UNC School of Government Benchmarking Study: Highlights

City of Greensboro
Budget & Evaluation

October 8, 2019

Overview

The City of Greensboro has participated in the annual UNC School of Government (SOG) benchmarking project along with many other municipalities for over 20 years. SOG releases an annual report that documents and compares various service performance measures among the municipalities participating in the benchmarking project. The final report on city services for fiscal year 2017-18 includes thirteen service areas compared across fourteen municipalities.

This report summarizes the services and the impact of delivering those services for each of the municipalities participating. In addition to cost details, the report also includes contextual information about each municipalities and their service population.

The full report is available from the Budget and Evaluation Department and includes detailed service profiles, comparison data from other jurisdictions, and performance measures. Below is a list of participating cities and service areas addressed in the benchmarking study.

Service Areas:

- Residential Refuse Collection
- Household Recycling
- Yard Waste/Leaf Collection
- Police Services
- Emergency Communications
- Asphalt Maintenance and Repair
- Fire Services
- Building Inspections
- Fleet Maintenance
- Central Human Resources
- Water Services
- Wastewater Services
- Core Parks & Recreation

Cities:

- Apex
- Asheville
- Chapel Hill
- Charlotte
- Concord
- Goldsboro
- Greensboro
- Greenville
- Hickory
- High Point
- Mooresville
- Raleigh
- Wilson
- Winston-Salem

Highlights

Below are highlights from the final report on city services for fiscal year 2017-18 (FY18).

This report provides a snapshot of the City of Greensboro's participation in the study by illustrating how resource allocations compare over time and demonstrating how the measurement of efficiency and effectiveness can encourage continuous improvement in the public sector.

Service Area: Infrastructure

Residential Refuse Collection

Residential refuse is defined as regularly scheduled collection of household refuse or "garbage" from residential premises and other locations, including small businesses, using containers small enough that residents and/or workers can move or lift manually. The service excludes collection of waste from dumpsters; regular or special collection of yard waste and leaves; collection of recyclable materials, white goods, or other bulky items; and any special or non-routine service provided to residences. Transportation of refuse to a landfill or a transfer station is included, but the disposal of refuse and tipping costs are excluded.

The City of Greensboro's refuse collection includes single family homes, multi-family dwellings and some small business. The program continues to excel in several areas when compared to other benchmark study municipal participants. In FY2017-18 the program collected 466 tons of refuse per municipal collection FTE more than the benchmarking average, 1,730, while also keeping cost per ton collected, $64, at almost half the benchmark average, $120. "Tons of refuse collected per 1,000 population" and "per 1,000 collection points" serve as measures of need for this service. Because of citizen expectations and public health requirements, sanitation crews or contractors must pick up all or virtually all household refuse that residents put out for collection.

In FY18 the City of Greensboro's received 28 complaints per 1,000 collection point which for the second year in a row was below the benchmark average of 35. All of the study's participating cities take calls about residential refuse collection, and nearly all maintain records of one kind or another about such calls. However, the municipalities follow very different procedures in processing and recording these calls and in determining which ones are complaints and which are not. For these reasons, the project is able to present limited comparative data about complaints or valid complaints for residential refuse collection or other solid waste services. Nonetheless, the project recommends that the participating municipalities devise common criteria for identifying complaints and procedures for processing and recording calls.

