



## CAPITAL PROGRAM

This section includes a description of the major capital achievements of fiscal year 2014 and the programs that make up the 2015 – 2020 Capital Improvement Program. Included are program descriptions, the impact on County operations, and a listing of the budgeted appropriations by project category.





### Capital Improvement Programs

Capital Improvement programs for the Department of Community Services are comprised of projects that help provide a comprehensive and coordinated system of facilities for the provision of high-quality recreational, educational, human, and other services to Gwinnett County residents. Projects in these programs include the construction and/or renovation of senior centers, community centers, and parks and recreational facilities. Parks and recreation projects involve providing quality parks and recreational facilities such as passive and active park land, sports fields, tennis complexes, aquatic centers, multi-use trails, playgrounds, picnic pavilions, and other park amenities.

#### 2014 Capital Achievements

The 2009 SPLOST capital program included the following projects completed in 2014:

- Lions Club Park renovation, including a five-field baseball/softball complex and concession/restroom building, providing youth sports programs for the Lilburn area. Other features included a pavilion, playground and restroom area, multi-purpose trails, and a trailhead and connection for the Camp Creek Greenway
- Concession/restroom building for Dacula Park between fields six and seven
- Bethesda Park adult softball complex renovation, including a new building and new backstops to make it a more suitable league and tournament facility
- Bethesda Park Aquatic Center renovation (scheduled for completion by the end of 2014), which includes the replacement of the aquatic play structure, new pool air-quality systems, tile replacement, repainting and pool re-plastering as needed, and other improvements
- Completion of a 0.7-mile section of Ivy Creek Greenway, including a major crossing of Ivy Creek and restroom facility
- Phase III construction of Little Mulberry Park, which added a new entrance and parking, a pavilion, playground and restroom area, multipurpose trail connections, and a disc golf course

A number of renovation and improvement projects to existing parks and recreational facilities were also completed in 2014. Examples include various repaving projects, plaza and concrete repair, Dacula Park tennis courts resurfacing, new park security systems, Bethesda Senior Center re-roofing, etc.

#### 2015 – 2020 Capital Improvement Plan

The 2015 capital budget and the 2016 – 2020 plan for the Community Services Capital Improvement Program totals \$67.4 million.

The 2013 Capital Improvement Plan serves as the guide for parks and recreation capital projects. This plan was the basis for the projects recommended by the Recreation Authority for the 2014 SPLOST. The Recreation Authority chose projects for Parks and Recreation that met its goal of improving or renovating existing parks and recreational facilities. The funding amount for the three-year SPLOST period for parks facilities is approximately \$24 million. In addition, for the first time, funding was also allocated for Senior Services capital projects of approximately \$5 million.

Parks and Recreation will continue to implement the 2009 SPLOST program as approved. Major capital projects under design for 2015 construction include: JB Williams Park (new park development), South Gwinnett Park (park renovation project), Rock Springs Park soccer complex (park improvement), George Pierce Park gymnasium (park improvement), Freeman's Mill Park (historic site improvement), Isaac Adair House (historic site improvement), and McDaniel Farm Park (park improvement). Major 2014 SPLOST projects under design for 2015 construction include: Alexander Park (park improvement) and Ronald Reagan Park (park improvement).

## Community Services Capital Improvement Program

Project Category	2015	2016	2017	2018	2019	2020	Total
							2015 – 2020
Community Services Administration	604,762	-	-	-	-	-	604,762
Community Services Miscellaneous	72,944	-	-	-	-	-	72,944
Environmental and Heritage Facility	250,000	-	-	-	-	-	250,000
Fleet Equipment	625,625	191,458	200,419	77,500	104,375	471,484	1,670,861
Libraries	1,866,691	11,108,156	837,327	-	-	-	13,812,174
Parks and Recreation	30,756,175	14,064,144	3,810,000	785,000	785,000	685,000	50,885,319
Senior Services Vehicles	-	111,000	-	-	-	-	111,000
<b>Total Community Services</b>	<b>34,176,197</b>	<b>25,474,758</b>	<b>4,847,746</b>	<b>862,500</b>	<b>889,375</b>	<b>1,156,484</b>	<b>67,407,060</b>



### Capital Improvement Programs

The General Government Capital Improvement Program (CIP) is a diverse group of projects that will enhance and/or improve general government services such as information technology, courts, and tax collection. In other words, the general government program includes all projects other than those related to community services, public safety, public utilities, and transportation.

Computer and Computer Systems projects involve upgrading and enhancing the technology infrastructure to support the County's information needs. Projects in this category include acquisition of new and replacement personal computers, peripheral equipment, and software applications, as well as upgrades to the systems, storage, networking, and communications infrastructure. Also included are various business applications and systems.

Other project categories are:

- General Government Facilities, which consists of projects related to the construction of new and/or improvements to existing County facilities; and
- Miscellaneous Projects, including studies and budgeted capital contingencies.

