Impact Fee Study

City of Atlanta, Georgia

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EXECUTIVE SUMMARY

This study updates the City's transportation, park, fire, and police impact fees. The impact fee study and ordinance have not been updated since originally adopted in 1993.[1] Potential update studies were prepared in 2010 and 2017, but were not adopted. This study relies on detailed facility inventories and cost information from the 2017 study,[2] adjusted upward to account for construction cost inflation. This study also updates key inputs, including land use estimates and projections, demographic characteristics of housing, travel demand factors, revenue credits and the current system evaluation.

Need for Update

The City's fees are based on levels of service and costs more than a quarter-century old and much has changed in the 27 years since Atlanta's original impact fees were adopted. In this time, construction costs have more than doubled and land costs are substantially higher than they were in 1993. Large area designations once targeted for impact fee exemptions are no longer in active use by the City. Continued reliance on outmoded data and procedures is not recommended. Further reasons for updating the current program include the following:

- Current transportation impact fees are exclusively focused on adding vehicular roadway capacity, while the City has an equally-important need for multi-modal improvements.
- Current transportation impact fees cover the cost of arterial roads, but not collector roads, which get the bulk of City improvements. Trip generation rates are based on the 1991 5th edition of the ITE manual, rather than the current 2017 10th edition.
- Current park fees cover only land and site development costs, but not park improvements.
- Any new procedures for programming transportation impact fees should comply with State requirements imposed in 2007. These require consideration of the proximity to new development and the greatest effect on level of service when programming transportation impact fee expenditures, with annual review by the impact fee advisory committee.

Key Recommendations

- Adopt an updated impact fee program that reflects 2020 policy and cost realities.
- Modify transportation fees to include the cost of City collector roads and exclude the cost of the City's share of State/Federal roads.
- Modify park fees to include improvement costs. Currently, park fees cover only land and site development costs and exclude park improvements.
- Require transportation fees to be spent only on priority projects identified in the *Comprehensive Transportation Plan*, with the exception of small multi-modal projects not specifically identified that further a major goal of the Plan.

[1] Duncan Associates, *City of Atlanta Impact Fee Study*, March 1993
[2] Duncan Associates, *City of Atlanta Impact Fee Study*, July 2017

- Establish three transportation impact fee service areas, consistent with the current park service area boundaries, as partial consideration of the proximity of improvements to areas where fees are paid. Use other techniques such as "heat maps" to visually represent where fees have been paid in evaluating proximity within service areas.
- Maintain an on-going Impact Fee Advisory Committee that meets at least annually to review the planned transportation projects to be included in the Capital Improvements Element (CIE). Limit amendments to the transportation CIE to once a year to ensure through vetting.
- Adopt uniform city-wide transportation and park fees based on the Northside service area.
- Fund well-defined affordable housing and economic development exemptions by tracking off-setting non-impact fee expenditures.

Current Fees

Atlanta's current impact fee schedule is presented in Table 1. Transportation fees were adopted at 100% city-wide. Park fees were based on a uniform city-wide level of service that was lower than the existing level of service in all three service areas for recoupment purposes. Northside park fees were higher because of higher land costs. Park fees were adopted at 50% of the calculated fees. Fire and police fees were also calculated on lower-than-existing levels of service, but adopted at 100%.

Table 1. Current Impact Fees

			Parks				Total	Total
Land Use Type	Unit	Roads*	North	S/W	Fire	Police	North	S/W
Adoption Rate:		**100%**	**50%**	**50%**	**100%**	**100%**		
Single-Family	Dwelling	$987	$410	$246	$114	$33	$1,544	$1,380
Multi-Family	Dwelling	$470	$285	$171	$79	$23	$857	$743
Hotel/Motel	Room	$793	$183	$110	$51	$15	$1,042	$969
Commercial <100 ksf	1,000 sq ft	$1,304	$713	$428	$199	$57	$2,273	$1,988
Commercial 100-199 ksf	1,000 sq ft	$1,189	$584	$350	$163	$47	$1,983	$1,749
Commercial 200-299 ksf	1,000 sq ft	$1,246	$535	$321	$146	$42	$1,969	$1,755
Commercial 300-399 ksf	1,000 sq ft	$1,327	$486	$292	$136	$39	$1,988	$1,794
Commercial 400-499 ksf	1,000 sq ft	$1,408	$463	$278	$129	$37	$2,037	$1,852
Commercial 500-599 ksf	1,000 sq ft	$1,350	$441	$265	$124	$35	$1,950	$1,774
Commercial 600-999 ksf	1,000 sq ft	$1,466	$401	$241	$112	$32	$2,011	$1,851
Commercial 1,000 ksf+	1,000 sq ft	$1,616	$370	$222	$104	$30	$2,120	$1,972
Office, <50,000 sq. ft.	1,000 sq ft	$2,416	$267	$161	$74	$21	$2,778	$2,672
Office, 50,000-99,999 sq. ft.	1,000 sq ft	$1,977	$254	$153	$71	$20	$2,322	$2,221
Office, 100-199 ksf	1,000 sq ft	$1,608	$241	$145	$67	$19	$1,935	$1,839
Office, 200-499 ksf	1,000 sq ft	$1,239	$232	$139	$64	$18	$1,553	$1,460
Office, 500 ksf+	1,000 sq ft	$1,008	$223	$134	$62	$18	$1,311	$1,222
Elementary School	1,000 sq ft	$0	$437	$262	$122	$35	$594	$419
High School	1,000 sq ft	$623	$445	$267	$124	$36	$1,228	$1,050
Church	1,000 sq ft	$519	$192	$115	$53	$15	$779	$702
Hospital	1,000 sq ft	$1,424	$477	$286	$133	$38	$2,072	$1,881
Nursing Home	1,000 sq ft	$124	$348	$209	$97	$28	$597	$458
Industrial	1,000 sq ft	$1,025	$169	$102	$47	$14	$1,255	$1,188
Warehouse	1,000 sq ft	$748	$94	$56	$26	$8	$876	$838

* fee reduced by 50% within 1,000 walking feet of a MARTA station
Source: City of Atlanta Impact Fee Schedule, effective March 26, 1993.

Updated Fees

Table 2 below summarizes the potential impact fees calculated in this report. City-wide transportation and park fees are recommended based on the level of service for the Northside service area, which has the lowest level of service of the three service areas. Note that these updated fees include the option of assessing single-family fees with either a flat rate or one that varies by size.

Total updated fees are more than double current fees for most land use categories This is not a surprising outcome given construction costs have more than doubled and land prices have increased far more in the 27 years since they were adopted. Other factors driving higher fee levels relative to the 1993 study include expanding park fees to include improvement costs and multi-use trails, basing updated fees on the current level of service for parks, fire, and police facilities (the previous study used a recoupment approach), and assuming adoption at 100% (park fees were adopted at 50% in 1993).

Table 2. Updated Impact Fee Summary

Land Use Type	Unit	Transp.*	Parks	Fire	Police	Total
Updated Fee						
Single-Family (avg.) - option 1	Dwelling	$3,128	$1,221	$282	$283	$4,914
Single-Family (tiered) - option 2						
Less than 1,500 sq. ft.	Dwelling	$2,940	$1,129	$260	$262	$4,591
1,500 to 2,499 sq. ft.	Dwelling	$3,128	$1,217	$281	$282	$4,908
2,500 sq. ft. or greater	Dwelling	$3,316	$1,349	$311	$313	$5,289
Multi-Family, Low-Rise (1-2 stories)	Dwelling	$1,752	$826	$191	$192	$2,961
Multi-Family, Mid-Rise (3-10 stories)	Dwelling	$1,376	$785	$181	$182	$2,524
Multi-Family, High-Rise (>10 stories)	Dwelling	$1,126	$651	$150	$151	$2,078
Hotel/Motel	Room	$2,002	$538	$124	$125	$2,789
Retail/Commercial	1,000 sq. ft.	$4,129	$1,202	$277	$279	$5,887
Office	1,000 sq. ft.	$2,064	$599	$138	$139	$2,940
Hospital & Other Public/Institutional	1,000 sq. ft.	$2,628	$369	$85	$86	$3,168
Nursing Home	1,000 sq. ft.	$1,064	$369	$85	$86	$1,604
Elementary/Secondary School	1,000 sq. ft.	$1,376	$369	$85	$86	$1,916
Church	1,000 sq. ft.	$876	$369	$85	$86	$1,416
Industrial	1,000 sq. ft.	$2,690	$233	$54	$54	$3,031
Warehouse	1,000 sq. ft.	$813	$129	$30	$30	$1,002
Mini-Warehouse	1,000 sq. ft.	$813	$53	$12	$12	$890
Percent Change						
Single-Family (avg.)	Dwelling	217%	198%	147%	758%	218%
Multi-Family, Low-Rise (1-2 stories)	Dwelling	273%	190%	142%	735%	246%
Multi-Family, Mid-Rise (3-10 stories)	Dwelling	193%	175%	129%	691%	195%
Multi-Family, High-Rise (>10 stories)	Dwelling	140%	128%	90%	557%	142%
Hotel/Motel	Room	152%	194%	143%	733%	168%
Retail/Commercial	1,000 sq. ft.	247%	106%	70%	494%	197%
Office	1,000 sq. ft.	28%	149%	106%	632%	52%
Hospital	1,000 sq. ft.	85%	-23%	-36%	126%	53%
Nursing Home	1,000 sq. ft.	758%	6%	-12%	207%	169%
High School	1,000 sq. ft.	121%	-17%	-31%	139%	56%
Church	1,000 sq. ft.	69%	92%	60%	473%	82%
Industrial	1,000 sq. ft.	162%	38%	15%	286%	142%
Warehouse	1,000 sq. ft.	9%	37%	15%	275%	14%
Mini-Warehouse	1,000 sq. ft.	9%	-44%	-54%	50%	2%

* fee reduced by 50% within 1,000 walking feet of a MARTA station

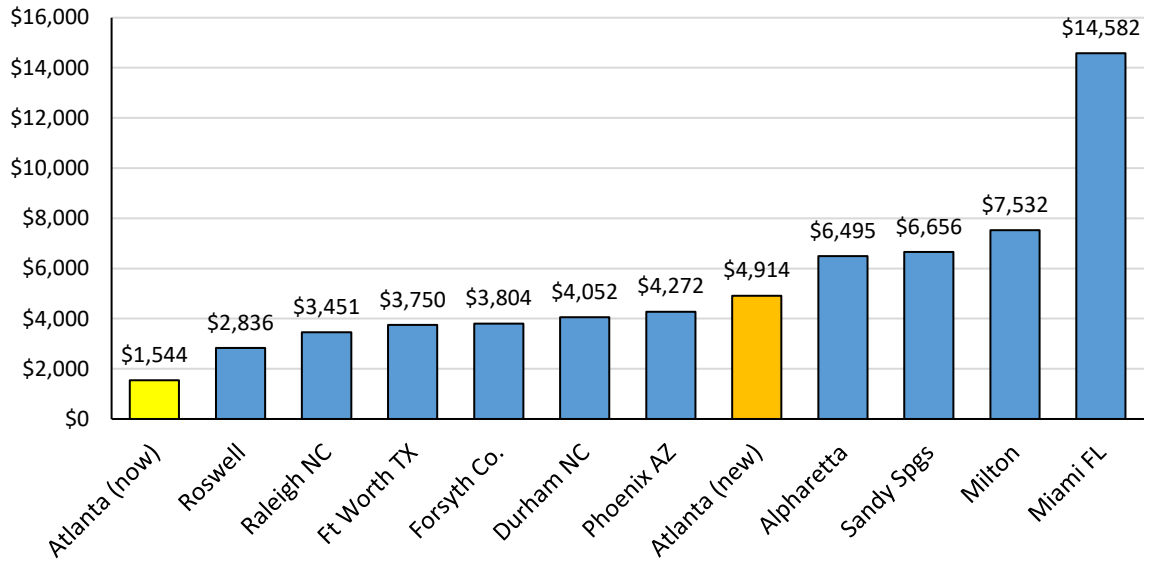
Source: Potential fees from Table 22 (transportation), Table 38 (parks), Table 48, (fire), and Table 60 (police); percent change from current fees from Table 1 (commercial/office fees for 100,000 square foot development, park fees for Northside service area).

In addition to the percentage change, it is also useful to look at the absolute amount of the fee change, especially when starting from a low base amount. For example, the maximum increase for a single-family unit would be about $3,400, or slightly more than 1% of the average sales price in Atlanta ($322,000 in March 2020 according to redfin.com). Similarly, the increase for retail would less than $4 per sq. ft. for a 100,000 sq. ft. shopping center, or about 1% of the average cost per sq. ft. for a regional mall in Atlanta (range of $377-$422 in 2019 from ccorpusa.com).

Comparative Fees

It is natural to be interested in how Atlanta's impact fees compare to nearby or comparable jurisdictions, but it should be kept in mind that impact fee differentials are not likely to have much effect on the City's ability to attract new development. Total non-utility fees for a typical single-family detached home are illustrated in Figure 1 for five nearby jurisdictions and five peer cities. In general, the updated fees would move Atlanta from the lower end to more mid-range fees. More detailed fee comparisons for these ten other jurisdictions are provided in Appendix G.

Figure 1. Single-Family Fees, Atlanta and Comparison Jurisdictions



Implementation Options

Atlanta's City Council could consider phasing the updated fees in over time, and/or adopting them at a less than the maximum fees calculated in this report. With any of these implementation options, the adopted fees should be based on a percentage of the updated fees that applies to all land use types for a given fee type and service area, in order to ensure that the fees are based on the updated study and retain the proportionality to the impact of the development. For example, the adopted fees should not be based on a percentage increase from current fees, because that would retain the proportionality between land uses from the 1993 study. Nor should the adoption percentage be different for different land use types, because that would weaken the nexus between the fee amount and the demand generated by the development. An example of the recommended approach to adopting lower impact fee rates and/or phasing them in over time is provided in Appendix H at the end of this report.

CAPITAL IMPROVEMENTS ELEMENT

According to the Georgia Development Impact Fee Act (DIFA), the City must adopt a Capital Improvements Element (CIE) as part of its comprehensive plan before it can collect impact fees. The regulations relating to the content and procedure for adopting and amending a CIE can be found in Chapter 110-12-2, Development Impact Fee Compliance Requirements, of the Rules of Georgia Department of Community Affairs (DCA). To briefly summarize, the Act and DCA regulations require:

1. The CIE must include a schedule of capital improvements needed to meet the need for system improvements identified in the comprehensive plan.

2. Local governments must annually update and maintain, at a minimum, a five-year schedule of system improvements in the CIE.

3. The CIE must include a description of the anticipated funding sources for each planned improvement.

4. The CIE must designate one or more service areas and assign levels of service, which shall be used as the basis for calculating impact fees.

5. Local governments wishing to exempt all or portions of particular development projects from impact fees for the purposes of encouraging economic development and employment growth or affordable housing must include in the comprehensive plan a policy statement supporting such projects through revenue sources other than development impact fees.

6. CIE updates must include the Annual Report on impact fees, a new fifth year schedule of improvements, and any changes to or revisions of previously listed CIE projects, including alterations in project costs, proposed changes in funding sources, construction schedules, or project scope.

The CIE has several required components: an annual financial report of impact fees collected, encumbered and used for the last completed fiscal year, a 20-year projection of capital facility needs attributable to accommodating the impacts of projected development, and a detailed 5-year work program and projection of 20-year needs. The levels of service used in the impact fee calculations also need to be included in the City's adopted comprehensive plan to comply with the Development Impact Fee Act. These requirements are addressed below.

Annual Financial Report

The City's annual impact fee financial report changes every year, and is provided as a separate document.

Service Areas

The service areas for the City's transportation, parks and recreation, fire rescue, and police development impact fees are as follows:

Roads	Northside, Southside, and Westside, as shown in Figure 5
Parks	Northside, Southside, and Westside, as shown in Figure 5
Fire	City-wide
Police	City-wide.

Transportation. The City currently has a single, city-wide service area for transportation impact fees. This is consistent with the original 1993 study, which defined the major roadway system as arterial roads and State and Federal highways. These major roads serve large areas and interconnect the city, making a city-wide service area reasonable. This update, however, adds collector roads to and excludes State and Federal highways from the definition of the major roadway system. Collector roads serve more limited areas. In addition, the City is under legislative mandate to consider the proximity of transportation fee projects to new development. The three proposed transportation service areas, which also happen to be the same as the park service areas, are more suitable to the new definition of the roadway system in terms of scale. They all come together in the city core, ensuring that each service area contains a representative slice of the City's transportation network. Finally, they each have sufficient growth potential to warrant future transportation improvements.

Parks and Recreation. The majority of the City's park acreage (59%) is used for regional, specialty, and nature parks that serve large areas, with 25% for community parks and 16% for block, neighborhood and garden parks. The major new recreational project is the construction of the BeltLine trail that will connect all areas of the city. Each of the service areas should have significant growth potential in order to justify the need for impact fee expenditures. The current three parks and recreation service areas continue to be appropriate for the areas served by the City's existing and planned parks and recreation facilities.

Levels of Service

The level of service is the ratio of supply (capital units) to demand (service units). The service units used in this analysis are equivalent lane-miles for transportation and functional population for parks, fire, and police. The following levels of service represent the current actual levels service, or a lower level of service, for all of the service areas. These levels of service are used for calculating the maximum impact fees, as well as for projecting future capacity-expanding capital needs attributable to new development:

Roads	0.001513 equivalent lane-miles per equivalent dwelling unit (all service areas)
Parks	Equivalent park acres per functional population, as follows:
	Northside 0.00283
	Southside 0.01254
	Westside 0.01059
Fire Rescue	0.705 equivalent fire station square feet per functional population
Police	0.737 equivalent police building sq. ft. per functional population.

Capital Improvement Needs Projection

Projections of future development in the City by service area are summarized in Table 68 in Appendix A for the next five years and the next 20 years. These projections are translated into service units (equivalent dwelling units for roads and functional population for parks, fire, and police) by service area in Table 11 (transportation) and Table 83 (parks, fire, and police). Based on projected growth in service units, the improvement quantities will be needed to accommodate growth over the next 5 years and 20 years to maintain the levels of service are provided in the following tables.

Table 3. Growth-Related Transportation Improvement Needs

	Transportation Service Area			
	North	South	West	Total
2020-2025 Growth				
New Equivalent Dwelling Units	15,151	9,527	7,049	31,727
x Equivalent Lene-Miles/EDU	0.001513	0.001513	0.001513	
Equivalent Lane-Miles Needed	22.92	14.41	10.67	48.00
2020-2040 Growth				
New Equivalent Dwelling Units	60,600	38,101	28,200	126,901
x Equivalent Lene-Miles/EDU	0.001513	0.001513	0.001513	
Equivalent Lane-Miles Needed	91.69	57.65	42.67	192.01

Source: New EDUs from Table 11; equivalent lane-miles per EDU from Table 15.

Table 4. Growth-Related Park Improvement Needs

	Park Service Area			
	North	South	West	Total
2020-2025 Growth				
New Functional Population	24,707	17,096	11,881	53,684
x Equivalent Park Acres/Func. Pop.	0.00283	0.01254	0.01059	
Equivalent Park Acres Needed	69.92	214.38	125.82	410.12
2020-2040 Growth				
New Functional Population	98,831	68,390	47,524	214,745
x Equivalent Park Acres/Func. Pop.	0.00283	0.01254	0.01059	
Equivalent Park Acres Needed	279.69	857.61	503.28	1,640.58

Source: New functional population from Table 83; equivalent park acres per functional population from Table 35.