Effectiveness Measures	**Efficiency Measures**

Complaints per 1,000 Collection Points

Residential Refuse Collection Cost per Collection Point
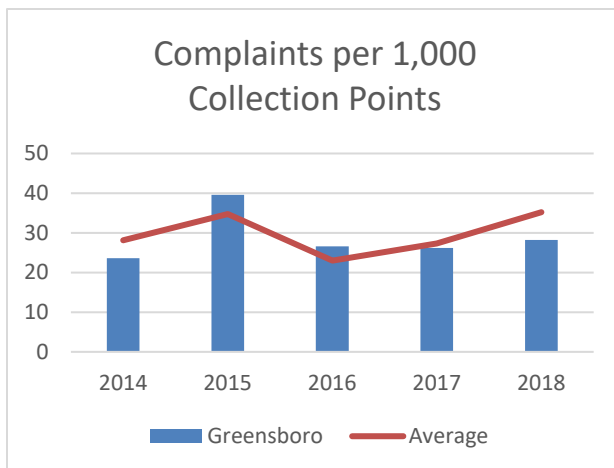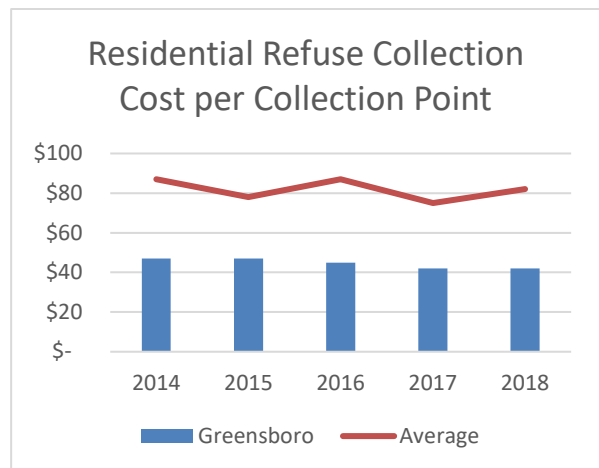
Water Resources

This service area includes the collection, treatment, distribution, and billing related to drinking water services. It includes reservoirs where appropriate, pumping stations, pipes to and from treatment plants, storage tanks, and treatment plants. Activities and costs include the operation, maintenance, and installation of infrastructure. Also included are costs and activities associated with the installation, upkeep, and reading of meters; billing and collection costs for drinking water services; and administrative activities such as planning, engineering, and testing. Excluded are reclaimed water, sewer collection, and wastewater treatment services.

Greensboro's drinking water is provided by the Water Supply Division, housed in the Water Resources Department. The water system serves approximately 287,000 people in an area covering about 148 square miles. In addition to City of Greensboro residents, the system serves many addresses in Guilford County in areas adjacent to the city limits.

Water Resources is able to accomplish lower costs to users, while also working more efficiently than benchmark peers. In FY2017-18 Water Supply Division costs to the customer per meter was $360, which is $69 below the benchmark study's average cost. City of Greensboro users consume slightly above average amounts of water, yet the Water Supply Division is able to keep the billing cost for volume of water, or per thousand gallons, billed to users at less than $4, or $.42 below the below the benchmark average of peer cities. Despite the average age of City main line pipes in the system being thirty-nine years old, main line pipes break 15% less than the average main line breaks reported by the benchmarking study. The department maintains 10.2 miles of main line pipe per square mile of service area, which is almost 2 more miles of main line pipes per square mile than its benchmark study peers. Water Resources is able to accomplish all of this while also operating at 1.2 FTE's per 10,000 population below the benchmarking average, and billing for 7.5 million gallons more per FTE.