### 2014 Capital Achievements – Support Services

#### Major Construction Projects

Highlights for 2014 major projects in the design or construction phase include the following:

- Employee Wellness Center: The Wellness Center will provide a clinic and health education center for County employees and retirees. Design and construction began in 2014 as a General Fund initiative. This project is a 5,000-square foot renovation of a space in the Government Annex and also includes major renovations of the restrooms and public areas in the building. The construction contract was awarded in October and construction began in December.
- Fire and Emergency Services:
  - Fire Equipment Maintenance Building: Construction was completed on the new Fire Equipment Maintenance Building located next to the Fire Apparatus Storage Building on Swanson Drive. This facility provides space for testing and maintaining a variety of firefighting and emergency rescue equipment.
  - Fire Training Academy: The County's Fire Training Academy will be enlarged and improved. The improved facility will be used to provide quality training for new recruits in addition to expanded and ongoing training for all firefighters to comply with the National Standards for Fire Services. Construction of the first phase, a new driving course, was completed in the first quarter. The second and larger phase of the project is the development of a new 34,900-square foot classroom/training building, a new three-bay apparatus storage building, and a new outdoor training pavilion. Construction of this new complex of buildings began in July 2014 and is expected to take almost two years.
  - Fire Stations 10 and 31: The County resumed design of two fire station projects: the relocation of Fire Station 10 to a site near Coolray Field, and the development of a new Fire Station 31 across from Georgia Gwinnett College. Preparation of documents to bid construction for both of these stations was nearing completion at year end.
- Gwinnett County Library System Branch Relocations:
  - Lilburn Branch Library: The Lilburn Branch Library and City Hall is a unique joint venture between the County and city of Lilburn. The Lilburn Branch Library and Lilburn City Hall will be relocated to a new shared building with a strong civic presence and modern efficiencies. An intergovernmental agreement between the city and County was approved in 2014, and preparation of construction documents was near completion at year end.
  - Norcross and Duluth Branch Libraries: Gwinnett County library branches in Norcross and Duluth will be relocated and are to be funded from the 2009 and 2014 SPLOST programs. The existing facilities, more than 33 years in age, will be replaced with upgraded and freshly conceived 20,000 – 22,000 square foot buildings located in the downtowns of the respective cities. Programming studies and site analyses for both of these projects began in 2014.

- **Juvenile Court and District Attorney Office Space Improvements:** A partial build-out of the fourth floor and the reconfiguration of the third floor in the Courthouse Annex will provide a new and expanded office area for the Juvenile Courts Guardian ad Litem Division and the District Attorney. This general fund project will also provide an expanded waiting area for the third floor courtrooms. Design was completed in 2014, and construction procurement will be in the first quarter of 2015.
- **Morgue and Medical Examiner's Office:** The construction of a new combined facility for the County's Morgue and Medical Examiner's Office is one of the major building projects from the 2014 SPLOST. This facility will replace the County's morgue and provide operational efficiencies by combining the morgue with the Medical Examiner's Office in a single building. The new facility will have 14,260 square feet and will be located on Hurricane Shoals Road in Lawrenceville. Design of the project is well underway and construction documents will be ready for bidding in the second quarter of 2015.
- **Senior Services Centers:**
  - **Swanson Drive Senior Services Center:** Phase 2 of the Gwinnett County Senior Services Center was completed and occupied in January 2014. This project included a 12,000-square foot addition with a new kitchen and other features to support Senior Services' food service programs. The project also completed the consolidation of Senior Services' administrative, casework, and food service functions in a single modern facility. The project was funded by the Community Development Block Grant Program administered by the U.S. Department of Housing and Urban Development.
  - **Centerville Senior Services Center:** The development of a new, free-standing Centerville Senior Services Center began in 2014. This facility will be located on Bethany Church Road adjacent to the Centerville Branch Library and Community Center. The programming study for this SPLOST project has been completed and sets the stage for the design and construction of a new 8,500-square foot facility and provides a plan for larger prototypical facilities that the County hopes to develop in future years.
  - **Lawrenceville Senior Services Center:** The County began planning the renovation of the Lawrenceville Senior Services Center. With the recent relocation of administrative and food service functions from this building, there is an opportunity to reconfigure and enhance this center. Design for these improvements is largely complete and the project will be bid for construction in early 2015. The project is funded by grant monies from the Department of Housing and Urban Development's Community Development Block Grant Program.

## Capital Maintenance Projects

Maintenance projects completed in 2014 include the following:

- **Buford Human Services Center**
  - Site drainage improvements
  - Redesigned and upgraded HVAC system engineering
- **Centerville Community Center**
  - Moveable room divider replacement
- **Comprehensive Corrections Complex**
  - Aging and deteriorated kitchen equipment replacement
  - Deteriorated and substandard fire sprinkler system components replacement
- **Courthouse Annex**
  - Parking lot sealing and restriping
- **DOT Central Maintenance and Supply Facility**
  - HVAC system unit replacement





- Government Annex (750 South Perry Street)
  - HVAC distribution system, ceilings, and lighting replacement on second and third floors
  - Fire alarm system replacement
  - Old credit union drive-through replacement
- Gwinnett County Library System Projects
  - Fire alarm system replacement at Collins Hill Branch
  - Roof replacement completion at Buford and Mountain Park Branches
  - Roof replacement completion at Snellville and Peachtree Corners Branches
  - Carpet replacement at Collins Hill and Mountain Park Branches
  - HVAC systems controls installation at Dacula, Grayson, Suwanee, and Centerville Branches
  - HVAC unit replacement at Lawrenceville Branch
- Gwinnett Historic Courthouse
  - HVAC system boiler replacement
  - HVAC unit replacement for restroom building
- Gwinnett Justice and Administration Center
  - Fire alarm system replacement
  - Dining room floor replacement in cafeteria
  - Implementation of Phase II of a multi-year plan to replace all air distribution boxes on HVAC system
  - Trail and picnic area construction on the grounds
- Park Facilities
  - HVAC units replacement at older concession and restroom buildings
  - Fire alarm system replacement at Bogan Aquatic Center
- Police Facilities
  - Batteries replacement in UPS units at Police Annex and 911 Center
  - Replacement of three aging rooftop HVAC units at Police Headquarters
  - Analysis, engineering, and HVAC system controls modifications to address ventilation and air balance issues at Police Training Center firing range
  - HVAC controls systems installation at Animal Welfare and Enforcement Center
  - Kennel ceilings and walls refurbishing and repainting in Animal Welfare and Enforcement Center

