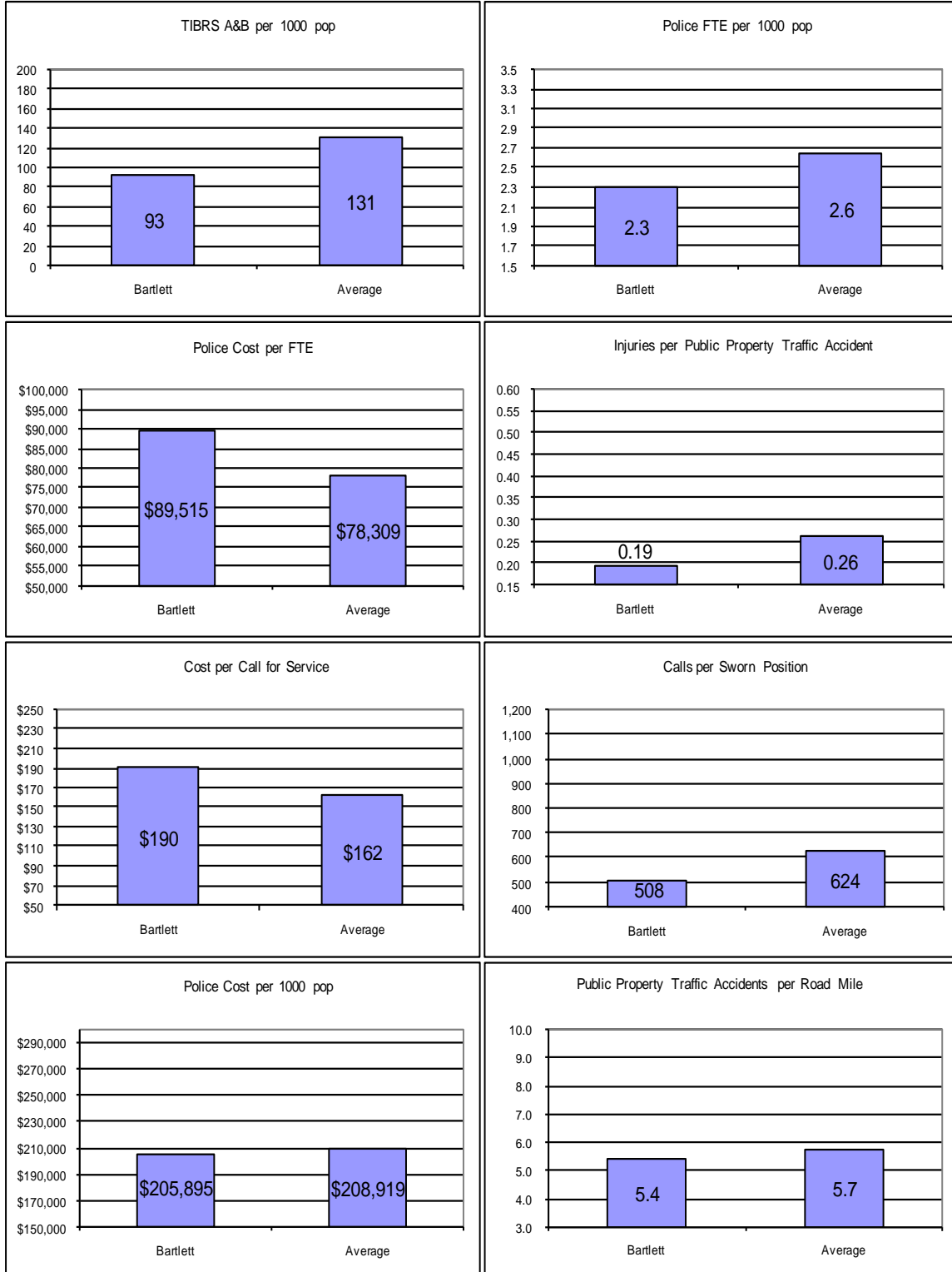
### Service Level and Delivery

- Bartlett operates a full-service police department, including DARE, traffic officers and community relations officers.
- The police department maintains a headquarters separate from the city hall building and operates a municipal jail.
- For the purpose of this study, the dispatch center and the jail unit are not included in this report.
- The city also operates a General Sessions Court.

### Conditions Affecting Service Performance and Cost

- Bartlett is part of the Memphis metropolitan area and is immediately adjacent to the City of Memphis, a city of 650,000 people.
- The city has significant commercial and retail development and multiple interstate exits.

## City of Bartlett Police Benchmarks



## City of Brentwood

### Profile

Population	35,262
City area (square miles)	41
Calls for service	31,772
TIBRS Type A crimes	1,084
TIBRS Type B crimes	197
Budgeted sworn positions	57
Support (non-sworn) personnel	4
Police vehicles	65
Alarm calls	3,326

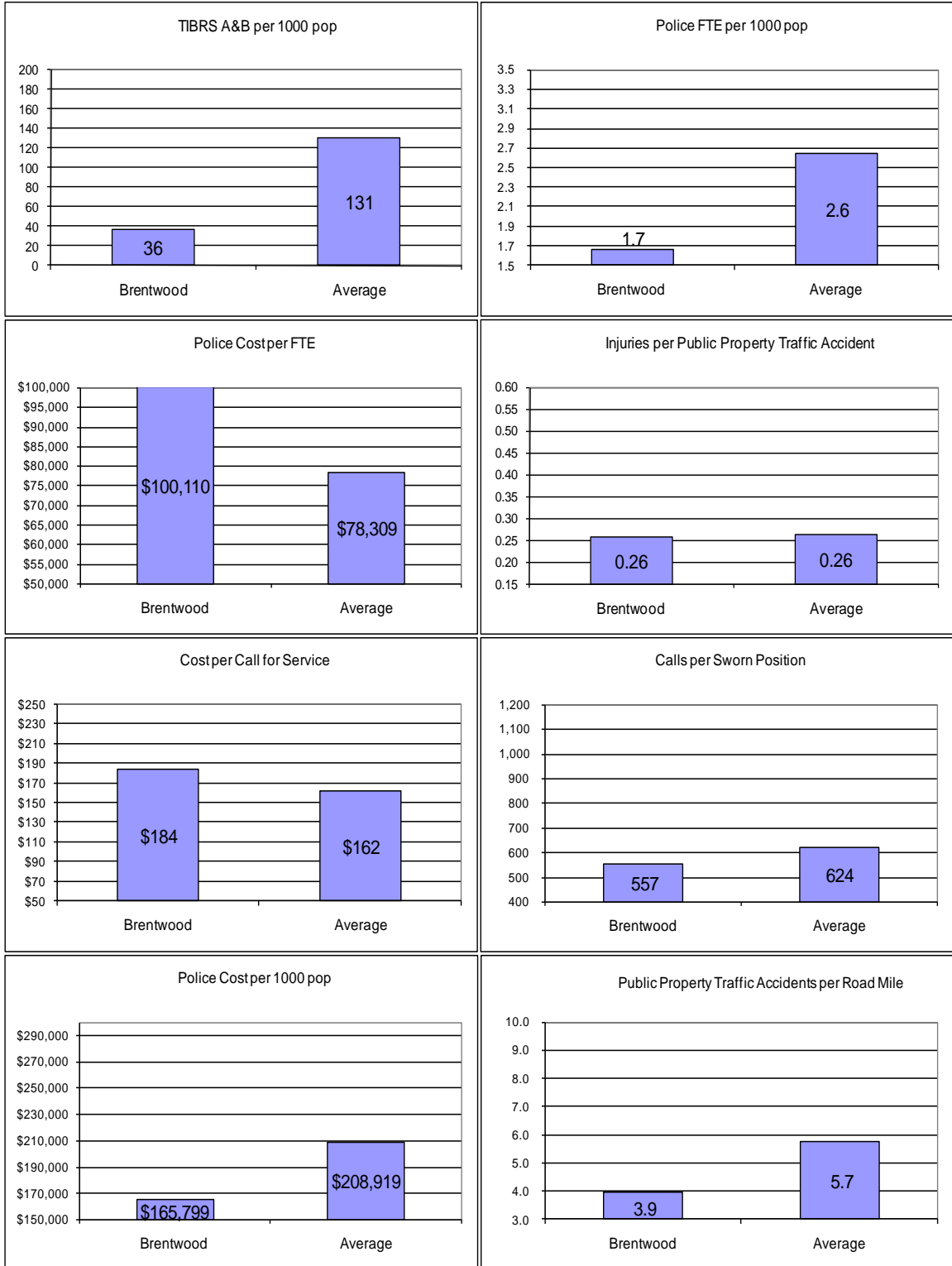
### Service Level and Delivery

- Brentwood operates a full-service police department including community service programs.
- For the purpose of this report, the police department includes administration, patrol and criminal investigations.
- The department has an in-house dispatch operation, but that unit is not included in this report.
- The police department headquarters is part of the city's municipal building.
- Officers work eight hour shifts and are generally scheduled to work 40 hours per week.
- The department does not have a "take-home" car program

### Conditions Affecting Service Performance and Cost

- Brentwood is part of the Nashville/Davidson County metropolitan area and is served by an interstate highway.

## City of Brentwood Police Benchmarks



## City of Chattanooga

### Profile

Population	155,554
City area (square miles)	144
Calls for service	381,962
TIBRS Type A crimes	24,945
TIBRS Type B crimes	3,290
Budgeted sworn positions	471
Support (non-sworn) personnel	130
Police vehicles	529
Alarm calls	N/A

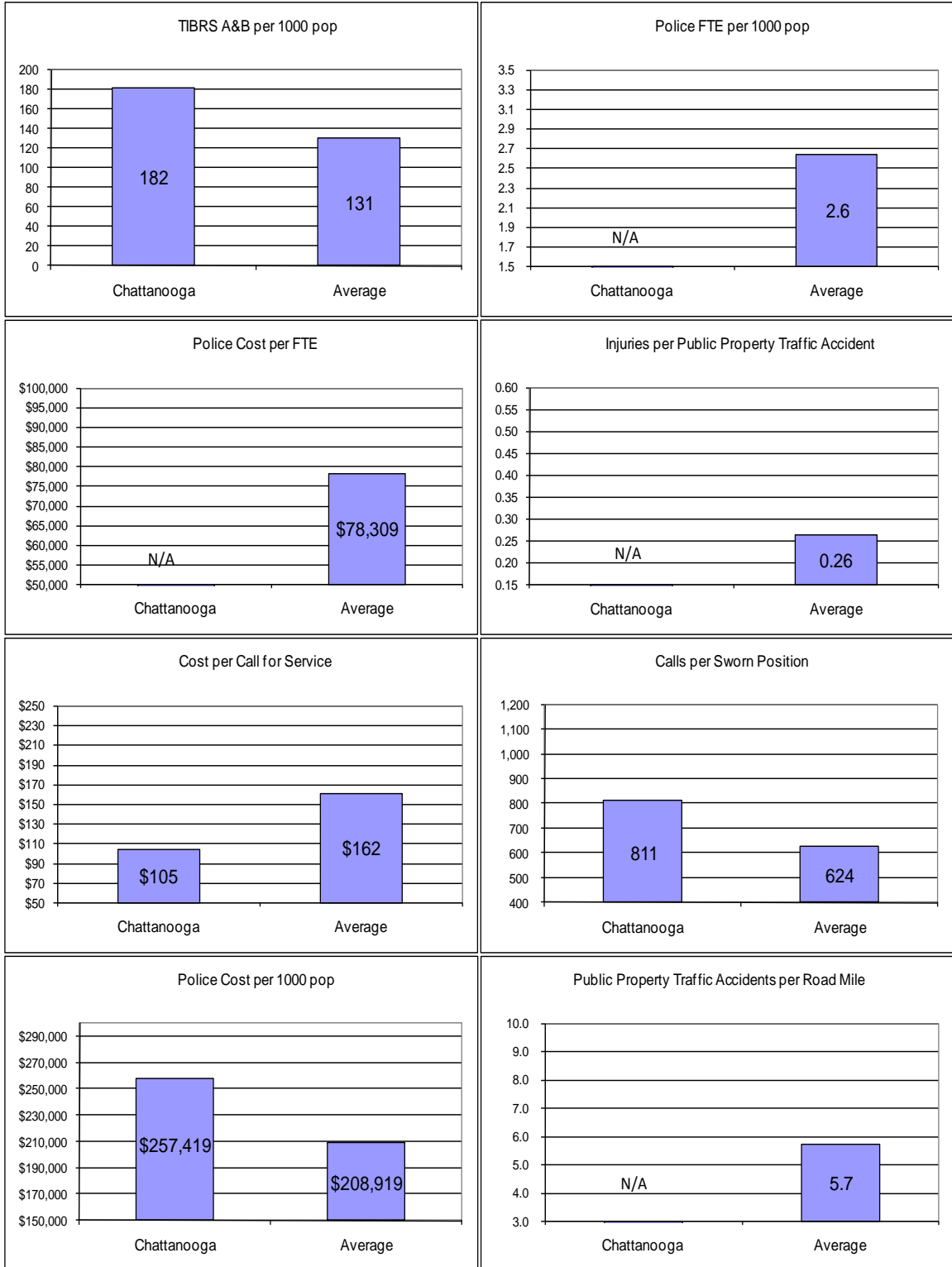
### Service Level and Delivery

- The Chattanooga Police Department is a full-service police department, including DARE and School Resource Officers.
- The city is divided into distinct geographical areas, with Patrol Commanders having authority over all aspects of patrol activity in their area.
- The department has opened “precinct” offices in the city.
- The department operates a “tele-serve” unit, which handles complaints by telephone when the complainant does not need to speak to an officer in person.
- The officers generally work eight-hour shifts. The department has a partial “home fleet,” with some officers allowed to drive the police vehicles home.
- For the purpose of this study, the dispatch and animal control functions of the department are not included in this report.

### Conditions Affecting Service Performance and Cost

- Two major interstates intersect in Chattanooga, producing a high traffic volume.
- The city is at the center of a metropolitan area and serves as a major shopping hub for a multi-county area, including counties in North Georgia.
- Chattanooga is a tourist destination and hosts conferences and conventions.

## City of Chattanooga Police Benchmarks



## City of Clarksville

### Profile

Population	103,455
City area (square miles)	100
Calls for service	151,798
TIBRS Type A crimes	12,669
TIBRS Type B crimes	1,574
Budgeted sworn positions	240
Support (non-sworn) personnel	54
Police vehicles	328
Alarm calls	9,169

### Service Level and Delivery

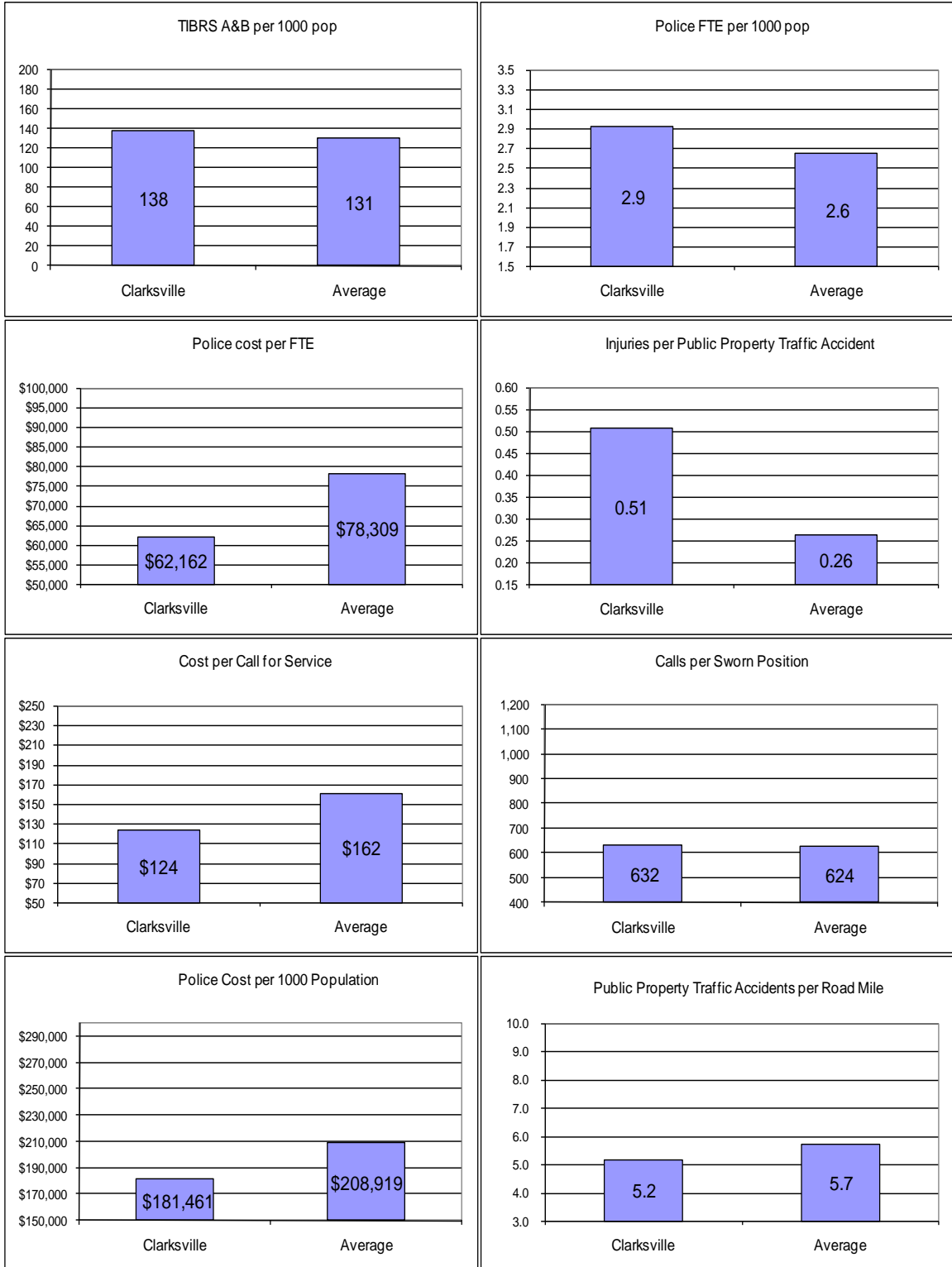
- Clarksville operates a full-service police department, including DARE officers.
- The department has three distinct districts, each operated almost as an independent police department. Each district has traffic, criminal investigation and patrol responsibilities.
- The department has a headquarters building, and two districts have their own office space in other buildings. The department maintains a “home fleet” with officers allowed to drive the police vehicles home.
- The department works 12-hour shifts, and officers are scheduled to work some “short” shifts to reduce the number of scheduled work hours below the overtime threshold.