**Resource Measures**
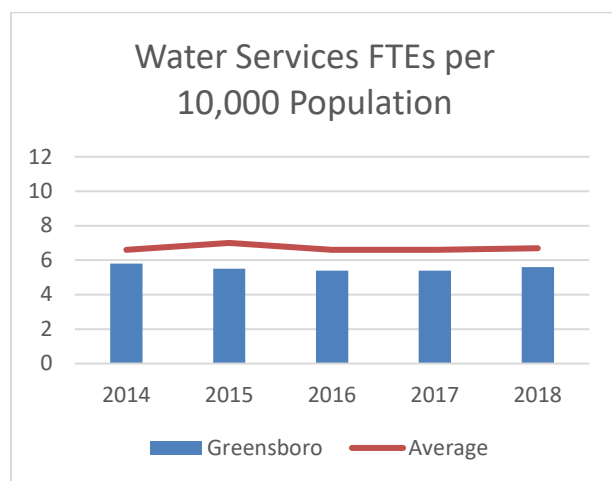
Efficiency Measures
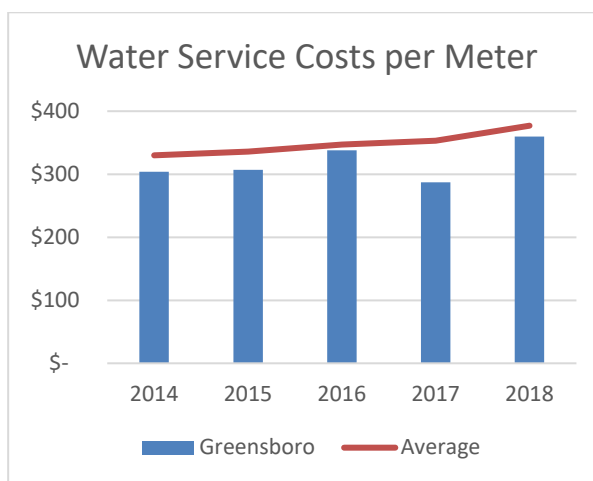
Wastewater

Wastewater Services as defined by the benchmarking study includes the collection, treatment, wastewater discharge, solids disposal, and billing related to sewer services. This service area includes the collection system after leaving the customer's outlet, lift stations, pretreatment, and treatment plants. Activities and costs include the operation, maintenance, and installation of infrastructure. Also included are costs and activities associated with billing and collection for sewer services and administrative activities such as planning, engineering, and testing. This includes wastewater treated for reuse at the plant site and for other purposes. Excluded are potable water systems and stormwater systems.

Wastewater treatment in Greensboro is handled by the Water Reclamation Division of the Water Resources Department. Services are provided to most of the City of Greensboro and to some addresses outside city limits within Guilford County. In October 2017, one of two wastewater plants was decommissioned with the effective capacity transferred to the remaining plant through a large construction upgrade. This plant uses advanced tertiary treatment. The system has nutrient regulatory limits in place that restrict what can be discharged in order to protect water quality. All biosolids produced by the Greensboro treatment plant are incinerated.

Like the Water Supply Division, the Water Reclamation Division also provides a high level of service while keeping costs low. In FY2017-18 wastewater services cost customers an average of $375 per account, which is $120 less than the benchmarking study average of $495. During FY18, the Water Reclamation Division billed residents $3.34 per 1,000 gallons of wastewater, which is $0.87 less than the average cost per 1,000 gallons of treated wastewater. The division is able to offer low costs to customers while also operating with a ratio of 658 customer accounts per FTE, which is 120 accounts more per FTE than the benchmark average. In FY18 Wastewater sewer employees maintained 10.2 miles of sewer main line pipe per square miles of service, which is 1.4 miles more than the average miles maintained in the benchmark study.

Efficiency Measure

Total Cost per 1,000 Gallons of Treated Wastewater

Effectiveness Measure

Percent of Main Line Rehabbed or Replaced
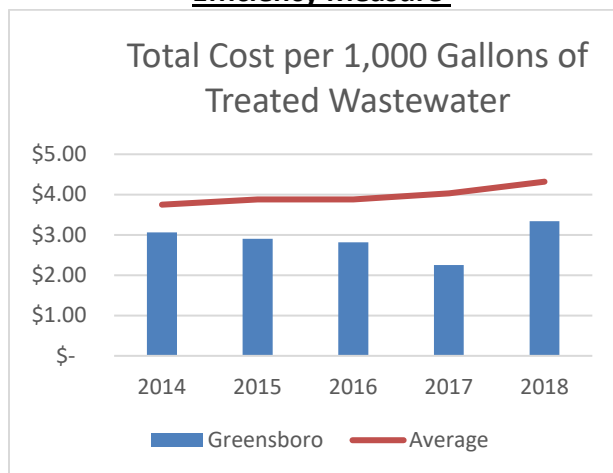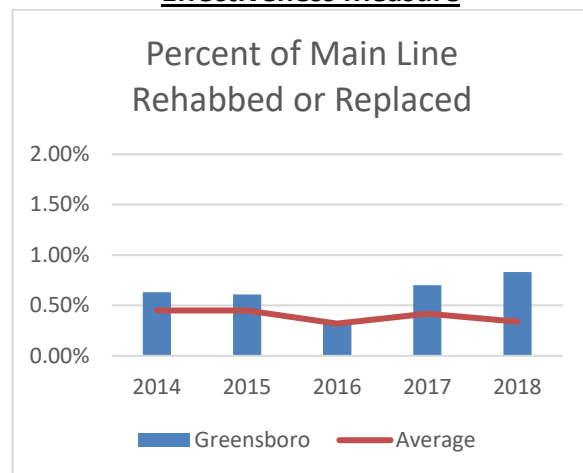
Building Inspections