Table 5. Growth-Related Fire Rescue Improvement Needs

2020-2025 Growth	
New Functional Population	31,727
x Equivalent Fire Station Sq. Ft./Func. Pop.	0.705
Equivalent Fire Station Sq. Ft. Needed	22,368
2020-2040 Growth	
New Functional Population	126,901
x Equivalent Fire Station Sq. Ft./Func. Pop.	0.705
Equivalent Fire Station Sq. Ft. Needed	89,465

Source: New functional population from Table 83; equivalent fire station square feet per functional population from Table 45.

Table 6. Growth-Related Police Improvement Needs

2020-2025 Growth	
New Functional Population	31,727
x Equivalent Sq. Ft./Functional Population	0.737
Equivalent Sq. Ft. Needed	23,383
2020-2040 Growth	
New Functional Population	126,901
x Equivalent Sq. Ft./Functional Population	0.737
Equivalent Sq. Ft. Needed	93,526

Source: New functional population from Table 83; equivalent square feet per functional population from Table 54.

Schedules of Improvements

Impact fees will be expended only on projects that are included in the CIE five-year capital facilities plan. The City's planned five-year schedule of transportation, parks and recreation, fire rescue, and police improvements that are wholly or partially funded with impact fees will change annually, and is provided in Appendix I. The list of planned transportation, parks and recreation, fire rescue, and police improvements over the next 20 years is also provided in Appendix I.

TRANSPORTATION

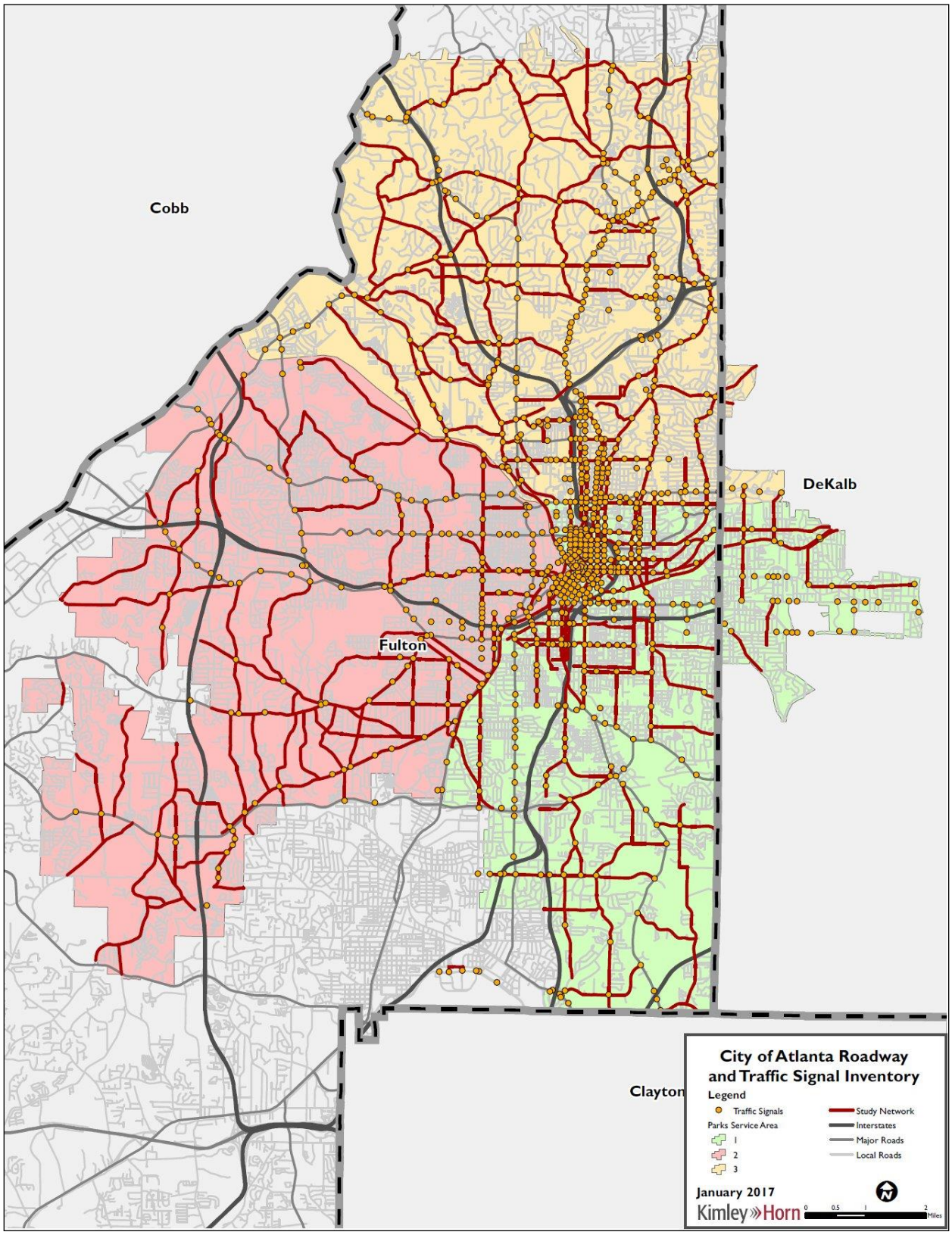
This chapter updates the City's transportation impact fees, which have not been updated since they were originally adopted in 1993. The City's authority to adopt its transportation impact fee comes from the *Development Impact Fee Act*, which authorizes impact fees for "roads, streets, and bridges, including rights of way, traffic signals, landscaping, and any local components of state or federal highways." The current fees are based on non-interstate arterial roads (plus three major collectors that function as arterials). The updated fees include all collector roads, but are contracted to exclude State and Federal highways. The major road network that the impact fees are designed to improve is illustrated in Figure 2. The graphic shows park service areas, because these same boundaries are recommended to be used as transportation impact fee service areas.

The Georgia statute does not specifically authorize transit facilities or equipment. A bill to explicitly authorize impact fees for public transit facilities failed in the Georgia legislature in 2007. Given the lack of clarity on this matter in Georgia statutes, it is recommended that the City not attempt to expand the transportation impact fee to include public transit improvements, but rather seek to amend the *Act* to secure explicit authorization.

Major Roadway System

A transportation impact fee should have a clear definition of the types of facilities that the fee is designed to help fund. In this update, the major roadway system is defined as all City-owned arterial and collector roads, and excludes interstates, State and Federal highways, and local streets. A map of the major roadway system is shown in Figure 2. For a detailed inventory of the existing major roadway system, see Appendix D.

Figure 2. Major Road Network



Source: Kimley-Horn, January 16, 2017

Service Areas

The *Development Impact Fee Act* defines "service area" as "a geographic area defined by a municipality, county, or intergovernmental agreement in which a defined set of public facilities provide service to development within the area." The Act requires that (1) "impact fees shall be calculated and imposed on the basis of service areas," (2) the "ordinance shall include a schedule of impact fees specifying the development impact fee .. on a service area by service area basis," and, (3) "impact fees shall only be spent .. in the service area in which .. the fees were paid." Consequently, a service area is a geographic area for which: (1) the level of service and maximum fee schedule is calculated, (2) the fee schedule is adopted; and (3) the fees collected are earmarked to be spent.

The City currently has a single, city-wide service area for transportation impact fees, and the fees collected can be spent on projects anywhere in the city. This is consistent with the original study, which defined the roadway system to be improved as arterial roads and State and Federal highways. These major roads serve large areas and interconnect the city, making a city-wide service area reasonable. This update, however, adds collector roads to and excludes State and Federal highways from the definition of the major roadway system. Collector roads serve more limited areas. In addition, the City is under legislative mandate to consider the proximity of transportation fee projects to new development. We recommend that the city be divided into three transportation service areas, consistent with the boundaries used for the City's current park impact fees (see Figure 2 on the preceding page). This would be a better match with the areas primarily served by the City's arterial and collector road network, and would embody a consideration of proximity to development in programming transportation impact fee funds.

Proximity Analysis

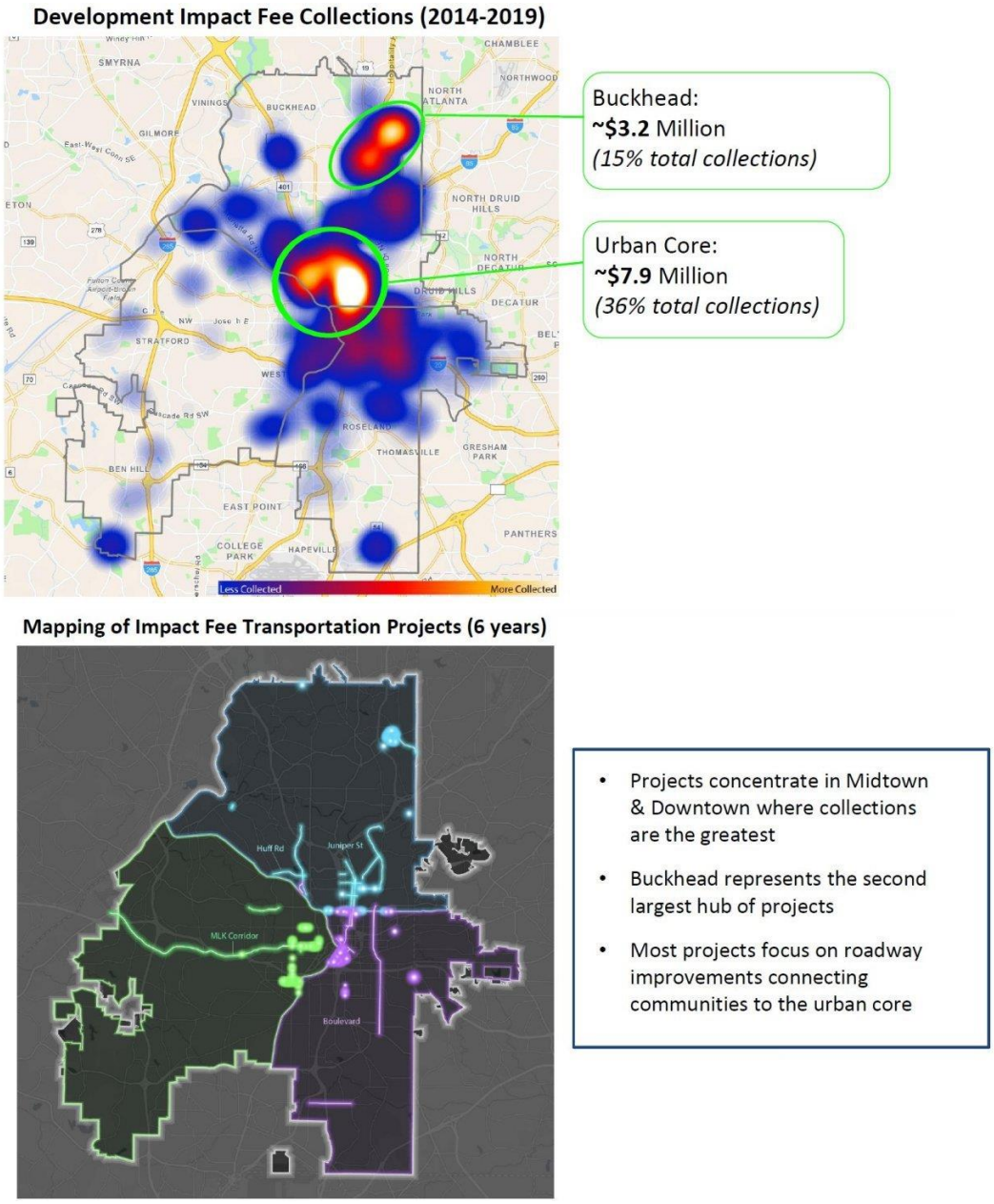
The Legislature amended the *Development Impact Fee Act* in 2007 to put additional restrictions on Atlanta's use of transportation impact fee revenues, effective on July 1, 2007. The Atlanta-specific proximity requirement states that the City, in programming expenditures of transportation impact fees, must consider the "proximity of the proposed system improvements to developments within the service area which have generated development fees." Because this analysis must be undertaken within each service area, dividing the city into multiple service areas, as recommended above, would not be sufficient in itself. However, reducing the size of the service area by dividing it into three service areas does guarantee some minimum level of proximity.

The proximity analysis needs to be done for a set of proposed projects. It is not possible to determine which project is in closest proximity to the feepayers by looking at a single project. This points to the need to consider the full set of potential projects so they can be evaluated in a comprehensive manner. To help ensure that all potential impact fee projects are thoroughly vetted and fairly evaluated, Capital Improvement Element amendments should be limited to once a year.

It is incumbent upon the Impact Fee Advisory Committee to report any perceived inequities in the expenditure of impact fees to the municipal governing body. Perceived inequalities would arise from there being no reasonable proximity between, or level-of-service improvement provided to, the areas where the impact fees were collected and where funds are being expended. In order to help inform the Advisory Committee's judgement in this matter, City staff prepared a distribution analysis of

transportation impact fee collections and encumbrances. This was accomplished by mapping all locations where impact fees have been collected for the previous five years, as well as the locations and extents of all projects against which transportation impact fees have been encumbered during that time period. This analysis shows an overall balance between transportation impact fee collections and encumbrances, with the distribution of projects demonstrating a clear association with the distribution of collections (see Figure 3).

Figure 3. Proximity Heat Map Examples



The City would consider these types of proximity analyses in conjunction with level-of-service evaluations for all the potential projects to determine the projects that best optimize both proximity and LOS enhancement. Level of service is addressed next.

LOS Analysis

In addition to the proximity test, there is what might be called the level of service (LOS) test. Not only should the funds be spent in reasonable proximity to where they were collected, they should also be spent on projects that will have "the greatest effect on levels of service." This test would seem to require that the improvements being funded can be shown to have a significant effect on expanding the capacity of transportation facilities that are most in need of additional capacity.

Any attempt to determine which projects have the greatest effect on LOS presupposes a list of projects against which a particular project is to be compared. Per compliance with the Georgia Development Impact Fee Act, the City creates a Capital Improvement Element (CIE) each year. The CIE serves as a menu of projects that are eligible for impact fee funding.

The City of Atlanta recently completed an update of its Comprehensive Transportation Plan (CTP), which is designed to identify projects that are of the greatest priority. The CTP is updated every 5-7 years on average, the current CTP was adopted in 2018. Because of the thorough analysis and broad public engagement effort that process entails, the City could address level of service considerations by limiting the programming of impact fees to near-term priority projects identified in the CTP. There may need to be an exception to this rule, however. One of the major goals of the CTP is to increase capacity by mode shift. A key element of that policy is to fill gaps in the sidewalk/bikeway/multi-use path network, but smaller gap-filling projects are not specifically identified in the CTP.

If all short-term projects from the CTP are completed, or staff feels that needs have changed and the CTP no longer represents the most important needs, additional projects should be added to the CIE, provided that staff can document that the benefit of the projects has been vetted in a similar manner. In particular, a project that is required as a condition of a Development of Regional Impact (DRI) approval should be eligible for inclusion in the CIE. To discourage pressure to override thorough vetting of projects and fairly evaluate all potential projects, amendments to the CIE should be restricted to once a year. Maintenance projects that do not add capacity are not eligible for inclusion in the CIE.

When determining which projects from the CIE to fund with impact fees, City staff should focus on which projects provide the greatest benefit to level of service (LOS). "Level of service" is defined by the Georgia Development Impact Fee Act as "a measure of the relationship between service capacity and service demand for public facilities in terms of demand to capacity ratios, the comfort and convenience of use or service of public facilities, or both." LOS is a common measure within the transportation engineering industry to quantify the performance of a particular roadway segment or intersection. Some LOS measures have been developed for bicycle and pedestrian facilities, but demand data are generally lacking.

Vehicular LOS – The Travel Demand Model

Travel demand modeling uses data such as roadway networks, population, and employment data to calculate the expected modal trip demand throughout a region. The Atlanta Regional Commission (ARC), the Metropolitan Planning Organization for the metropolitan Atlanta area, utilizes an activity-based model reflecting demographic information, household structure, and employment information to predict travel demand along metro Atlanta's roadways and transit systems. The travel demand model provides outputs regarding volume to capacity (v/c) ratios for roadway segments, which can be attributed to standard A through F LOS thresholds, with F being the worst. While a very powerful tool for estimating transportation impacts regionwide, the ARC model would require a significant amount of refinement and calibration to be used for the purposes of determining LOS for impact fee calculations. As mentioned previously, the City of Atlanta recently updated the CTP to identify current and future needs within all modes of the transportation network. The City chose not to use the model as part of the CTP process because of the effort required for calibration and because of the City's focus on more multi-modal transportation improvements, which are not included in the model. Because of these model limitations, it is probably not practical to use the model to determine the effect of various improvements on improving LOS.

Vehicular LOS – Highway Capacity Manual

The Highway Capacity Manual provides guidance on calculating LOS for roadway segments and intersections. LOS calculations are performed using data such as daily traffic volume, number of lanes, presence of medians/access control measures, and signal spacing. The Georgia Regional Transportation Authority (GRTA) provides a methodology that is a variation of Highway Capacity Manual procedures to calculate LOS as part of the Developments of Regional Impact (DRI) program. The Georgia Department of Community Affairs requires GRTA to administer a review of all developments over a certain threshold within a 13-county metro Atlanta jurisdiction. All data necessary to calculate roadway segment LOS are included in the roadway inventory associated with this impact fee project (see Appendix D). While the study network for this project consists of non-state roadways, the GRTA method also includes data for determining LOS for State Two-Way Arterials and Freeways. Once a roadway category and number of lanes are identified for each segment, adjustments are applied to account for medians and left-turn lanes. Additional adjustments are provided to convert two-way volumes for one-way traffic flow. These resources provide a sound basis for evaluating the effect of vehicular improvements on improving levels of service.

Bicycle and Pedestrian LOS

Levels of service for multi-modal improvements such as bicycle, pedestrian or multi-use corridors are much more difficult to quantify than vehicular LOS. The capacity of such facilities can be estimated, but there is much more limited information on demand. Vehicular traffic is routinely counted, but demand for non-transit alternative modes is not.

An alternative to determining LOS based on facility characteristics would be to run a spatial analysis in GIS to determine the areas of greatest alternative mode need. This method would attempt to identify areas with the greatest demand for multi-modal facilities. A spatial analysis could be performed using population and employment data for Census block groups to determine the areas with the highest population and employment per square mile. Additional demand-generating elements could be included, such as transit and locations with key destinations like retail, schools, parks, and other community facilities.

LOS Summary

The Comprehensive Transportation Plan (CTP) should drive the selection of high-impact and high-priority projects and allow the impact fee process to build upon it. The Capital Improvements Element (CIE) should include short-term, high-priority projects from the CTP. Determining which projects in the CIE have the greatest impact on LOS is not a completely numerical exercise. There is not one consistent methodology available to compare projects of multiple modes. Staff should use discretion to determine which mode's LOS should take priority. Within a particular mode, relative need and greatest effect on LOS should be quantified to the extent possible and the selections made on the basis of that analysis.