### Conditions Affecting Service Performance and Cost

- A portion of the U. S. Army’s Fort Campbell is inside the city, and the city is significantly impacted by commercial and residential development associated with the presence of the military base.
- The city is served by Interstate 24 and serves as a gateway for traffic going into and out of Kentucky.



## City of Clarksville Police Benchmarks



## City of Cleveland

### Profile

Population	37,311
City area (square miles)	26
Calls for service	59,703
TIBRS Type A crimes	5,296
TIBRS Type B crimes	1,854
Budgeted sworn positions	92
Support (non-sworn) personnel	27
Police vehicles	103
Alarm calls	3,052

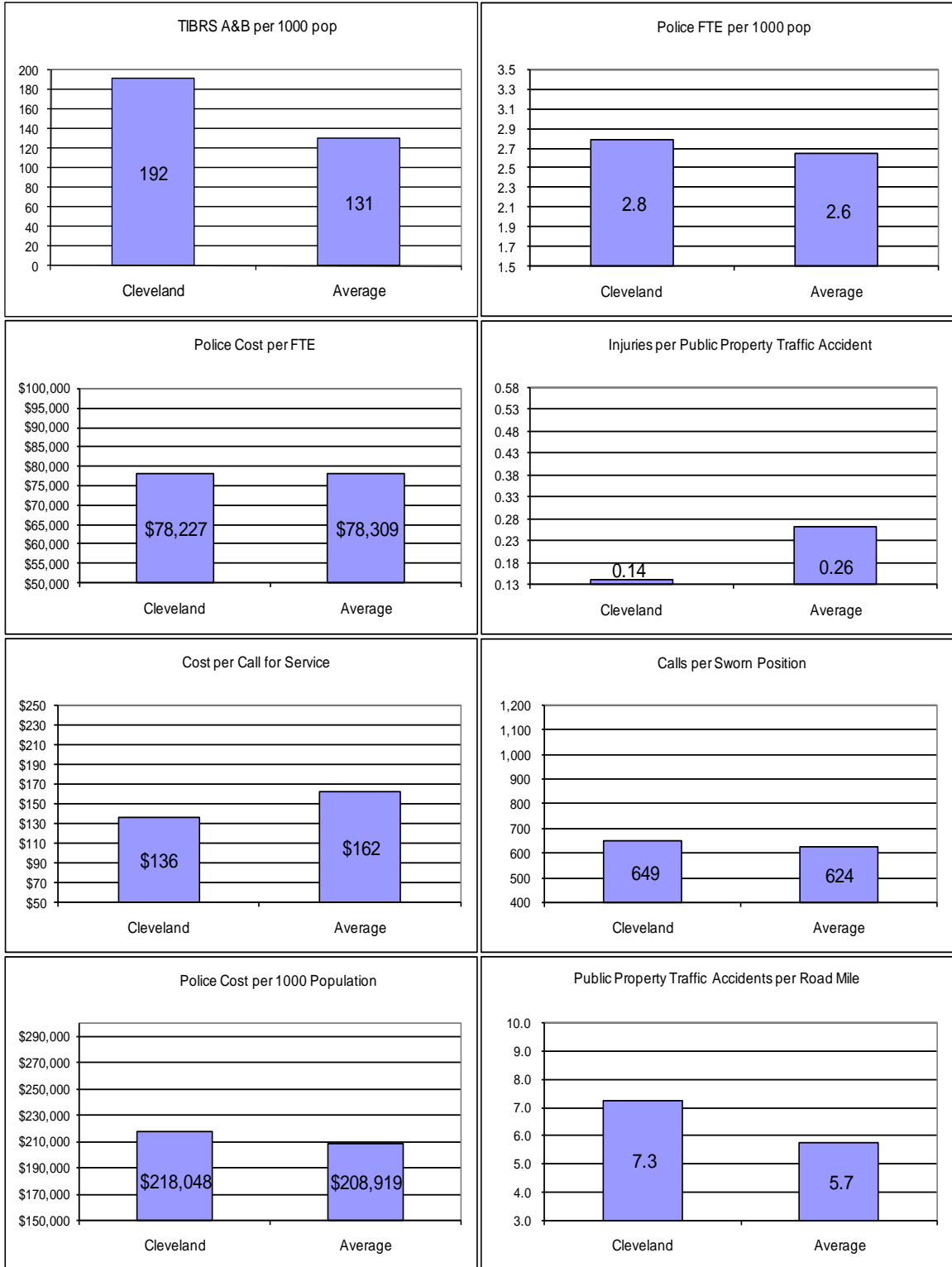
### Service Level and Delivery

- To ensure continuous patrol coverage and uninterrupted response to calls, the Patrol Services Division makes available six patrol teams that work four 10-hour shifts. The shifts are custom-tailored to place as many as 31 police officers on duty during peak call times.
- The Investigative Division is comprised of two separate units: Criminal Investigations responsible for handling all property and people crimes and Special Investigations responsible for handling all vice crimes.
- The department also maintains a Teleserve Unit, Canine Unit, Traffic Unit, Crime Prevention Unit, and a Special Response Team. School Resource Officers are provided for all city schools by the department. Take-home vehicles are provided for all officers who live within a 15-mile radius of the department. There are currently 2.4 officers per 1,000 citizens in Cleveland.
- During FY06 officers responded to 63,440 calls for service, issued 12,143 citations for moving violations and made 5,391 arrests.
- Animal Control is managed by the Cleveland police department. Bradley County contracts the services of Animal Control.

### Conditions Affecting Service Performance and Cost

- Cleveland is located less than 20 miles from Chattanooga, a city with a population in excess of 155,000, and is located on an interstate highway.

## City of Cleveland Police Benchmarks



## Town of Collierville

### Profile

Population	41,923
City area (square miles)	29
Calls for service	39,416
TIBRS Type A crimes	2,085
TIBRS Type B crimes	1,072
Budgeted sworn positions	92
Support (non-sworn) personnel	29
Police vehicles	65
Alarm calls	2,874

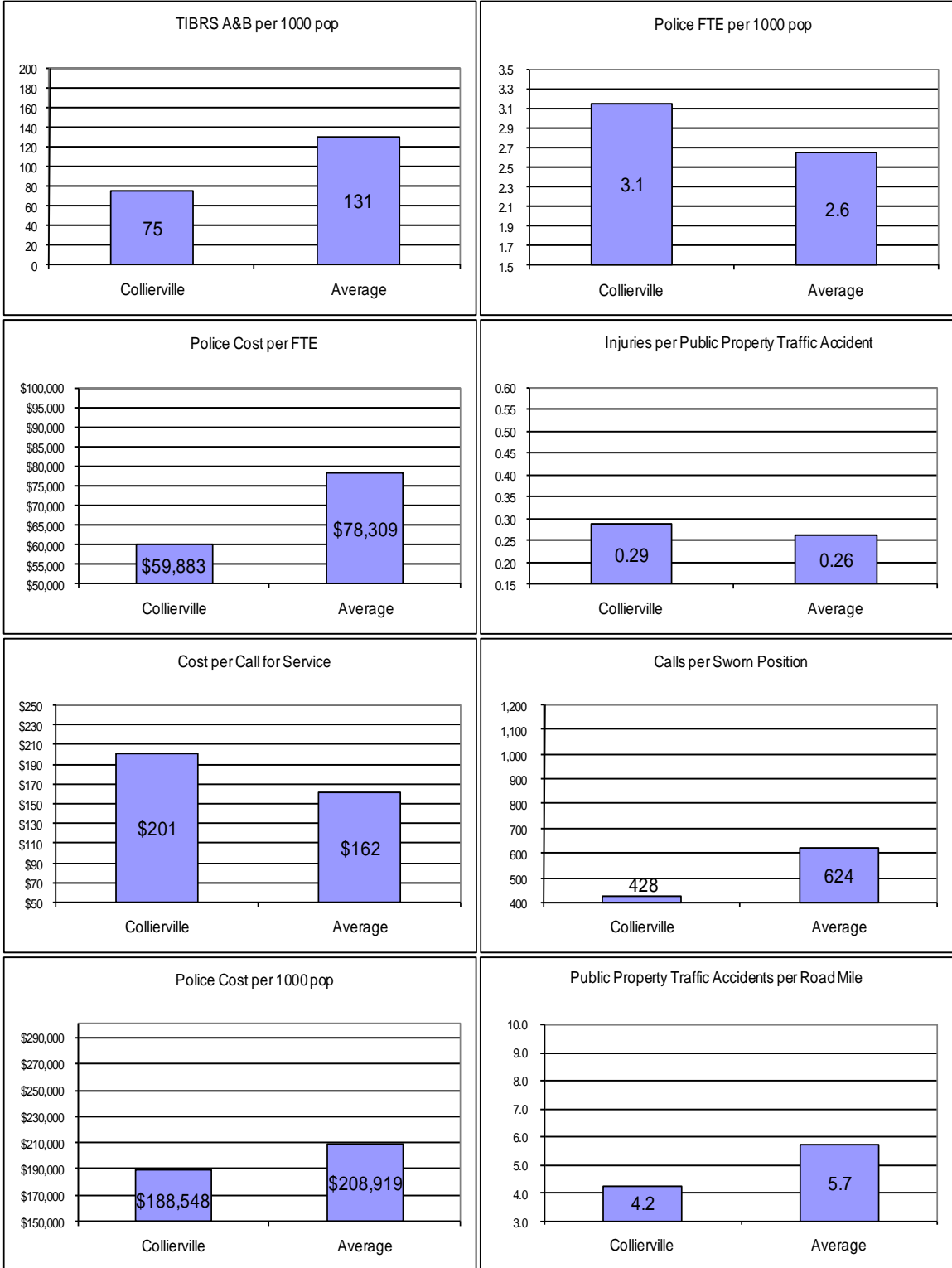
### Service Level and Delivery

- Collierville operates a full-service police department, including school resource officers, traffic officers, crisis intervention officers and tactical officers. In addition, the police department also has a police reserve program, special citizen volunteers, a citizens' police academy and an explorer post as part of the community policing program.
- Police services consist of traditional law enforcement functions, including patrol, investigations, and police administration. These functions encompass preventive patrols, traffic enforcement, responding to calls for service, and investigation of crimes. The Collierville Police Department is nationally accredited through the Commission on Accreditation for Law Enforcement Agencies (CALEA).
- The police department includes a municipal jail, communications center and an annex building. For the purpose of this study, the dispatch center and the jail unit are not included in the report. The city also operates a General Sessions Court located in the main police complex.

### Conditions Affecting Service Performance and Cost

- Collierville is part of the Memphis metropolitan area and is immediately adjacent to the City of Memphis, a city of 650,000 people.

## Town of Collierville Police Benchmarks



## City of Franklin

### Profile

Population	49,412
City area (square miles)	41
Calls for service	55,765
TIBRS Type A crimes	3,022
TIBRS Type B crimes	447
Budgeted sworn positions	136
Support (non-sworn) personnel	29
Police vehicles	156
Alarm calls	3,238

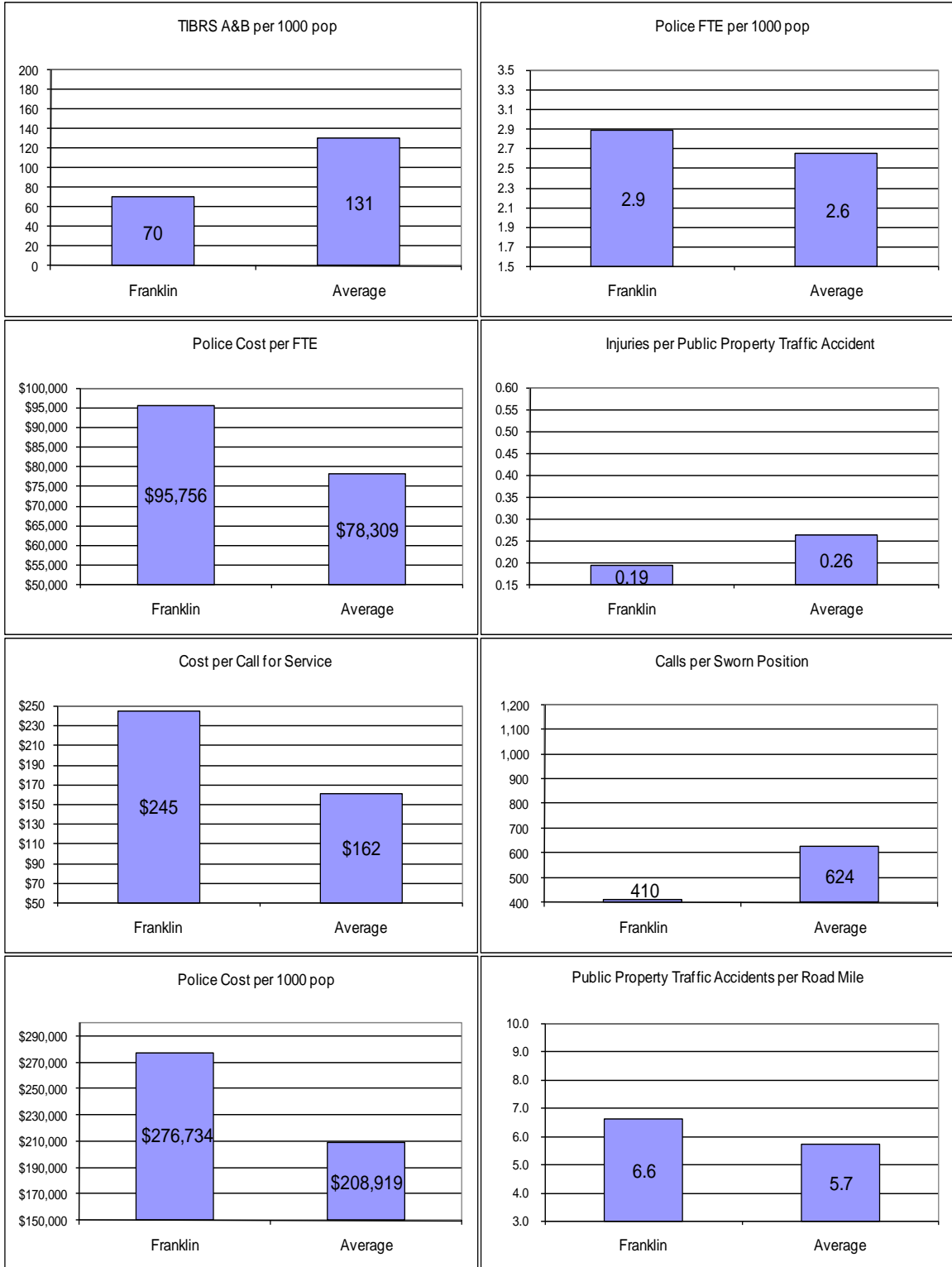
### Service Level and Delivery

- The Franklin Police Department is divided into three divisions: Patrol/Operations, Administration, and Criminal Investigations. There are three shifts and patrol officers work four 10-hour days per week.
- The department maintains specialized units such as the Special Response Team, Hostage Negotiation Team, Canine, Dive Search and Recovery Team, Critical Incident Response Team, and an Incident Command Vehicle for Homeland Security Region 5 responses and other emergency incidents.
- All patrol vehicles are equipped with mobile data terminals and in-car cameras
- The Franklin Police Department is nationally accredited through the Commission on Accreditation for Law Enforcement Agencies (CALEA).

### Conditions Affecting Service Performance and Cost

- Franklin is approximately 15 miles south of Nashville and is served by Interstate 65, which is the gateway for traffic from the south.
- The City of Franklin revised its pension formula in 2003 to a level that is 33% higher than the Tennessee Consolidated Retirement System. The City also provides comprehensive medical insurance; employees to pay 8% of individual coverage and 12% of family coverage premiums.
- Franklin is significantly impacted by commercial and residential development due to corporations such as the North American Nissan Headquarters relocating from California.

## City of Franklin Police Benchmarks



## City of Murfreesboro

### Profile

Population	81,393
City area (square miles)	52
Calls for service	87,275
TIBRS Type A crimes	11,217
TIBRS Type B crimes	4,382
Budgeted sworn positions	187
Support (non-sworn) personnel	47
Police vehicles	171
Alarm calls	6,380

### Service Level and Delivery

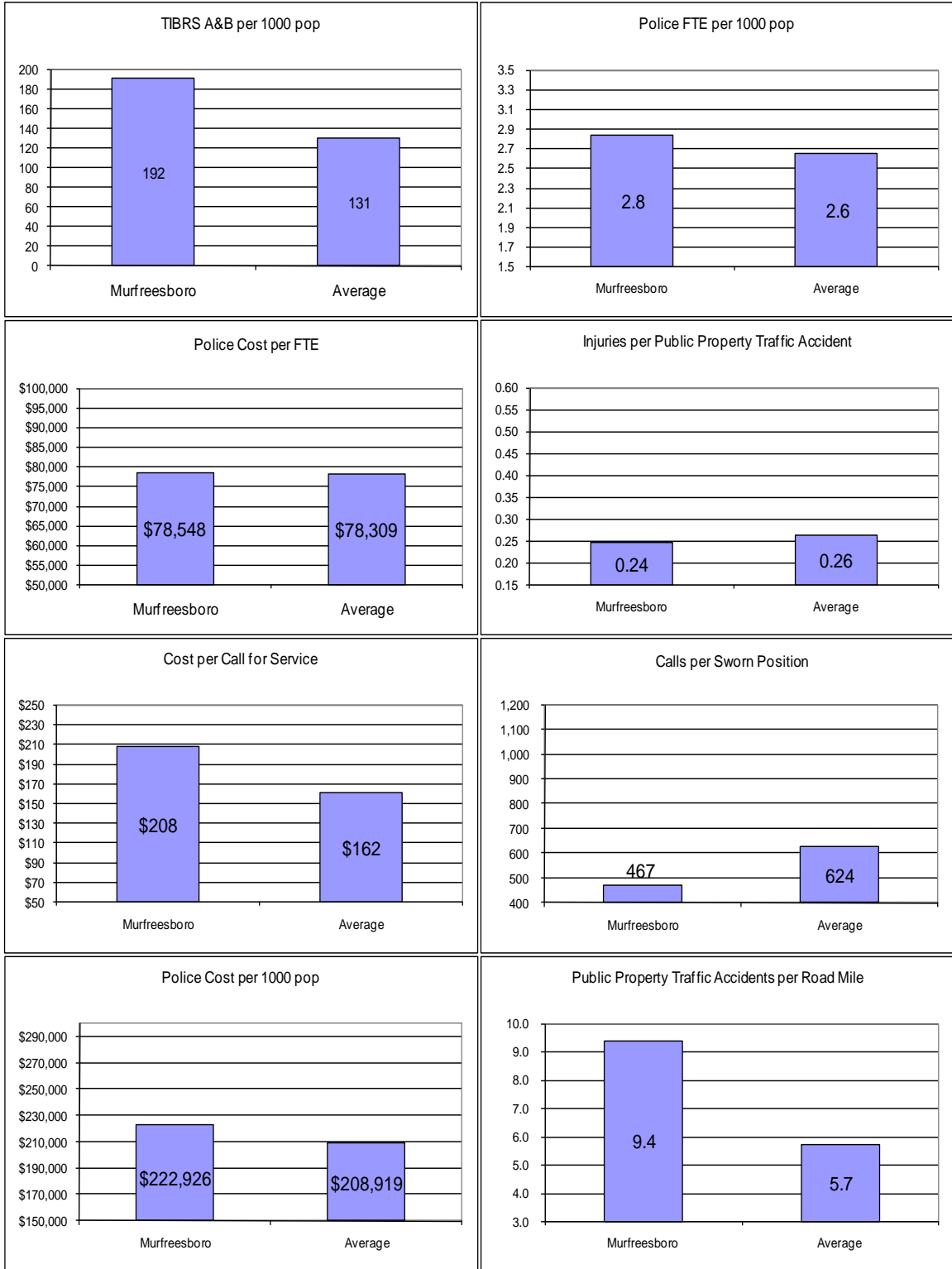
- Murfreesboro offers a full-service police department supplemented by flex shifts, community policing precincts, motorcycle traffic enforcement, an alcohol-countermeasures team, a special operations unit, canine support, vice and domestic violence sections, and a variety of community service programs.
- The Murfreesboro Police/Fire Communications Center is operated from within the Police Department.
- Murfreesboro is home to Middle Tennessee State University, with a consistent enrollment of greater than 20,000 students per semester. MTSU and the events connected to that campus bring thousands of tourists into Murfreesboro each year.
- Murfreesboro is served by I-24 and I-840 and is a regional destination for commercial, retail and medical services. The City's proximity to Nashville provides opportunity for residents to commute to Nashville for work.
- Nissan operates a major manufacturing plant less than five minutes from the Murfreesboro City limits, and fuels a number of satellite suppliers in the surrounding area. As a result, the City is experiencing unprecedented growth and development.