        Building inspection services refers to permit issuance and inspections for building, electrical, mechanical (including heating and cooling), and plumbing work on new residential and commercial construction or additions and alterations to enforce the North Carolina State Building Code and related local building regulations. The inspection process includes the receipt of permit applications, review of plans and specifications, issuance of permits, and follow-up field inspections to ensure compliance. Excluded are the enforcement of zoning and subdivision regulations, fire codes, minimum housing codes, erosion and sedimentation control regulations, watershed regulations, historic preservation ordinances, and other development regulations or plans.

        Inspections is a division of the Engineering and Inspections Department of the City of Greensboro. The inspections division consists of plans review, building inspections, plumbing inspections, mechanical inspections, electrical inspections, and local code enforcement. Trade inspectors are required to attain a Level III certification of their primary building trade within two years. Mechanical and plumbing inspectors are required to attain a secondary certification. Local ordinance inspectors are required to attain a Level I certification. All certified inspectors are required to take and pass a law and administrative course.

        Like many other City departments, Building Inspections has been able to keep costs comparatively low, while delivering quality services. In FY2017-18 Building Inspections cost residents about $11 per capita, which is almost $10 less per capita than the benchmark study's peers. When taking into account all types of inspections, each inspection costs taxpayers about $42, which is almost half of the benchmarking study average of $82 per inspection. In FY18 Greensboro's building inspection services cost $118 million dollars in total, which was $82 million dollars below the average benchmarking study cost of peer building inspection services. Building Inspections has kept costs low while also operating at with almost .75 a FTE less than the average FTE count in the benchmarking study. The building inspections division also completes almost 5 more inspections per day, per inspector than the average amount of 13 reported by the benchmarking study.