The approaches to ranking projects by effects on level of service described above unfortunately offer little guidance in comparing the LOS effects of projects between vehicular, bicycle, and pedestrian modes of travel. It may be useful for the Department of Public Works to develop some rough guidelines for an appropriate modal mix for the total dollar amount of project costs.

Methodology

The original impact fee study used a standards-based methodology for the transportation impact fees. This approach is commonly referred to as a "consumption-based" methodology. The concept is that new development should pay for the cost of replacing the capacity that the additional traffic consumes in the major roadway system. It is based on the existing system-wide level of service, expressed as a ratio of vehicle-miles of travel (VMT) to vehicle-miles of capacity (VMC). Existing VMC was quantified based on an inventory of all existing arterial road segments within the city limits. Generalized peak hour capacity estimates were used that took into consideration the number of lanes, presence of a median, number of signalized intersections per mile and percentage of intersections with left turn lanes. The estimated capacity of each road segment was multiplied by the length of the segment in miles to determine segment VMC, and the VMC for all segments was summed to determine system-wide VMC. At the time of the 1993 study, the existing system-wide ratio was 0.70 VMT/VMC, and the fees were based on the slightly worse level of service of 0.75 VMT/VMC.

A limitation of the current approach is the difficulty of quantifying the VMC added by improvements other than new roads or widening projects. The capacity added by intersection improvements, for example, is difficult to quantify in terms of vehicle-miles. In Atlanta's as in most standards-based systems, the cost per VMC is determined based on a list of road segment improvements, while the ordinance allows the fees to be spent on any capacity-expanding improvement. In Georgia, the Department of Community Affairs, which certifies local governments as in or out of compliance with the *Development Impact Fee Act*, has released guidelines suggesting that level of service measures "be expressed in quantifiable terms or in a manner sufficient to allow future evaluation of progress in meeting capital improvements goals."[3] The City's current approach can only quantify the capacity added by new through lanes or new left turn lanes. Consequently, if the current approach is retained, the impact fee funds could possibly be restricted to expenditures on these types of improvements that add quantifiable VMC to the system.

[3] Georgia Department of Community Affairs, "How to Address Georgia's Impact Fee Requirements," updated April 2008

Such a restriction might not be a major problem for growing communities with pressing needs for new lane-miles, but Atlanta is a relatively mature city with greater needs for other types of improvements. The City's 2018 transportation master plan, *Atlanta's Transportation Plan*, is heavily focused on bicycle, pedestrian and transit improvements. Many of the bike/ped improvements will be located in collector road corridors. The current road impact fee, however, is based only on the costs related to arterial roadways. This update expands the scope of the fees to cover collector roads. In addition, as discussed in the level of service analysis, the level of service in this update is measured in terms of equivalent lane-miles rather than vehicle-miles of capacity in order to include other transportation cost components allowable under the Georgia Impact Fee Act.

Travel Demand

A service unit is a common unit of demand generated by different land uses. The transportation impact fees calculated in this study encompass all person-travel within the City's major roadway corridors, whether by private vehicle, bus, taxi or rideshare, motorcycle or scooter, bicycle, walking or other mode of travel. An appropriate service unit in this context is an equivalent dwelling unit (EDU). An EDU represents the demand for travel generated by a typical single-family detached dwelling unit.

Given that demand for non-vehicular modes is more difficult to quantify, travel demand for various land use types will be estimated based on the relative generation of vehicle-miles of travel (VMT). Vehicle-miles is a combination of the number of vehicles traveling during a given time period and the distance (in miles) that these vehicles travel.

The two time periods most often used in traffic analysis are the 24-hour weekday (average daily trips or ADT) and the single hour of the weekday with the highest traffic volume (peak hour trips or PHT). This update maintains the use of the PM peak hour trip rates, because evening rush hour traffic is generally the most critical period of roadway use in urban areas like Atlanta.

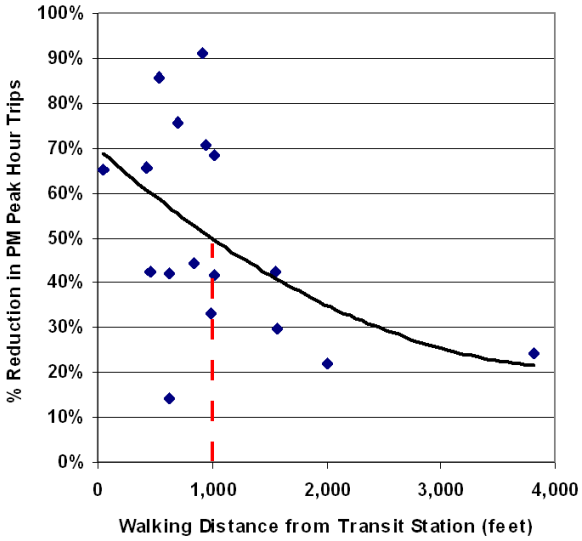
The vehicular travel demand generated by specific land use types is a product of three factors: 1) trip generation; 2) percent new trips; and 3) trip length. The result is the vehicle-miles of travel (VMT) placed on the major roadway system during the peak hour by a land use.

Trip Generation

Trip generation rates are based on information published in the most recent edition of the Institute of Transportation Engineers' (ITE) *Trip Generation* manual. Trip generation rates represent trip ends, or driveway crossings at the site of a land use. Thus, a single one-way trip from home to work counts as one trip end for the residence and one trip end for the workplace, for a total of two trip ends. To avoid over counting, all trip rates have been divided by two. This allocates the burden of travel equally between the origin and destination of the trip and eliminates double-charging for any trip.

The City's current transportation impact fees are reduced by 50% for development within 1,000 feet of a MARTA station. Such a reduction is supported by research. A 2008 study published by the Transportation Research Board studied 17 transit-oriented housing developments in four metropolitan areas (Philadelphia PA, Washington DC, Portland OR, and San Francisco CA). The projects were all apartment buildings with the exception of one condominium project. The average walking distance to the nearest transit stop was 1,060 feet. The number of units ranged from 90 to 854, four of the projects were high-rises (10-21 stories), and the number of parking spaces ranged from 1.0-2.5 per unit. The study found that PM peak hour trip rates for these developments were, on average, 50.6% lower than the published ITE rates. Most of the projects were located within 1,000 feet of a transit station (see Figure 4).[4]

Figure 4. Trip Reduction Near Transit



The City's ordinance already provides that the distance from the rail station be measured in terms of walkable distance. City transportation staff propose that the ordinance language for the reduction be modified to require that developments provide reduced parking (e.g., no more than 103% of the minimum requirement, and no more than 80% of the maximum requirement unless that is lower than the minimum requirement, in which case no more than 103% of the minimum requirement would be determinative). It should also extend the reduction to any rail transit station, in order to accommodate future light-rail stations.

This study gives the City the option of charging single-family detached residential units based on the size of the dwelling unit. Data from the National Cooperative Highway Research Program (HCHRP) reveal that the number of trips generated by a dwelling unit is related to the number of persons residing in the unit. While the national data are for average daily trips, the relationships between the various household sizes in terms of daily trips can be used to estimate peak hour trip generation by dwelling unit size. As part of this study, average household sizes have been determined for three single-family square footage categories (see Appendix A). Based on these average household sizes, average daily trip generation rates were estimated for each size category using the NCHRP data. The daily trip generation rates were then used to estimate peak hour trip rates by dwelling size. The resulting tiered single-family trip rates are summarized in Table 7.

[4] G.B. Arrington and Robert Cervero, *Effects of TOD on Housing, Parking, and Travel*, Transit Cooperative Research Program, TCRP Report 128, Washington, DC: Transportation Research Board, 2008

Table 7. Tiered Single-Family Trip Rates

Housing Type	Average Household Size	Pk Hr Trip Ends
Single-Family, Detached (All)	2.66	0.99
Less than 1,500 sf	2.46	0.94
1,500 to 2,499 sf	2.65	0.99
2,500 sf or greater	2.94	1.06

Source: Average household sizes from Table 78 in Appendix B; peak hour derived from Transportation Research Board, NCHRP Report 365, "Travel Estimation Techniques for Urban Planning," Washington, D.C.: National Academy Press, Table 9 (for areas with populations of more than 1 million), 1998 based on household sizes (daily trips converted to peak hour assuming 10% of daily travel during PM peak hour); peak hour trip rate for all single-family detached units from Table 10; tiered peak hour trip rates based on the ratio of daily trips for the size category to daily trips for all single-family units times the peak hour trip rate for all single-family units.

The strongest argument in favor of the tiered option is that it might help to encourage the development of smaller units, which tend to be less expensive and therefore more affordable. However, the fee differentials are not significant enough to have much effect on encouraging the production of smaller, more affordable units. Tiered residential fees would also increase the complexity of the impact fee system, raising issues such as whether the enlargement of an existing dwelling unit that caused it to cross a threshold should be subject to an impact fee.

New Trip Factor

Trip rates also need to be adjusted by a "new trip factor" to exclude pass-by and diverted-linked trips. This adjustment is intended to reduce the possibility of over-counting by only including primary trips generated by the development. Pass-by trips are those trips that are already on a particular route for a different purpose and simply stop at a particular development on that route. For example, a stop at a convenience store on the way home from the office is a pass-by trip for the convenience store. A pass-by trip does not create an additional burden on the street system and therefore should not be counted in the assessment of impact fees. A diverted-linked trip is similar to a pass-by trip, but a diversion is made from the regular route to make an interim stop. The reduction for pass-by and diverted-linked trips is drawn from published information and professional judgement.

Average Trip Length

In the context of a transportation impact fee based on a consumption-based methodology, it is important to determine the average length of a trip on the City's major road system (City-owned arterials and collectors). The point of departure in developing local trip lengths is to utilize national data. The U.S. Department of Transportation's *2017 National Household Travel Survey* identifies average trip lengths for specific land uses and trip purposes. These trip lengths are unlikely to be representative of travel on the City-owned major road system, given that they include travel on Federal and State roads, local streets, and roads outside the City's jurisdiction. Nevertheless, the relative lengths of trips for different land uses derived from the national data should be reasonably representative of trips in Atlanta as well. An adjustment factor can be derived by dividing the VMT that is observed on the major road system by the VMT that would be expected using national average trip lengths and trip generation rates.

The first step is to estimate the total VMT that would be expected to be generated by existing development in Atlanta based on national travel demand characteristics. This can be accomplished by taking existing city-wide land uses and multiplying existing development in each land use category by the appropriate national trip generation rates, new trip factors and trip lengths. Estimates on the total number of dwelling units and nonresidential square feet are presented in Appendix A. Total city-wide peak hour VMT is estimated by multiplying existing development units for each land use category by national data on average daily trip generation rates, new trip factors, and average trip lengths, and then summing for all land uses. As shown in Table 8, existing city-wide land uses, using national travel demand factors, would be expected to generate approximately 2.24 million peak-hour vehicle-miles of travel.

Table 8. Expected Vehicle-Miles of Travel

Land Use Type	Unit	Existing Units	Trip Ends	1/2 Trip Rate	New Trips	Trip Length	Peak Hr. VMT
Single-Family Detached	Dwelling	113,914	0.99	0.50	100%	8.58	488,691
Multi-Family (average)	Dwelling	159,476	0.50	0.25	100%	8.58	342,076
Retail/Commercial	1,000 sq. ft.	133,853	3.81	1.91	42%	7.03	754,859
Office	1,000 sq. ft.	86,666	1.15	0.58	75%	6.39	240,901
Public/Institutional	1,000 sq. ft.	142,247	0.49	0.25	75%	6.48	172,830
Industrial	1,000 sq. ft.	39,780	0.67	0.34	95%	11.28	144,936
Warehouse	1,000 sq. ft.	90,053	0.19	0.10	95%	11.28	96,501
Total Expected City-Wide Peak Hour Vehicle-Miles of Travel							2,240,794

Source: Existing dwelling units from Table 69, Appendix A; existing nonresidential square footage (in thousands) from Table 71, Appendix A; trip rates and new trip factors from Table 10; average trip length in miles from U.S. Department of Transportation, *National Household Travel Survey*, 2017 (retail/commercial based on "shopping," office and public/institutional based on "family/personal;" peak hour VMT is product of existing units, ½ trip rate, new trips and trip length.

The next step in developing the trip length adjustment factor is to estimate current VMT on the major roadway system. The Georgia Department of Transportation maintains a database of existing traffic counts for major roads, and the data were compiled by Kimley-Horn and Associates as part of the inventory of major roads presented in Appendix D. As shown in Table 9, current travel on the major roadway system is only about 12% of total travel that would be expected based on national travel demand factors. This is reasonable because travel on the major roadway system only includes travel

on City-owned arterial and collector roads, and excludes travel on interstates, State roads, local streets and any roads outside Atlanta's city limits.

Table 9. Local Travel Demand Adjustment Factor

Actual Peak Hour Vehicle-Miles of Travel	262,992
÷ Expected Peak Hour VMT	2,240,794
Local Adjustment Factor	0.117

Source: Actual peak/hour VMT on major roadway system from Table 84; expected VMT on all roadways from Table 8.

The result of combining trip generation rates, new trip factors average trip lengths and the local adjustment factor is a travel demand schedule that establishes the peak hour VMT during the average weekday on Atlanta's major roadway system generated by various land use types per unit of development. VMT are converted into transportation service units (equivalent dwelling units) to reflect the relative transportation demand generated by different land uses compared to an average single-family detached unit. The recommended transportation service unit multipliers are presented in Table 10.

Table 10. Transportation Service Unit Multipliers

Land Use Type	Unit	Trip Ends	1/2 Trip Rate	New Trips	Trip Length	Adjust. Factor	Pk Hr VMT	EDUs/ Unit
Single-Family Detached (Avg.)	Dwelling	0.99	0.50	100%	8.58	0.117	0.50	1.00
Less than 1,500 sf	Dwelling	0.94	0.47	100%	8.58	0.117	0.47	0.94
1,500 to 2,499 sf	Dwelling	0.99	0.50	100%	8.58	0.117	0.50	1.00
2,500 sf or greater	Dwelling	1.06	0.53	100%	8.58	0.117	0.53	1.06
Multi-Family (Avg.)*	Dwelling	0.50	0.25	100%	8.58	0.117	0.25	0.50
Low-Rise (1-2 stories)	Dwelling	0.56	0.28	100%	8.58	0.117	0.28	0.56
Mid-Rise (3-10 stories)	Dwelling	0.44	0.22	100%	8.58	0.117	0.22	0.44
High-Rise (>10 stories)	Dwelling	0.36	0.18	100%	8.58	0.117	0.18	0.36
Hotel/Motel	Room	0.49	0.25	80%	13.81	0.117	0.32	0.64
Retail/Commercial	1,000 sq. ft.	3.81	1.91	42%	7.03	0.117	0.66	1.32
Office	1,000 sq. ft.	1.15	0.58	75%	6.39	0.117	0.33	0.66
Hospital & Other Public/Institutional	1,000 sq. ft.	0.97	0.49	75%	9.76	0.117	0.42	0.84
Elementary/Secondary School	1,000 sq. ft.	1.18	0.59	50%	6.48	0.117	0.22	0.44
Nursing Home	1,000 sq. ft.	0.59	0.30	75%	6.39	0.117	0.17	0.34
Church	1,000 sq. ft.	0.49	0.25	75%	6.48	0.117	0.14	0.28
Industrial	1,000 sq. ft.	0.67	0.34	95%	11.28	0.117	0.43	0.86
Warehouse	1,000 sq. ft.	0.19	0.10	95%	11.28	0.117	0.13	0.26

* Trip generation is weighted average of low-rise (55.44%), mid-rise (38.40%) and high-rise (6.16%), based on the national distribution of multi-family units by number of building floors from the 2017 American Housing Survey

Source: PM peak hour trip rates from Institute of Transportation engineers (ITE), *Trip Generation Manual*, 10th ed., 2017 (retail-commercial based on shopping center, industrial based on manufacturing, tiered single-family trip ends from Table 7); new trip percentage for retail from ITE 10th edition for shopping centers, others based on judgement; average trip lengths in miles from U.S. Department of Transportation, National Household Travel Survey, 2017 based on the following trip purposes: residential is average of all trips, retail/commercial based on "shopping," hotel based on "work-related business," office and nursing home based on "other family/personal business," hospital based on "medical/dental," school and church based on "school/church"; local adjustment factor from Table 9; EDUs per unit based on vehicular peak hour VMT for each land use relative to an average single-family detached unit.

Future Transportation Demand

Future growth in transportation service units is estimated based on residential and nonresidential development growth forecasts presented in Appendix A. As shown in Table 11, travel demand on the City's arterial and collector road network is estimated to grow by about 130,000 equivalent dwelling units over the next 20 years, or by about 24%.

Table 11. Transportation Demand, 2020-2040

Land Use Type	Unit	2020 Units	2025 Units	2040 Units	EDUs/ Unit	2020 EDUs	2025 Units	2040 EDUs
Northside								
Single-Family Detached	Dwelling	39,256	42,617	52,701	1.00	39,256	42,617	52,701
Multi-Family	Dwelling	80,612	87,365	107,623	0.50	40,306	43,683	53,812
Retail/Commercial	1,000 sq. ft.	81,219	84,144	92,919	1.32	107,209	111,070	122,653
Office	1,000 sq. ft.	56,687	60,297	71,125	0.66	37,413	39,796	46,943
Public/Institutional	1,000 sq. ft.	43,747	47,637	59,308	0.28	12,249	13,338	16,606
Industrial	1,000 sq. ft.	18,073	19,045	21,961	0.86	15,543	16,379	18,886
Warehouse	1,000 sq. ft.	36,543	37,480	40,292	0.26	9,501	9,745	10,476
Northside Total						261,477	276,628	322,077
Southside								
Single-Family Detached	Dwelling	33,550	36,059	43,587	1.00	33,550	36,059	43,587
Multi-Family	Dwelling	44,114	49,925	67,358	0.50	22,057	24,963	33,679
Retail/Commercial	1,000 sq. ft.	40,305	41,974	46,980	1.32	53,203	55,406	62,014
Office	1,000 sq. ft.	25,435	26,549	29,891	0.66	16,787	17,522	19,728
Public/Institutional	1,000 sq. ft.	81,091	84,531	94,853	0.28	22,705	23,669	26,559
Industrial	1,000 sq. ft.	13,175	13,324	13,769	0.86	11,331	11,459	11,841
Warehouse	1,000 sq. ft.	38,817	39,130	40,071	0.26	10,092	10,174	10,418
Southside Total						169,725	179,252	207,826
Westside								
Single-Family Detached	Dwelling	41,108	43,938	52,429	1.00	41,108	43,938	52,429
Multi-Family	Dwelling	34,750	37,362	45,199	0.50	17,375	18,681	22,600
Retail/Commercial	1,000 sq. ft.	12,329	13,762	18,061	1.32	16,274	18,166	23,841
Office	1,000 sq. ft.	4,544	4,876	5,872	0.66	2,999	3,218	3,876
Public/Institutional	1,000 sq. ft.	17,409	18,931	23,498	0.28	4,875	5,301	6,579
Industrial	1,000 sq. ft.	8,532	8,806	9,628	0.86	7,338	7,573	8,280
Warehouse	1,000 sq. ft.	14,693	15,235	16,861	0.26	3,820	3,961	4,384
Westside Total						93,789	100,838	121,989
City-Wide Total						524,991	556,718	651,892

Source: Units from Table 68 in Appendix A; EDUs per unit from Table 10; EDUs is units times EDUs per unit.