## **2014 Capital Achievements – Information Technology**

The following are the Department of Information Technology Services' activities and accomplishments in 2014:

- Completed a phase of the network and server infrastructure expansion through the acquirement of updated network equipment, server hardware, storage, software, and diagnostic tools necessary to better incorporate new technologies and support Gwinnett County's continued growth and expansion
- Continued implementation of VoIP telephone systems at Department of Water Resources (including water and sewer), Community Services, and Fire and Emergency Services locations, in alignment with the phased approach to replace existing older PBX systems with a long-term standardized solution for voice technology services



- Upgraded Supplier Relationship Management System (SRM) to version 7.0 to provide more functionality and enhancements to internal and external customers doing business with the County and to ensure continued support from the system provider
- Completed countywide implementation of Manager Self-Service (MSS) standard functionality and integration with Employee Self-Service (ESS) platform to incorporate employee profile development, career planning, and qualification and training reporting
- Continued ongoing implementation of Accuvote Touch Screen Voting System to enable a more efficient voting process with less waiting time, while providing additional voting units for existing precincts to accommodate Gwinnett County's growth
- Completed upgrade of the Electronic Warrant System to current technology enabling more functionality. This upgrade included a new video tele-conferencing system that allows the warrant applicant to communicate directly with a Magistrate Judge. This feature removes the necessity for the warrant applicant to present themselves in person to obtain an arrest or search warrant.
- Completed 800 MHz radio system tower site analysis project by performing a physical inspection of the tower structures and other components of the radio system to evaluate repair or replacement needs. Deficiencies will be addressed in 2015 to ensure the continued operation of this critical system.

## **2015 – 2020 Capital Improvement Plan**

The 2015 capital budget and 2016 – 2020 plan for the General Government Capital Improvement Program totals approximately \$235.0 million.

## **2015 – 2020 Capital Improvement Plan – Support Services**

### **Major Construction Projects**

The following projects are currently under design, construction, or are scheduled to start in 2015:

- Employee Wellness Center: Construction of the County's new Employee Wellness Center in the Government Annex is scheduled to be completed in the second quarter of 2015.
- Fire and Emergency Services:
  - The largest element of the Fire Academy expansion, the classroom/training building, is scheduled for completion in July 2015. Work on other elements of the project will continue for approximately another year.
  - Construction of Fire Stations 10 and 31 will be bid in a single procurement in the first quarter and will take roughly a year to complete.
- Gwinnett County Library System Branch relocations:
  - Lilburn Branch Library and City Hall construction will bid in the first quarter of 2015, and the project is expected to be 50 percent complete by the end of the year.
  - Programming for the Norcross and Duluth Branch relocations should be completed in the first quarter of 2015 and design will begin in 2015.
- Juvenile Court and District Attorney space: Construction of the partial build-out of the fourth floor and associated third floor renovation at the County's Courthouse Annex is scheduled to be under contract early in 2015 and to be completed by the end of the year.
- Morgue and Medical Examiner's Office: Construction documents are scheduled to be completed in the second quarter of 2015. The project should be under construction by summer.

- Senior Services Centers:
  - Design of the new 8,500-square foot Centerville Senior Services Center on Bethany Church Road will begin in the first quarter of 2015. The construction contract is expected to be awarded by the end of the year.
  - Design is scheduled to begin on the renovation and expansion of the senior center at the Buford Human Services Center in the fourth quarter of 2015.
  - Renovation of Lawrenceville Senior Center will be bid for construction in the first quarter of 2015, and construction should near completion by the end of the year.

### Capital Maintenance Projects

There will continue to be a major focus on general capital maintenance projects in 2015. Some projects began or were funded in 2014, while others are newly programmed for 2015. Projects to be completed or newly implemented in 2015 include the following:

- Central Services
  - Re-engineer and upgrade HVAC controls system to provide more efficient operations and more refined controls for the Records Warehouse
- Comprehensive Corrections Complex
  - Replace aging, deteriorated kitchen and server equipment
  - Replace carpet in select administrative areas
  - Implement various plumbing system repairs and upgrades
- Courthouse Annex
  - Replace building security controls touchscreen
  - Implement landscaping enhancements
- Fire and Emergency Services Facilities
  - Replace HVAC system components at three fire stations
- Fleet Management Facility
  - Replace fire alarm system
  - Enhance HVAC system to improve ventilation on the light vehicle side
- Government Annex (750 South Perry Street)
  - Complete replacement of HVAC distribution system, ceilings, and lighting on the fourth floor
  - Implement replacement of main HVAC supply units mounted on roof (final phase of HVAC system replacement)
  - Replace roof in association with final phase of HVAC system replacement
  - Patch, seal, and restripe parking lot
  - Clean and seal exterior pre-cast
- Gwinnett County Historic Courthouse
  - Replace low slope built-up roof
  - Restore, seal, and tuck-point brick walls
  - Rehabilitate two HVAC system air handling units
  - Expand and upgrade HVAC system controls