Efficiency Measures
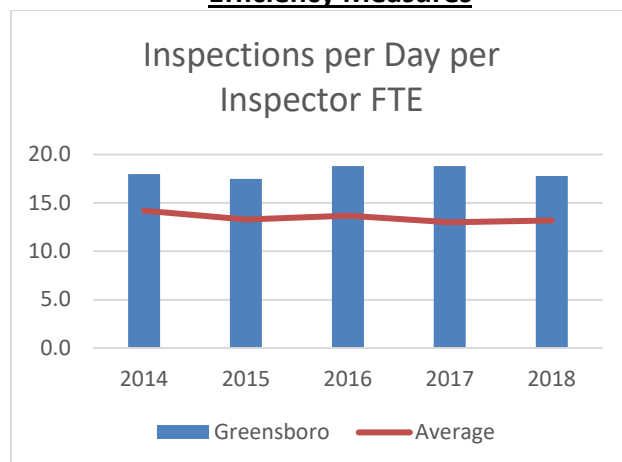
Effectiveness Measure
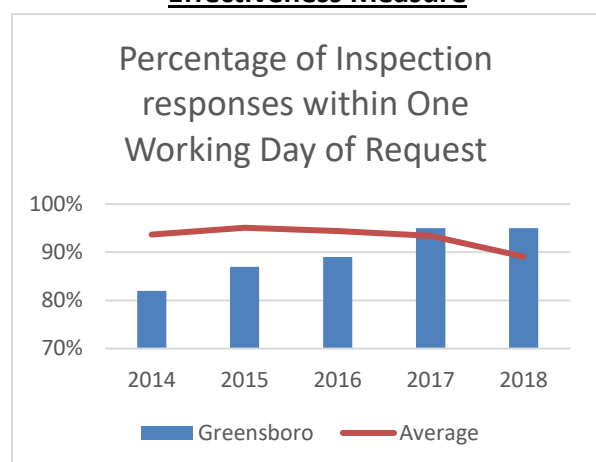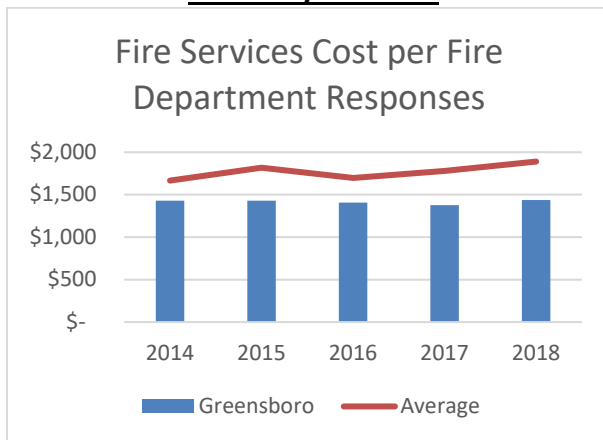
Service Area: Public Safety

Fire Services

The Greensboro Fire Department (GFD) contains two branches: emergency services and support services. During FY2017-18 the GFD responded to 39,153 fires, medical emergencies, false alarms, and other situations that result in the mobilization of fire equipment and personnel. While responding to all of these emergencies the department has kept fire service costs per capita at $25 below the benchmarking average, and kept the average cost to citizens $451 below the benchmarking average.
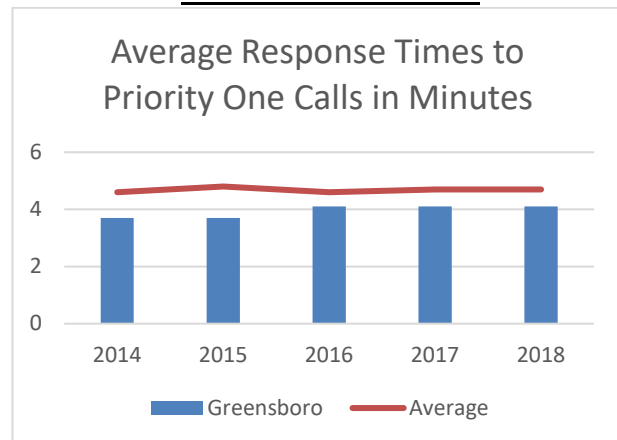
The Greensboro Fire Department also continues to excel in response time categories. A quick response is a critical determinant in how successful fire responders will be at changing the outcomes of fires. The fire department's top goal is to keep fires to the room of origin, or even the object of origin if possible.   Response time is calculated by adding both the turnout time (the time the dispatch is received until the first unit is out the door) and the travel time (the time the first unit is out the door until the unit arrives on scene). GFD's response time to priority one calls, which are emergency calls that require immediate response, has been faster than the benchmarking average over the past five years, and 36 seconds faster than the FY18 benchmark average of 4.7 minutes. In addition to dispatch time, GFD tracks the amount of time it takes until the first unitarrives, as well as the amount of time it takes for a full complement of trucks and personnel to respond to an emergency. According to the National Fire Protection Agency, a full complement response should occur within is 8 minutes for 90% of responses. In FY18, the fire department arrived with a full response within 8 minutes of travel time 88% of the time, while the benchmarking average is 81%.