### Conditions Affecting Service, Performance and Cost

- To extend police services into annexed areas and for the City's increasing population, additional police employees are being hired, trained and deployed.
- To provide an expected level of service delivery during peak periods, overtime assignments are frequently used.



## City of Murfreesboro Police Benchmarks



## FIRE SERVICES

Fire services consists of the entire range of services provided by the city's fire department, which may include fire suppression, fire prevention, fire code inspections, fire safety education, arson investigation, rescue, and/or emergency medical services.

A special caution to the reader is appropriate for fire services benchmarks because there is considerable variation in how these services are provided. The source of some of that variation is emergency medical services. Athens and Cleveland do not provide emergency medical services. Bartlett provides some advanced life support (ALS) and some transport service. Franklin provides basic life support (BLS) and some advanced life support (ALS) while Brentwood and Collierville provide advanced life support (ALS). Chattanooga, Clarksville, and Murfreesboro are first responders.

The steering committee made every attempt to exclude costs associated with emergency medical service from each fire cost category, but it is impossible to fully account for cost and service level variations when so many fire service employees are also performing emergency medical services.

### Definitions of Terms Used

**Calls For Service** – Includes all response categories for both emergency and non-emergency service that require use of Fire Department personnel and equipment.

**Fire Calls** – The total of all reported fires of all types, including structure fires. The reporting standard for all fire data is TFIRS, the Tennessee Fire Incident Reporting System, which complies with the standards of NFIRS, the National Fire Incident Reporting System operated by the U.S. Fire Administration, part of the Federal Emergency Management Agency (FEMA).

**Fire Inspections** – Includes inspections performed by both certified fire inspectors and by the staff of the city's engine companies.

**FTE Positions** – Number of hours worked in the Fire Department converted to full time equivalent (FTE) positions at 2,760 hours per year. Since a standard work year is used, this figure may not correspond to the number of positions budgeted in the Fire Department.

For some cities, the number of FTE's may be a budgeted figure, rather than actual hours worked, which could result in either understating or overstating the actual hours worked.

**Fire Response Time** – The time that elapses between the time at which the fire department (not the 911 or dispatch center) first becomes aware of the call and the arrival of the first fire department unit is on the scene of the incident.

**Fire Services Performance Measures Comparison  
Fiscal Year 2007**

	Athens	Bartlett	Brentwood	Chattanooga	Clarksville
2007 Certified population	13,334	46,954	35,262	155,554	103,455
Calls for service	414	3,663	2,466	11,385	7,022
Fire calls	102	559	112	1,171	615
Structure fires	42	45	11	220	92
Fire inspections	279	3,369	653	7,714	2,043
Fire code violations - issued	61	816	1,318	N/A	1,002
Number FTEs	21.1	75.4	46.3	404.4	195.3
Certified positions	20	72	57	417	199
Appraised value (millions)	\$1,077	\$3,785	\$7,140	\$12,311	\$4,404
Fire loss	\$995,150	\$1,267,979	\$2,308,003	\$8,400,000	\$1,889,700
Total cost	\$1,468,783	\$6,104,706	\$5,516,209	\$29,432,949	\$11,674,205
Calls for service per 1000 population	31.0	78.0	69.9	73.2	67.9
Fire calls per 1000 population	7.6	11.9	3.2	7.5	5.9
Structure fires per 1000 population	3.1	1.0	0.3	1.4	0.9
Cost per call for service	\$3,548	\$1,667	\$2,237	\$2,585	\$1,663
Fire inspections per FTE	13	45	14	19	10
Code violations per position	3	11	23	N/A	5
Percent of fire code violations cleared in 90 days	97%	95%	89%	N/A	100%
Certified positions per 1000 population	1.5	1.5	1.6	2.7	1.9
Total response time	3:48	N/A	6:06	5:55	5:10
Dispatch time	1:18	N/A	1:13	0:50	0:30
Fire response time	2:30	4:47	4:53	5:05	4:40
Percent of structure fires where fire cause is determined	70%	50%	91%	55%	95%
Fire loss per \$ million appraised value	\$924	\$335	\$323	\$682	\$429
Per capita total cost	\$110	\$130	\$156	\$189	\$113
ISO rating	4	3	4	2	3

**Fire Services Performance Measures Comparison  
Fiscal Year 2007**

	Cleveland	Collierville	Franklin	Murfreesboro	Average
2007 Certified population	37,311	41,923	49,412	81,393	
Calls for service	1,313	2,551	5,078	7,653	4616
Fire calls	1,261	101	199	389	501
Structure fires	52	58	66	158	83
Fire inspections	2,522	2,957	1,837	5,184	2951
Fire code violations - issued	3,778	4,004	1,287	2,896	1895
Number FTEs	96.0	57.0	159.2	182.0	137.4
Certified positions	91	72	157	182	140.7
Appraised value (millions)	\$2,919	\$4,639	\$7,830	\$6,561	\$5,630
Fire loss	\$1,614,850	\$915,653	\$484,595	\$1,933,150	\$2,201,009
Total cost	\$7,137,149	\$6,091,729	\$12,514,105	\$12,939,949	\$10,319,976
Calls for service per 1000 population	35.2	60.8	102.8	94.0	68.1
Fire calls per 1000 population	33.8	2.4	4.0	4.8	9.0
Structure fires per 1000 population	1.4	1.4	1.3	1.9	1.4
Cost per call for service	\$5,436	\$2,388	\$2,464	\$1,691	\$2,631
Fire inspections per FTE	26	52	12	28	24
Code violations per position	42	56	8	16	20
Percent of fire code violations cleared in 90 days	99%	92%	N/A	45%	88%
Certified positions per 1000 population	2.4	1.7	3.2	2.2	2.1
Total response time	5:01	5:05	6:17	5:47	5:23
Dispatch time	1:45	0:35	2:01	1:26	1:12
Fire response time	3:56	4:30	4:16	3:39	4:15
Percent of structure fires where fire cause is determined	99%	80%	93%	83%	79%
Fire loss per \$ million appraised value	\$553	\$197	\$62	\$295	\$422
Per capita total cost	\$191	\$145	\$253	\$159	\$161
ISO rating	3	4	3/9	3	

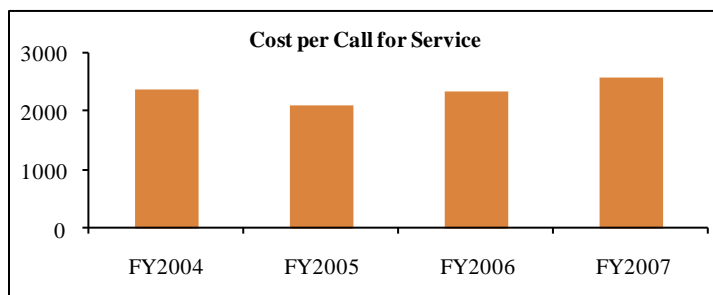
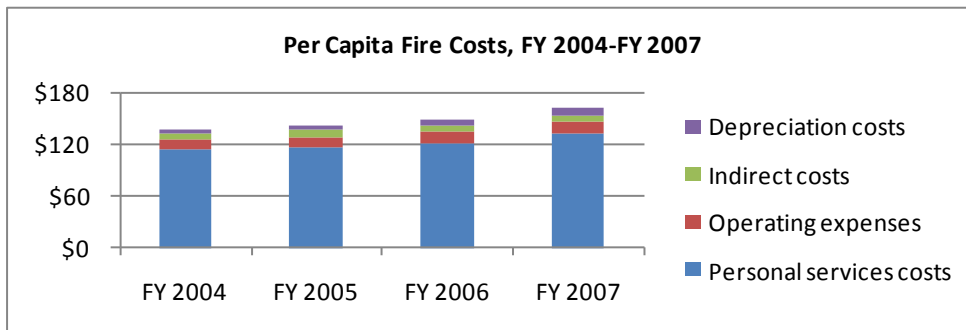
## Service Specific Trends: Fire

### Fire Costs

Total fire service per capita costs increased at a rate of 5½% per year over the three-year period. As is the case with police services, personal service costs are by far the largest component of total costs. Of all the services in the benchmarking program the component costs of fire services exhibit the greatest stability.

### Summary of All-City Per Capita Fire Costs, FY 2004-FY 2007

Measure	FY 2004	FY 2005	FY 2006	FY 2007
Personal services costs	\$113	\$117	\$121	\$133
Operating expenses	\$12	\$11	\$13	\$12
Indirect costs	\$6	\$8	\$7	\$8
Depreciation costs	\$6	\$6	\$7	\$7
Total costs	\$137	\$142	\$147	\$161



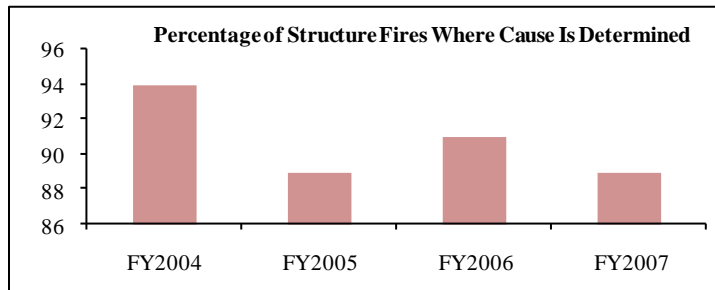
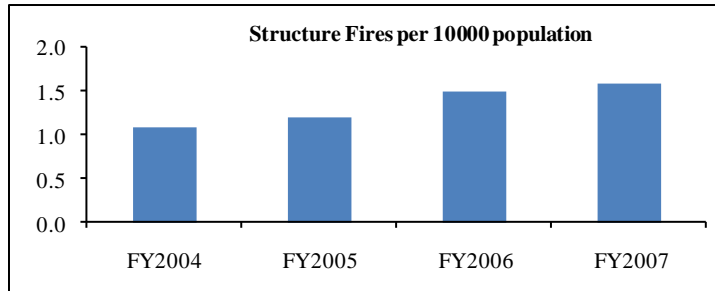
### Fire Performance Measures

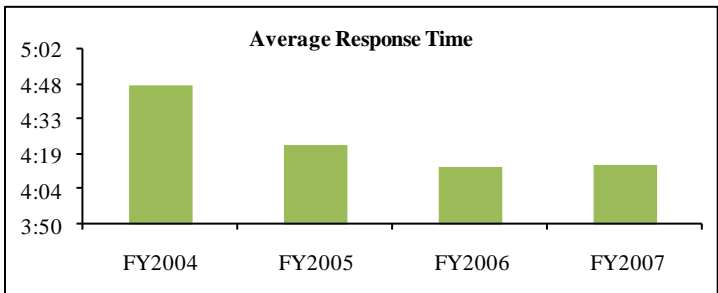
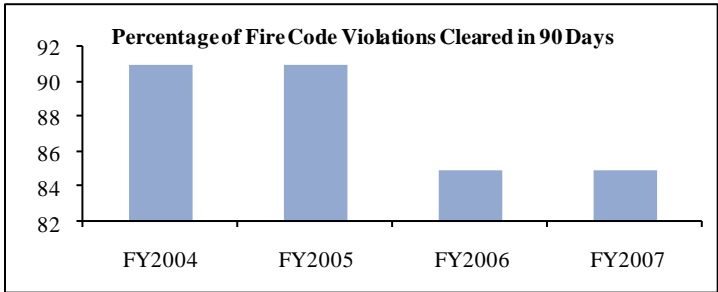
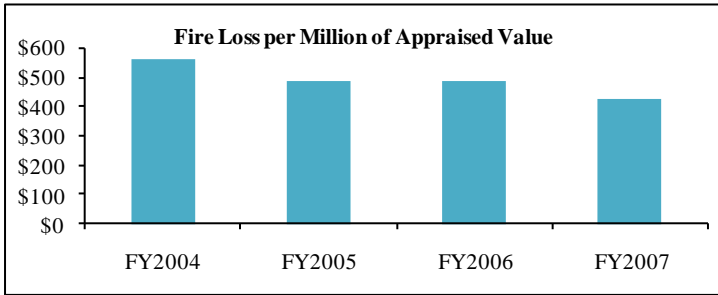
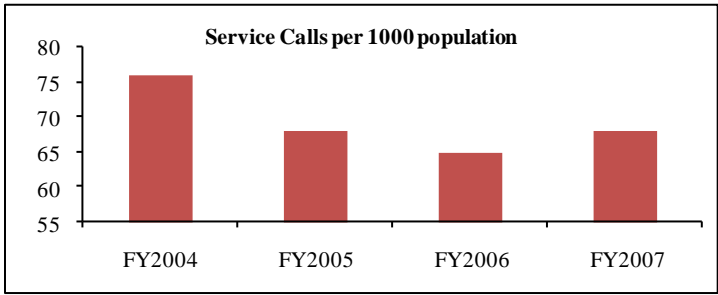
Two key measures of particular interest to citizens are fire response time and fire loss as a percentage of appraised value. In both of these measures, benchmarking program participating cities are showing improvement over the four-year period.

**Summary of All-City Fire Measures, FY 2004-FY 2006**

<b>Measure</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>
Calls for service per 1000 population	76	68	74	68
Non-emergency calls per 1000 population	16	11	5	9
Emergency calls per 1000 population	60	57	69	59
Fire calls per 1000 population	4	11	11	9
Structure fires per 1000 population	1.10	1.19	1.63	1.42
Fire inspections per 1000 population	50	54	54	47
Fire code violations issued per 1000 population	39	31	12	41
Percent of fire code violations cleared in 90 days	91%	91%	85%	88%
Number of FTE's per 1000 population	2.13	1.95	4.04	2.04
Budgeted certified positions per 1000 population	N/A	1.44	1.91	2.09
Total appraised property value in millions	\$3,764	\$3,845	\$4,329	\$5,630
Fire response time	4:48	4:23	4:14	4:15
Percent fire cause determined	94%	89%	91%	79%
Fire loss per million of appraised value	\$557	\$488	\$488	\$422
EMS calls per 1000 population	49	48	54	41

**Fire Benchmarks**







## City of Athens

### Profile

Population	13,334
City area (square miles)	15
Centerline miles	146
Calls for service	414
Fire calls	102
Structure fires	42
Fire inspections	279
Code violations issued	61
Certified positions	20
Fire response time	2:30
EMS Service Level	None
EMS calls	0
ISO Rating	4
Number of fire stations	2

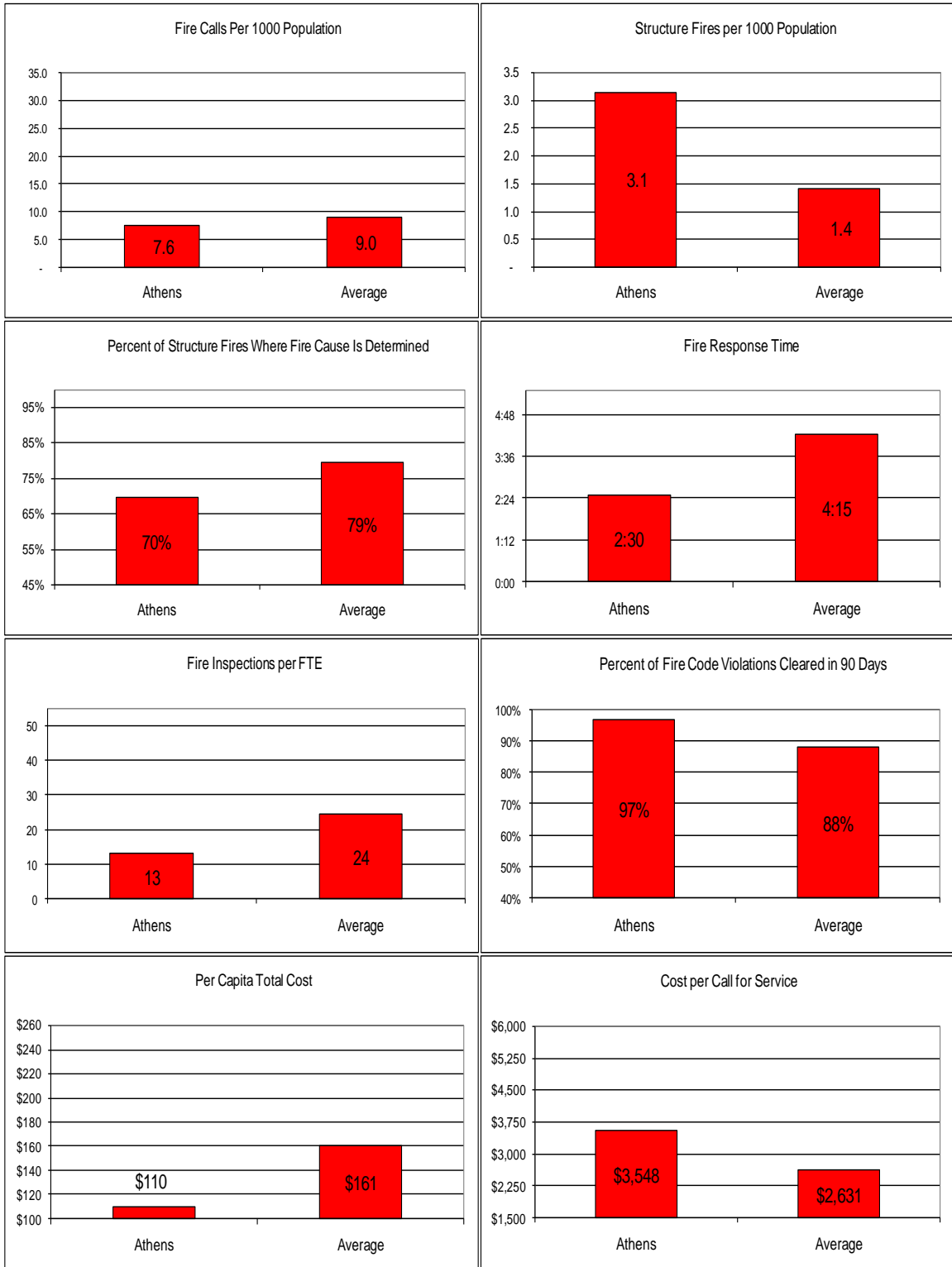
### Service Level and Delivery

- Athens operates a full-service fire department, and provides almost all of the services offered in fire departments across the state.
- The department provides fire prevention, public fire education, and code enforcement services.
- The fleet management fund allows for timely purchase of capital needs.
- The employees work three 4 day cycles; four days from 7 a.m. to 5 p.m., four days from 5 p.m. to 7 a.m., four days off.