- Gwinnett County Library System Projects
  - Replace major HVAC equipment units at Snellville, Mountain Park, and Centerville Branches
  - Replace carpet at Library Headquarters
  - Patch, seal, and re-stripe parking lots at three branches
  - Implement landscaping upgrades at various branches
- Gwinnett Justice and Administration Center
  - Complete conversion of former IT Data Center to office space and implement related space reconfigurations in building's lower level
  - Implement various plumbing system repairs and upgrades
  - Convert video surveillance system to a Video over Internet Protocol system
  - Rework front entrance drive (Langley Drive) and resurface walkway system in front of the building
  - Replace audio-visual equipment in conference center
  - Implement Phases 3 and 4 of a multi-year plan to replace all air distribution boxes on the HVAC system
  - Implement pilot project to replace audio-visual systems in courtrooms
  - Install surge protection on building electrical service
  - Replace three facility UPS systems
  - Replace facility roof
  - Patch, seal, and re-stripe public parking lot and Nash Street parking lot
  - Replace pump on HVAC system cooling tower
  - Redesign cafeteria kitchen waste line system
- Multiple County Facilities
  - Complete plumbing fixture retrofits (install low-flow units) at 21 County facilities
- One Justice Square
  - Continue implementation of landscaping enhancements
- Park Facilities
  - Complete major HVAC unit replacements at Bethesda Senior Center
  - Replace several HVAC units on older concession and restroom buildings
  - Replace fire alarm systems at Bethesda Senior Center and Collins Hill Aquatic Center
  - Replace corroded fire sprinkler system heads at aquatic centers
- Police Facilities
  - Replace package HVAC units at South Precinct and three remaining old rooftop units at Police Headquarters
  - Replace fire alarm system at South Precinct

## 2015 – 2020 Capital Improvement Plan – Information Technology

Several of the major projects currently underway include:

- Ensure compliance with mandated requirements issued by the Federal Bureau of Investigation for advanced authentication of individuals accessing sensitive federal and state criminal justice databases in the execution of their law enforcement duties for the purpose of protecting the sources, transmissions, storage, and generation of criminal justice information
- Continue implementation of the VoIP telephone systems in remaining departments
- Continue deployment and availability of Gwinnett County services via mobile device accessibility to citizens, business partners, and employees
- Continue enhancements and improvements to Gwinnett County's public website including interfaces with SAP and/or other third-party applications to offer more convenience, better accessibility, and more useful functionality for Gwinnett County employees and residents
- Implement Symantec Endpoint Management Suite to enhance and streamline the support, security, and management functions of client endpoint devices located strategically throughout County offices
- Implement enterprise billing system to consolidate all or some of the County's different billing processes so residents will receive one consolidated bill for County services presented in a uniform format with common methods of payments, rules-based billing cycles, and collection methods. An enterprise billing system will also improve visibility of outstanding receivables, better financial reporting, and revenue forecasting
- Continue update to the Disaster Recovery Plan through the acquisition of equipment and services needed to interconnect the GJAC Data Center and the E-911 Data Center to diminish downtime of critical business systems and to ensure business continuity
- Continue expansion of the network and communications infrastructure, including wireless access points (WLAN), virtual private networks (VPN), access point name networks (APN), firewalls, and various security platforms. Procurement of updated network equipment, server hardware, software, and diagnostic tools necessary to better incorporate new technologies and support Gwinnett County's continued growth and expansion
- Upgrade the 800 MHz radio system to version 7.15 to maintain support and incorporate enhancements to our alerting systems, which provides communication to all Gwinnett County radio system subscribers and municipalities
- Upgrade the FileNet P8 system to improve system stability and maintenance support, which provides agenda and invoice processing as well as general document management for the County



# General Government Capital Improvement Program

<b>Project Category</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total 2015 – 2020</b>
Cities Share of 2014 SPLOST	31,563,423	32,626,327	8,293,476	-	-	-	72,483,226
Computers and Computer Systems	4,317,520	15,614,666	12,502,743	10,389,183	9,592,058	9,875,548	62,291,718
Contingencies and Miscellaneous Projects	(7,201,297)	473,888	266,210	165,191	206,554	77,303	(6,012,151)
General Government Facilities	39,302,407	42,248,414	11,734,140	4,059,810	3,069,900	600,910	101,015,581
Health and Human Service Facilities	2,112,340	1,716,086	418,663	-	-	-	4,247,089
Support Services Administration	335,867	-	-	-	-	-	335,867
Underground Storage Tank Improvements	30,000	586,850	-	-	-	-	616,850
<b>Total General Government</b>	<b>70,460,260</b>	<b>93,266,231</b>	<b>33,215,232</b>	<b>14,614,184</b>	<b>12,868,512</b>	<b>10,553,761</b>	<b>234,978,180</b>



### Capital Improvement Programs

Gwinnett County's Public Safety program consists of projects that preserve and protect the lives and property of Gwinnett County residents.

#### 2014 Capital Achievements

Achievements in 2014 pertaining to the Gwinnett County Police Department include the following:

- **Police Headquarters Renovation:** Renovations included replacing backup generators and upgrading the front entrance. Police completed the refurbishment of the Crime Scene Investigation unit in December. The only remaining project is an upgrade to the HVAC controls, which will take place in 2015.
- **Animal Welfare and Enforcement Center:** Renovations included HVAC system upgrades, which included installation of exhaust fans in each kennel run, cleaning all ductwork, and installing all new diffusers. Kennels and walls in the back office area were cleaned, repaired, and painted, and concrete floors in the public corridors were refinished. The Department of Support Services has completed 75% of the HVAC upgrade; it is scheduled to be complete at the end of January. Repair for the kennel floors and walls began on January 12<sup>th</sup>. The completion of this repair is scheduled at approximately 90 days from the beginning date.
- **Public Safety Notification Response System:** Meetings for this project began in August 2014 and a Steering Committee was formed. An intergovernmental agreement was created for both the county and the schools. The draft of this document has been reviewed by the committee and is in the final revision stage. Implementation is expected to begin in March 2015.
- **Major Repairs and Renovations:** The Police major repairs and renovations project included repainting the South Precinct.
- **Police Helicopter Upgrade:** The process to upgrade one of Police's helicopters began in the third quarter. Training for Aviation personnel took place in December. Completion of this project will be in 2015.