The Fire & Life Safety Division of GFD houses the fire inspections unit. In FY18 Fire Inspections completed 6,687 fire maintenance inspections, construction inspectoins, and reinspections. General inspections are performed according to the state mandated inspection schedule, which is based on occupancy type established in the International Fire Code. During FY18, the fire insepections unit was able to clear 47% of fire code violations within 90 days. This is well below the benchmarking average of 72% of fire code violations cleared within 90 days. The fire department has been below average in this mark for the last five years.

Efficiency Measure

Fire Services Cost per Fire Department Responses

Effectiveness Measure

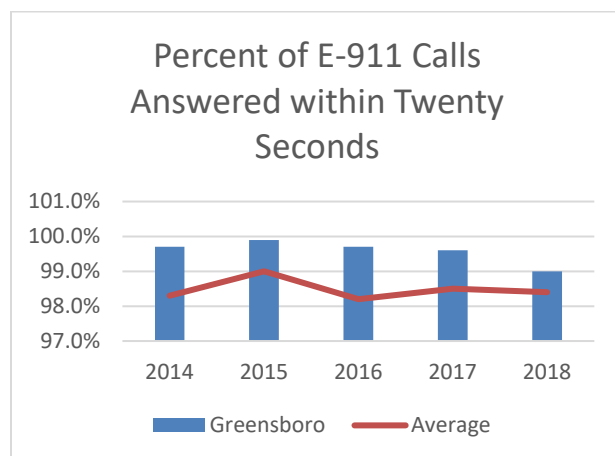### Average Response Times to Priority One Calls in Minutes

Metro Communications

Guilford Metro 911 (GM 911) operates under an interlocal agreement between the City of Greensboro and Guilford County. GM 911 is responsible for call intake and dispatch for all law agencies, fire agencies, and EMS for the City of Greensboro, Guilford County, and Gibsonville, but does not dispatch for the City of High Point's Police or Fire departments. In FY 2017-18 GM 911's communications center handled a total of 588,425 incoming calls and dispatched 442,620. Calls are dispatched along with a priority code. The city defines highest priority emergency calls as call types that require the fastest response, such as shootings, robberies and fires.
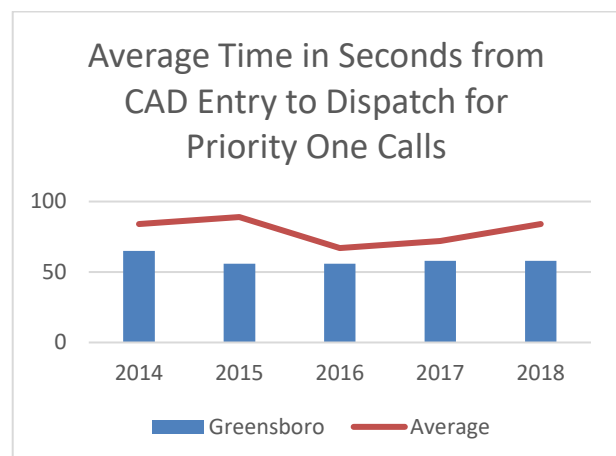
GM 911 houses a dispatch center as well as a radio shop that maintains the twenty-eight channel Motorola SmartNet 800 MHz system that almost all local first responders utilize. Operating an in-house radio shop is more uncommon than common, but adds positives such as cheaper radio maintenance costs and less radio down time to GM 911 operations as well as first responder operations. GM 911 is also home to the Public Safety IT (PSIT) division which provides IT services to Metro, GFD, and the Greensboro Police Department. The associated costs, staff, and other services for this function are not included in the benchmarking project.

GM 911 is able to accomplish a lot while keeping costs low and results high. In FY18 GM 911 continued a five year trend of keeping emergency communications costs at $15 per capita, which is $6 below the benchmarking average; or $18 per call, which is about $2 per call below peer averages. GM 911 is able to accomplish low costs while answering all calls within 20 seconds 99% of the time and operating with .34 FTE's below the benchmarking average in FY18. GM 911 Communications continues to excel in the average time in seconds from CAD entry to dispatch for priority one calls. In 2018 GM 911 Communications averaged 58 seconds from CAD entry to dispatch, compared to the benchmark average of 84 seconds.