### Conditions Affecting Service Performance and Cost

- None

## City of Athens Fire Benchmarks



## City of Bartlett

### Profile

Population	46,954
City area (square miles)	23
Centerline miles	221
Calls for service	3,663
Fire calls	559
Structure fires	45
Fire inspections	3,369
Code violations issued	816
Certified positions	72
Fire response time	4:47
EMS Service Level	ALS, Transport
EMS calls	2,749
ISO Rating	3
Number of fire stations	5

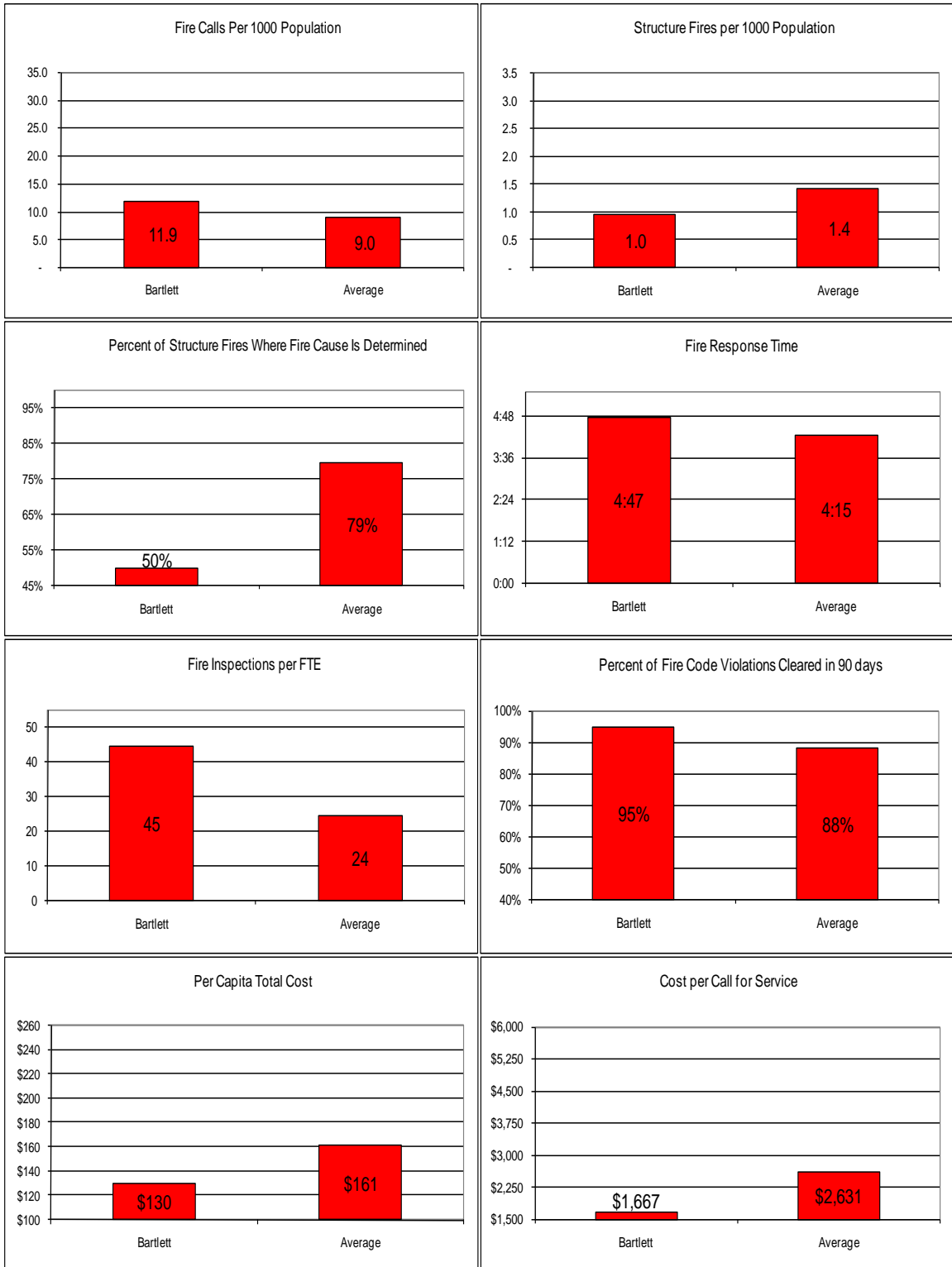
### Service Level and Delivery

- Bartlett operates a full-service fire department and provides all of the services offered in any other fire department in the state.
- The department provides fire prevention, public fire education, code enforcement services, and ambulance transport.
- See the “Fire Services Definitions” table at the beginning of this section for more detail.

### Conditions Affecting Service Performance and Cost

- Bartlett is the only participating city providing ambulance transport services. Therefore the costs associated with ambulance transport are not included in this cost analysis.

## City of Bartlett Fire Benchmarks



## City of Brentwood

### Profile

Population	35,262
City area (square miles)	41
Centerline miles	225
Calls for service	2,466
Fire calls	112
Structure fires	11
Fire inspections	653
Code violations issued	1,318
Certified positions	57
Fire response time	4:53
EMS Service Level	ALS
EMS calls	1,032
ISO Rating	4
Number of fire stations	4

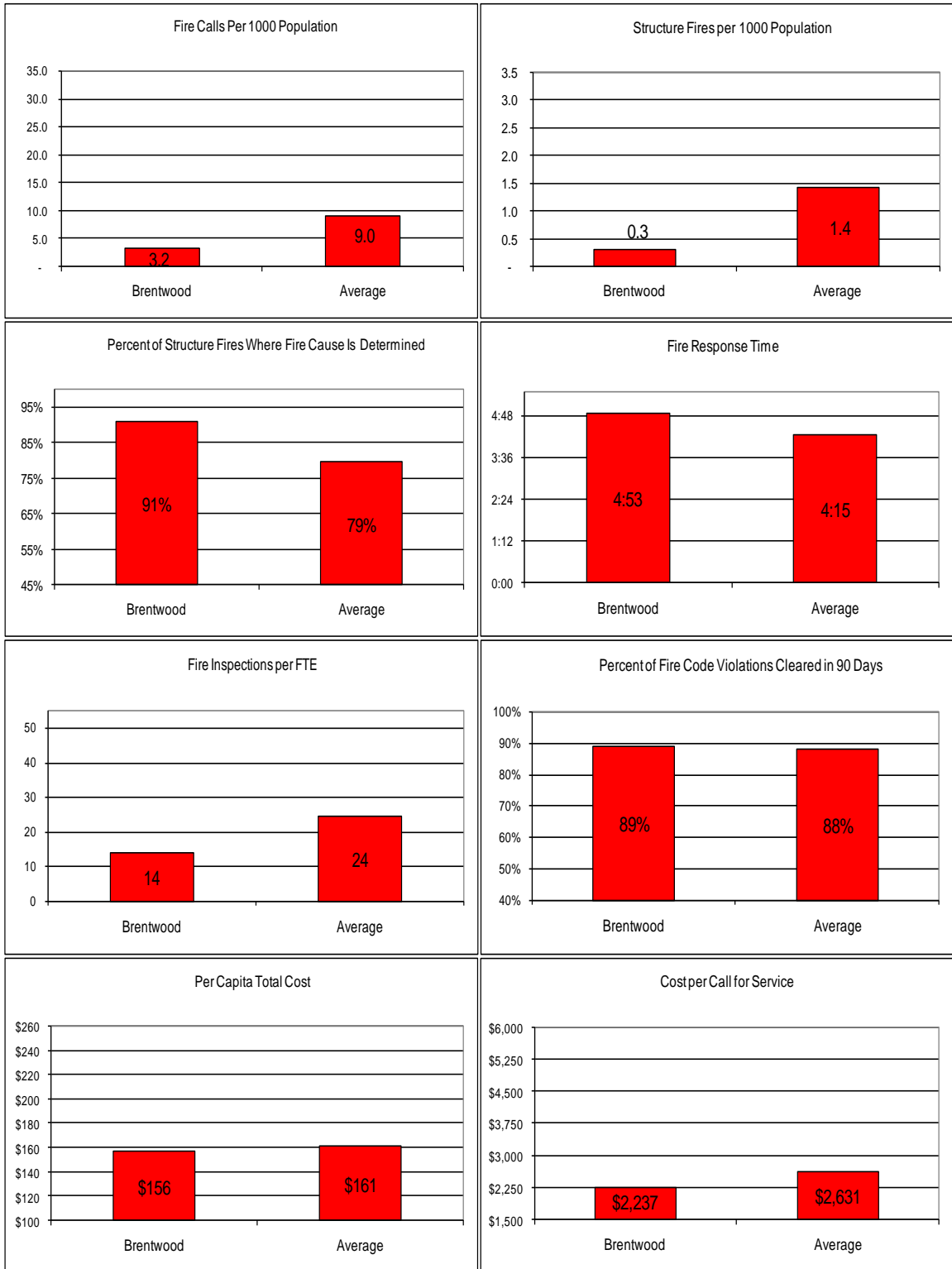
### Service Level and Delivery

- Brentwood operates a full-service fire department, and provides almost all of the services offered in any fire department in the state.
- The department also offers a wide range of non-emergency services including fire prevention, public fire education, and code enforcement activities.
- They also provide fire alarm acceptance testing.
- The department has a written Master Plan.
- Firefighter pay scales are related to levels of training and certification.
- See the “Fire Services Definitions” table at the beginning of this section for more details.

### Conditions Affecting Service Performance and Cost

- None

## City of Brentwood Fire Benchmarks



## City of Chattanooga

### Profile

Population	155,554
City area (square miles)	144
Centerline miles	1100
Calls for service	11,385
Fire calls	1,171
Structure fires	220
Fire inspections	7,714
Code violations issued	N/A
Certified positions	404
Fire response time	5:05
EMS Service Level	First
EMS calls	5,240
ISO Rating	2
Number of fire stations	17

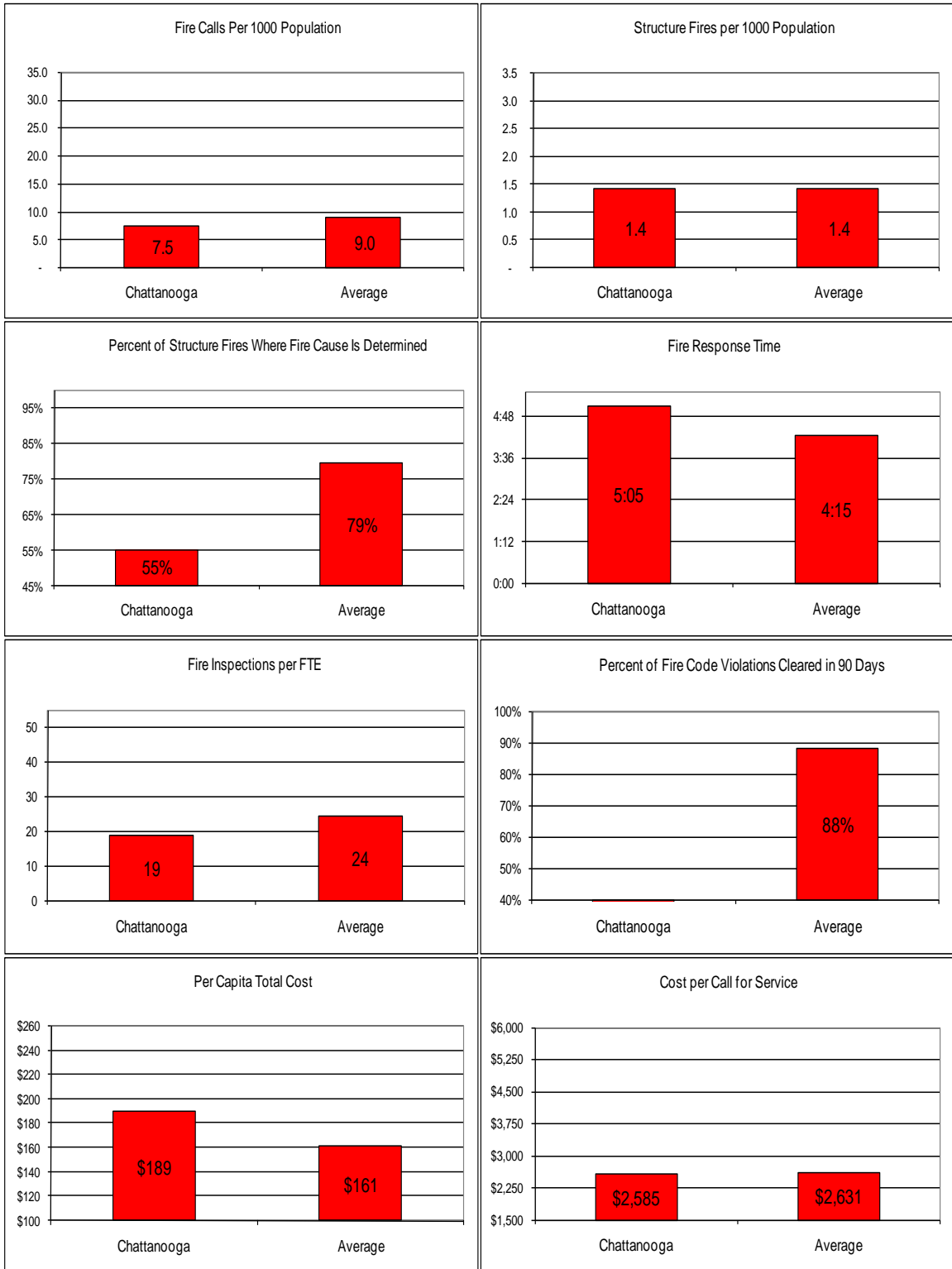
### Service Level and Delivery

- Chattanooga has made a major effort in the past few years to modernize and upgrade their fire department.
- A significant capital investment is being made to modernize the fire department fleet.
- The department provides fire prevention, public fire education, and code enforcement services.
- Firefighter pay scales are related to levels of training and certification.
- See the “Fire Services Provided” table at the beginning of this section for more details.

### Conditions Affecting Service Performance and Cost

- The department has many first-out, emergency response that are over 21 years old, which could affect performance. Replacement of those vehicles could affect future operational costs.