Achievements in 2014 pertaining to the Department of Fire and Emergency Services include the following:

- Purchased six new medic units (ambulances) to replace older units
- Purchased one additional new medic unit (ambulance)
- Purchased four new fire engines to replace older units
- Replaced 11 various light-duty vehicles
- Replaced two operational command vehicles
- Replaced carpet at Stations 4, 5, 9, 16, and 17
- Repainted interiors of Stations 1, 11, and 22
- Installed an additional HVAC system at Fire Resource Management Warehouse
- Re-roofing at Fire Station 9
- Shower restorations at Fire Station 20 and Fire Headquarters
- Upgraded lighting systems at Fire Resource Management Warehouse and Fire Apparatus Warehouse

### Capital Improvement Programs

#### **2015 – 2020 Capital Improvement Plan**

The 2015 capital program and 2016 – 2020 plan for the Public Safety Capital Improvement Program totals \$110.3 million. Some of the highlights of planned improvements are listed below.

Police Services' capital improvement plans for 2015 – 2020 include existing capital projects: Improvements to the Animal Welfare and Enforcement Center and major repairs and renovations at Police Headquarters and the public safety notification response system. New projects include a five-year replacement program for police firearms, replacement logging recorder for E-911, the purchase of a new helicopter, and resurfacing the driver's track at the Police Training Center.

Future plans for the Department of Fire and Emergency Services include: Continued replacement of older fire apparatus and ambulances in the department's vehicle fleet; addition of Fire Station 31 located at the Georgia Gwinnett College campus on Collins Hill Road, which is expected to be a 14,300-square-foot facility; relocation of Fire Station 10 near Coolray Field on Rock Springs Road, which is also expected to be a 14,300-square-foot facility; improvements at the Fire Academy, including a new two-story academic building and apparatus building; adding ambulances to every fire station; upgrading the department's self-contained breathing apparatus equipment; and replacing HVAC systems in numerous fire facilities.



## Public Safety Capital Improvement Program

<b>Project Category</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Total 2015 – 2020</b>
Ambulances	2,274,600	2,395,380	2,424,200	2,615,100	2,924,000	3,059,000	15,692,280
Detention Center Renovations/Improvements	860,129	1,462,784	107,197	-	-	-	2,430,110
Fire Facilities	13,628,144	6,437,000	6,342,813	5,610,119	5,645,066	6,015,000	43,678,142
Police Facilities	3,230,000	317,000	190,000	200,000	-	-	3,937,000
Police Program Miscellaneous/Contingencies	1,626,933	1,540,715	1,542,847	291,012	189,000	193,500	5,384,007
Public Safety Vehicles and Equipment	9,032,555	10,412,458	3,496,516	6,254,655	5,109,835	3,056,623	37,362,642
Technology Needs	-	1,506,057	-	-	-	-	1,506,057
Transportation Administration	300,578	-	-	-	-	-	300,578
<b>Total Public Safety</b>	<b>30,952,939</b>	<b>24,071,394</b>	<b>14,103,573</b>	<b>14,970,886</b>	<b>13,867,901</b>	<b>12,324,123</b>	<b>110,290,816</b>



### Capital Improvement Programs

The Transportation Capital Improvement Program consists of projects to improve the County's transportation infrastructure. Projects in this program fall into three categories: Road Improvements (of which there are several sub-categories), Airport Improvement, and Transit.

The County's Road Improvement Program consists of the following:

- Major Roadway Improvements include new road construction, new alignments, and increasing the capacity of existing roads.
- Intersections/Traffic Operation Improvements include the addition of turn lanes, improvements of alignments of cross streets, improving sight distances, and signalizations, as well as Advanced Traffic Management System (ATMS) improvements.
- Bridges/Roadway Drainage Improvements consist of new construction or reconstruction of existing bridges and culverts up to sufficiency standards.
- Road Safety and Alignment projects correct safety deficiencies such as sight distances, horizontal and vertical alignments, and at-grade railroad crossings.
- School Safety projects improve traffic safety near schools with the installation of turn lanes at school entrances, installation of sidewalks, and signalization improvements.
- Sidewalks and Multi-Use Trails include projects to link existing sidewalk segments or link residential areas to nearby activity centers.
- The Unpaved Road category funds the paving of gravel and dirt roads throughout the county.
- The Rehabilitation and Resurfacing category renovates, rehabilitates, and resurfaces existing County roads to prolong the life of the road.

The County Airport Improvement category consists of various improvements to Gwinnett County's Briscoe Field, the fourth busiest airport in the state. Projects in the Transit category consist of the acquisition/replacement of buses and equipment and the construction of various transit facilities.