Efficiency Measure   **Effectiveness Measure**

Percent of E-911 Calls Answered within Twenty Seconds — Greensboro / Average — 2014, 2015, 2016, 2017, 2018

Average Time in Seconds from CAD Entry to Dispatch for Priority One Calls — Greensboro / Average — 2014, 2015, 2016, 2017, 2018

Police

The Greensboro Police Department (GPD) provides comprehensive police services performed by sworn and non-sworn personnel, including patrol, investigations, a traffic unit, a telephone response unit, a forensics laboratory, a canine unit, a motorcycle unit, a special response unit, a bicycle patrol unit, a drug enforcement unit, and a student outreach and recruiting program. In FY2017-18 the City had 674 sworn officer positions and 113 un-sworn positions authorized for the fiscal year, with an average length of service of 11.2 years.

Greensboro defines a high priority emergency call as one where there is a potential for imminent serious injury or death. In FY18 GPD used Uniform Crime Reporting (UCR) to report crimes against persons (criminal homicide, forcible rape, robbery, and aggravated assault) and crimes against property (burglary, larceny, motor vehicle theft, and arson) which is a summary based reporting system. The police department was successful in clearing a total of 3,054 Part I cases during the fiscal year. In FY21 GPD will begin utilizing the National Incident-Based Reporting System (NIBRS) which reports criminal offenses at the incident level.

GPD falls in line with the benchmarking average for multiple measures in the benchmark study. GPD operates right at the benchmarking average, 27, for total police personnel per 10,000 populations, and total sworn police officers, 23, per 10,000 population. The police department reported 40 Part I crimes per 1,000 populations, which is the same as the benchmark average, while also reporting the same cost, $26,000 per Part I case cleared.

Resource Measure
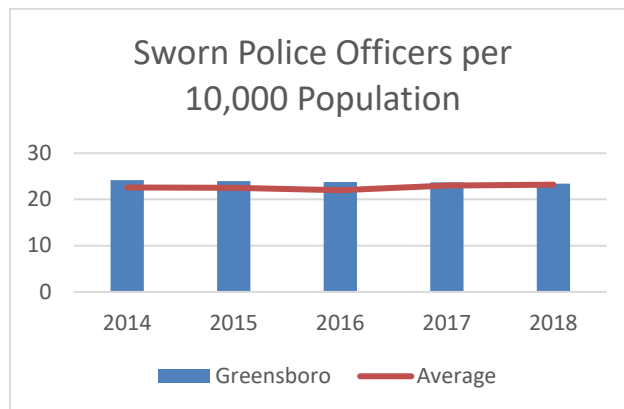
Service Area: Community Services

Parks and Recreation

      Parks and Recreation includes both passive and active recreation opportunities maintained and operated by a local government. For the purposes of this benchmarking effort, this includes core operational functions such as parks, multipurpose recreation facilities, athletic facilities, greenways, and trails. This also includes programs and events. However, Parks and Recreation departments frequently may include a variety of other activities and facilities. To support reasonable comparisons, this service benchmarking excludes these secondary recreational activities, including performance venues, museums, historic sites, golf courses, marinas/boat ramps, and professional stadiums. Also excluded are other non-recreational activities sometimes performed by parks and recreation departments, such as care of cemeteries; maintenance of rights-of-way along city streets; maintenance of facilities owned by a municipality but not parks-related; and maintenance of city lots. The dollars and people associated with these secondary and non-park activities are excluded.

      The City of Greensboro Parks and Recreation Department has several cooperative agreements with the local schools and some non-profits for the provision of services or use of facilities. The city provides a full array of recreational facilities and activities. The city has 351 separate parks and sites. These parks cover 11,160 land acres; most of them are developed. In addition, 2,641 acres in water space is part of the parks system. The city also has over 100 miles of trails. The City of Greensboro Parks and Recreation Department was recently named a finalist for the National Recreation and Park Association's (NRPA) National Gold Medal Award for Excellence in Park and Recreation Management. This award recognizes departments across the county for excellence in long-range planning, resource management, and innovative approaches to developing outstanding parks and recreation services. The department won the award in 2002, 1987, and 1979.