Level of Service

The current transportation level of service (LOS) is expressed in terms of the system-wide ratio of vehicle-miles of travel to vehicle-miles of capacity (VMT/VMC). As discussed in the methodology section of this chapter, it is difficult to quantify the VMC added by a roadway improvement other than a new road or a road widening project. Given the Georgia Department of Community Affairs' recommendation that LOS measures should be capable of being evaluated to show progress over time, retaining this LOS measure could potentially restrict eligible improvements to those that add quantifiable VMC. Since capacity improvements to Atlanta's relatively mature roadway system tend

to be dominated by intersection and bicycle/pedestrian improvements, the current LOS measure is ill-suited to the City's current needs.

This study uses an alternative measure of LOS to capture road improvement components aside from road widening projects – "equivalent lane-miles per EDU." Under this approach, the total travel lane-miles in the major road system, which consists of City-owned collector and arterial roads, along with the equivalent lane-miles provided by other types of improvements (traffic signals, sidewalks, medians, turn lanes) are derived by dividing the total replacement value of the other, non-travel lane improvements by the average cost of adding a mile of travel lane. The advantage of this measure is that it takes account of non-vehicular transportation improvements, such as intersection improvements, signalization, turn lanes, bike lanes, and sidewalks.

Estimated construction costs per mile were prepared by Kimley-Horn based on their knowledge of recent local bids for through travel lanes (excluding curb and gutter, which is a function of miles rather than lane-miles), medians, sidewalks and bike lanes. These component unit costs are summarized in Table 12.

Table 12. Transportation Construction Costs per Mile

Item	Travel Lane	Median Type			Side-Walk	Bike Lane
		TWLTL	Concrete	Landscape		
Pavement	$459,400	$532,700			$134,000	$190,300
Curb and Gutter			$228,300	$228,300		
Concrete Median			$827,000	$270,300		
Earthwork	$1,189,100	$1,189,100			$216,200	$540,500
Drainage	$702,700		$691,800	$691,800	$108,100	$344,800
Signs	$14,600		$14,600	$14,600	$7,300	$7,300
Pavement Marking	$19,500	$19,500				$24,900
Utility	$108,100				$54,100	$64,900
Total	$2,493,400	$1,741,300	$1,761,700	$1,205,000	$519,700	$1,172,700

Source: Cost estimates prepared by Kimley-Horn, January 16, 2017, increased by 8.1%, which is the change in the *Engineering New-Record* Construction Cost Index from January 2017 to January 2020.

In addition to construction, road improvements also include the cost of land acquisition. A conservative estimate of the average cost of right-of-way (ROW) is based on recent park land acquisition costs. Assuming a typical travel lane width of 12 feet, a minimum of just under one and one-half acres of land is required per lane-mile of road. The city-wide average ROW cost is estimated to be $194,453 per lane-mile, as shown in Table 13.

Table 13. Right-of-Way Costs per Lane-Mile

	Northside	Southside	Westside	City-Wide
City-Wide Average Park Land Cost per Acre	$267,100	$60,300	$71,400	$133,645
x Acres/Lane-Mile	1.455	1.455	1.455	1.455
ROW Cost/Lane-Mile	$388,631	$87,737	$103,887	$194,453

Source: Cost per acre based on parkland acquisition costs from Table 25; acres per lane-mile assumes 12-foot lane width.

An inventory of the major road system is provided in Table 84, Appendix D. For each road segment, the inventory includes the segment length, number of through travel lanes, and the presence of other road-related components included in this study. The first step in calculating the LOS is to determine the existing lane-miles, as well as the quantities of other improvements, such as medians, curb and

gutter, traffic signals, and right-of-way, that are not included in the lane-mile cost. These are derived from the major road system inventory and average unit costs prepared by Kimley-Horn. The total city-wide replacement cost of the major roadway system is about $2.7 billion, as presented in Table 14.

Table 14. Transportation System Replacement Cost

Improvement Type	Unit	Quantity	Cost/Unit	Total Cost
Northside				
Curb and Gutter for Travel Lanes	Mile	99.51	$228,300	$22,716,992
Turn Lane (100 ft. length)	Each	467	$47,223	$22,053,141
Two-Way Left Turn Lane (14 ft. width)	Mile	1.84	$1,741,300	$3,203,992
Raised Median - Concrete (20 ft. width)	Mile	2.03	$1,761,700	$3,576,251
Raised Median - Landscape (20 ft. width)	Mile	2.74	$1,205,000	$3,301,700
Sidewalk, 1 Side (5 ft. width)	Mile	119.91	$519,700	$62,317,227
Bike Lane, 1 Side (5 ft. width)	Mile	46.29	$1,172,700	$54,284,283
Traffic Signal	Each	230	$243,000	$55,890,000
Right-of-Way (12 ft. width)	Lane-Mi.	263.40	$388,631	$102,365,405
Subtotal, Other Improvements				$329,708,991
Through Travel Lane (12 ft. width)	Mile	263.40	$2,493,400	$656,761,560
Northside Total Replacement Cost				$986,470,551
Southside				
Curb and Gutter for Travel Lanes	Mile	98.24	$228,300	$22,427,507
Turn Lane (100 ft. length)	Each	464	$47,223	$21,911,472
Two-Way Left Turn Lane (14 ft. width)	Mile	4.24	$1,741,300	$7,383,112
Raised Median - Concrete (20 ft. width)	Mile	1.57	$1,761,700	$2,765,869
Raised Median - Landscape (20 ft. width)	Mile	1.22	$1,205,000	$1,470,100
Sidewalk, 1 Side (5 ft. width)	Mile	155.15	$519,700	$80,631,455
Bike Lane, 1 Side (5 ft. width)	Mile	19.65	$1,172,700	$23,043,555
Traffic Signal	Each	284	$243,000	$69,012,000
Right-of-Way (12 ft. width)	Lane-Mi.	271.86	$87,737	$23,852,181
Subtotal, Other Improvements				$252,497,251
Through Travel Lane (12 ft. width)	Mile	271.86	$2,493,400	$677,855,724
Southside Total Replacement Cost				$930,352,975
Westside				
Curb and Gutter for Travel Lanes	Mile	100.47	$228,300	$22,936,616
Turn Lane (100 ft. length)	Each	171	$47,223	$8,075,133
Two-Way Left Turn Lane (14 ft. width)	Mile	1.97	$1,741,300	$3,430,361
Raised Median - Concrete (20 ft. width)	Mile	0.26	$1,761,700	$458,042
Raised Median - Landscape (20 ft. width)	Mile	0.29	$1,205,000	$349,450
Sidewalk, 1 Side (5 ft. width)	Mile	106.68	$519,700	$55,441,596
Bike Lane, 1 Side (5 ft. width)	Mile	16.39	$1,172,700	$19,220,553
Traffic Signal	Each	133	$243,000	$32,319,000
Right-of-Way (12 ft. width)	Lane-Mi.	244.40	$103,887	$25,389,983
Subtotal, Other Improvements				$167,620,734
Through Travel Lane (12 ft. width)	Mile	244.40	$2,493,400	$609,386,960
Westside Total Replacement Cost				$777,007,694
City-Wide Total Replacement Cost				$2,693,831,220

Source: Quantities from Table 84 in Appendix C (curb and gutter quantity is road miles, number of signals from Kimley-Horn, February 7, 2017); construction unit costs from Table 12 (turn lane cost based on travel lane cost per foot and average 100-foot length); right-of-way cost from Table 13; signal cost from Kimley-Horn, January 16, 2017.

The total replacement cost of non-lane-mile transportation components is divided by the average cost per travel lane-mile to determine the equivalent lane-miles of other improvements. This is then added to travel lane-miles to determine total equivalent lane-miles. The current city-wide level of service is 2.058 equivalent lane-miles per equivalent dwelling unit, as shown in Table 15 below. The existing level of service varies by service area, from a low of 1.513 in the Northside to a high of 3.323 in the Westside. A uniform level of service is recommended for the transportation impact fees, based on the existing level of service in the Northside, which is the lowest of the three service areas.

Table 15. Existing Transportation Levels of Service

	Northside	Southside	Westside	City-Wide
Other Improvement Replacement Value	$329,708,991	$252,497,251	$167,620,734	$749,826,633
÷ Travel Lane Cost per Mile	$2,493,400	$2,493,400	$2,493,400	$2,493,400
Equivalent Lane-Miles, Other Improvements	132.23	101.27	67.23	300.72
Travel Lane Lane-Miles	263.40	271.86	244.40	779.66
Total Equivalent Lane-Miles	395.630	373.130	311.630	1,080.380
÷ Equivalent Dwelling Units (EDUs) in 1,000s	261.477	169.725	93.789	524.991
Equivalent Lane-Miles per 1,000 EDUs	1.513	2.198	3.323	2.058

Source: Other (non-travel lane) replacement values, travel lane cost per mile, and travel lane lane-miles from Table 14; existing EDUs in thousands from Table 11.

Based on the existing level of service standard for the Northside, future transportation improvement needs can be estimated by multiplying the projected growth in EDUs from 2020-2040 by the existing equivalent lane-miles per EDU. As shown in Table 16, future transportation needs city-wide over the next 20 years required to maintain the recommended LOS based on projected growth amount to approximately 192 equivalent lane-miles city-wide.

Table 16. Future Transportation Demand, 2020-2040

	North-Side	South-Side	West-Side	City-Wide
Growth in Equivalent Dwelling Units, 2020-2040	60,600	38,101	28,200	126,901
x Recommended LOS (Equiv. Lane-Miles per EDU)	0.001513	0.001513	0.001513	
Equivalent Lane-Miles Needed, 2020-2040	91.69	57.65	42.67	192.01

Source: Growth in EDUs from Table 11; equivalent lane-miles per EDU from Table 15 (Northside – lowest).

Cost per Service Unit

The cost per service unit is determined by multiplying the cost of a mile of travel lane by the existing level of service, expressed in equivalent lane-miles per service unit. As shown in Table 17, the cost to maintain the existing LOS is $3,773 per equivalent dwelling unit.

Table 17. Transportation Cost per Service Unit

Cost per Travel Lane-Mile	$2,493,400
x Equivalent Lane-Miles per Equivalent Dwelling Unit (EDU)	0.001513
Transportation Cost per EDU	$3,773

Source: Cost per lane-mile from Table 12; equivalent lane-miles per EDU from Table 15.

Net Cost per Service Unit

The net cost per service unit is based on the cost per service unit less revenue credits to account for revenue generated by new development that will be used to pay for capacity-related capital improvements through motor fuel taxes and property taxes. This section provides an update of the transportation credits based on a review of the City of Atlanta's debt funding for road-related capacity expenditures and future funding programmed in the current regional Transportation Improvement Program (TIP) for transportation projects that expand the capacity of the road system. A debt credit is calculated to account for future taxes that will be utilized to pay for past road improvements. In addition, an analysis of future Federal and State funding for capacity improvements to the City-owned major road network identifies State and Federal gas tax funding eligible for credit.

Debt Credit

Transportation impact fees should provide credit for future tax revenues that will be used to pay outstanding debt incurred to expand the capacity of the City's transportation system. A summary of the City's outstanding debt is presented in Appendix E. In addition, developers have made improvements to the transportation system that have expanded capacity in return for credits that can be used to defray future impact fees that would otherwise be due, and outstanding credits will be treated in the same manner as debt.

A straight-forward method that ensures that new development is not required to pay for existing facilities, through funds used for debt retirement, as well as new facilities through impact fees, is to calculate the credit by dividing the outstanding debt on the City's major road network by existing EDUs. This puts new development on the same footing as existing development in terms of the share of transportation capital costs funded through debt. As shown in Table 18, the transportation debt credit is $526 per equivalent dwelling unit.

Table 18. Transportation Debt Credit

Outstanding Transportation Debt	$271,750,000
Outstanding Developer Credits	$4,422,979
Total Outstanding Transportation Obligations	$276,172,979
÷ Existing City-Wide Equivalent Dwelling Units (EDUs	524,991
Debt Credit per EDU	$526

Source: Outstanding debt from Table 85, Appendix E; city-wide EDUs from Table 11.

State/Federal Funding

A revenue credit for State and Federal funding recognizes the Georgia Department of Transportation (GDOT) expenditures on City-owned roads in Atlanta. The credit is based on all planned improvements that add capacity to the major road network in the current six-year Transportation Improvement Program (TIP). As shown in Table 19, the current TIP programs $18.4 million in State-funded capacity improvements for major roads in the City of Atlanta.

Table 19. State/Federal Transportation Funding, 2016-2021

Project Description	Total Cost	City Share	State Share
Peachtree Corridor Complete Street Retrofit, Phase 3	$13,177,647	$6,255,355	$6,922,292
Cycle Atlanta, Phase 1.0 - Implementation	$3,187,500	$2,997,500	$190,000
15th St Extension, Peachtree St to Williams St	$4,274,318	$3,085,693	$1,188,625
Path 400 Trail, Wieuca Rd to Loridans Dr	$11,690,000	$4,270,000	$7,420,000
Path 400 Trail, Loridans Dr to Sandy Springs city limit	$100,000	$100,000	$0
10th St Bridge Multi-Modal Connection, Techwood Dr to Williams St	$5,348,100	$2,707,500	$2,640,600
Total	$37,777,565	$19,416,048	$18,361,517

Source: Atlanta Regional Commission, *The Atlanta Region's Plan*, FY 2018-2023 Transportation Improvement Program, updated December 5, 2019.

The credit for State/Federal funding is based on the net present value of annual funding from the current six-year TIP. Assuming that the City continues to receive a similar amount of outside funding for capacity-expanding projects, new development will generate the present value equivalent of $119 in State/Federal funding per service unit over the next 25 years, as shown in Table 20.

Table 20. State/Federal Funding Credit

Total Planned State/Federal Capacity Funding FY 2018-2023	$18,361,517
÷ Years	6
Annual Capacity Funding	$3,060,253
÷ Existing Equivalent Dwelling Units (EDUs)	524,991
Average Annual Funding per EDU	$5.83
x Net Present Value Factor (25 years @ 1.60%)	20.47
State/Federal Funding Credit per EDU	$119

Source: Planned Federal/State capacity funding from Table 19; existing City-wide EDUs from Table 11; present value factor based on 25 years at 1.60% discount rate based on average yield on municipal AAA 20-year bonds from fmsbonds.com on February 19, 2020.

As shown in Table 21, reducing the transportation cost per service unit by the debt credit and State/Federal funding credit leaves a net cost of $3,128 per equivalent dwelling unit.

Table 21. Transportation Net Cost per Service Unit

Transportation Cost per EDU	$3,773
– Debt Credit per EDU	-$526
– State/Federal Funding Credit per EDU	-$119
Transportation Net Cost per EDU	$3,128

Source: Cost per VMT from Table 17; debt credit from Table 18; outside funding credit from Table 20.

Net Cost Schedule

The maximum fees that can be adopted by the City based on this study are derived by multiplying the travel demand factor for each land use by the net cost per service unit. The potential fee schedule is shown in Table 22. It provides the option of charging single-family units either a flat rate or a tiered rate that varies by the size of the dwelling unit.

Table 22. Updated Transportation Impact Fee

Land Use	Unit	EDUs/ Unit	Net Cost/ EDU	Net Cost/ Unit
Single-Family Det. (avg.) - option 1	Dwelling	1.00	$3,128	$3,128
Single-Family Det. (tiered) - option 2:				
Less than 1,500 sq. ft.	Dwelling	0.94	$3,128	$2,940
1,500 to 2,499 sq. ft.	Dwelling	1.00	$3,128	$3,128
2,500 sq. ft. or more	Dwelling	1.06	$3,128	$3,316
Multi-Family, Low-Rise (1-2 stories)	Dwelling	0.56	$3,128	$1,752
Multi-Family, Mid-Rise (3-10 stories)	Dwelling	0.44	$3,128	$1,376
Multi-Family, High-Rise (>10 stories)	Dwelling	0.36	$3,128	$1,126
Hotel/Motel	Room	0.64	$3,128	$2,002
Retail/Commercial	1,000 sq. ft.	1.32	$3,128	$4,129
Office	1,000 sq. ft.	0.66	$3,128	$2,064
Hospital & Other Public/Institutional	1,000 sq. ft.	0.84	$3,128	$2,628
Nursing Home	1,000 sq. ft.	0.34	$3,128	$1,064
Elementary/Secondary School	1,000 sq. ft.	0.44	$3,128	$1,376
Church	1,000 sq. ft.	0.28	$3,128	$876
Industrial	1,000 sq. ft.	0.86	$3,128	$2,690
Warehouse*	1,000 sq. ft.	0.26	$3,128	$813

* including mini-warehouse
Source: EDUs per unit from Table 10; net cost per EDU from Table 21.

The potential transportation impact fees calculated in this report are compared with the current fees in Table 23 below. The potential fee would more than double for most land use categories. The rate of increase should not be unexpected, given that the City's impact fees have not been updated since they were implemented in 1993.

Table 23. Change in Transportation Impact Fees

Land Use Type		Current Fee	Updated Fee	Change	Percent Change
Single-Family Det. (avg.) - option 1	Dwelling	$987	$3,128	$2,141	217%
Single-Family Det. (tiered) - option 2:					
Less than 1,500 sq. ft.	Dwelling	$987	$2,940	$1,953	198%
1,500 to 2,499 sq. ft.	Dwelling	$987	$3,128	$2,141	217%
2,500 sq. ft. or more	Dwelling	$987	$3,316	$2,329	236%
Multi-Family, Low-Rise	Dwelling	$470	$1,752	$1,282	273%
Multi-Family, Mid-Rise	Dwelling	$470	$1,376	$906	193%
Multi-Family, High-Rise	Dwelling	$470	$1,126	$656	140%
Hotel/Motel	Room	$793	$2,002	$1,209	152%
Shopping Center/Commercial					
Less than 100,000 sq. ft.	1,000 sq. ft.	$1,304	$4,129	$2,825	217%
100,000-199,999 sq. ft.	1,000 sq. ft.	$1,189	$4,129	$2,940	247%
200,000-299,999 sq. ft.	1,000 sq. ft.	$1,246	$4,129	$2,883	231%
300,000-399,999 sq. ft.	1,000 sq. ft.	$1,327	$4,129	$2,802	211%
400,000-499,999 sq. ft.	1,000 sq. ft.	$1,408	$4,129	$2,721	193%
500,000-599,999 sq. ft.	1,000 sq. ft.	$1,350	$4,129	$2,779	206%
600,000-999,999 sq. ft.	1,000 sq. ft.	$1,466	$4,129	$2,663	182%
1,000,000 sq. ft. +	1,000 sq. ft.	$1,616	$4,129	$2,513	156%
Office					
Less than 50,000 sq. ft.	1,000 sq. ft.	$2,416	$2,064	-$352	-15%
50,000-99,999 sq. ft.	1,000 sq. ft.	$1,977	$2,064	$87	4%
100,000-199,999 sq. ft.	1,000 sq. ft.	$1,608	$2,064	$456	28%
200,000-499,999 sq. ft.	1,000 sq. ft.	$1,239	$2,064	$825	67%
500,000 sq. ft. +	1,000 sq. ft.	$1,008	$2,064	$1,056	105%
Public/Institutional					
Hospital	1,000 sq. ft.	$1,424	$2,628	$1,204	85%
Nursing Home	1,000 sq. ft.	$124	$1,064	$940	758%
Elementary School	1,000 sq. ft.	$0	$1,376	$1,376	n/a
High School	1,000 sq. ft.	$623	$1,376	$753	121%
Church	1,000 sq. ft.	$519	$876	$357	69%
Manufacturing/Industrial	1,000 sq. ft.	$1,025	$2,690	$1,665	162%
Warehouse	1,000 sq. ft.	$748	$813	$65	9%

Source: Current fee from Table 1; updated impact fee from Table 22.