### 2014 Capital Achievements

- Completed selection of projects by the Citizens Project Selection Committee for the 2014 SPLOST program
- Completed the procurement of the new Transportation Consultant Demand Professional Services contract
- Began preliminary design of approximately 50 2014 SPLOST program projects
- Entered into agreements with all 16 cities within Gwinnett County for use of \$25 million in 2014 SPLOST joint city-county projects
- Began construction on 15 projects in the 2009 SPLOST program, including intersection, pedestrian safety, school safety, and safety and alignment improvements
- Began construction on the Lilburn Main Street widening and realignment in partnership with the city of Lilburn and the Lilburn Community Improvement District
- Completed new traffic signal installation at the intersection of Prospect Road and SR 124 with 2014 SPLOST funds
- Opened 17 projects to traffic, including intersection, pedestrian safety, school safety, and safety and alignment improvements
- Completed the widening of Pleasant Hill Road (Buford Highway to Howell Ferry Road), Hurricane Shoals Road (SR 120 to Collins Hill Road), and SR 20 (I-985 to South Lee Street)
- Completed 30 percent of the construction of the SR 20 widening from Peachtree Industrial Boulevard to the Chattahoochee River
- Began right-of-way acquisition on Walther Boulevard Bridge over SR 316 in coordination with the Georgia Department of Transportation. GDOT began and finalized the design portion of design/build contract for the new bridge.
- Resurfaced 135 miles of County-maintained roadways
- Completed 17 quick fix projects
- Rehabilitation of six bridges to extend their life
- Rehabilitated 5.3 miles of unpaved roads using compacted asphalt millings
- Activated nine new traffic signals and eight traffic signal rebuilds/modifications in road improvement or development projects

## Capital Improvement Programs

- Installed a pedestrian crossing flasher on Austin Garner Road at Gary Pirkle Park, a rectangular rapid flashing beacon on Club Drive near Club Drive Park, a vehicle entering flashing beacon on Ingram Road, a fire station flasher on Herring Road for Fire Station 8, and upgraded seven intersections to flashing yellow arrows left turn phasing
- Completed two ATMS/ITS projects (Dacula Road from SR 324/Auburn Road to SR 8/Winder Highway and SR 324/Gravel Springs Road/Auburn Road from SR 20 to Dacula Road) that added an additional 10.2 miles of fiber optic cable, installed 16 CCTV cameras, and connected 16 traffic signals to the Traffic Control Center (TCC)
- Completed designs, advertised projects, and set to award bids on four ATMS/ITS projects (Indian Trail-Lilburn Road from SR 378/Beaver Ruin Road to US 29/SR 8/Lawrenceville Highway, Suwanee Dam Road from PIB to SR 20/Cumming Highway, US 78/SR 10/East Main Street/Athens Highway from SR 124/Scenic Highway to Brand Road/Old Loganville Road, and Pleasant Hill Road from US 23/SR 13/Buford Highway to Fulton County line)
- Completed upgrades to the TCC software (NaviGator) to allow expanded access internally to Gwinnett County public safety personnel (Police, Fire, E-911, and EOC) and externally to public safety staff in local municipalities
- Completed upgrades to the *GCSmartCommute* website that provides users the ability to select individual camera views from a map display and view up-to-date snapshots of current traffic conditions throughout different areas of the county
- Completed implementation of the Computer-Aided Dispatch/Automated Vehicle Location (CAD/AVL) system to provide real-time vehicle location for transit
- Completed pedestrian access enhancements and installed bus shelters at bus stops on Lawrenceville Highway, Boggs Road, Buford Highway, and Oakland Park Boulevard
- Finished construction of electrical vault relocation project to improve airport operating efficiency
- Implemented the first group of recommendations made by the Airport Privatization Citizens Review Committee (APCRC) to enhance the general aviation facilities at the airport including construction of an aircraft wash rack, construction of Air Traffic Control Tower enhancements, installation of vehicle signs, installation of a second airport monument sign, and renovation of the original airport monument sign

### 2015 – 2020 Capital Improvement Plan

The 2015 capital budget and 2016 – 2020 plan for the Transportation Capital Improvement Program totals approximately \$376.0 million. Some of the major projects are as follows:

- Complete delivery of the 2009 SPLOST program
- Continue implementation and delivery of the 2014 SPLOST program
- Begin construction of the Five Forks Trickum Road widening project from Oak Road to Killian Hill Road in 2015
- Design the Sugarloaf Parkway Extension Phase II from SR 316 to I-85
- Complete the SR 20 widening from Peachtree Industrial Boulevard to Burnette Trail and widening/bridge project over Chattahoochee River in 2016
- Complete an update to the Comprehensive Transportation Plan (CTP)
- Complete engineering and right of way acquisition on two new I-85 interchanges
- Improve southbound Peachtree Industrial Boulevard/SR 141 from Holcomb Bridge Road to south of Jimmy Carter Boulevard
- Initiate various improvements in the SR 316 corridor
- Continue the expansion of the ATMS/ITS Traffic Network for real time monitoring of major corridors and arterials via connectivity to the Traffic Control Center using available SPLOST and CMAQ funds
- Continue to increase the percentage of traffic signals connected to the Traffic Control Center with the installation of cellular modems or short runs of fiber cable for locations off main corridors and arterial
- Continue to upgrade and enhance the *GCSmartCommute* website for increased use by providing additional traveler information
- Complete construction of Sugarloaf park-ride lot/transit center improvements
- Begin process and purchase 28 replacement local buses for transit