## City of Chattanooga Fire Benchmarks





## City of Clarksville

### Profile

Population	103,455
City area (square miles)	100
Centerline miles	638
Calls for service	7,022
Fire calls	615
Structure fires	92
Fire inspections	2,043
Code violations issued	1,002
Certified positions	195
Fire response time	4:40
EMS Service Level	First
EMS calls	3,162
ISO Rating	3
Number of fire stations	10

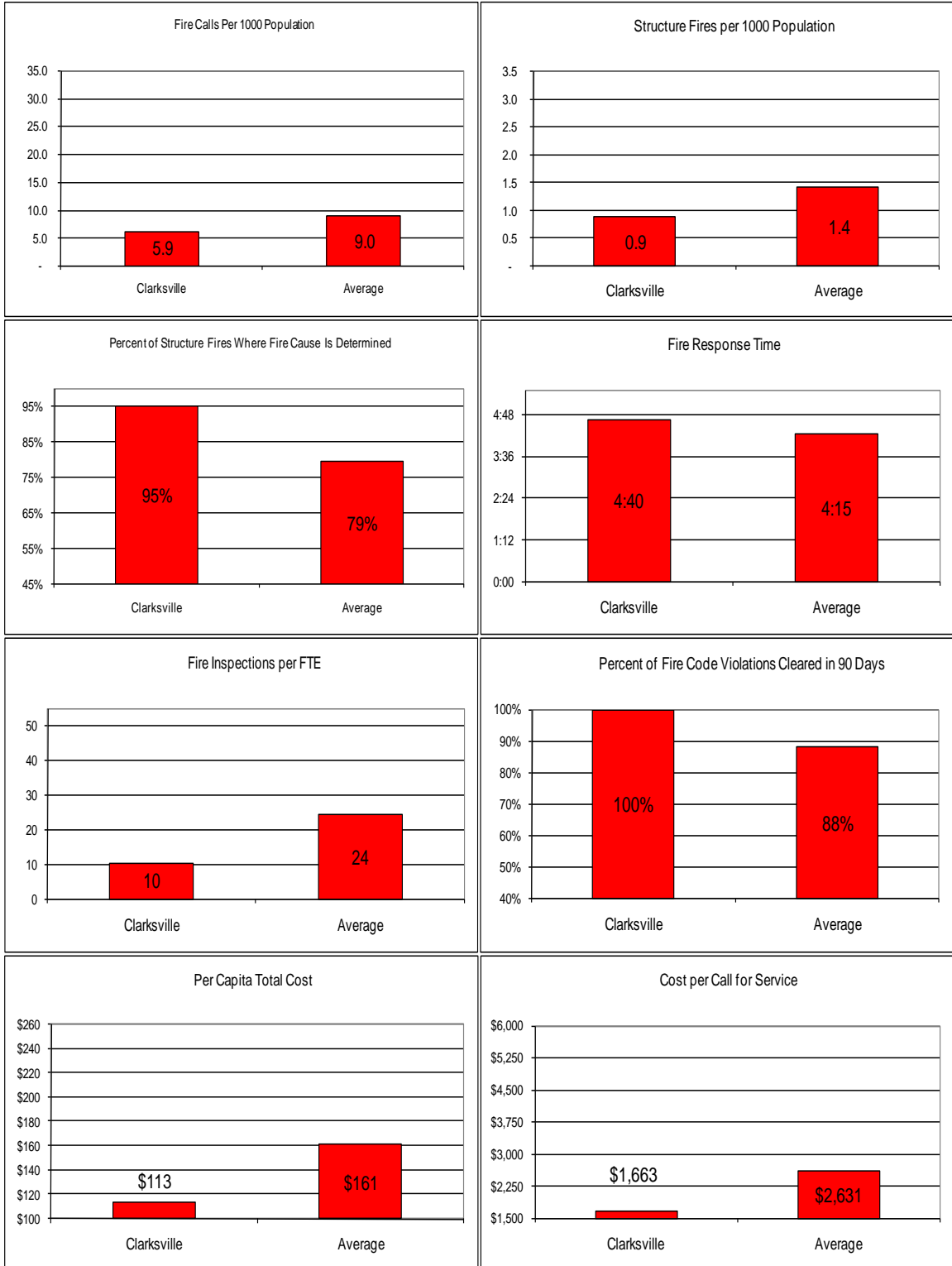
### Service Level and Delivery

- Clarksville operates a modern well-equipped department, and is moving aggressively to improve fire services and enhance training of firefighters.
- Significant investments are being made to train firefighters to a higher overall level of competency.
- The department provides fire prevention, public fire education, and code enforcement activities.
- See the “Fire Services Definitions” table at the beginning of this section for more details.

### Conditions Affecting Service Performance and Cost

- The rapid growth of the city has made it difficult for the department to both expand service delivery and maintain coverage density.
- The department has first-out, emergency response vehicles that are over 21 years old, which could affect performance.

## City of Clarksville Fire Benchmarks



## City of Cleveland

### Profile

Population	37,311
City area (square miles)	26
Centerline miles	268
Calls for service	1,313
Fire calls	1,261
Structure fires	52
Fire inspections	2,522
Code violations issued	3,778
Certified positions	91
Fire response time	3:56
EMS Service Level	none
EMS calls	0
ISO Rating	3
Number of fire stations	5

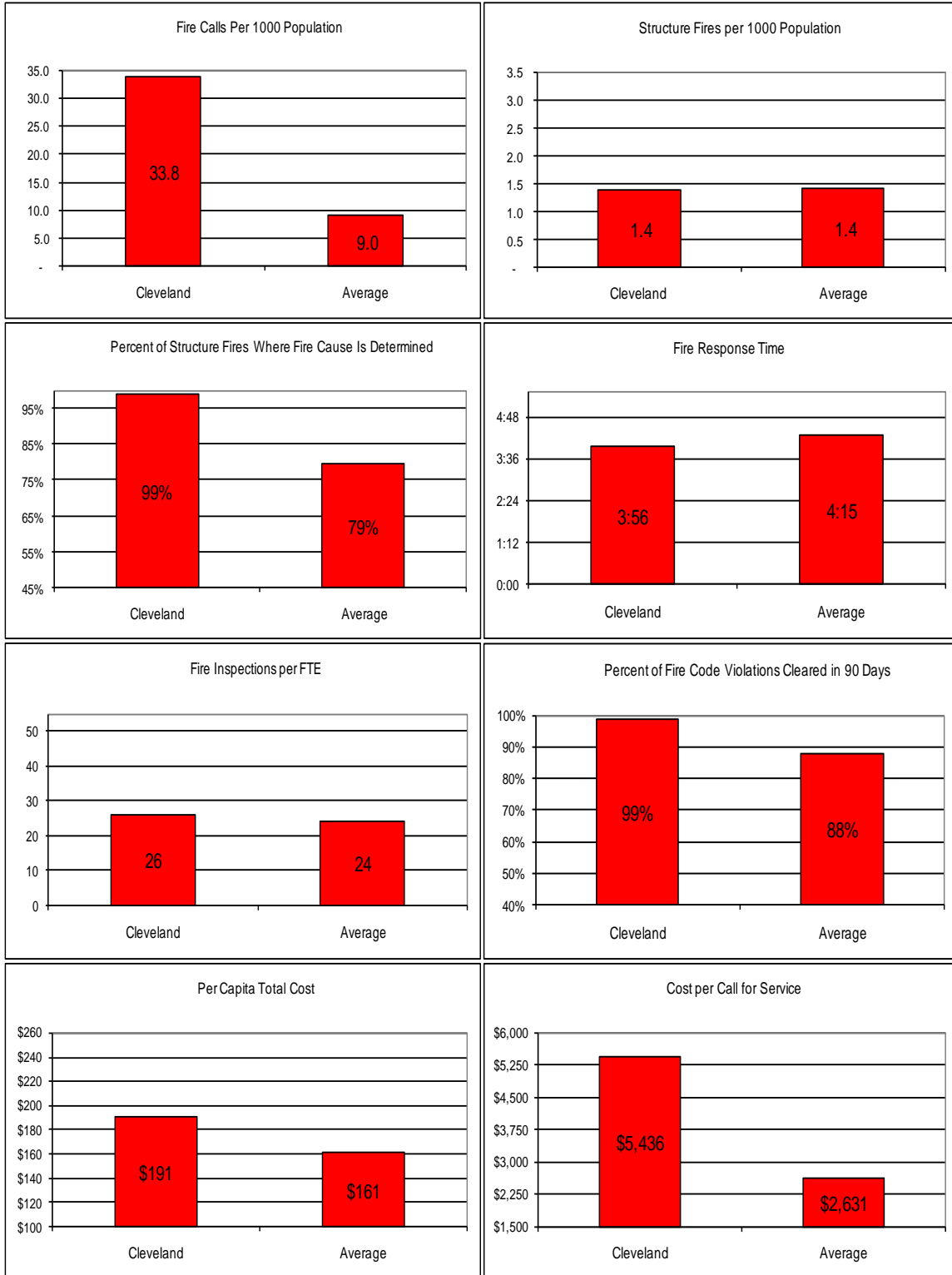
### Service Level and Delivery

- Cleveland operates a modern, up-to-date fleet of fire apparatus and provides the traditional services offered by most departments. However, they do not provide emergency medical services.
- The fire department also provides fire prevention education and code enforcement services.
- Cleveland also provides fire protection services for a portion of Bradley County five miles beyond the city limits (57.5 square miles outside the city limits).
- Costs and incidents outside the city limits are not included in this data.
- See the “Fire Services Definitions” table at the beginning of this section for more detail.

### Conditions Affecting Service Performance and Cost

- Fire Inspector provides plan review.

## City of Cleveland Fire Benchmarks



## Town of Collierville

### Profile

Population	41,923
City area (square miles)	29
Centerline miles	221
Calls for service	2,551
Fire calls	101
Structure fires	58
Fire inspections	2,957
Code violations issued	4,004
Certified positions	72
Fire response time	4:30
EMS Service Level	ALS
EMS calls	1,624
ISO Rating	4
Number of fire stations	5

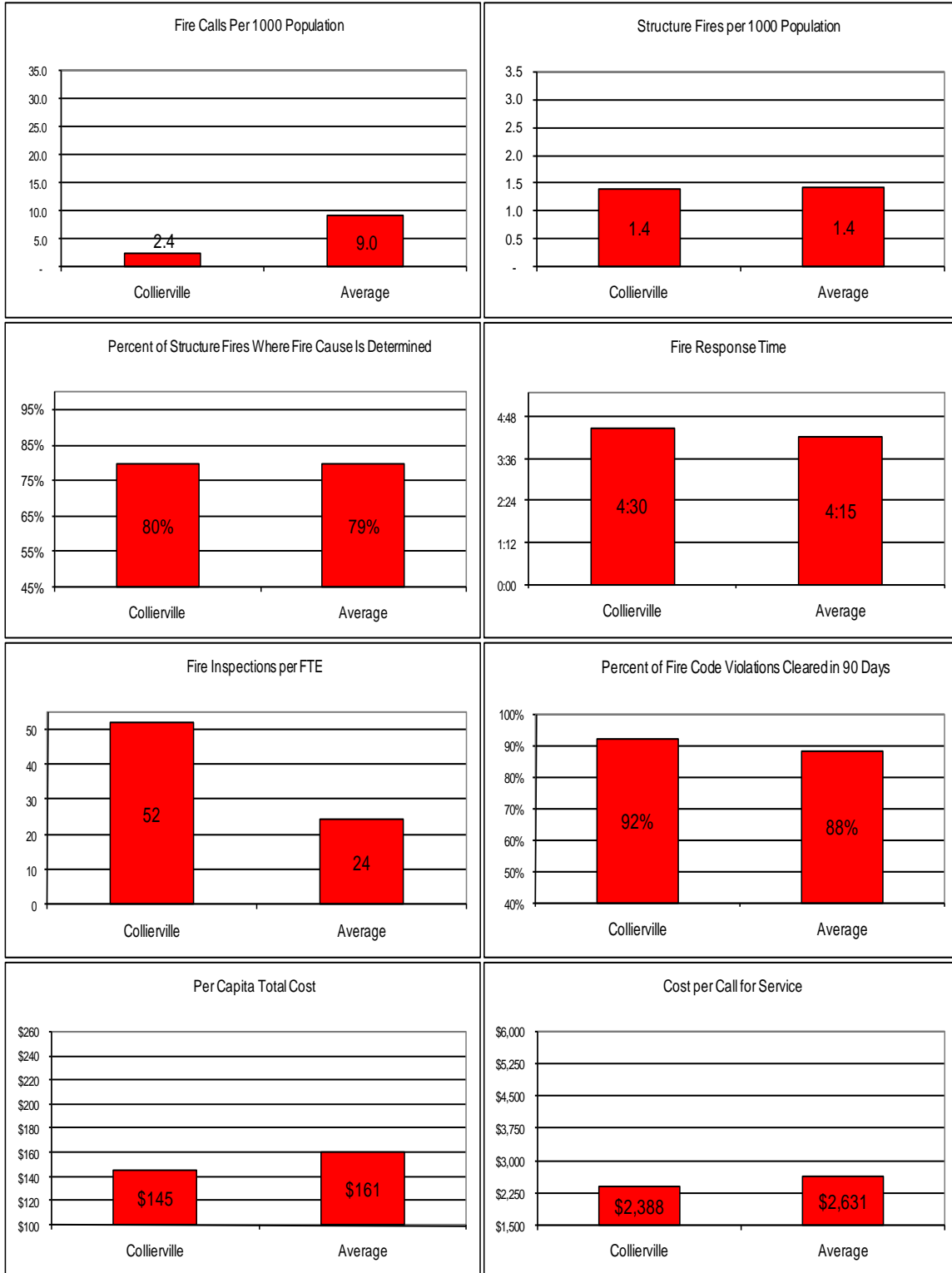
### Service Level and Delivery

- Collierville operates a full-service fire department, and provides a large percentile of all services offered in any fire department within the state. Collierville has a paramedic on duty at each station and all fire trucks are fully equipped for Advanced Life Support. The department also offers a wide range of non-emergency services, which include public fire education through our Fire Prevention Bureau and code enforcement activities.
- The fire department maintains five fire stations. The Collierville Fire Administration Headquarters is currently located within one of the stations.
- Collierville is located within Shelby County and is adjacent to Fayette County, Germantown, and the State of Mississippi. Collierville provides mutual aid to fellow fire departments as needed and when available.

### Conditions Affecting Service Performance and Cost

- In 1992, the Town of Collierville adopted a Fire Facility Fee, which places one time fees on new development within the town limits for fire services. Due to Collierville's Fire Facility Fee, we have been able to build two fire stations, purchase new apparatus, and buy needed equipment for fire department personnel without having to use any money from the General Fund.

## Town of Collierville Fire Benchmarks



## City of Franklin

### Profile

Population	49,412
City area (square miles)	41
Centerline miles	290
Calls for service	5,078
Fire calls	199
Structure fires	66
Fire inspections	1,837
Code violations issued	1,287
Certified positions	157
Fire response time	4:16
EMS Service Level	BLS, ALS
EMS calls	3,499
ISO Rating	3/9
Number of fire stations	5

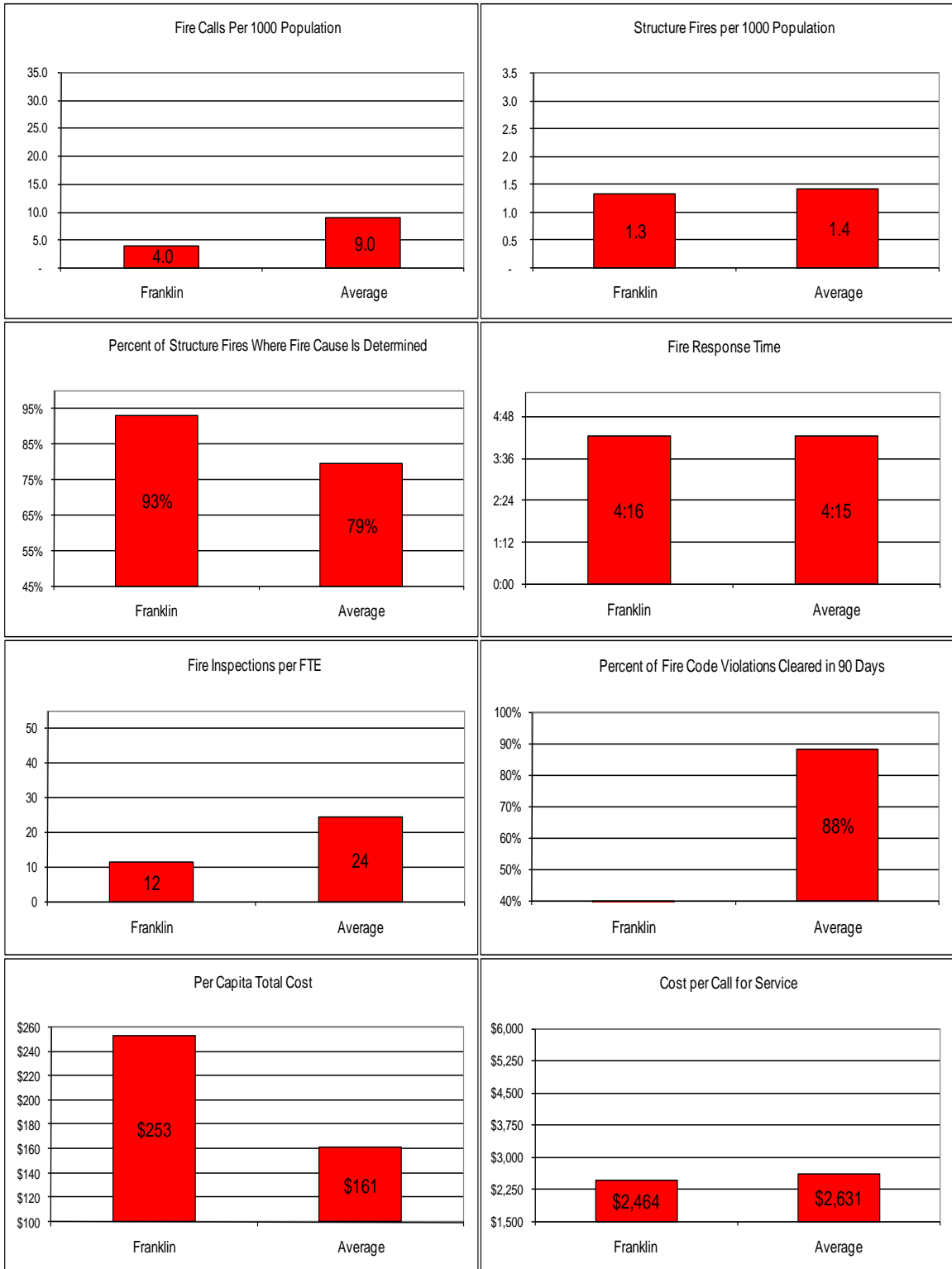
### Service Level and Delivery

- Franklin operates a full-service fire department and offers a wide range of non-emergency services including fire prevention, public fire education, and code enforcement activities.
- Franklin staffs four engines, two quints, three truck companies, four rescues, and one shift commander housed at five fire stations. The department responds with two engines, one truck, one rescue and one shift commander to all fire alarms. For structure fires, the department adds one truck and one rescue that is equipped for air supply.
- Suppression is operated on a 24 hour on duty and 48 hour off duty shift rotation and does not have sleep time differential.
- Franklin has a full scale training center that includes a 350' X 350' driving pad, a 4 story tower with one Natural gas powered prop, and a two story annex with one Class A burn room and one Natural gas powered prop. The department also has the following propane powered props; An MC306 tanker, Car Fire, Bar-B-Cue, Propane Tank, and Fuel Fire, along with an explosion generator and an electrical panel prop. The department conducts most multi-company training at this facility.

### Conditions Affecting Service Performance and Cost

- Infrastructure problems have continued to delay the opening of Fire Station 6 that is now due for completion in November of 2007. A 75' Quint has been received for this station.
- In January 2007, the department began provided citywide ALS care from three of its fire stations to compliment its department wide medical response. Three of the four rescues provide this service.