PARKS AND RECREATION

The City of Atlanta charges a parks and recreation impact fee on new residential and commercial development. As with all of the City's existing fees, the park impact fees have not been updated since they were adopted 27 years ago, in 1993. The current fees are based on a level of service that was lower than the existing level of service in all three service areas. The fees are higher in the Northside service area, due to its higher land costs. This report calculates the potential impact fees that could be charged to new development based on updated cost data and the level of service provided by the City's existing parks and recreation facilities. The updated park impact fees cover the cost of park improvements, which were excluded due to a policy decision made at the time of adoption in 1993.

The Department of Parks and Recreation (DPR) has responsibility for the City's parks and recreation facilities. The City's park system consists of 3,653 acres of land, and includes block, garden, neighborhood, community, and regional parks, conservation areas, and nature preserves. An inventory of existing parks and major park amenities is provided in Table 86, Appendix F.

Service Areas

The city is divided into three service areas (see Figure 5), and parks and recreation impact fees collected in a service area are earmarked to be spent in the same service area. The majority of the City's park acreage (59%) is used for regional, specialty, and nature parks that serve large areas, with 25% for community parks and 16% for block, neighborhood and garden parks. The major new recreational project is the construct of the BeltLine trail that will connect all areas of the city. Each of the service areas should have significant growth potential in order to justify the need for impact fee expenditures. The current three parks and recreational service areas continue to be appropriate to the areas served by the City's existing and planned parks and recreation facilities.

Park impact fees collected by service area for the last five years are summarized in Table 24. The bulk of the fees have been collected in the Northside service area, due to stronger growth and higher fees in that area.

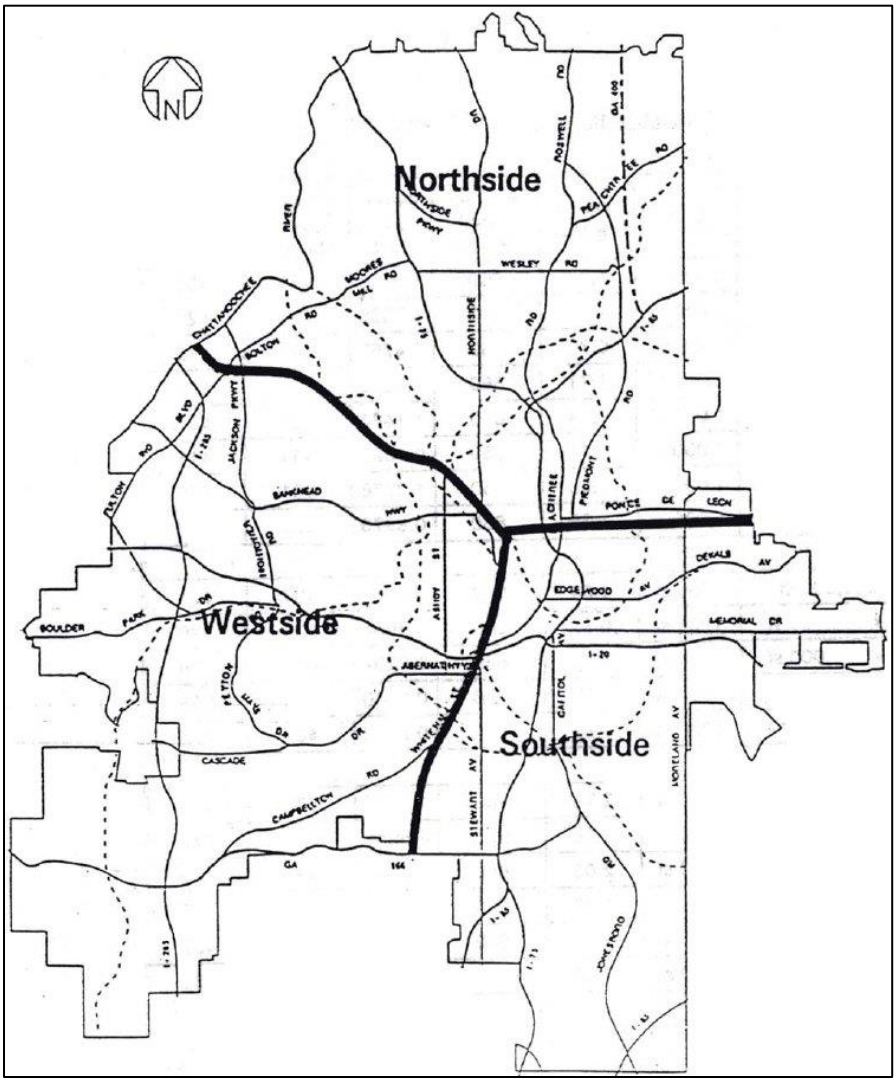
Table 24. Park Fee Collections by Service Area, FY 2017-2019

Service Area	FY 2017	FY 2018	FY 2019	3-Yr. Total	Percent
Northside	$1,794,560	$1,314,185	$1,408,118	$4,516,863	71.9%
Southside	$435,015	$625,348	$291,893	$1,352,256	21.5%
Westside	$98,144	$135,316	$183,148	$416,608	6.6%
Total	$2,327,719	$2,074,849	$1,883,159	$6,285,727	100.0%

Source: Park fee collections and interest earned, City of Atlanta, February 20, 2020.

No problems have been noted with the current park service area structure. Each service area is able to generate enough revenue to finance some improvements. The service areas ensure that improvements are located in the same general proximity as the developments that pay the fees. No changes are recommended to the current park impact fee service areas.

Figure 5. Park Impact Fee Service Areas



Methodology

The 1993 park impact fee study used a standards-based methodology. The fees were based on a level of service (LOS) of 5.75 acres per 1,000 functional population, which was lower than the existing LOS in each of the three service areas in 1993. A policy decision was made to exclude the cost of recreational improvements, so that the fees covered only the cost of acquiring land and making site improvements (i.e., grading, utilities, signage, fencing, road access, parking, and landscaping). Because the impact fee LOS was set below the existing levels of service in all three service areas, there was excess capacity relative to the adopted LOS. The 1993 study estimated there was sufficient excess acreage in the Northside and Westside service areas to accommodate growth for 7-8 years, while the Southside had sufficient acreage to accommodate projected growth for over 60 years.

Until the excess capacity was consumed, the fees were designed to function as recoupment fees. Recoupment fees are intended to recover costs incurred in advance of development to create capacity for future growth. Since the original costs were not known for many of the existing park improvements, the fees excluded all improvement costs. Because recoupment fees are reimbursements to the City for past expenditures, they are not subject to the earmarking and expenditure restrictions of non-recoupment fees. Recoupment fees can be waived for affordable housing or economic development projects, for example, without identifying replacement funds, and this was the City's practice until exemptions were halted in 2009. In the early years of the program, some of the funds were used to fund exemptions to the transportation impact fees, which were not recoupment fees, although this practice was discontinued about 1996. The granting of exemptions was suspended in 2009, and since that time the park fees collected have been spent only on capacity-expanding park capital improvements in the service area in which they were collected.

Given Atlanta's renewed population growth, and following a recent city-wide process to identify outstanding park needs, this update will utilize the existing LOS in calculating the impact fee. However, in this update, the LOS will include both the acres of land and a measure of equivalent acres attributed to amenities such as recreation centers and pools in each service area.

Service Units

Atlanta's 1993 impact fee study used the same functional population approach used for fire and police for the calculation of the park impact fee. This approach recognizes that people use parks, and allocates park costs between residential and nonresidential development types based on where people spend their time. Functional population represents the number of "full-time equivalent" people present at the site of a land use, and it is used for the purpose of determining the impact of a particular development on the need for park facilities. For residential development, functional population is simply average household size times the percent of time people spend at home. For nonresidential development, functional population is based on a formula that factors trip generation rates, average vehicle occupancy and average number of hours spent by employees and visitors at a land use. The functional population multipliers for the various land use types and a detailed discussion of the methodology used in developing the multipliers are presented in Appendix C.

Capital Costs

In order to determine the existing level of service for parks in this update, it is necessary to determine the value of existing park land and amenities. Utilizing a simple ratio of acres to park functional population in the level of service analysis does not capture the value of amenities such as pools, recreation centers, gyms, ballfields, trails and playgrounds. In the current impact fee, the value of such amenities is not reflected in the LOS.

Land Costs

The City has recently acquired land for parks in each of the three service areas. These land purchases can be used to provide an estimate of the cost to replace existing park land. The park land purchases used to determine the average cost per acre in each service area are based on the purchase of park land by the City from 2010 through 2016. The average land values, excluding the parcel with the highest cost per acre, range from a low of $60,300 per acre in the Southside service area to a high of $267,100 in the Northside service area, as shown in Table 25. The land values used in this study

reflects the type of land purchased for recent parks, which often include environmentally sensitive land, steep terrain and other features that make the cost per acre lower than typical improved land costs for these areas.

Table 25. Average Park Land Values per Acre by Service Area

Date	Address	Acres	Orig. Cost	Cost/Acre
February 18, 2013	3162 Lenox Road	2.54	$1,170,000	$460,600
August 9, 2013	0 North Ivy Rd NE	0.90	$98,000	$108,900
June 2, 2014	519 Old Ivy Rd NE	0.65	$519,490	$799,200
June 11, 2014	3931 Land O' Lakes	3.76	$650,000	$172,900
March 21, 2016	3148 Lenox Rd NE	1.53	$1,503,707	$982,800
March 21, 2016	685 Loridans Dr NE	1.55	$219,589	$141,700
May 16, 2016	650 Canterbury Rd NE	1.38	$176,270	$127,700
July 5, 2016	751 Burke Rd NE	0.91	$289,037	$317,600
Total, Northside Service Area		13.22	$4,626,093	$349,900
Total without Most Expensive Acquisition		11.69	$3,122,386	$267,100
February 6, 2010	1067, 1071, 1075 Grant Way SE (Stanton Park)	0.84	$145,000	$172,600
May 25, 2011	Harper Road, Schell Road (Swann Preserve)	16.25	$560,000	$34,500
August 15, 2011	1181 Boulevard SE (Boulevard Crossing)	0.52	$275,000	$528,800
October 3, 2011	94 Flat Shoals Road (Lang Carson)	0.11	$230,000	$2,090,900
October 1, 2012	71 Weatherby (Lang Carson)	0.10	$25,000	$250,000
April 15, 2013	Macon Dr & Mt Zion Rd SW	1.08	$60,000	$55,600
June 2, 2014	133 Dearborn St SE	0.15	$77,260	$515,100
Subtotal, Southside Service Area		19.05	$1,372,260	$72,000
Total without Most Expensive Acquisition		18.94	$1,142,260	$60,300
June 18, 2012	0 Waterford Rd NW	1.19	$34,425	$28,900
July 16, 2012	Elm/Spencer Sts (Mims Park)	4.70	$488,386	$103,900
November 19, 2012	145 Graves (Vine City Park)	0.17	$438,500	$2,579,400
April 15, 2013	2853 Campbellton Rd SW	10.18	$325,000	$31,900
August 19, 2013	320 Enota Pl SW	0.20	$60,000	$300,000
November 2, 2015	534 Oliver St NW	1.20	$171,563	$143,000
July 18, 2016	392 Enota Pl. SW	0.18	$57,361	$318,700
July 18, 2016	396 Enota Pl. SW	0.14	$134,258	$959,000
Subtotal, Westside Service Area		17.96	$1,709,493	$95,200
Total without Most Expensive Acquisition		17.79	$1,270,993	$71,400

Source: City of Atlanta Department of Parks and Recreation, June 12, 2017.

Based on these recent average acquisition costs, the current values of existing parkland in the three service areas are summarized in Table 26.

Table 26. Existing Land Values by Service Area

Service Area	Acres	Average Cost/Acre	Land Value
Northside	968.77	$267,100	$258,758,467
Southside	1,340.72	$60,300	$80,845,416
Westside	1,343.79	$71,400	$95,946,892
Total	3,653.28	$119,222	$435,550,775

Source: Acres from Table 86 in Appendix F; cost per acre from Table 25.

Improvement Costs

In addition to land, parks and recreation facilities include amenities such as picnic facilities, playgrounds and playing fields, and some parks have aquatic and community center facilities. Facilities not included in the fee calculation include the Zoo, Omni, sports stadiums, Underground and the Lakewood Amphitheater, which is leased by a private company. Golf courses are excluded because they are enterprise fund facilities.

For this analysis, the replacement cost of the City's park amenities is based on standardized unit costs for major amenities common to many parks. The cost data are based on recent construction costs estimates developed by the City of Atlanta and the inventory of standard amenities provided in Appendix F. The replacement costs of amenities for each service area are summarized in Table 27.

Table 27. Standard Park Amenities

Improvement Type	Unit	Cost/Unit	Units	Replacement Cost
Pavilion/Gazebo	Sq. Ft.	$109	15,652	$1,707,633
Playground	Playground	$245,000	32	$7,840,000
Basketball Court	Court	$65,000	3	$195,000
Tennis Court	Court	$76,000	61	$4,636,000
Baseball Field	Field	$546,000	14	$7,644,000
Soccer/Football Field	Field	$655,000	2	$1,310,000
Trail, Hard Surface	Mile	$24,000	10.61	$254,640
Trail, Natural Surface	Mile	$10,000	13.61	$136,100
Picnic Shelter	Shelter	$82,000	3	$246,000
Total, Northside Service Area				$23,969,373
Pavilion/Gazebo	Sq. Ft.	$109	45,791	$4,995,798
Playground	Playground	$245,000	56	$13,720,000
Basketball Court	Court	$65,000	38	$2,470,000
Tennis Court	Court	$76,000	59	$4,484,000
Baseball Field	Field	$546,000	33	$18,018,000
Soccer/Football Field	Field	$655,000	6	$3,930,000
Trail, Hard Surface	Mile	$24,000	10.96	$263,040
Trail, Natural Surface	Mile	$10,000	2.50	$25,000
Picnic Shelter	Shelter	$82,000	16	$1,312,000
Total, Southside Service Area				$49,217,838
Pavilion/Gazebo	Sq. Ft.	$109	32,651	$3,562,224
Playground	Playground	$245,000	48	$11,760,000
Basketball Court	Court	$65,000	20	$1,300,000
Tennis Court	Court	$76,000	54	$4,104,000
Baseball Field	Field	$546,000	30	$16,380,000
Soccer/Football Field	Field	$655,000	3	$1,965,000
Trail, Hard Surface	Mile	$24,000	5.80	$139,200
Trail, Natural Surface	Mile	$10,000	3.60	$36,000
Picnic Shelter	Shelter	$82,000	25	$2,050,000
Total, Westside Service Area				$41,296,424

Source: Improvement cost per unit from City of Atlanta Department of Parks and Recreation, November 14, 2016, adjusted for cost inflation by the change in the *Engineering News-Record* Construction Cost Index from January 2017 to January 2020 (8.01%); amenity units from Table 86, Appendix F.

The City of Atlanta maintains pools and aquatic facilities in numerous parks, and the value of those facilities is included in the updated level of service and impact fees. The replacement values of these types of facilities are based on the City's insured value listings. The existing facilities and estimated replacement costs for each service area are summarized in Table 28.

Table 28. Pools and Aquatic Facilities

Park	Facility	Street Address	Insur. Value
Chastain Memorial Park	Pool, Pool House & Pump Bldg	215 W Wieuca Rd, NW	$1,549,310
Garden Hills Park	Pool, Pool House & Pump Bldg	355 Pine Tree Dr, NE	$405,071
Piedmont Park	Pool and Pool Building	400 Park Dr, NE	$1,622,076
Total, Northside Service Area			$3,576,457
Candler Park	Pool/ Building	1500 Mclendon Ave, NE	$338,821
Grant Park	Swimming Pool Bldg	840 Cherokee Ave, SE	$590,780
John A. White Park	Swimming Pool	1053 Cascade Cir, SW	$727,019
Selena S. Butler Park	M.L.King, Jr Rec/Aquatic Center	Hillard St, SE	$25,403,500
Pittman Park	Pittman Park Pool	950 Girabaldi St, SE	$983,875
Rosa L. Burney Park	Dunbar Pool	477 Windsor St, SW	$505,065
South Bend Park	Pool and Pool Building	2000 Lakewood Ave	$1,557,966
Thomasville Park	Pool, Pool House & Pump Bldg	1835 Henry Thomas Dr, SE	$374,825
Total, Southside Service Area			$30,481,851
Adams Park	Pool Building	1581 Lagoon Ln	$542,304
Anderson Park	Pool & Bath House	98 Anderson Avenue	$338,526
Maddox Park	Swimming Pool & Bath House	1142 Bankhead Hwy	$1,477,657
Mozley Park	Powell Pool & Chlorine Bldg	1565 M. L. King Jr Dr, SW	$450,962
Rev Jms Orange Park at Oakland City	Pool, Pool House & Pump Bldg	1305 Oakland Dr	$931,323
Washington Park	Washington Park Natatorium	90 Ollie St	$4,431,658
Total, Westside Service Area			$8,172,430

Source: City of Atlanta Risk Management, insured value listings as of June 27, 2016, adjusted for cost inflation by the change in the *Engineering News-Record* Construction Cost Index from January 2017 to January 2020 (8.01%).

The updated park impact fee includes recreation and community centers located in City parks. Such facilities typically include gyms, community meeting rooms and fitness areas. The replacement values for these facilities used in the impact fee analysis are based on the City's insured values. The replacement costs of the City's existing recreation and community centers in each of the three service areas are summarized in Table 29.