## Transportation Capital Improvement Program

Project Category							Total
	2015	2016	2017	2018	2019	2020	2015 – 2020
Airport Capital Improvements	97,188	47,375	187,600	166,250	161,250	-	659,663
Bridge and Roadway Drainage Improvements	11,855,604	12,662,420	9,500,000	4,175,000	3,000,000	3,000,000	44,193,024
Cities Allocation-Roads	9,058,642	6,130,662	6,158,586	-	-	-	21,347,890
Intersection/Traffic Operations Improvements	13,872,941	11,700,965	8,380,000	2,222,500	1,130,000	1,130,000	38,436,406
Major Road Improvements	35,668,750	24,859,366	12,000,000	8,291,000	-	-	80,819,116
Miscellaneous	2,367,222	-	-	-	-	-	2,367,222
Neighborhood Speed Control	48,435	450,000	236,250	-	-	-	734,685
Pedestrian Safety/Sidewalks	13,308,111	10,928,225	7,200,000	1,507,500	250,000	250,000	33,443,836
Resurfacing/Rehabilitation	14,103,758	9,725,000	19,725,000	10,000,000	10,000,000	10,000,000	73,553,758
Road Program Management	1,704,380	9,900,000	2,500,000	504,750	-	-	14,609,130
Road Safety and Alignments	6,505,750	5,920,000	4,520,000	1,807,500	720,000	750,000	20,223,250
School Safety Program	7,846,712	6,452,060	4,000,000	2,087,500	1,000,000	1,000,000	22,386,272
Transit Program Miscellaneous/Contingencies	1,260,749	-	28,000	27,377	-	-	1,316,126
Transit Vehicles/Equipment	11,426,700	-	-	-	-	-	11,426,700
Transportation Planning	700,000	2,252,634	1,854,493	1,417,013	1,048,775	2,541,130	9,814,045
Unpaved Roads	500,000	100,000	80,750	-	-	-	680,750
<b>Total Transportation</b>	<b>130,324,942</b>	<b>101,128,707</b>	<b>76,370,679</b>	<b>32,206,390</b>	<b>17,310,025</b>	<b>18,671,130</b>	<b>376,011,873</b>



### Capital Improvement Programs

The mission of the Gwinnett County Department of Water Resources is to provide superior water services at an excellent value.

The Water Resources' Capital Improvement program consists of projects that provide clean, potable water for Gwinnett residents and businesses; collect and reclaim wastewater to protect the environment and promote and protect the health, safety, and welfare of the public and projects that help manage stormwater. These projects include construction of new facilities, improvements to existing water facilities, and projects that improve the efficiency of operations. The need for improvements or new facilities may be driven by increased demand, changes in regulatory requirements, required service level improvements, asset failure due to age, or a combination of these and other factors. The focus of the Department of Water Resources' current Capital Improvements Program is rehabilitation and replacement of aging infrastructure.

DWR operates and maintains two water treatment facilities with 225 million gallons per day (MGD) of treatment capacity and three water reclamation facilities (WRF) with over 101 MGD of treatment capacity. DWR also operates and maintains over 220 raw sewage lift stations, 16 water booster pump stations and storage tanks, 280 miles of pressurized sewer pipe, 2600 miles of gravity sewer pipe, 1,371 miles of stormwater drainage pipe and 3400 miles of water main serving over 140,000 sewer customers and 220,000 retail water customers. This infrastructure has a replacement value of over \$9 billion dollars. Projects in the Capital Improvement Program are funded either by water and sewer revenue or stormwater fees.

### 2014 Capital Achievements

The Water and Sewer Capital Improvement Program is divided into six subprograms:

- Water Reclamation Facilities
- Collection System
- Distribution System
- Water Production Facilities
- System Development
- Miscellaneous

The Water Reclamation Facilities program includes projects for expansions of and improvements to the County's three water reclamation facilities and also projects to support watershed protection required by the water reclamation facility's NPDES permits. In 2014 completed projects included facility electrical grounding improvements, the Crooked Creek Operations and Maintenance Building, F. Wayne Hill ozone system repairs and F. Wayne Hill wet well coating. In addition, in support of the watershed protection plan seven stream bank restoration projects were completed.

The Collection System program includes projects for expansion, replacement and assessment of gravity sewer pipe, force mains and wastewater pump stations. It also includes projects that improve cost effectiveness by installing gravity sewers to decommission pump stations. Projects completed in 2014 include:

- Pump station arc flash assessments and arc flash safety upgrades
- Pump station electrical grounding improvements
- No Business Creek Pump Station grating and lift station guiderail rehabilitation
- Alcovy River and Brooks Road Pump Station piping rehabilitation and structure painting
- Jim Moore Pump Station rehabilitation
- Seven pump station decommissioning projects

### Capital Improvement Programs

The Distribution System program has projects associated with water meters and water distribution pipe extensions and replacement. The water distribution projects completed in 2014 include:

- Buford Highway 48" PCCP transmission main replacement from City Hall Street to Suwanee Avenue
- Old Peachtree and Mitchell Road water main replacement
- Hickory Trail water main replacement
- Lake Luella water main replacement
- Sugarloaf water main extension
- Critical valve audit including over 7,200 valves inspected, operated and repairs initiated

The water production facilities program includes projects for expansion and improvements to the two water production facilities and the booster stations and tanks. The following water facility rehabilitation projects were completed in 2014:

- Walton Court Booster Station rehabilitation
- Lanier intake rehabilitation geotechnical work
- Water Production Vulnerability Assessment and Emergency Response Plan updates
- Lanier filter plant filter backwash pump replacements
- Lanier filter plant high service pumps variable frequency drive rehabilitation

The system development program is a new program and includes water and sewer planning studies and projects that promote economic development.

The miscellaneous program has a wide variety of projects that include IT projects, new and replacement vehicles, administration building improvements, relocations of utilities necessary during road projects and other projects that support the mission of the Department. The Miscellaneous program also includes funds for reserves and contingencies.