      The City's Parks and Recreation department operates at a high level of excellence while providing citizens low cost services for high value experiences. The department's services cost per capita in FY2017-18 were $53 less than the average cost per capita of $104. Additionally Parks and Recreation cost $9,362 less per acre than the study's average cost per acre, $10,932. Greensboro operates its Parks and Recreation department with 5.6 FTE's less per 10,000 population than the benchmark study average of 11.2. Parks and Recreation department also manages and maintains an above average amount of park land. In FY18 Parks and Recreation managed 388 acres of parks per 10,000 residents, which is 249 land acres of parks per 10,000 residents than benchmark average of 139 land acres. Park maintenance employees maintained 100.9 acres per FTE more than the benchmark study average of 41.3 acres of park maintained per maintenance FTE.

Facilities Maintenance   **Efficiency Measure**

Land Acres of Parks per 10,000 Population

Greensboro ▬ Average

Acres of Park Maintained per Maintenance FTE
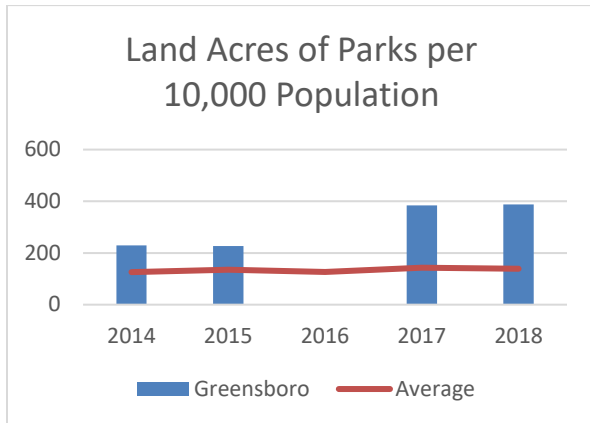
Greensboro ▬ Average
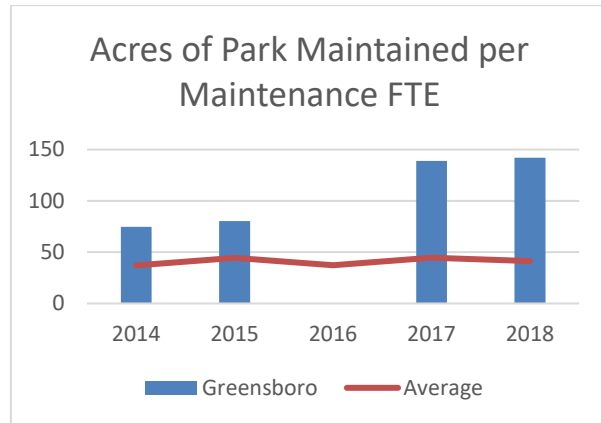
Conclusion

The overall objective of the benchmarking project is to both develop and expand the use of performance measurement as a tool that drives local governments towards improving the delivery of the services provided. The City of Greensboro will continue to use benchmark reports in future years, looking to identify service delivery areas that should be considered for evaluation to improve efficiency and effectiveness.

The FY 2017-18 benchmarking report provided a great deal of data and useful analysis on a variety of services. Only a few of the services and measures were included in the brief overview above. Other notable results show Greensboro's relatively low cost of refuse collection per ton collected, low cost of water services, as well as an increased value of the city's fire department responses and an outstanding parks and recreation program.   These and all of the findings have been shared electronically and in hard copy with participating departments for use in operational analysis and improvement efforts.

More information, or a copy of the full report can be obtained by contacting the Budget and Evaluation Department. For specific inquiries please contact Tracy Nash at Tracy.Nash@Greensboro-NC.gov.