## City of Franklin Fire Benchmarks





## City of Murfreesboro

### Profile

Population	81,393
City area (square miles)	52
Centerline miles	485
Calls for service	7,653
Fire calls	389
Structure fires	158
Fire inspections	5,184
Code violations issued	2,896
Certified positions	182
Fire response time	3:39
EMS Service Level	First
EMS calls	5,311
ISO Rating	3
Number of fire stations	9

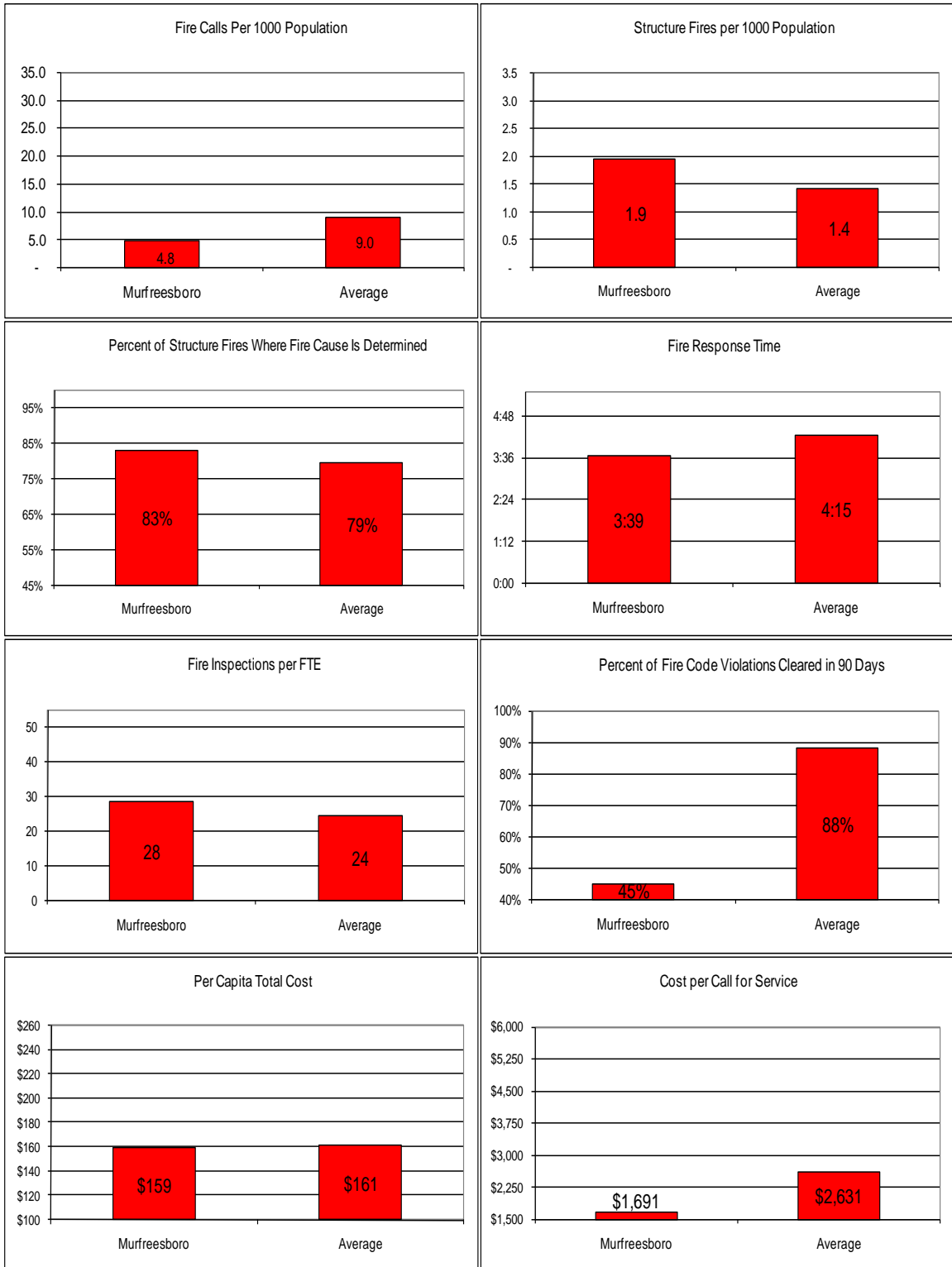
### Service Level and Delivery

- Murfreesboro operates a full-service fire department, and provides all of the services offered in any fire department in Tennessee.
- The department provides fire prevention, public fire education and training.
- See the “Fire Services Definitions” table at the beginning of this section for more detail.

### Conditions Affecting Service Performance and Cost

- Operational readiness is assured by proper staffing, equipment, and training.
- Management plans capital improvement projects and timetables for implementation. Also, specifications for new equipment and apparatus are developed, reviewed, and approved.

## City of Murfreesboro Fire Benchmarks



## RESIDENTIAL REFUSE COLLECTION & DISPOSAL

Residential refuse collection is the routine collection of household refuse or garbage from residential premises and other locations. Small businesses may be included if they use containers small enough to move or lift manually and if their pick-up is done on the same schedule as residential collection.

Residential refuse services may include small bulky items. It excludes waste from commercial dumpsters, yard waste and leaves, collection of recyclable material and any other special or non-routine service.

Transportation of refuse to the disposal site (landfill or transfer station) is included, along with disposal costs (tipping fees). Some cities enjoy free tipping fees, while others pay a fixed price per ton disposed. For cities that contract for the service, the disposal cost is part of the contract package.

Two cities are not involved in the refuse collection business at all - Brentwood and Clarksville. Their citizens contract directly with a private vendor.

### Service Terms Definition

**Residential Refuse Collected** – This figure includes household refuse collected on a regularly-scheduled basis, and those small businesses that use residential-sized containers that are collected on the same schedule as residences.

**Residential Collection Points** – A collection point is a single home, or an apartment or duplex unit or small business that has residential-sized containers that do not exceed the number of containers and/or capacity limit for residential service. It does not include commercial-sized containers that service multiple housing units, apartments or businesses.

**Service Requests** – This is a written or oral request that is recorded and requires an action. Examples include missed pickups, spillage, and missing containers or lids. It excludes general information requests.

**Tons of Refuse Collected Per FTE Employee** – This measure is applied only to cities that collect residential refuse with city employees and equipment (Athens, Bartlett, Chattanooga, Collierville, Franklin, Maryville and Murfreesboro) rather than through a contractor. It is a measure of the efficiency of the city refuse work crews, and is not available from contractors. An FTE is defined as 2,080 hours per year, which is one year at 40 hours per week.

**Residential Refuse Performance Measures Comparison  
Fiscal Year 2007**

	Athens	Bartlett	Chattanooga	Cleveland
2007 Certified population	13,334	46,954	155,554	37,311
Tons collected	3,729	26,390	55,267	10,234
Tons diverted	2,994	17,714	22,081	3,964
Number FTEs	4.8	24.2	39.0	N/A
Collection points	4,753	17,384	57,000	13,355
Service requests	59	2,620	8,471	819
Annual fees	\$ 386,646	\$ 2,640,317	\$ -	\$ 946,699
Total cost	\$ 466,640	\$ 3,043,818	\$ 8,799,630	\$ 1,073,214
<b>Tons of refuse collected per 1000 population</b>				
	280	562	355	274
<b>Tons diverted per 1000 population</b>				
	225	377	142	106
<b>Collection points per 1000 population</b>				
	356	370	366	358
<b>Tons collected per FTE</b>				
	777	1,090	1,417	N/A
<b>Tons diverted per FTE</b>				
	624	732	566	N/A
<b>Service requests per 1000 collection points</b>				
	12	151	149	61
<b>Annual fees per ton collected</b>				
	104	100	-	93
<b>Total cost per ton collected</b>				
	\$ 125	\$ 115	\$ 159	\$ 105

	Collierville	Franklin	Murfreesboro	Average
2007 Certified population	41,923	49,412	81,393	60,840
Tons collected	14,838	22,868	34,997	24,046
Tons diverted	24,879	1,284	-	10,417
Number FTEs	6.0	19.0	23.2	19.4
Collection points	13,465	16,500	34,000	22,351
Service requests	971	199	1,258	2,057
Annual fees	\$ 832,137	\$ 360,000	\$ -	\$ 737,971
Total cost	\$ 972,168	\$ 2,377,651	\$ 2,573,261	\$ 2,758,055
<b>Tons of refuse collected per 1000 population</b>				
	354	463	430	388
<b>Tons diverted per 1000 population</b>				
	593	26	-	210
<b>Collection points per 1000 population</b>				
	321	334	418	361
<b>Tons collected per FTE</b>				
	2,473	1,204	1,508	1,412
<b>Tons diverted per FTE</b>				
	4,146	68	N/A	1,227
<b>Service requests per 1000 collection points</b>				
	72	12	37	71
<b>Annual fees per ton collected</b>				
	56	16	-	53
<b>Total cost per ton collected</b>				
	\$ 66	\$ 104	\$ 74	\$ 107

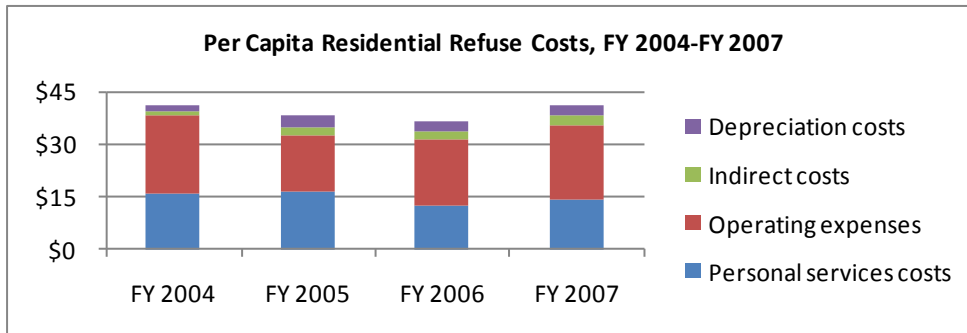
## Service Specific Trends: Residential Refuse

### Residential Refuse Costs

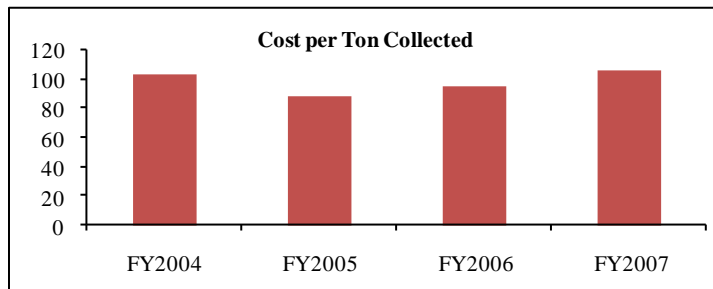
Residential refuse collection costs have risen only slightly over the four year period. Overall declines in costs in the first three years were offset by a spike in costs in FY 2007. Residential refuse collection cost measures reflect considerable volatility across all component costs. Operating expenses are the largest component, perhaps a reflection of the fact that not all residential refuse collection services are performed in-house.

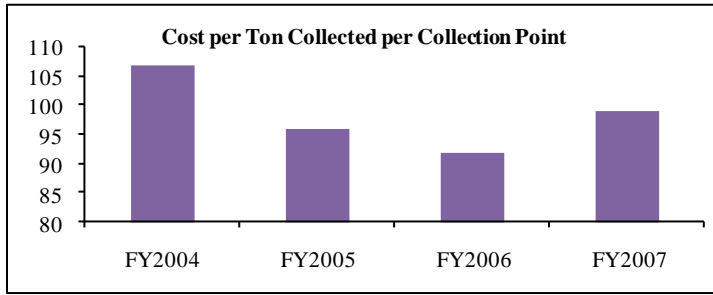
#### Summary of All-City Per Capita Residential Refuse Costs, FY 2004-FY 2007

Measure	FY 2004	FY 2005	FY 2006	FY 2007
Personal services costs	\$16	\$16	\$12	\$14
Operating expenses	\$22	\$16	\$19	\$21
Indirect costs	\$1	\$2	\$3	\$3
Depreciation costs	\$2	\$3	\$3	\$3
<b>Total costs</b>	<b>\$41</b>	<b>\$38</b>	<b>\$36</b>	<b>\$41</b>



Other than per capita costs, costs per ton collected are a useful measure of services provided.





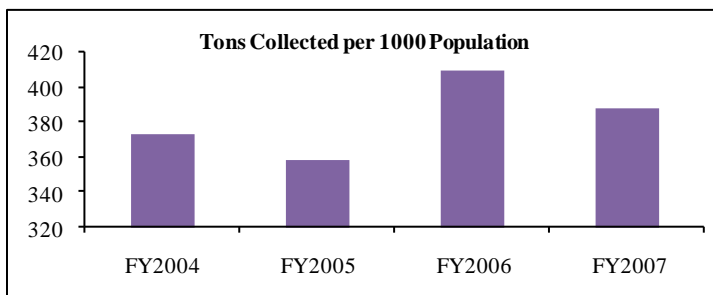
**Residential Refuse Performance Measures**

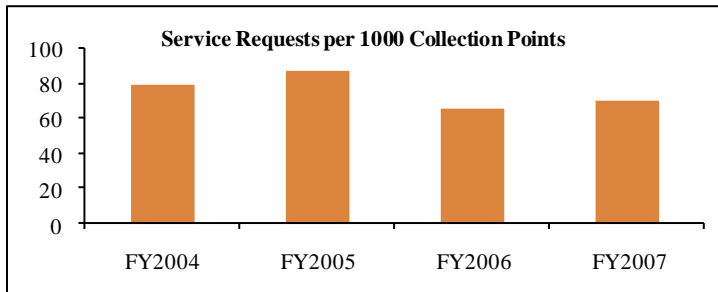
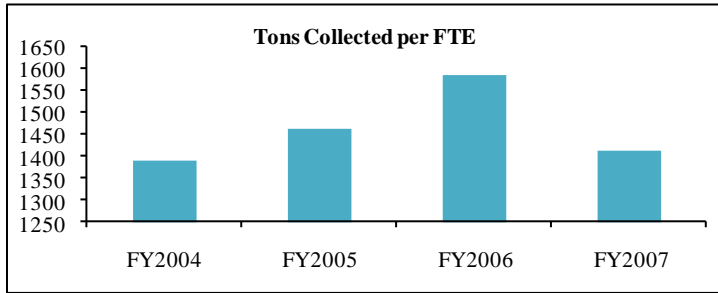
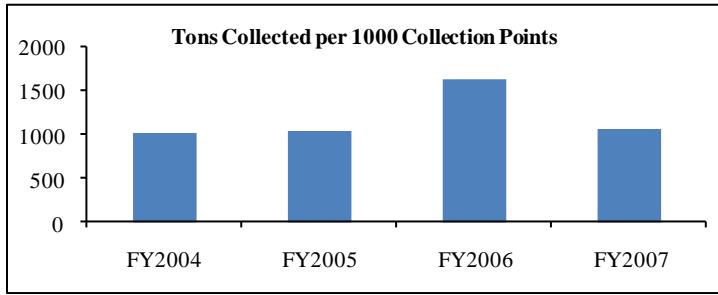
Until more consistent data are available, performance measures of residential refuse collection services will be difficult to analyze.

**Summary of All-City Residential Refuse Measures, FY 2004-FY 2006**

Measure	FY 2004	FY 2005	FY 2006	FY 2007
Residential refuse collected per 1000 population	373	414	410	388
Total tons diverted from landfill	N/A	N/A	268	210
Residential collection points per 1000 population	371	369	379	361
FTEs per 1000 population	0.32	0.36	0.29	0.33
Service requests per 1000 population	29	41	66	29
Average charge per month	N/A	N/A	\$5.02	\$5.05
Average annual fees per ton collected	N/A	N/A	\$44.82	\$52.58
Average landfill fee per ton	N/A	N/A	\$22.02	\$18.55
Average miles to landfill	N/A	N/A	25	25
Average miles to transfer station	N/A	N/A	3	7

**Residential Refuse Benchmarks**





## City of Athens

### Profile

Population	13,334
Residential refuse collected (tons)	3,729
Residential collection points	4,753
Charge per month	\$7.50
Number of FTE Positions	4.8
Service requests	59
Collection location	Curb
Collection frequency	Once
Crew type	City

### Service Level and Delivery

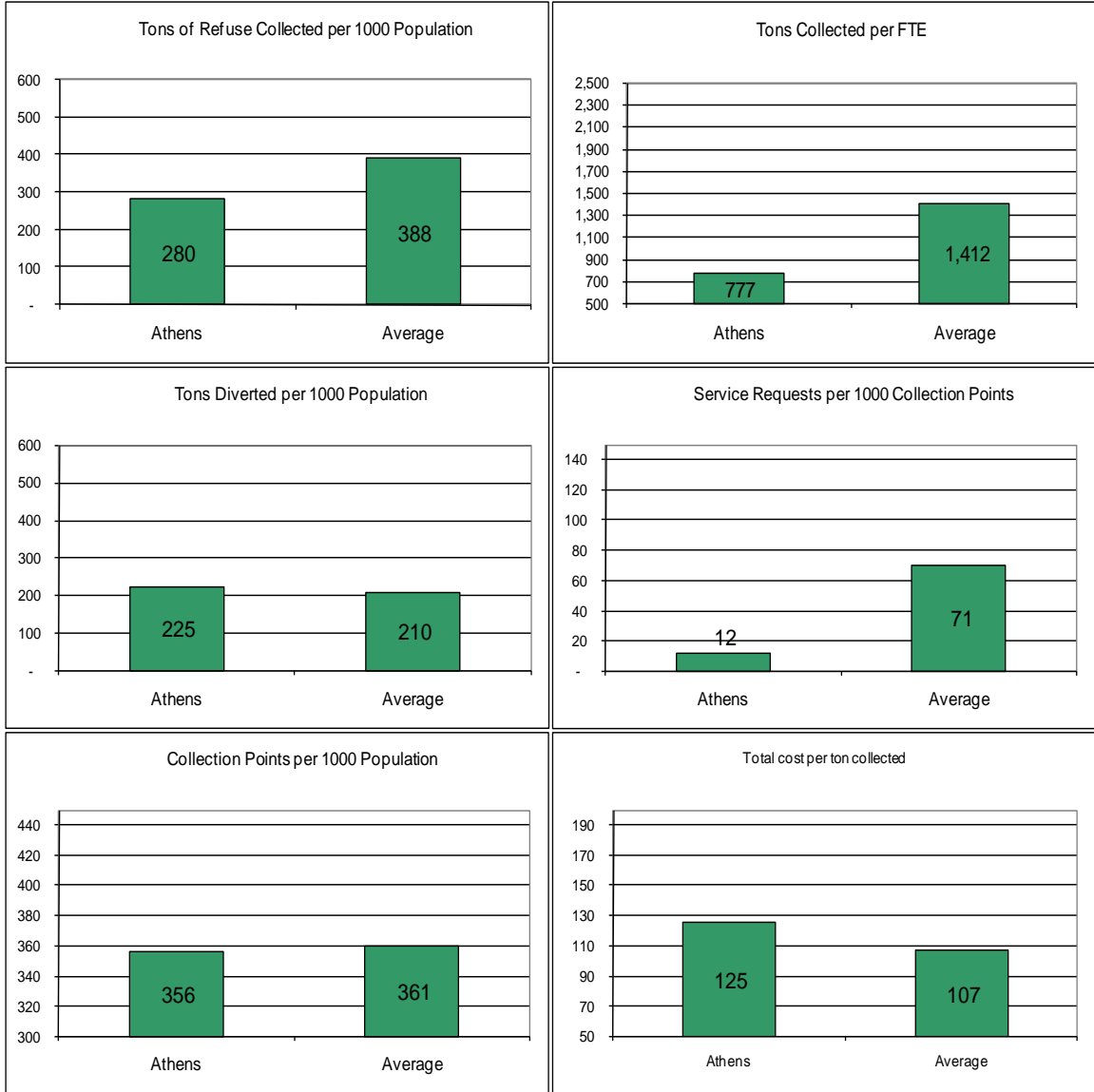
- The City of Athens uses city crews with a rear loader and three-man crew to collect residential refuse weekly at curbside. The city picks up residential refuse 4 days a week with 4.8 FTE's. The other day is used for leaf and brush pickup.
- The city provides a "pride" car service (a big trailer) to any residence at no charge. They utilize 5 trailers and move them every weekday and are available over the weekend. The trailers may be used for any residential refuse except building materials.
- A fee of \$7.50/month funds refuse collection and disposal.
- Refuse is transported by city truck. The round trip distance is 8 miles to the County landfill. They make 4 trips per day to the landfill.
- The tipping fee is \$16.00 per ton.