Table 29. Recreation and Community Centers

Park	Building	Street Address	Sq. Feet	Insur. Value
Chastain Memorial Park	Chastain Park Gymnasium	140 W Wieuca Rd., NW	16,479	$3,557,736
Garden Hills Park	Neighborhood Meeting	355 Pine Tree Dr, NE	2,144	$357,009
Peachtree Hills Park	Recreation Center	308 Peachtree Hills Rd	11,720	$1,156,955
Piedmont Park	Community Center	1071 Piedmont Ave	10,363	$1,289,559
Total, Northside Service Area			40,706	$6,361,259
Arthur Langford, Jr. Park	Community Center	211 Thornton St, SW	6,205	$991,188
Bass Recreation Ctr Park	Bass Recreation Center	326 Moreland Ave, NE	9,918	$989,287
Bessie Branham Park	Bessie Branham Rec Ctr	2051 Delano Dr	20,113	$3,520,745
Brownwood Park	Brownwood Rec Ctr	602 Brownwood Ave	5,616	$765,941
Cabbagetown Park	Recreation Center	701 Kirkwood Ave. SE	10,128	$1,107,750
Central Park	Central Rec Center	400 Merritts Ave	12,048	$1,839,728
Coan Park	Coan Recreation Center	530 Woodbine Avenue	14,855	$1,662,305
Daniel Stanton Park	Recreation Center	213 Haygood Ave, SE	7,412	$969,104
East Lake Park	Zaban Recreation Center	2617 Memorial Drive SE	4,844	$825,948
Four Corners Park	Rick McDevitt Youth Center	30 Haygood Ave	3,823	$454,019
Grant Park	Recreation Center	537 Park Ave	14,220	$2,519,622
J.D. Sims Park	Recreation Center	544 Angier Ave, NE	6,198	$792,964
Lang-Carson Park	Lang Carsen Rec Ctr	100 Flat Shoals Ave, SE	22,437	$3,414,496
MLK Recreation Ctr	MLK Recreation Center	90 Boulevard., St, NE	29,864	$5,422,496
Perkerson Park	Perkerson Park Rec Ctr	770 Deckner Ave	4,800	$775,187
Pittman Park	Sarah Lowrie Community Ctr	950 Girabaldi St, SE	28,692	$4,465,093
Rosa L. Burney Park	Dunbar Recreation Center	477 Windsor St, SW	n/a	n/a
Rosel Fann Park	Rosel Fann Rec Center	365 Cleveland Ave, SE	85,356	$13,695,149
Selina S. Butler Park	Butler Recreation Center	98 W. H. Borders Dr, SE	4,749	$680,605
Thomasville Park	Recreation Center	1835 Henry Thomas Dr, SE	18,178	$2,959,652
Total, Southside Service Area			309,456	$47,851,279
A.D. Williams Park	A. D. Williams Rec Ctr	1154 Jms Jackson Pky, NW	6,059	$663,695
Adams Park Rec Ctr	Adams Rec Ctr	2231 Campbellton Rd, SW	17,723	$2,632,906
Adamsville Gym Park	Adamsville Gym	3404 Delmar Ln, SW	11,412	$1,876,465
Adamsville Park	Rec Center/Natatorium	3201 M. L. King, Jr. Dr. SW	96,994	$16,438,845
Anderson Park	Recreation Center	98 Anderson Avenue	20,602	$3,208,303
Ben Hill Park	William Walker Rec Ctr	2405 Fairburn Rd., SW	59,520	$4,469,141
Collier Drive Park	Recreation Center	3691 Collier Dr	5,170	$787,199
English Park	Recreation Center	1350 Bolton Road, NW	5,236	$812,858
Grove Park	Recreation Center	709 Hortense Place	30,613	$5,141,615
Mozley Park	C. A. Scott Rec Ctr	1565 ML King Jr Dr., SW	6,200	$966,688
Oakland City Park	Recreation Center	1305 Oakland Dr	4,438	$897,708
West Manor Park	Anthony Flanagan Rec Ctr	3240 W Manor Cir	4,236	$636,022
Total, Westside Service Area			268,203	$38,531,445

Source: City of Atlanta Risk Management, insured value listings as of June 27, 2016, adjusted for cost inflation by the change in the *Engineering News-Record* Construction Cost Index from January 2017 to January 2020 (8.01%).

Another type of recreation improvement consists of multi-use trails that are not located within road right-of-way corridors (which can be addressed with transportation impact fees). As part of this update, information was collected on the completed sections of multi-use trails within the BeltLine corridor. Some of the cost of the BeltLine trails will be funded from State and Federal sources. Based on the BeltLine project programmed in the Atlanta region's transportation improvement program,

State/Federal funding will cover 15.9% of the cost. Consequently, the cost included in the park impact fee calculations is limited to the City's anticipated share of the cost.

Table 30. Multi-Use Trails

	Northside	Southside	Westside
Existing Miles of Multi-Use Trails	1.86	3.15	2.87
x Construction Cost per Mile	$1,390,000	$1,390,000	$1,390,000
Existing Cost of Multi-Use Trails	$2,585,400	$4,378,500	$3,989,300
x City Funding Share	84.1%	84.1%	84.1%
City Cost Share	$2,174,321	$3,682,319	$3,355,001

Source: Miles of completed BeltLine trails and construction cost per mile from City on April 16, 2020; City funding share derived from programed funding for BeltLine multi-use trail, Lindbergh Center to 10th St/Monroe Drive in Atlanta Regional Commission, *The Atlanta Region's Plan*, FY 2018-2023 Transportation Improvement Program, updated December 5, 2019.

Level of Service

The current park level of service (LOS) is expressed in terms of acres per 1,000 functional population. However, a parks and recreation system represents a capital investment in land, buildings and other improvements that provides service to residents and visitors. Reducing the LOS relationship to a simple ratio of acres of land to population does provide a concrete, measurable indicator, but it may unintentionally emphasize the acquisition of park land. The emphasis on park land in the traditional LOS comes at the expense of the provision of recreational facilities and improvements. The expansion of a park system may involve periods of extensive land acquisition, followed by periods that focus on the development of land with park improvements.

This study utilizes an approach that considers land, recreational facilities and other improvements in measuring the LOS. This alternative LOS measure is "equivalent acres per 1,000 functional population." Under this approach, the total replacement value of all improvements is divided by the average cost per acre in each service area to determine equivalent acres of improvements. The equivalent acres of improvements are added to the number of physical acres to determine total equivalent acres, as shown in Table 31.

Table 31. Existing Park Equivalent Acres

	Service Area		
	Northside	Southside	Westside
Standard Amenity Value	$23,969,373	$49,217,838	$41,296,424
Aquatic Facility Value	$3,576,457	$30,481,851	$8,172,430
Recreation Center Value	$6,361,259	$47,851,279	$38,531,445
Multi-Use Trails (BeltLine)	$2,174,321	$3,682,319	$3,355,001
Total Park Improvement Value	$36,081,410	$131,233,287	$91,355,300
÷ Land Cost per Acre	$267,100	$60,300	$71,400
Improvement Equivalent Acres	135.09	2,176.34	1,279.49
Actual Park Acres	968.77	1,340.72	1,343.79
Total Equivalent Park Acres	1,103.86	3,517.06	2,623.28

Source: Amenity replacement value from Table 27; aquatic facility value from Table 28; recreation center value from Table 29; land cost per acre from Table 25; actual park acres from Table 86, Appendix F.

With this LOS measure, improvements that add recreational value to existing parks can be quantified and reflected in the updated LOS, as shown in Table 32. These levels of service can be used to measure changes in a service area over time, but are not very useful for comparing levels of service between service areas, because of the widely-varying land costs per acre (which results in service areas with high land costs having fewer equivalent acres). Nevertheless, it is clear that the Northside has the lowest park LOS, whether measured in terms of acres of land, amenity value, or equivalent acres.

Table 32. Existing Park Levels of Service

	Service Area		
	Northside	Southside	Westside
Total Park Equivalent Acres	1,103.86	3,517.06	2,623.28
÷ Existing Functional Population, 2020	390,710	257,603	153,639
Equivalent Park Acres per Functional Population	0.00283	0.01365	0.01707

Source: Equivalent acres from Table 31; 2020 functional population from Table 83.

The cost per service unit is lowest in the Northside service area, and it is recommended that this be used to calculate fees in all three service areas. Based on the recommended city-wide fees, the levels of service that can be maintained in the Southside and Westside service areas will be somewhat lower than the existing levels of service in those areas

Table 33. Recommended Park Levels of Service

	Service Area		
	Northside	Southside	Westside
Recommended Cost per Functional Population	$756	$756	$756
÷ Park Land Cost/Acre	$267,100	$60,300	$71,400
Recommended LOS (Equiv. Acres/Func. Pop.)	0.00283	0.01254	0.01059

Source: Recommended cost per functional population is the lowest cost to maintain the existing level of service (Northside service area) from Table 35; land cost per acre from Table 25.

Future park improvement needs are determined by multiplying the projected functional population growth for each service area in 2040 by the recommended equivalent park acre levels of service that can be maintained under the proposed uniform city-wide fees (see next section). As shown in Table 34, in order to maintain the recommended level of service the City would have to acquire park land or construct the equivalent cost in improvements by 280 acres in the Northside service area, 858 acres in the Southside, and 503 acres in the Westside.

Table 34. Future Park Needs, 2020-2040

	Service Area		
	Northside	Southside	Westside
2040 Functional Population	489,541	325,993	201,163
– 2020 Functional Population	-390,710	-257,603	-153,639
New Functional Population, 2020-2040	98,831	68,390	47,524
x Recommended Equiv. Park Acres per Func. Pop.	0.00283	0.01254	0.01059
Equivalent Park Acres Needed, 2020-2040	280	858	503

Source: Functional population from Table 83; recommended park LOS from Table 35.

Cost per Service Unit

The cost per service unit is based on the existing level of service, which includes both actual park land and park amenity equivalent acres, and the park land cost per acre for each service area, as shown in Table 35. The cost per service unit is lowest in the Northside service area, and it is recommended that this be used to calculate fees in all service areas.

Table 35. Park Cost per Service Unit

	Service Area		
	Northside	Southside	Westside
Existing LOS (Equivalent Park Acres/ Func. Pop.)	0.00283	0.01365	0.01707
x Park Land Cost per Acre	$267,100	$60,300	$71,400
Total Park Cost per Func. Pop.	$756	$823	$1,219

Source: Existing park acres per 1,000 functional population from Table 32; land cost per acre from Table 25.

Net Cost per Service Unit

The City primarily funds park capital projects with Park Improvement property tax revenues, General Obligation bonds, and impact fees. Credit is not due for debt or funding related to other facilities not included in this report, such as the Zoo, Omni, sports stadiums, Underground, golf courses and the Lakewood Amphitheater.

To avoid requiring new development to pay more than its proportionate share of facility costs, impact fees should be reduced to account for future tax payments that will retire outstanding debt used to develop the existing parks. An additional credit is not warranted for grants, because grant funds are limited to available Federal or State funding, such as Community Development Block Grants, which are not dedicated for capacity-expanding park improvements.

The Park Improvement Fund is supported by a half-mill property tax. It is used exclusively for capital improvements to the City's parks, recreation and cultural facilities. Up to half of this fund's annual receipts can be used for constructing a stadium and related facilities, or to retire debt on those facilities. The fund has been used as a pledge of revenue to fund park improvement revenue bonds issued by the City of Atlanta and Fulton County Recreation Authority. The City's share of revenue bond funds has been used to finance the acquisition, construction and equipping of new recreation areas, and replacing, renovating, upgrading and restoring existing recreation facilities and amenities. This update includes a credit for all the outstanding park improvement revenue bond principal.

An analysis of the City's outstanding debt is presented in Appendix E. Based on the analysis of debt-funded expenditures, about $57 million of the outstanding debt is attributed to park and recreation projects. A simple method that ensures that new development is not required to pay for existing facilities, through funds used for debt retirement, as well as new facilities through impact fees, is to calculate the credit by dividing the outstanding debt by existing City-wide functional population. This puts new development on the same footing as existing development in terms of the share of capital costs funded through debt. As shown in Table 36, the park credit for outstanding debt is $71 per service unit.

Table 36. Park Debt Credit

Outstanding Park Debt	$56,915,000
÷ City-Wide Functional Population	801,952
Debt Credit per Functional Population	$71

Source: Park debt from Table 85, Appendix E; city-wide functional population from Table 83, Appendix C.

The net cost per service unit for parks and recreation is derived by reducing the cost per service unit by the debt credit. As shown in Table 37, the net cost per service unit is $685 per functional population.

Table 37. Park Net Cost per Service Unit

Cost per Functional Population	$756
– Debt Credit per Functional Population	-$71
Net Cost per Functional Population	$685

Source: Cost per functional population from Table 35; debt credit from Table 36.

Net Cost Schedule

The maximum fees that can be adopted by the City based on this study are derived by multiplying the functional population for each land use by the net cost per functional population. As shown in Table 38, the updated fee schedule provides the option to adopt single-family fees that vary by the size of the dwelling unit.

Table 38. Updated Parks and Recreation Impact Fee Schedule

Land Use	Unit	Park Func. Pop./Unit	Net Cost/ Func. Pop.	Net Cost/ Unit
Single-Family Det. (avg.) - option 1	Dwelling	1.782	$685	$1,221
Single-Family Det. (tiered) - option 2:				
Less than 1,500 sq. ft.	Dwelling	1.648	$685	$1,129
1,500 to 2,499 sq. ft.	Dwelling	1.776	$685	$1,217
2,500 sq. ft. or more	Dwelling	1.970	$685	$1,349
Multi-Family, Low-Rise (1-2 stories)	Dwelling	1.206	$685	$826
Multi-Family, Mid-Rise (3-10 stories)	Dwelling	1.146	$685	$785
Multi-Family, High-Rise (>10 stories)	Dwelling	0.951	$685	$651
Hotel/Motel	Room	0.785	$685	$538
Shopping Center/Commercial	1,000 sq. ft.	1.755	$685	$1,202
Office	1,000 sq. ft.	0.875	$685	$599
Public/Institutional	1,000 sq. ft.	0.539	$685	$369
Industrial	1,000 sq. ft.	0.340	$685	$233
Warehouse	1,000 sq. ft.	0.189	$685	$129
Mini-Warehouse	1,000 sq. ft.	0.078	$685	$53

Source: Net cost per functional population from Table 37; functional population per unit from Table 82, Appendix C.

The updated fees are compared with the current fees in Table 39. The large percentage increases in the fees for most land uses reflect (1) the change in park land costs since the last study was conducted in 1993; (2) the inclusion of facility costs, which account for between 10-60% of the total updated fee, depending on service area; (3) the use of the existing level of service rather than a future level of service, and (4) the presumed adoption of park impact fees at 100% rather than 50% of the calculated amounts as was done in 1993. Current fees would need to double just to be at amounts calculated in 1993.

Table 39. Change in Parks and Recreation Impact Fees

		Northside			Southside/Westside		
Land Use Type		Current Fee	Updated Fee	% Change	Current Fee	Updated Fee	% Change
Single-Family Det. (avg.) - option 1	Dwelling	$410	$1,221	198%	$246	$1,221	396%
Single-Family Det. (tiered) - option 2:							
Less than 1,500 sq. ft.	Dwelling	$410	$1,129	175%	$246	$1,129	359%
1,500 to 2,499 sq. ft.	Dwelling	$410	$1,217	197%	$246	$1,217	395%
2,500 sq. ft. or more	Dwelling	$410	$1,349	229%	$246	$1,349	448%
Multi-Family, Low-Rise (1-2 stories)	Dwelling	$285	$826	190%	$171	$826	383%
Multi-Family, Mid-Rise (3-10 stories)	Dwelling	$285	$785	175%	$171	$785	359%
Multi-Family, High-Rise (>10 stories)	Dwelling	$285	$651	128%	$171	$651	281%
Hotel/Motel	Room	$183	$538	194%	$110	$538	389%
Shopping Ctr/Commercial							
Less than 100,000 sq. ft.	1,000 sq. ft.	$713	$1,202	69%	$428	$1,202	181%
100,000-199,999 sq. ft.	1,000 sq. ft.	$584	$1,202	106%	$350	$1,202	243%
200,000-299,999 sq. ft.	1,000 sq. ft.	$535	$1,202	125%	$321	$1,202	274%
300,000-399,999 sq. ft.	1,000 sq. ft.	$486	$1,202	147%	$292	$1,202	312%
400,000-499,999 sq. ft.	1,000 sq. ft.	$463	$1,202	160%	$278	$1,202	332%
500,000-599,999 sq. ft.	1,000 sq. ft.	$441	$1,202	173%	$265	$1,202	354%
600,000-999,999 sq. ft.	1,000 sq. ft.	$401	$1,202	200%	$241	$1,202	399%
1,000,000 sq. ft. +	1,000 sq. ft.	$370	$1,202	225%	$222	$1,202	441%
Office							
Less than 50,000 sq. ft.	1,000 sq. ft.	$267	$599	124%	$161	$599	272%
50,000-99,999 sq. ft.	1,000 sq. ft.	$254	$599	136%	$153	$599	292%
100,000-199,999 sq. ft.	1,000 sq. ft.	$241	$599	149%	$145	$599	313%
200,000-499,999 sq. ft.	1,000 sq. ft.	$232	$599	158%	$139	$599	331%
500,000 sq. ft. +	1,000 sq. ft.	$223	$599	169%	$134	$599	347%
Public/Institutional							
Elementary School	1,000 sq. ft.	$437	$369	-16%	$262	$369	41%
High School	1,000 sq. ft.	$445	$369	-17%	$267	$369	38%
Church	1,000 sq. ft.	$192	$369	92%	$115	$369	221%
Hospital	1,000 sq. ft.	$477	$369	-23%	$286	$369	29%
Nursing Home	1,000 sq. ft.	$348	$369	6%	$209	$369	77%
Manufacturing/Industrial	1,000 sq. ft.	$169	$233	38%	$102	$233	128%
Warehouse	1,000 sq. ft.	$94	$129	37%	$56	$129	130%
Mini-Warehouse	1,000 sq. ft.	$94	$53	-44%	$56	$53	-5%

Source: Current fees from Table 1; updated fee from Table 38.

FIRE RESCUE

The Atlanta Fire Rescue Department provides fire protection and rescue services throughout the City of Atlanta, operating from 35 active fire stations. This chapter updates the fire impact fee and impact fee level of service standards to reflect current facilities and updated costs.

Service Area

The entire city is designated as the service area for the current fire impact fee. This is appropriate because public safety services are provided on a system-wide basis. Fire-fighting apparatus located in a particular fire station will respond to calls some distance from the station if the equipment located closer is out on another call. No change to the fire service area is recommended in this update.

Methodology

The methodology used for the current fire impact fee is a standards-based approach, with an adopted level of service (LOS) of 470 square feet of fire station per 1,000 functional population. Since the adopted LOS was less than the 502 square feet per 1,000 functional population being provided at the time the 1993 study was performed, the fees were designed as recoupment fees. Consistent with that approach, the value of equipment was based on original, depreciated costs rather than replacement costs.

The recoupment approach was taken despite the fact that the need for three new stations had been identified for the 1993-2007 period. However, growth projections indicated that, even with the new stations, the LOS would fall from 502 to 477 square feet per 1,000 functional population by 2010. The decision was made to have the fees function as recoupment until the LOS fell to the adopted level, which was estimated to be about 1998. After that time, the fees would no longer function as recoupment fees. Since 2009, when funding for exemptions ceased being certified, the fire impact fees have functioned like non-recoupment impact fees, with the funds earmarked for capacity-expanding improvements. This update is based on the existing LOS and current replacement values of existing facilities, rather than the recoupment approach used in the original study.

Service Units

The demand for fire services is quantified for different land use types using the "functional population" approach, which is consistent with the approach used in the original study for developing public safety service units. This is a generally-accepted methodology for these facility types and is based on the observation that demand for public safety is generally proportional to the presence of people. The functional population concept is analogous to the concept of "full-time equivalent" employees. It represents the number of "full-time equivalent" people present at the site of a land use. Functional population is the equivalent number of people occupying a building or land use site on a 24-hour-per-day basis.

For residential development, functional population is simply average household size times the percent of time people spend at home. For nonresidential development, functional population is based on a formula that factors trip generation rates, average vehicle occupancy and average number of hours spent by employees and visitors at a land use. The functional population multipliers for the various land use types and a detailed discussion of the methodology used in developing the multipliers are presented in Appendix C.