The Stormwater Capital Improvement Program contained projects related to stormwater pipe replacement, pipe lining, flood studies and dam rehabilitation. In 2014 one-hundred and twenty-five stormwater pipe replacements and rehabilitation projects were completed along with one dam rehabilitation project.

### 2015 – 2020 Capital Improvement Plan

The 2015 capital budget and 2016 – 2020 plan for the Water Resources Capital Improvement program totals approximately \$748.7 million. Some of the major projects are described in the following paragraphs.

The largest project in the 2015 – 2020 CIP is in the Water Reclamation Facility Program. With design beginning in 2014 the aging Crooked Creek Water Reclamation Facility will be undergoing a major renovation over the next 5 years. In addition there are rehabilitation and replacement projects necessary at the F. Wayne Hill Water Resources Center including membrane replacement and dewatering improvements. In water production the Lake Lanier Water Intake will be rehabilitated and on-site hypochlorite generation will be installed at the two production facilities to improve safety. In the Collection System program, the largest pump station, the Beaver Ruin Pump Station will undergo a major rehabilitation. For all water and wastewater facilities the CIP includes funds for replacement of aging equipment and continued implementation of the electrical arclash program and a comprehensive metal coatings program.

The PCCP water transmission main replacement program will be continuing with funding of approximately \$5 million per year.

# Water Resources

## Capital Improvement Programs

Condition assessment programs will be on-going in water reclamation, water production, collection, distribution, and stormwater systems and will result in additional capital projects based on condition and asset criticality.

The new System Development program includes projects that will promote economic development in Gwinnett County. The Department will be developing, prioritizing and implementing projects for this program over the next five years.

These activities bring a more business-like approach to the department, incorporating business case decision making, unified strategies, cost effectiveness, a more proactive approach, and improved customer service. Business case evaluations are ongoing in the department, and it is expected that solutions to identified problems will be increasingly determined by the use of these analyses. The department has performed a business case evaluation that resulted in the future implementation of UV disinfection and onsite generation of sodium hypochlorite, an inherently safer process for chlorination.

As the emphasis of the Capital Improvement Plan (CIP) shifts from growth to rehabilitation during this planning period, the development of a reliability centered maintenance program will be implemented.

The department will continue the Sewer Assessment program throughout the planning period. The objective of this program is to reduce the amount of non-sewer water entering the gravity sewer system. This objective is being achieved by improving the overall integrity of the system through monitoring, locating, quantifying, and eliminating sources of inflow/infiltration (I/I). This reduction in I/I should manifest itself in increased usable capacity in the system, decreased surcharging, reduced risk of sewer overflows, and decreased transport/treatment costs.

The department has initiated a pump station phase-out program to decommission pump stations and reduce associated long-term operational costs. Nine pump stations have been decommissioned and several more candidates have been identified and are in the process of design.

Revitalization, infill, and higher density rezoning have rendered some sanitary sewer collection systems out of capacity and susceptible to blockage. The Sanitary Sewer Collection System Renewal program continues in 2015. Costs of this program, which replaces outdated systems and increases capacity, are estimated to be \$48.6 million. The program began in 2014 and has an estimated end date of 2020.

The department has initiated a replacement program for pre-stressed concrete cylinder pipe (PCCP), which has proven to be a problematic material in the transmission system. The program plans to replace 15 miles of this pipe, which has begun in 2014.

The 2015 – 2020 capital budget program for the Stormwater Renewal and Extension Fund totals approximately \$128.7 million. The scope of this budget encompasses maintenance to the drainage system, stream bank restoration projects, stormwater management facility upgrades, and expanded efforts to protect water quality and aquatic ecosystems through the Watershed Improvement Program (WIP). Efforts continue to upgrade watershed dams to meet federal standards and to inventory and analyze the current storm drain system. The stormwater capital budget also supports watershed protection efforts required by the NPDES permits. As a result of a countywide assessment, stormwater will continue drainage improvements through its infrastructure improvement program. This ongoing project has a five-year budget of \$124.5 million from 2015 – 2020. This will help replace the infrastructure that has reached its useful life and is beginning to or has failed.



## Water Resources Capital Improvement Program

Project Category	2015	2016	2017	2018	2019	2020	Total 2015 – 2020
Collection System Rehabilitation/ Replacement	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	12,000,000
Interceptors and Sewers	300,000	1,000,000	100,000	100,000	100,000	100,000	1,700,000
ITS Applications	1,119,766	1,225,000	725,000	725,000	725,000	725,000	5,244,766
Stormwater Management	28,359,745	31,582,262	32,697,262	32,752,762	32,500,000	32,400,000	190,292,031
Utility Relocations	100,000	200,000	200,000	200,000	200,000	200,000	1,100,000
Miscellaneous Projects and Contingencies	13,005,494	11,620,000	10,250,000	9,750,000	10,250,000	11,250,000	66,125,494
Water and Sewer Plans and Studies	4,441,000	6,832,000	6,443,000	2,695,000	10,700,000	22,705,000	53,816,000
Water Production Facilities	3,000,000	2,000,000	-	-	-	-	5,000,000
Water Reclamation Facilities	9,500,000	29,200,000	48,500,000	43,500,000	31,000,000	16,000,000	177,700,000
Water Transmission/Distribution	43,300,000	39,800,000	37,800,000	38,800,000	38,000,000	38,000,000	235,700,000
<b>Total Water Resources</b>	<b>105,126,005</b>	<b>125,459,262</b>	<b>138,715,262</b>	<b>130,522,762</b>	<b>125,475,000</b>	<b>123,380,000</b>	<b>748,678,291</b>