### Conditions Affecting Service Performance and Cost

- None.



## City of Athens Residential Refuse Benchmarks



## City of Bartlett

### Profile

Population	46,954
Residential refuse collected (tons)	26,390
Residential collection points	17,384
Charge per month	\$12.35
Number of FTE Positions	24.2
Service requests	2,620
Collection location	Curb*
Collection frequency	Once
Crew type	City

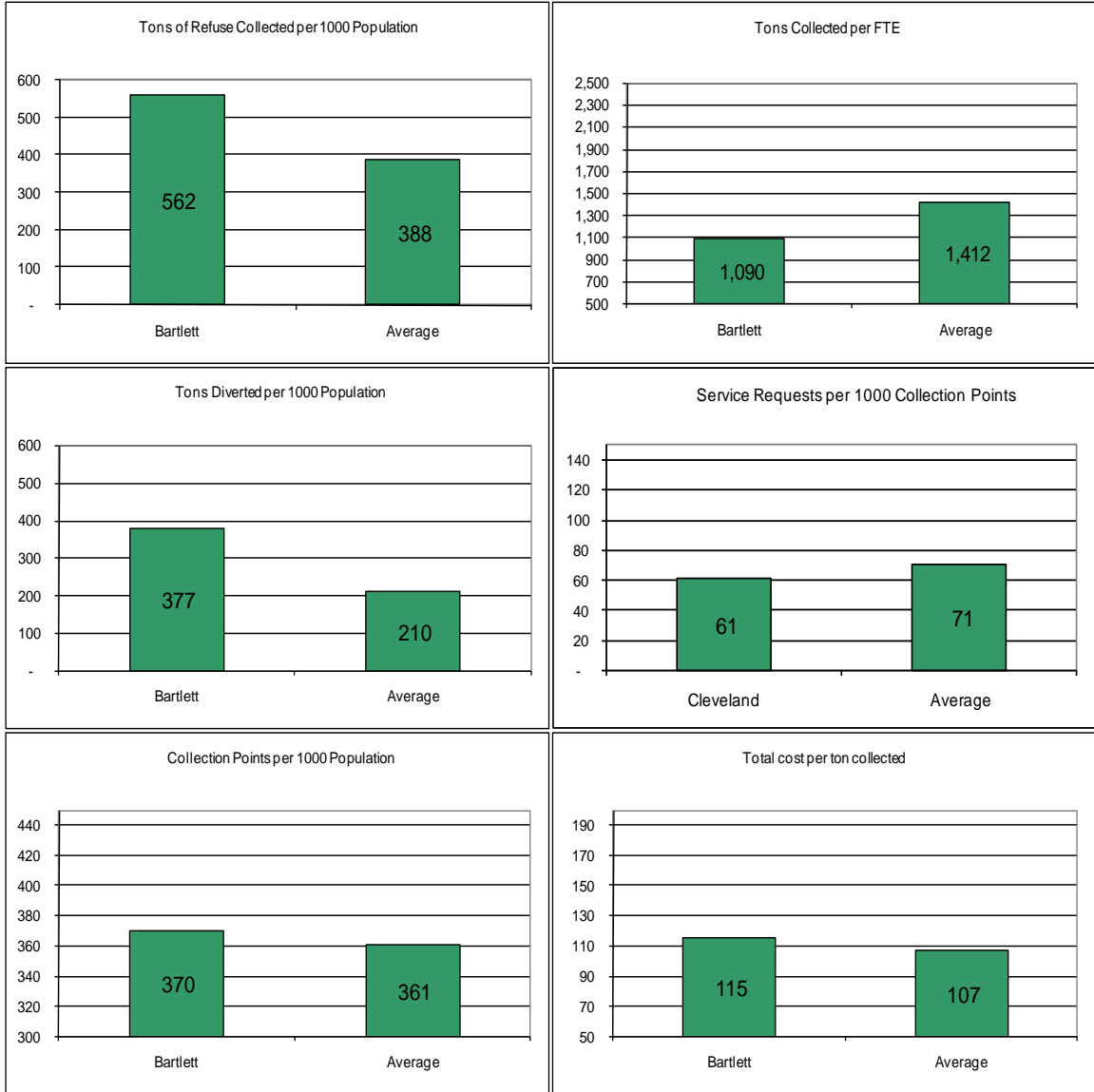
### Service Level and Delivery

- The City of Bartlett uses city crews, standard 90-gallon carts and fully automated side loaders to collect residential refuse weekly at curbside.
- Backdoor service is provided for elderly and handicapped residents.
- A fee of \$19/month funds household refuse collection, brush and bulky item collection, and recycling.
- Household refuse is taken to a city-owned transfer station and then loaded into tractor trailer rigs for transport by the city approximately 13 one-way miles to a BFI landfill.
- Brush is hauled directly to the City's contracted mulch site.
- Items collected at the City's 7 drop-off recycling centers are taken to FCR Recycles in Memphis.

### Conditions Affecting Service Performance and Cost

- The number of customers are growing at about 30/month.
- Use of fully automated side loaders has allowed the department to absorb growth with minimal staff additions.
- The use of yard waste carts has greatly reduced the number of grass bags collected, reduced landfill costs, reduced on the job injuries, and helped the City divert from the landfill and recycle approximately 40% of its solid waste.

## City of Bartlett Residential Refuse Benchmarks



## City of Chattanooga

### Profile

Population	155,554
Residential refuse collected (tons)	55,267
Residential collection points	57,000
Charge per month	\$0.00
Number of FTE Positions	39.0
Service requests	8,471
Collection location	Curb
Collection frequency	Once
Crew type	City

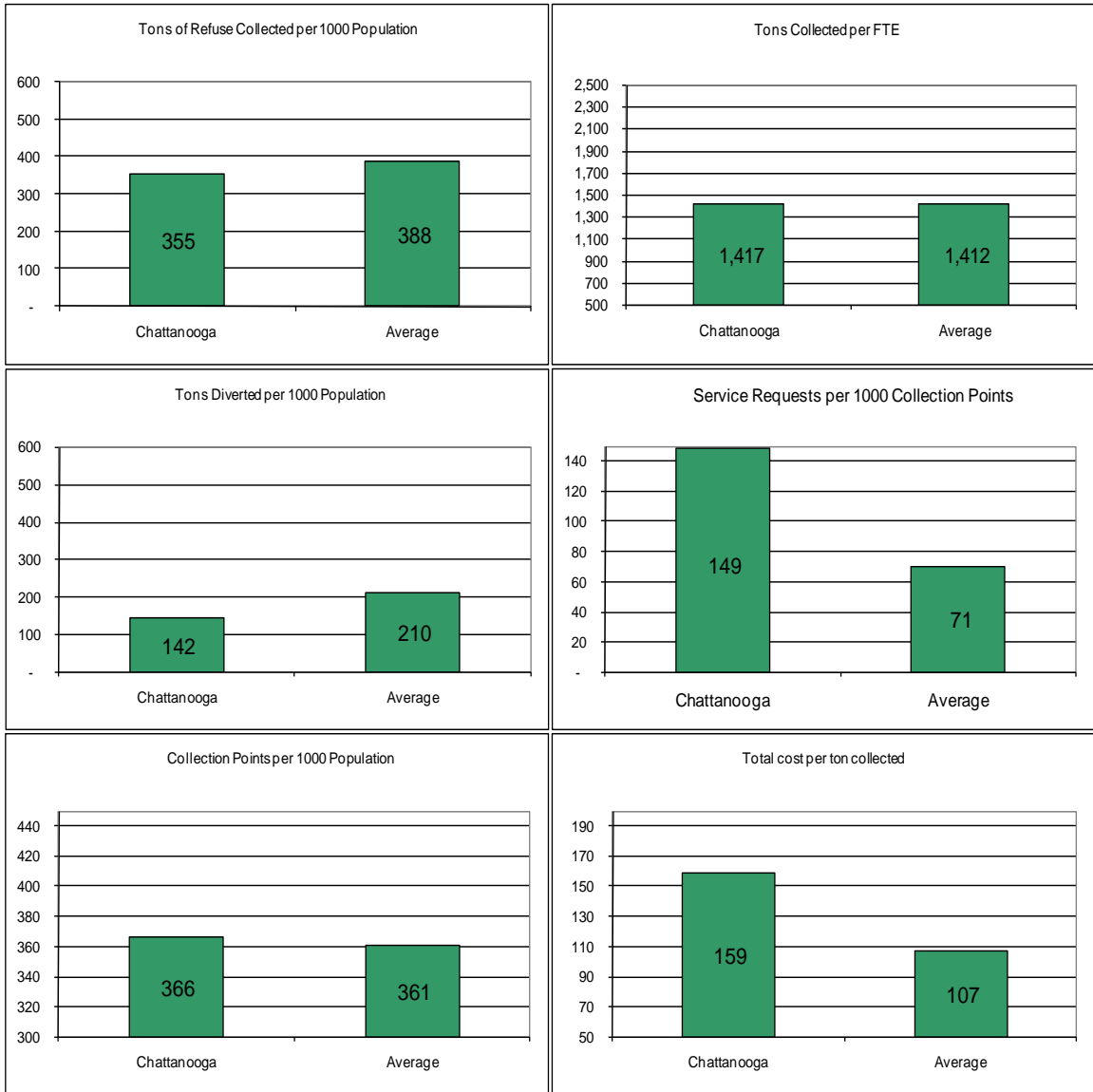
### Service Level and Delivery

- The City of Chattanooga collects residential refuse once per week at the curb. At the door pickup is provided for handicapped and disabled citizens. The city uses primarily fully automated refuse trucks with a one man crew, one semi-automated refuse truck with a two man crew, and one conventional rear loader refuse truck with a three man crew.
- There are thirteen routes and the trucks make two trips per day to the landfill, which is approximately five miles from the city. There is no fee for refuse collection service.
- Ninety-five gallon containers are provided where there is automated service.

### Conditions Affecting Service Performance and Cost

- Hilly terrain in many parts of the city necessitates the use of the more costly 2 and 3 man crew vehicles on some routes

## City of Chattanooga Residential Refuse Benchmarks



## City of Cleveland

### Profile

Population	37,311
Residential refuse collected (tons)	10,234
Residential collection points	13,355
Charge per month	\$6.63
Number of FTE Positions	N/A
Service requests	819
Collection location	Curb
Collection frequency	Once
Crew type	Contract

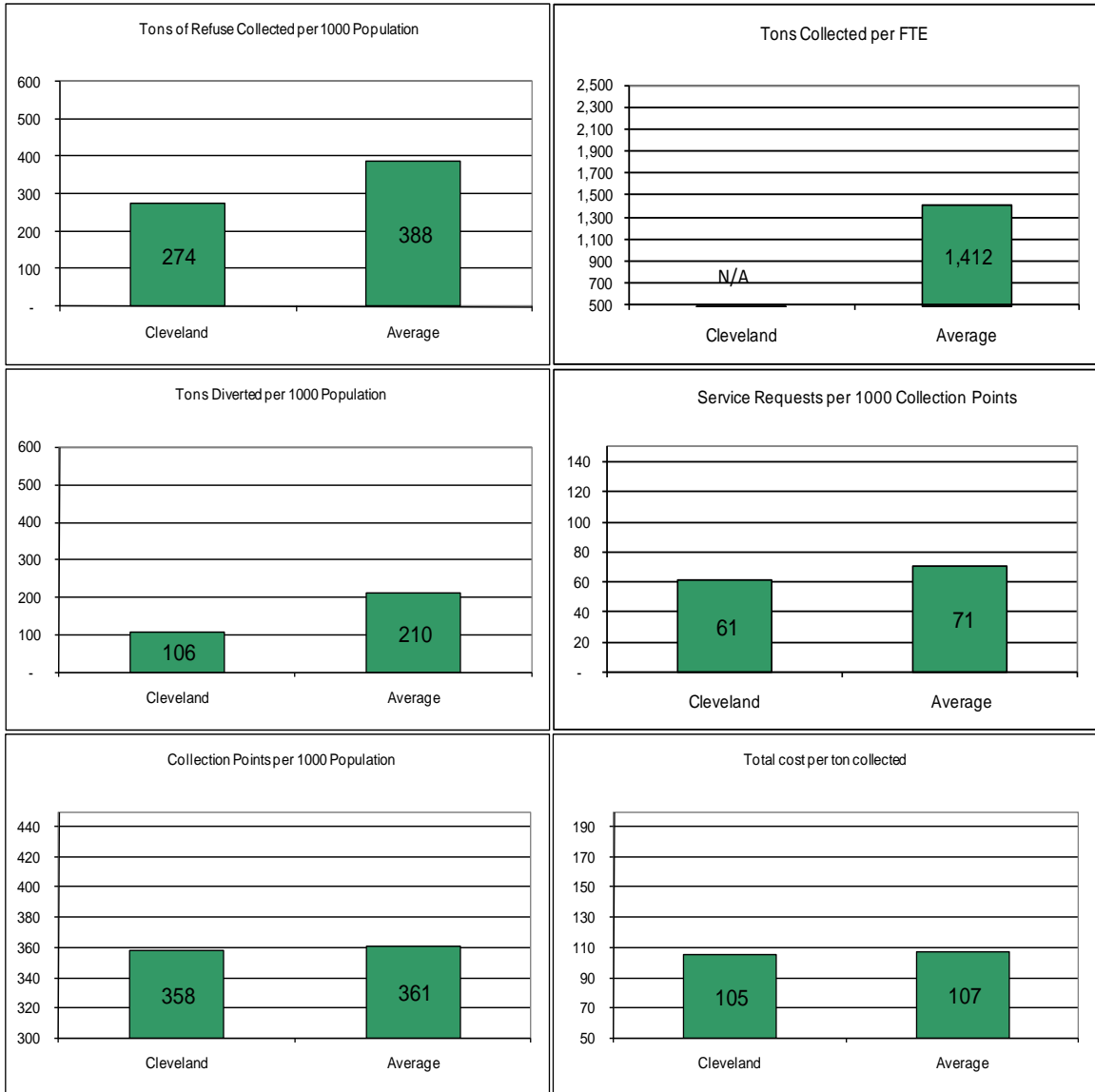
### Service Level and Delivery

- The City of Cleveland contracts with Waste Connections of TN, Inc. for once per week curbside collection of residential refuse.
- The city does not provide refuse containers.
- The monthly fee of \$6.00 covers 92% of the costs of refuse collection and disposal.
- Waste Connections of TN, Inc. transports the waste a one-way distance of 30 miles for disposal at Mine Road Regional Landfill.

### Conditions Affecting Service Performance and Cost

- The city closely monitors contractor performance and promptly handles complaints.
- Since standard carts are not used, the contractor uses rear-loading collection vehicles. Rear-loaders are less efficient than fully automated side loaders. However, standardized carts must be used with fully automated side-loaders.
- The city also contracts with Waste Connections of TN, Inc. to provide refuse collection for commercial customers.

## City of Cleveland Residential Refuse Benchmarks



## Town of Collierville

### Profile

Population	41,923
Residential refuse collected (tons)	14,838
Residential collection points	13,465
Charge per month	\$5.15
Number of FTE Positions	6.0
Service requests	971
Collection location	Curb
Collection frequency	Once
Crew type	City

### Service Level and Delivery

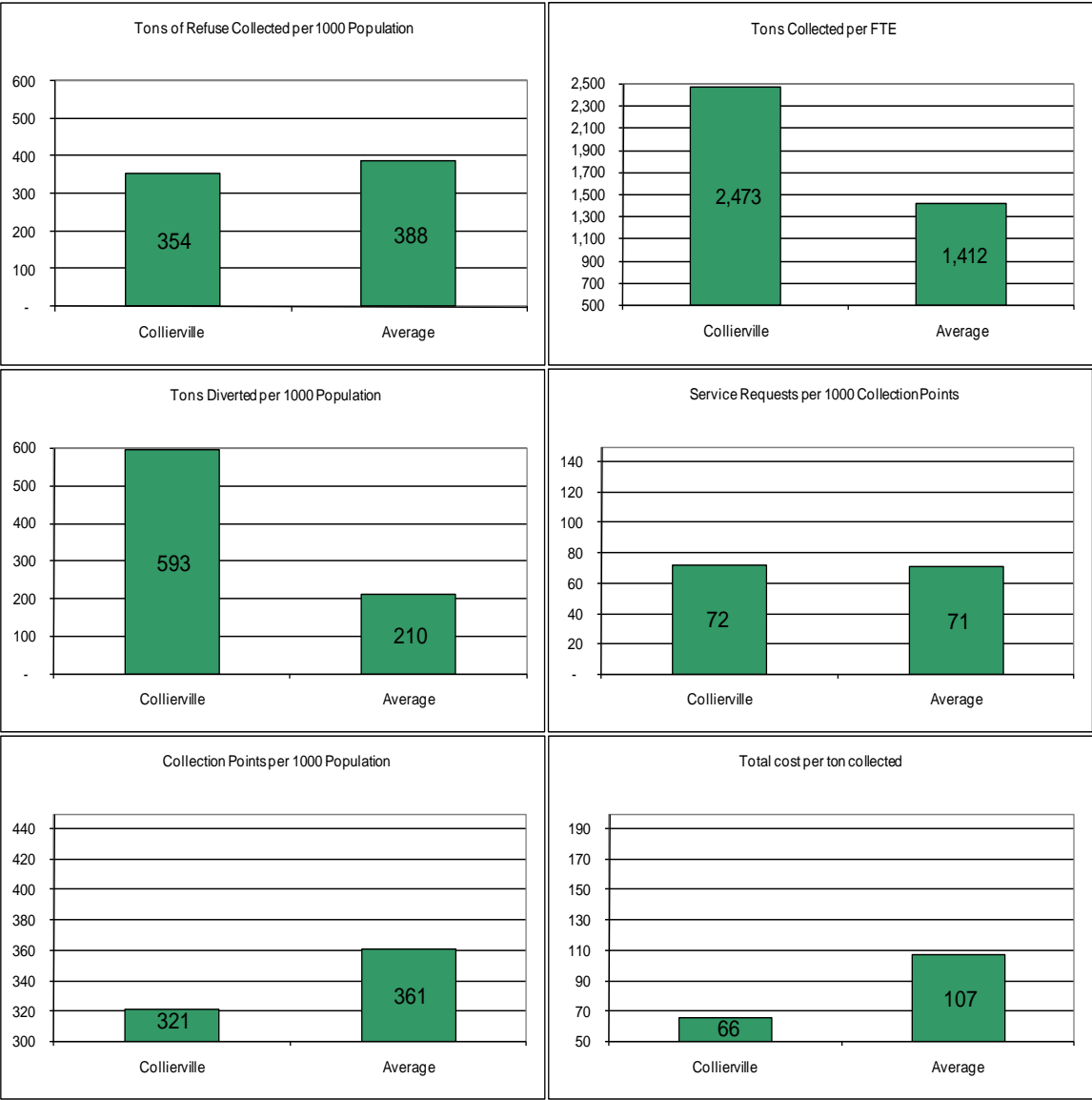
- The Town of Collierville uses city crews, standard 95-gallon carts and fully automated side loaders to collect residential refuse weekly at curbside.
- Refuse is disposed at a city-owned transfer station. Then refuse is transported by the town to a landfill owned by Waste Connection, Inc. in Walnut, Mississippi.
- Recycling is disposed at a town-owned transfer station. Recyclables are then transported by a contracted hauler to a recycling processing center in Memphis, Tennessee.