Capital Costs

The cost associated with each fire station includes land acquisition, facility construction and the purchase of necessary equipment and fire protection and rescue vehicles. The existing level of service for fire rescue facilities in this study is based on the existing facilities. An inventory of the existing City-owned fire stations is shown in Table 40. The City currently operates from 31 fire stations, excluding stations at the airport. The airport stations are excluded for two reasons: (1) the demand for airport stations is not as strongly related to land development and growth in the city, given Hartsfield-Jackson Atlanta's status as a major regional and international air traffic connection; and (2) the stations are funded from aviation fee revenues.

In addition to the stations, this study includes central facilities that serve the entire city. Centralized facilities include the Atlanta Fire Rescue headquarters and the training academy. The training academy is operated on land owned by Atlanta Public Schools and leased to Atlanta Fire Rescue and is not included in this update. The Atlanta Fire Rescue headquarters occupies one floor of the City's five-story Public Safety facility in downtown Atlanta. Consequently, one-fifth of the land, building square footage and replacement value of the Public Safety building is included in the fire impact fee calculations. Similarly, the acreage, square footage, and replacement costs of two fire stations have been reduced to reflect the fact that approximately 1,000 square feet in each of the two stations is occupied by a police mini-precinct.

Table 40. Fire Rescue Land and Building Inventory

Station No.	Address	Year Built	Acres	Building Area (sf)	Insured Value
HQ*	226 Peachtree Street SW	2009	1.07	44,235	$19,458,000
1	71 Elliot St	1961	0.73	14,336	$2,400,567
2	1568 Jonesboro Rd, SE	1978	0.20	7,450	$1,446,881
3	721 Phipps Blvd, NE	1991	5.81	9,064	$1,378,339
4	309 Edgewood Ave, SE	2002	0.63	10,000	$1,684,356
5	2825 Campbellton Rd, SW	1991	2.30	9,600	$1,549,158
8	1711 Marietta Blvd, NW	1969	0.15	7,910	$1,664,107
9	3501 MLK Jr. Dr, SW	1967	0.93	8,465	$1,445,955
10	447 Boulevard, SE	1958	0.24	6,817	$1,536,965
11	165 16th Street, NW	2010	1.32	8,670	$5,166,861
12	1288 Dekalb Ave, NE	1958	0.59	7,247	$1,369,268
13	431 Flat Shoals Ave, SE	2010	0.47	6,727	$3,823,886
14	1203 Lee Street, SW	2002	0.17	6,500	$1,309,329
15	170 10th St, NE	1987	0.79	8,150	$1,714,758
16	1048 Joseph E. Boone Blvd	1963	1.08	7,744	$1,766,353
17	1489 Ralph D. Abernathy Blvd	1988	0.36	8,190	$1,261,658
18	2007 Oakview Rd, SE	2010	0.46	10,177	$3,823,886
19	1063 N Highland Ave, NE	1924	0.24	5,428	$977,827
20	590 Manford Rd	1938	0.35	4,068	$751,981
21	3201 Roswell Rd, NE	1984	0.35	8,700	$1,597,764
22*	817 Hollywood Rd, NE	1938	0.29	1,653	$356,222
23	1545 Howell Mill Rd, NW	1948	0.41	5,265	$1,046,833
24	3300 N Inner Loop Cir (Airport)	2009	n/a	24,700	$7,278,502
25	2349 Benjamin E. Mays Dr, SW	1948	0.71	5,549	$1,130,223
26	2970 Howell Mill Rd, NW	1954	0.69	4,674	$1,135,603
27	4260 Northside Dr, SW	1953	0.41	3,862	$870,509
28*	1925 Hollywood Rd, NW	1953	2.00	12,225	$3,432,330
29	2167 Monroe Dr, NE	1956	0.72	6,845	$1,114,574
30	10 Cleveland Ave, SW	1956	1.33	4,048	$859,464
31	2406 Fairburn Rd, SW	1958	1.50	4,703	$1,037,514
32	8500 N Terminal Rd (Airport)	1985	n/a	22,161	$8,192,907
34	3631 Southside Industrial Park	1989	1.23	8,528	$1,501,434
35	2150 Central Cargo Cir (Airport)	1975	n/a	15,064	$4,778,389
36	4121 Cascade Rd, SW	VAC	2.50	n/a	n/a
38	2911 Donald Lee Hollowell	1972	1.00	8,028	$1,337,388
39	4697 Wieuca Rd, NW	1975	1.38	19,648	$3,387,074
40	4600 ASR Rd (Airport)	1975	n/a	20,603	$6,151,563
Total			32.41	367,034	$99,738,428
Total, Excluding HQ and Airport Stations			31.34	240,271	$53,879,067

* values shown represent the portion of shared fire/police facilities attributable to fire based on square footage occupied (estimated 1,000 square feet are occupied by each police mini precinct)
Source: Atlanta Fire Rescue, December 5, 2016, and City insured value listings provided on January 25, 2017, adjusted for the change in the *Engineering News-Record* Construction Cost Index from January 2017 to January 2020 (8.01%).

The City's most recent fire station land acquisitions were 15 years ago. Nevertheless, they are the only available basis for estimating the replacement value of fire facility sites. In 2005, the City of Atlanta acquired two sites adjacent to existing facilities to allow for expansion. Using the lower of the two costs per acre, the replacement value of the City's existing fire facility land is about $15 million, as shown in Table 41 on the following page.

Table 41. Fire Rescue Facility Land Cost

Address	Year	Cost	Acres	Cost/Acre
431 Flat Shoals Ave, SE	2005	$513,000	0.43	$1,193,023
1929 & 1937 Hollywood Rd	2005	$1,220,000	2.58	$472,868
Average Cost per Acre		$1,733,000	3.01	$575,748
Cost per Acre of Largest Parcel				$472,868
x Fire Station and HQ Land (Acres)				32.41
Fire Facility Land Replacement Cost				$15,325,659

Source: Land costs from Atlanta Fire Rescue, September 10, 2009; fire facility land from Table 40.

This study includes fire rescue apparatus and equipment that have a useful life of 10 or more years as allowed under the Development Impact Fee Act. The replacement cost of fire rescue equipment is based on the original cost from the City's fixed asset listings. As shown in Table 42, the replacement cost of existing fire rescue apparatus is about $38 million.

Table 42. Fire Rescue Department Equipment

Apparatus/Equipment Type	Cost
Fire Engines/Pumpers	$23,323,885
Ladder Trucks	$9,683,988
Specialized Equipment (HazMat, Extrication, Air)	$2,682,607
Heavy Duty Trucks	$325,278
Trailers	$1,135,806
Thermal Imaging Cameras	$148,248
Mobile Radios	$178,365
Other Equipment with 10-Year Life	$517,425
Total	$37,995,602

Source: Original costs from City of Atlanta fixed asset records provided by Atlanta Finance Department, November 5, 2016, adjusted for cost inflation by the change in the Engineering News-Record Construction Cost Index from January 2017 to January 2020 (8.01%).

Level of Service

The current fire level of service (LOS) is expressed in terms of fire station building square feet per 1,000 functional population. The problem with this metric is that only the construction of additional fire stations will result in an improved LOS. An alternative is "equivalent square feet per 1,000 functional population." Under this approach, the total replacement value of land, vehicles and other capital equipment are divided by the average fire station construction cost per square foot to determine equivalent square feet of eligible non-station capital assets. The equivalent square feet of non-station assets are added to the number of physical square feet of the City's stations to determine total equivalent square feet. With this LOS measure, non-building improvements that add service capacity are quantified and reflected in the updated LOS.

The first step in determining the LOS related to non-station assets is to divide the total value of those assets by the replacement cost per square foot of fire station facilities. The average cost of a fire station based on the City's insured values is $224 per square foot, as shown in Table 43.

Table 43. Fire Station Cost per Square Foot

Fire Station Replacement Value	$53,879,067
÷ Fire Station Square Feet	240,271
Fire Station Cost per Square Foot	$224

Source: Value and square feet from Table 40.

Dividing the replacement cost of the fire share of the public safety building, land, and apparatus and equipment by the cost per square foot indicates that non-station facilities are equivalent to 324,907 fire station square feet, as shown in Table 44.

Table 44. Fire Rescue Non-Station Equivalent Square Feet

Fire Headquarters Building Value	$19,458,000
Land Cost	$15,325,659
Fire Apparatus/Equipment	$37,995,602
Total Non-Fire Station Replacement Value	$72,779,261
÷ Fire Station Cost per Square Foot	$224
Equivalent Fire Station Square Feet, Other Costs	324,907

Source: Fire HQ building value from Table 40; land value from Table 41; equipment value from Table 42; cost per square foot from Table 43.

The fire fee in this update is based on the existing fire level of service. As shown in Table 45, the fire level of service is developed based on the total square feet of the existing fire stations and the fire station equivalent square feet associated with non-station assets. The City of Atlanta currently has 565,178 fire station equivalent square feet. Based on the existing city-wide functional population, the fire station equivalent level of service is 0.705 square feet per functional population. It is recommended that the City of Atlanta adopt this LOS standard for the updated fire impact fees in order to maintain the city-wide fire rescue level of service.

Table 45. Fire Rescue Level of Service

Fire Station Building Square Feet	240,271
Equivalent Fire Station Square Feet, Other Costs	324,907
Total Equivalent Fire Station Building Square Feet	565,178
÷ Existing City-Wide Functional Population	801,952
Equivalent Fire Station Square Feet per Functional Population	0.705

Source: Non-station equivalent square feet from Table 44; fire station square feet from Table 40; 2017 functional population from Table 83, Appendix C.

Future fire rescue improvement needs are determined by multiplying the projected city-wide functional population growth over the next twenty years by the current and future level of service. As shown in Table 46, in order to maintain the existing level of service the City would have to construct the equivalent of 89,465 square feet of new fire station space over the next 20 years.

Table 46. Fire Rescue Capital Needs, 2020-2040

New Functional Population	126,901
x Equivalent Fire Station Sq. Ft./Func. Pop.	0.705
Equivalent Fire Station Sq. Ft. Needed	89,465

Source: New functional population from Table 83; equivalent fire station square feet per functional population from Table 45.

Cost per Service Unit

The cost per service unit is based on the existing level of service, which includes stations, fire apparatus and the Fire Rescue Department's share of the public safety building. As shown in Table 47, maintaining the existing fire level of service for new development will cost $158 per new service unit.

Table 47. Fire Rescue Cost per Service Unit

Fire Station Cost per Square Foot	$224
x Equivalent Square Feet per Functional Population	0.705
Cost per Functional Population	$158

Source: Fire station cost per square foot from Table 44; equivalent square feet per functional population from Table 45.

Net Cost per Service Unit

The City has traditionally funded fire facilities through a mix of general fund revenue, long-term and short-term debt, capital leases and grant funds. The City does not currently have any outstanding debt related to existing fire facilities and equipment. Additional offsets are not necessary for grants, since grant funds are limited to available Federal or State funding, such as Community Development Block Grants, and the grant funding is not dedicated for growth-related improvements. No revenue credits are warranted, and the net cost per service unit is the same as the cost per service unit identified in the previous table.

Net Cost Schedule

The maximum fire impact fees that can be adopted by the City based on this study are derived by multiplying the functional population estimates for each land use by the net cost per functional population. The potential fire impact fee schedule (with optional flat rate and variable fees by unit size for single-family units) is shown in Table 48.

Table 48. Updated Fire Rescue Impact Fee Schedule

Land Use	Unit	Functional Pop./Unit	Net Cost/ Func. Pop.	Net Cost/ Unit
Single-Family Det. (avg.) - option 1	Dwelling	1.782	$158	$282
Single-Family Det. (tiered) - option 2:				
Less than 1,500 sq. ft.	Dwelling	1.648	$158	$260
1,500 to 2,499 sq. ft.	Dwelling	1.776	$158	$281
2,500 sq. ft. or more	Dwelling	1.970	$158	$311
Multi-Family, Low-Rise (1-2 stories)	Dwelling	1.206	$158	$191
Multi-Family, Mid-Rise (3-10 stories)	Dwelling	1.146	$158	$181
Multi-Family, High-Rise (>10 stories)	Dwelling	0.951	$158	$150
Hotel/Motel	Room	0.785	$158	$124
Shopping Center/Commercial	1,000 sq. ft.	1.755	$158	$277
Office	1,000 sq. ft.	0.875	$158	$138
Public/Institutional	1,000 sq. ft.	0.539	$158	$85
Industrial	1,000 sq. ft.	0.340	$158	$54
Warehouse	1,000 sq. ft.	0.189	$158	$30
Mini-Warehouse	1,000 sq. ft.	0.078	$158	$12

Source: Functional population per unit from Table 82, Appendix C; net cost per functional population is cost per functional population from Table 47.

The fire rescue impact fees calculated in this report are compared with the current fees in Table 49. For most land uses, the potential fee would roughly double from the current fee. The rate of increase should not be unexpected, given that the City's impact fees have not been updated since they were implemented in 1993 – over a quarter-century ago. The variation in the potential increase by land use type reflects the change in functional population multipliers since the last study was conducted, as well as the use of more general land use categories.

Table 49. Change in Fire Rescue Impact Fees

Land Use Type	Unit	Current Fee	Potential Fee	Change	Percent Change
Single-Family Det. (avg.) - option 1	Dwelling	$114	$282	$168	147%
Single-Family Det. (tiered) - option 2:					
Less than 1,500 sq. ft.	Dwelling	$114	$260	$146	128%
1,500 to 2,499 sq. ft.	Dwelling	$114	$281	$167	146%
2,500 sq. ft. or more	Dwelling	$114	$311	$197	173%
Multi-Family, Low-Rise (1-2 stories)	Dwelling	$79	$191	$112	142%
Multi-Family, Mid-Rise (3-10 stories)	Dwelling	$79	$181	$102	129%
Multi-Family, High-Rise (>10 stories)	Dwelling	$79	$150	$71	90%
Hotel/Motel	Room	$51	$124	$73	143%
Shopping Ctr/Commercial					
Less than 100,000 sq. ft.	1,000 sq. ft.	$199	$277	$78	39%
100,000-199,999 sq. ft.	1,000 sq. ft.	$163	$277	$114	70%
200,000-299,999 sq. ft.	1,000 sq. ft.	$146	$277	$131	90%
300,000-399,999 sq. ft.	1,000 sq. ft.	$136	$277	$141	104%
400,000-499,999 sq. ft.	1,000 sq. ft.	$129	$277	$148	115%
500,000-599,999 sq. ft.	1,000 sq. ft.	$124	$277	$153	123%
600,000-999,999 sq. ft.	1,000 sq. ft.	$112	$277	$165	147%
1,000,000 sq. ft. +	1,000 sq. ft.	$104	$277	$173	166%
Office					
Less than 50,000 sq. ft.	1,000 sq. ft.	$74	$138	$64	86%
50,000-99,999 sq. ft.	1,000 sq. ft.	$71	$138	$67	94%
100,000-199,999 sq. ft.	1,000 sq. ft.	$67	$138	$71	106%
200,000-499,999 sq. ft.	1,000 sq. ft.	$64	$138	$74	116%
500,000 sq. ft. +	1,000 sq. ft.	$62	$138	$76	123%
Public/Institutional					
Elementary School	1,000 sq. ft.	$122	$85	-$37	-30%
High School	1,000 sq. ft.	$124	$85	-$39	-31%
Church	1,000 sq. ft.	$53	$85	$32	60%
Hospital	1,000 sq. ft.	$133	$85	-$48	-36%
Nursing Home	1,000 sq. ft.	$97	$85	-$12	-12%
Manufacturing/Industrial	1,000 sq. ft.	$47	$54	$7	15%
Warehouse	1,000 sq. ft.	$26	$30	$4	15%
Mini-Warehouse	1,000 sq. ft.	$26	$12	-$14	-54%

Source: Current fee from City of Atlanta; potential fee from Table 48.

POLICE

The Atlanta Police Department provides uniformed law enforcement patrol, investigations, communications and 911 communications. Law enforcement services to City residents, businesses and visitors are supported by central facilities, six patrol precincts, training, mini-precincts, airport and other facilities. Each precinct station serves as a base for the City's police patrol zones. The City's 911 calls are handled by the Police Department through the 911 Communications Center. As with the other impact fees, the current police fee was implemented in 1993. This chapter calculates the potential police impact fees that could be charged based on current data to maintain the existing level of service.

Service Area

Like the fire impact fee, the police impact fee is structured as city-wide service area. This is appropriate, since public safety services are provided on a system-wide basis. Police services are provided by officers on patrol, regardless of the location of the police headquarters or police substations. Consequently, no change to the police impact fee service area is recommended in this update.

Methodology

The methodology used for the current police impact fees is a standards-based approach, with an adopted level of service (LOS) of 660 square feet per 1,000 functional population. At the time of the 1993 study, the City was planning to use CDBG funds to construct three planned precinct headquarters, and had no concrete plans for any other police capital improvements. Consequently, the police fees were designed to recoup existing excess capacity. The adopted LOS was the projected LOS for 2010, based on existing station square footage and growth projections. Consistent with the recoupment approach, the value of equipment was based on original, depreciated costs rather than replacement costs.

Since the fees were adopted, the City has built a new police headquarters and purchased a new radio system. While these new facilities likely have excess capacity to serve future development, they were funded with debt and have not been fully paid for. While the updated police fees could be structured as recoupment fees, this approach is not necessary because impact fee funds could be used to retire outstanding debt on facilities with excess capacity to accommodate growth. This update bases the fees, in part, on a future LOS for central facilities that takes into consideration excess capacity in existing facilities that have been funded with debt and the existing LOS for precinct stations.

Service Units

As with fire, the police fees are based on the functional population approach. The functional population multipliers for the various land use types, total existing and projected city-wide functional population, and a detailed discussion of the functional population methodology are presented in Appendix C.

Capital Costs

The Police Department's patrol functions operate from six zone precincts and several mini-precincts. The patrol function is supported by central facilities (police headquarters and annex) and ancillary facilities. The existing level of service is based on City-owned facilities. Leased facilities do not represent a capital investment by the City, and are therefore excluded from the impact fee calculations. An inventory of the existing City-owned police facilities is shown in Table 50. Because there have been no recent police land acquisitions, land values are based on the cost per acre for fire station sites. Building values are based on the City's current insured values.

Table 50. Police Building Inventory

Building/Usage	Address	Acres	Land Value	Building Sq. Ft.	Building Insured Val.
Public Safety Building*	226 Peachtree Street SW	4.27	$2,019,147	176,940	$58,910,340
Public Safety Annex	3493 Hollowell Pkwy NW	7.10	$3,357,364	184,765	$33,290,303
Police Academy	180 Southside Pkwy	n/a	n/a	58,036	$11,250,343
Subtotal, Central Facilities		11.37	$5,376,511	419,741	$103,450,986
Zone 1 Precinct	2315 Hollowell Pkwy NW	0.75	$354,651	10,578	$1,409,038
Zone 2 Mini Precinct/Fire Station 22*	817 Hollywood Rd NW	0.17	$80,388	1,000	$215,500
Zone 3 Precinct	880 Cherokee Ave SE	n/a	n/a	4,737	$615,973
Zone 3 Mini-Precinct/Birdine Nhood Ctr*	215 Lakewood Way	0.57	$269,535	8,600	$1,760,471
Zone 4 Precinct	1125 Cascade Circle SW	n/a	n/a	4,270	$848,359
Zone 6 Precinct	2025 Hosea Williams Dr	0.33	$156,047	9,000	$1,627,762
Mini Precinct/Fire Station 28*	1925 Hollywood Rd NW	0.16	$75,659	1,000	$280,076
Subtotal, Precincts		1.98	$936,280	39,185	$6,757,179
Detective Unit/Adamsville Rec Ctr*	3201 MLK, Jr. Drive SW	0.14	$66,202	2,800	$285,746
Training Facility/Public Works*	1500 Key Road	n/a	n/a	14,122	$1,081,867
Subtotal, Ancillary Facilities		0.14	$66,202	16,922	$1,367,613
Total, City-Owned Police Facilities		13.49	$6,378,993	475,848	$111,575,778

* values shown represent the portion of shared facilities attributable to police based on square footage occupied by police
Source: Facilities and acres from Atlanta Police Department, December 5, 2016; land value based on acres and cost per acre from Table 41; building square feet and insured values from Atlanta Risk Management, January 27, 2017, adjusted by the change in the *Engineering News-Record* Construction Cost Index from January 2017 to January 2020 (8.01%).