### Conditions Affecting Service Performance and Cost

- The department collects refuse in four nine-hour workdays, Monday-Thursday, which helps reduce overtime.
- Use of fully automated side loaders has allowed the department to absorb growth while keeping staff to a minimum.
- Split body recycling truck has improved collection performance.
- Loose leaves are collected with a vacuum truck and knuckle boom loaders at curbside during the fall and winter months.



## Town of Collierville Residential Refuse Benchmarks



## City of Franklin

### Profile

Population	49,412
Residential refuse collected (tons)	22,868
Residential collection points	16,500
Charge per month	\$3.75
Number of FTE Positions	19.0
Service requests	199
Collection location	Curb
Collection frequency	Once
Crew type	City

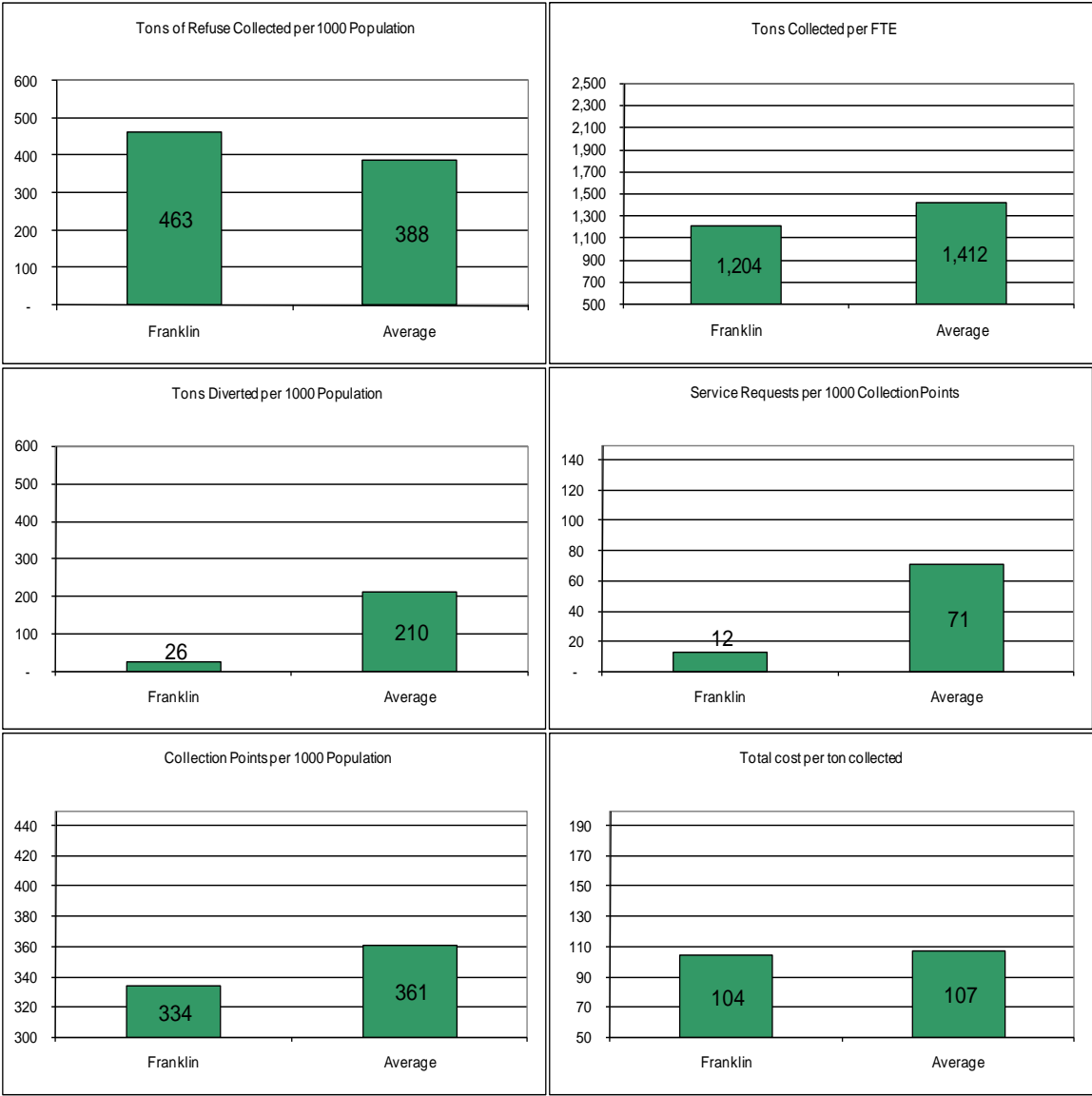
### Service Level and Delivery

- The City of Franklin uses city crews and 96-gallon carts to collect residential refuse weekly. Most residential refuse is collected by automated sideloaders. However, rear-end loaders are used to collect residential refuse in the immediate area surrounding the Central Downtown Business District.
- Each home is eligible for six services per week: 1) containerized, 2) excess waste, 3) yard waste, 4) bulky waste, 5) brush and tree waste, and 6) white goods.
- Residential customers pay \$3.50 per container per month to cover disposal costs only, with the fee being billed on the water utility bill. The
- City furnishes one roll out container for each home.
- Separated into four divisions, the department provides administration, collection, disposal, and fleet maintenance.
- The department's fleet maintenance division repairs all solid waste equipment and provides maintenance and repair of other City equipment.
- The City operates a 500-ton per day transfer station. The City carries all waste from the transfer station to the Cedar Hill Landfill located in Lewisburg, TN, approximately 42 miles one way.

### Conditions Affecting Service Performance and Cost

No change.

## City of Franklin Residential Refuse Benchmarks



## City of Murfreesboro

### Profile

Population	81,393
Residential refuse collected (tons)	34,997
Residential collection points	34,000
Charge per month	\$0.00
Number of FTE Positions	23.2
Service requests	1,258
Collection location	Curb
Collection frequency	Once
Crew type	City

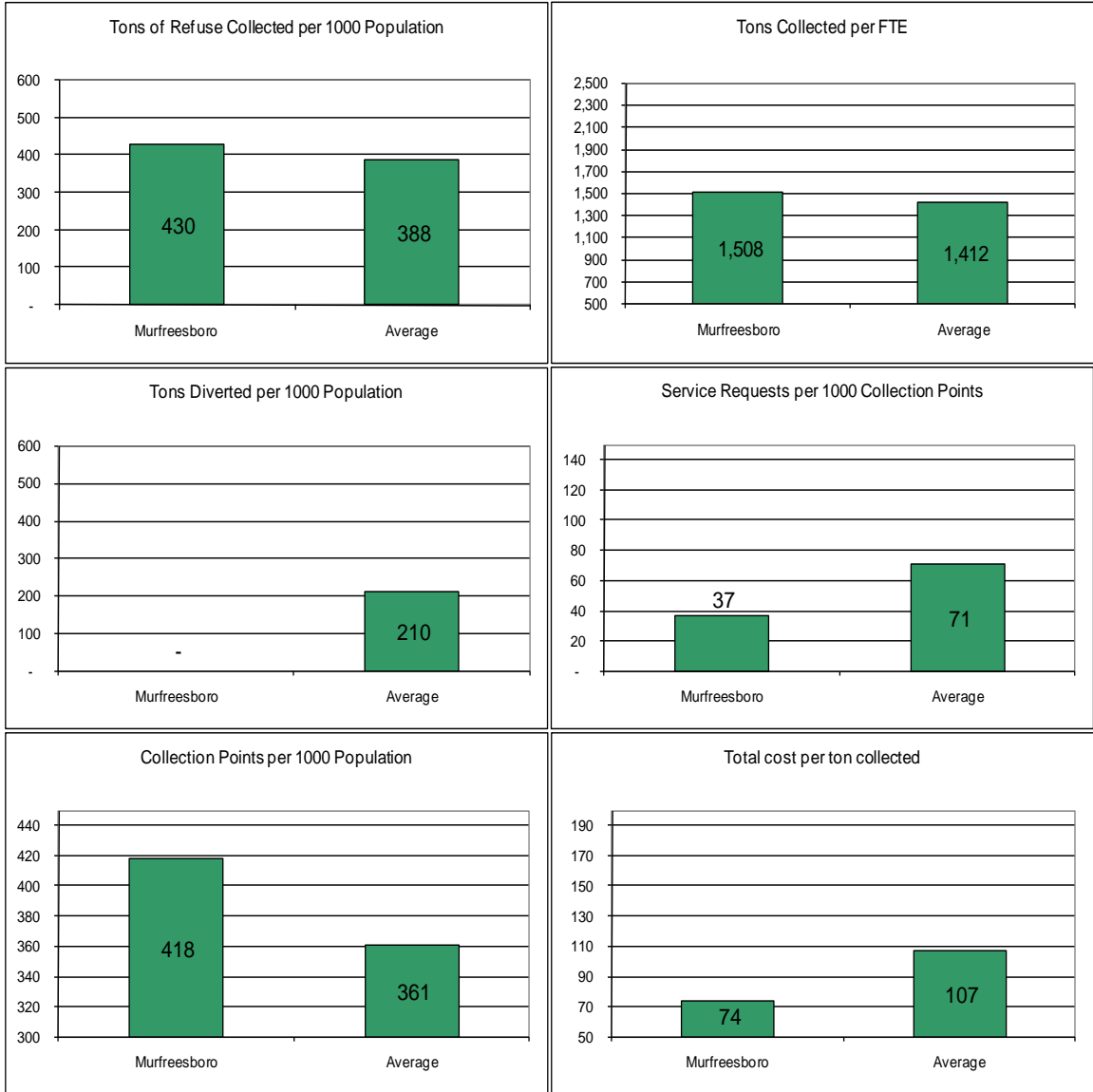
### Service Level and Delivery

- The City of Murfreesboro residents pay for Solid Waste services through local taxes so there is no monthly bill for service.
- The City of Murfreesboro provides once per week curbside collection of residential refuse by city crews.
- Limited backdoor pickup is available in special circumstances.
- The City of Murfreesboro provides a 96-gallon cart to each single family household free of charge.

### Conditions Affecting Service Performance and Cost

- This standardization of container allows for the use of high efficiency equipment and less manpower.

## City of Murfreesboro Residential Refuse Benchmarks



Appendix

TENNESSEE MUNICIPAL BENCHMARKING PROJECT  
PARTICIPANT COST CALCULATION WORKSHEET

<b>FORM A: COST OF PERSONAL SERVICES</b>			
	<b>ACCOUNT</b>	<b>ACCOUNT DEFINITION</b>	<b>FY 2006</b>
1	Salaries and wages - full time	Gross earnings of fulltime/permanent employees subject to FICA and retirement regulations; includes holiday pay	\$0
2	Salaries and wages - part time	Gross earnings of part time/temporary employees subject to FICA but not retirement regulations; includes volunteers	\$0
3	Overtime wages	Overtime pay	\$0
4	Other pay except state salary supplements	All other pay including longevity, Christmas, educational, shift differential, FLSA and EMT supplements	\$0
5	FICA taxes	Department's share of FICA taxes on all wages	\$0
6	Insurance - medical and hospitalization	Department's share of hospitalization & medical insurance	\$0
7	Retirement contributions	Department's share of retirement plan contributions	\$0
8	Claims paid for Worker's Comp	Actual medical costs and compensation paid for lost time from job related accidents if self-insured, or department's share of Worker's Comp insurance paid for employees	\$0
9	Unemployment taxes	Department's share of state unemployment taxes	\$0
10	Other employee benefits	Department's share of any other employee benefits; includes disability, tuition reimbursement, life, and dental.	\$0
11	Other employer contributions	Department's share of any other employer contributions; includes deferred compensation matching	\$0
<b>PERSONAL SERVICES TOTAL</b>			<b>\$0</b>

**FORM B: OPERATING EXPENSES**

ACCOUNT	ACCOUNT DEFINITION	FY 2006
Printing/ publications/ postage	Includes all direct costs of printing, publications, postage, delivery charges, and other transportation costs	\$0
Advertising	All direct costs of advertising	\$0
Dues and subscriptions	All direct costs of subscriptions, registration fees, dues, memberships	\$0
Telephone	Costs for local and long distance services, pagers, cell phones, wireless connections	\$0
Utilities	All costs for electric, water, sewer, gas, or other fuels used to provide utility service	\$0
Professional and contractual services	Direct costs of medical, engineering, accounting, or other professional services; does not include audit or legal costs	\$0
Data processing & GIS	Includes direct costs of data processing, MIS, GIS, and other similar services	\$0
Fleet maintenance	Direct costs for fleet maintenance	\$0
Fuel	Includes all direct costs for fuel, diesel, gas	\$0
Equipment maintenance	All direct costs for office machines, equipment, and maintenance contracts	\$0
Buildings and grounds maintenance	All direct costs for building and property maintenance including janitorial services and repairs	\$0
Training and travel expenses	All training and travel costs except registration fees	\$0
Fees and licenses	Direct costs of fees, license, and permits	\$0
Uniforms	All direct costs for uniform or gear purchased or rented for employees; includes cleaning	\$0
Operating supplies	Direct costs of all supplies except supplies for re-sale; category combines office and operating supplies and includes non-capital purchases	\$0
Grant expenditures	Includes any non-capital grant expenditures not listed elsewhere	\$0
Contract administration	Direct costs the department incurs for contract administration	\$0
Rents	Direct costs for building and equipment rent; includes equipment leases not capitalized	\$0
Other operating expenses	All direct costs not captured in another category; includes fuel and oil not included on line 19	\$0
<b>OPERATING EXPENSES TOTAL</b>		<b>\$0</b>

<b>FORM C: INDIRECT COSTS</b>			
	<b>ACCOUNT</b>	<b>ACCOUNT DEFINITION</b>	<b>FY 2006</b>
31	Insurance - building and property	Your department's percentage of building and property insurance costs and/or direct costs of this insurance; usually based on square footage occupied	\$0
32	Insurance - equipment and vehicles	Your department's percentage of equipment and vehicle insurance costs and/or direct costs of this insurance; usually based on the number of vehicles	\$0
33	Insurance - liability	Your department's percentage of liability insurance costs and/or direct costs of this insurance; usually based on the number of FTEs in your department divided by the number of FTEs in the city	\$0
34	Insurance - Worker's Compensation	Your department's percentage of Worker's Compensation insurance costs and/or direct costs of this insurance, usually based on FTEs; includes expenditures to a separate fund	\$0
35	Insurance - other	Includes any insurance cost not captured elsewhere.	\$0
36	Central data processing	Allocation based on your department's percentage of computers; do not duplicate costs recorded on line 18	\$0
37	Payroll and benefits administration	Resource costs devoted to benefits administration; allocation usually based on your department's number of FTE's	\$0
38	Accounts payable	Resource costs devoted to accounts payable; allocation usually based on your department's number of non-payroll checks	\$0
39	Purchasing	Resource costs devoted to purchasing; allocation usually based on your department's number of purchase orders	\$0
40	Shared building costs	Allocation based on your department's square footage occupied in a shared facility	\$0
41	Fleet and equipment maintenance	Indirect fleet and equipment maintenance expenses	\$0
42	Risk management	Your department's share of the risk management function; note your method of allocation	\$0
43	Grant expenditure	Any grant expenditure not included on line 26	\$0
<b>INDIRECT EXPENSES TOTAL</b>			<b>\$0</b>



<b>FORM D: DEPRECIATION</b>			
	<b>ACCOUNT</b>	<b>ACCOUNT DEFINITION</b>	
Every city in the TMBP has implemented GASB 34. This required every city to create capital asset records and compute depreciation for the new financial statements. Use your calculated depreciation in the categories listed below.			
44	Depreciation	Buildings	\$0
45	Depreciation	Improvements other than buildings	\$0
46	Depreciation	Equipment other than rolling stock	\$0
47	Depreciation	Autos and light vehicles	\$0
48	Depreciation	Medium and heavy equipment	\$0
49	Depreciation	Other capital assets	\$0
50	Depreciation	Grant assets	\$0
<b>DEPRECIATION EXPENSES TOTAL</b>			<b>\$0</b>
<b>FORM E: SUMMARY OF EXPENSES</b>			
	<b>ACCOUNT</b>	<b>ACCOUNT DEFINITION</b>	<b>0</b>
51	Personal services		\$0
52	Operating expenses		\$0
53	Indirect costs		\$0
54	Depreciation expense		\$0
<b>TOTAL COSTS</b>			<b>\$0</b>