In addition to buildings, the City also owns major equipment used to support police functions, including the radio system and other equipment with a useful life of at least 10 years, as shown in Table 51.

Table 51. Police Equipment Cost

Equipment Type	Cost
Helicoptors	$3,236,338
Heavy Vehicles	$2,047,702
Mobile Radios	$389,980
Other Equipment with 10-Year Life	$1,943,371
Other Vehicles and Equipment	$7,617,391
Public Safety Radio System	$45,302,444
Total Equipment	$52,919,835

Source: Radio system value based on insured value from Atlanta Risk Management, January 27, 2017; other equipment based on original cost from City fixed asset records, November 16, 2016; all costs adjusted up by the change in the *Engineering News-Record* Construction Cost Index from January 2017 to January 2020 (8.01%).

Level of Service

The current police level of service is expressed in terms of building square feet per 1,000 functional population. The level of service (LOS) used in the 1993 study was based on the projected LOS for 2010, because it was determined at the time of the study that police capital facilities were already in place to serve projected community needs to the year 2010. As a result, the prior study used a LOS of 660 square feet per 1,000 functional population, even though the LOS in 1992 was 787 square feet per 1,000 functional population.

This update continues to use building square feet in the LOS measure. However, this update utilizes equivalent square footage rather than physical square footage to take into account the cost of land and equipment. The value of these components is converted into equivalent square feet by dividing the replacement value of the component by the average building cost, which is $234 per square foot, as shown in Table 52.

Table 52. Police Building Cost per Square Foot

Police Building Replacement Value	$111,575,778
÷ Police Building Square Feet	475,848
Police Building Cost per Square Foot	$234

Source: Total value and square feet from Table 50.

Separate levels of service analyses are conducted for central facilities and precinct/ancillary facilities. Central facilities include the Police Department headquarters in the Public Safety Building, the Public Safety Annex, and the radio system. The police headquarters occupies four floors of the City's new five-story Public Safety facility in downtown Atlanta. These central facilities have all recently been expanded or improved, and have capacity to serve a significant amount of future development. Consequently, the level of service for central facilities is based on 2040 functional population. As shown in Table 53, the central facility level of service is 0.648 equivalent square feet per functional population.

Table 53. Police Central Facility Level of Service

Central Facility Building Replacement Value	$103,450,986
Central Facility Land Replacement Value	$5,376,511
Radio System Replacement Value	$45,302,444
Total Central Facility Replacement Value	$154,129,941
÷ Building Cost per Square Foot	$234
Central Facility Equivalent Square Feet	658,675
÷ City-Wide Functional Population, 2040	1,016,697
Central Facility Equivalent Sq. Ft. per Functional Population	0.648

Source: Replacement values from Table 50 for buildings and land and Table 51 for radio system; building cost per square foot from Table 52; 2040 city-wide functional population from Table 83.

In contrast, the City has identified the need to construct additional precinct stations in the coming decades to achieve industry standards and optimize operational efficiencies, and will also need to expand ancillary facilities and equipment as the city grows. For this reason, the level of service for non-central facilities is based on 2020 functional population. As shown in Table 54, the non-central facility level of service is 0.089 equivalent square feet per functional population.

Table 54. Police Non-Central Facility Level of Service

Precinct Building and Land Replacement Value	$7,693,459
Ancillary Facility Building Replacement Value	$1,433,815
Support Vehicles and Equipment Replacement Value	$7,617,391
Total Non-Central Facility Replacement Value	$16,744,665
÷ Building Cost per Square Foot	$234
Non-Central Facility Equivalent Square Feet	71,558
÷ City-Wide Functional Population, 2020	801,952
Non-Central Facility Equivalent Sq. Ft. per Functional Population	0.089

Source: Replacement values from Table 50 for buildings and land and Table 51 for support vehicles and equipment; building cost per square foot from Table 52; 2020 city-wide functional population from Table 83.

The recommended police level of service is the sum of the current LOS for precincts and ancillary facilities and equipment, and the future LOS for central facilities. This is 0.737 equivalent sq. ft. per functional population, as shown in Table 55.

Table 55. Recommended Police Level of Service

Central Facility Equivalent Sq. Ft. per Functional Population	0.648
Non-Central Facility Equivalent Sq. Ft. per Functional Population	0.089
Total Equivalent Precinct Sq. Ft. per Functional Population	0.737

Source: Central and non-central facility equivalent square feet per functional population from Table 53 and Table 54.

Future fire rescue improvement needs are determined by multiplying the projected city-wide functional population growth over the next twenty years by the current and future level of service. As shown in Table 56, in order to maintain the recommended level of service the City would have to construct the equivalent of 93,526 square feet of police facilities over the next 20 years.

Table 56. Police Capital Needs, 2020-2040

New Functional Population	126,901
x Equivalent Sq. Ft./Functional Population	0.737
Equivalent Police Building Sq. Ft. Needed	93,526

Source: New functional population from Table 83; equivalent square feet per functional population from Table 57.

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Cost per Service Unit

The police cost per service unit is based on the recommended level of service. As shown in Table 57, multiplying the combined level of service (equivalent square feet per functional population) by the cost per square foot yields the cost per service unit of $172 per functional population.

Table 57. Police Cost per Service Unit

Total Equivalent Precinct Building Sq. Ft. per Functional Populatio	0.737
x Building Cost per Square Foot	$234
Cost per Functional Population	$172

Source: Equivalent square feet per functional population from Table 53 and Table 54; building cost per square foot from Table 52.

Net Cost per Service Unit

The City has traditionally funded police facilities through a mix of general fund revenue, long-term and short-term debt, capital leases and grant funds. More recently, the City has funded the construction and acquisition of police facilities through the Atlanta Public Safety Authority, which issues bonds that are repaid by the City through lease arrangements. Additional offsets are not necessary for grants, since grant funds are limited to available Federal or State funding, such as Community Development Block Grants, and the grant funding is not dedicated for growth-related improvements.

A summary of the City's outstanding debt is presented in Appendix E. Based on the analysis of debt-funded expenditures, the amount of debt attributed to Police Department projects was determined. The City has debt related to the new public safety facility, public safety radio upgrade and public safety annex. All of these are classified as central police facilities. The level of service for this component of the fee is being based on a future level of service that estimates existing central facilities have sufficient capacity to serve new anticipated development for the next 20 years. This excess capacity is attributable to new development, and police impact fees can be used to retire this debt. Only debt in excess of this amount is attributable to existing development. The amount of debt attributable to existing development is about $10 million, as shown in Table 58

Table 58. Police Debt Analysis

City-Wide Functional Population, 2020	801,952
÷ City-Wide Functional Population, 2040	1,016,697
Share of Central Facility Value Included in Fee	78.88%
Central Facility Replacement Value	$154,129,941
x Share of Existing Value Excluded from Fee	21.12%
Existing Value of Excess Capacity	$32,552,244
Total Outstanding Police Debt	$42,601,886
– Existing Value of Excess Capacity	-$32,552,244
Debt Attributable to Existing Development	$10,049,642

Source: Functional population from Table 83, Appendix C; central facility value from Table 53; outstanding debt from Table 85, Appendix E; 2017 functional population from Table 83, Appendix C.

A straight-forward method that ensures that new development is not required to pay for existing facilities, through funds used for debt retirement, as well as new facilities through impact fees, is to calculate the credit by dividing the outstanding debt by existing city-wide functional population. This puts new development on the same footing as existing development in terms of the share of capital costs funded through debt. As shown in Table 58, the debt credit for the outstanding police-related debt is $13 per service unit. The police net cost per service unit is derived by reducing the cost per service unit by the debt credit. As shown in Table 59, the net cost is $159 per functional population.

Table 59. Police Net Cost per Service Unit

Debt Attibutable to Existing Development	$10,049,642
÷ City-Wide Functional Population	801,952
Debt Credit per Functional Population	$13
Cost per Functional Population	$172
– Debt Credit per Functional Population	-$13
Net Cost per Functional Population	$159

Source: Debt attributable to existing development from Table 58; existing functional population from Table 83, Appendix C; cost per functional population from Table 57.

Net Cost Schedule

The maximum police impact fees that can be adopted by the City based on this study are derived by multiplying the functional population estimates for each land use by the net cost per functional population. The potential impact fee schedule is shown in Table 60.

Table 60. Updated Police Impact Fee Schedule

Land Use	Unit	Functional Pop./Unit	Net Cost/ Func. Pop.	Net Cost/ Unit
Single-Family Det. (avg.) - option 1	Dwelling	1.782	$159	$283
Single-Family Det. (tiered) - option 2:				
Less than 1,500 sq. ft.	Dwelling	1.648	$159	$262
1,500 to 2,499 sq. ft.	Dwelling	1.776	$159	$282
2,500 sq. ft. or more	Dwelling	1.970	$159	$313
Multi-Family, Low-Rise (1-2 stories)	Dwelling	1.206	$159	$192
Multi-Family, Mid-Rise (3-10 stories)	Dwelling	1.146	$159	$182
Multi-Family, High-Rise (>10 stories)	Dwelling	0.951	$159	$151
Hotel/Motel	Room	0.785	$159	$125
Shopping Center/Commercial	1,000 sq. ft.	1.755	$159	$279
Office	1,000 sq. ft.	0.875	$159	$139
Public/Institutional	1,000 sq. ft.	0.539	$159	$86
Industrial	1,000 sq. ft.	0.340	$159	$54
Warehouse	1,000 sq. ft.	0.189	$159	$30
Mini-Warehouse	1,000 sq. ft.	0.078	$159	$12

Source: Functional population per unit from Table 82, Appendix C; net cost per functional population from Table 59.

The police impact fees calculated in this report are compared with the current fees in Table 61. For residential, commercial and office uses, the potential fee is generally more than double the current fee, although fees for public/institutional and industrial uses would increase more modestly. The rate of increase should not be unexpected, given that the City's impact fees have not been updated since they were implemented in 1993 – over a quarter-century ago. The variation in the potential increase by land use type reflects the change in functional population multipliers since the last study was conducted, as well as the use of more general land use categories.

Table 61. Change in Police Impact Fees

Land Use Type	Unit	Current Fee	Potential Fee	Change	Percent Change
Single-Family Det. (avg.) - option 1	Dwelling	$33	$283	$250	758%
Single-Family Det. (tiered) - option 2:					
Less than 1,500 sq. ft.	Dwelling	$33	$262	$229	694%
1,500 to 2,499 sq. ft.	Dwelling	$33	$282	$249	755%
2,500 sq. ft. or more	Dwelling	$33	$313	$280	848%
Multi-Family, Low-Rise (1-2 stories)	Dwelling	$23	$192	$169	735%
Multi-Family, Mid-Rise (3-10 stories)	Dwelling	$23	$182	$159	691%
Multi-Family, High-Rise (>10 stories)	Dwelling	$23	$151	$128	557%
Hotel/Motel	Room	$15	$125	$110	733%
Shopping Ctr/Commercial					
Less than 100,000 sq. ft.	1,000 sq. ft.	$57	$279	$222	389%
100,000-199,999 sq. ft.	1,000 sq. ft.	$47	$279	$232	494%
200,000-299,999 sq. ft.	1,000 sq. ft.	$42	$279	$237	564%
300,000-399,999 sq. ft.	1,000 sq. ft.	$39	$279	$240	615%
400,000-499,999 sq. ft.	1,000 sq. ft.	$37	$279	$242	654%
500,000-599,999 sq. ft.	1,000 sq. ft.	$35	$279	$244	697%
600,000-999,999 sq. ft.	1,000 sq. ft.	$32	$279	$247	772%
1,000,000 sq. ft. +	1,000 sq. ft.	$30	$279	$249	830%
Office					
Less than 50,000 sq. ft.	1,000 sq. ft.	$21	$139	$118	562%
50,000-99,999 sq. ft.	1,000 sq. ft.	$20	$139	$119	595%
100,000-199,999 sq. ft.	1,000 sq. ft.	$19	$139	$120	632%
200,000-499,999 sq. ft.	1,000 sq. ft.	$18	$139	$121	672%
500,000 sq. ft. +	1,000 sq. ft.	$18	$139	$121	672%
Public/Institutional					
Elementary School	1,000 sq. ft.	$35	$86	$51	146%
High School	1,000 sq. ft.	$36	$86	$50	139%
Church	1,000 sq. ft.	$15	$86	$71	473%
Hospital	1,000 sq. ft.	$38	$86	$48	126%
Nursing Home	1,000 sq. ft.	$28	$86	$58	207%
Manufacturing/Industrial	1,000 sq. ft.	$14	$54	$40	286%
Warehouse	1,000 sq. ft.	$8	$30	$22	275%
Mini-Warehouse	1,000 sq. ft.	$8	$12	$4	50%

Source: Current fee from Table 1; potential fee from Table 60.

CURRENT SYSTEM EVALUATION

This chapter of the report provides a description and analysis of the City's current impact fee system, and develops recommendations for improvement. It starts an overview of the legal framework that governs impact fees nationally and within Georgia. Subsequent sections address the fee calculation methodology, land use categories, exemptions and administrative procedures. Facility-specific changes are discussed in more detail in subsequent chapters for each facility type.

Impact fees are charges assessed on new development to cover the costs of capital improvements needed to accommodate growth. Impact fees provide a mechanism to fund public infrastructure necessary to serve new development.

The City of Atlanta assesses impact fees on new development to help pay for the expanded capital facilities that will be needed to serve the new residents and businesses that will occupy those developments. The City assesses impact fees for transportation, parks, police and fire facilities. The fees were originally adopted in March 1993, and the fee amounts have not been changed since that time.

Legal Framework

The *Georgia Development Impact Fee Act*, Chapter 36-71, Georgia Code Annotated, was passed by the legislature in 1990. An important provision of the *Act* was that all developer exactions for "system improvements" must comply with the requirements of the Act. System improvements are defined as "public facilities" that provide service to the community at large, as opposed to "project improvements," which are improvements that are designed primarily to serve a particular development project. Public facilities are defined to include water, wastewater, roads, stormwater, parks, public safety and library facilities. To be eligible to adopt impact fees, a local government must have adopted a Capital Improvements Element that sets out a schedule of capital improvements needed over the planning horizon of the comprehensive plan, including anticipated funding sources.

The *Development Impact Fee Act* provides some general guidance on how impact fees are to be calculated. The *Act* mandates that the fees:

- "shall not exceed a proportionate share of the cost of system improvements;"
- "shall be calculated and imposed on the basis of service areas;"[5]
- "shall be calculated on the basis of levels of service … that are applicable to existing development as well as the new growth and development;" and

[5] "Service area" is defined in the Act as "a geographic area defined by a municipality, county, or intergovernmental agreement in which a defined set of public facilities provide service to development within the area. Service areas shall be designated on the basis of sound planning or engineering principles or both" (Chapter 36-71-2(13), Georgia Code Annotated)

- "shall be calculated on a basis that is net of credits for the present value of revenues that will be generated by new growth and development based on historical funding patterns and that are anticipated to be available to pay for system improvements, including taxes, assessments, user fees, and intergovernmental transfers."

Determining the "proportionate share" of the cost of planned improvements that is attributable to growth is at the heart of any impact fee methodology. The third bulleted phrase provides the most guidance, and captures one of the most fundamental principles of impact calculation, which is that impact fees should not charge new development for a higher level of service than is provided existing development. While impact fees can be based on a higher level of service than is currently being provided to existing development, a source of funding other than impact fees must be identified and committed to remedy the deficiency.

The fourth bulleted phrase reflects another fundamental impact fee principle, which is that new development should not have to pay more than its proportionate share when multiple sources of payment are considered. As noted above, if impact fees are based on a higher-than-existing level of service, the fees should be reduced by a revenue credit that accounts for the contribution of new development toward remedying the existing deficiencies. A similar situation arises when the existing level of service has not been fully paid for. Outstanding debt on existing facilities that are counted in the existing level of service will be retired, in part, by revenues generated from new development. Given that new development will pay impact fees to provide the existing level of service for itself, the fact that new development may also be paying for the facilities that provide that level of service for existing development could amount to paying for more than its proportionate share. Consequently, impact fees should be reduced to account for future payments that will retire outstanding debt on existing facilities.

In general, revenue credits are not necessarily required for other types of funding that have historically been used for, or that are committed to be used for growth-related, capacity-expanding improvements. While new development may contribute toward such funding, so does existing development, and both existing and new development benefit from the higher level of service that the additional funding makes possible. To insist that historical capacity funding patterns must be continued after the adoption of impact fees, and that new development is entitled to an offset for its contribution to those funding sources, would be to argue that local governments cannot require "growth to pay for growth" unless they have always done so. As long as the fees are based on new development paying to maintain existing levels of service that have been paid for in full by existing development, and additional funding can reasonably be used to raise the level of service for existing and new development alike, no additional revenue offsets are warranted.

The *Act* imposes a number of important requirements for the imposition and collection of impact fees.

- The fees may not be collected earlier than the issuance of a building permit.
- The ordinance must include an impact fee schedule for each service area.
- Credit must be given for system improvements provided by the developer.

- The ordinance must provide an option for individual assessment of impact fees for a particular project, as well as a procedure for certification of the impact fee for a particular project for a period of 180 days.
- The fees can be used to recoup previous expenditures made to construct system improvements in anticipation of growth.
- Exemptions may be granted for economic development or affordable housing projects, provided the exemption is funded through a revenue source other than impact fees.
- The impact fees collected can only be spent for the category of system improvements for which the fees were collected and in the same service area.
- Prior to the adoption of an impact fee ordinance, a Development Impact Fee Advisory Committee, with at least 50% of the members representing the development, building or real estate industries, must be appointed to review the proposed ordinance.
- Impact fees must be refunded if they are not encumbered or spent within six years.

Several amendments to the state enabling act, some specifically targeting the City of Atlanta, were made in 2007 and became effective on July 1, 2007. The accounting requirements were amended to require the recording of the address of each property for which impact fees are paid, the amount of each category of fees and the data of payment. For each exemption granted, the record must include the address, the reason for the exemption, and the revenue source used to pay for the exemption.

The other amendments concern how the City of Atlanta spends its transportation impact fees. The expenditure of transportation impact fees by the City must take into consideration the "proximity of the proposed system improvements to developments within the service area which have generated development impact fees," and projects that have "the greatest effect on levels of service" on transportation facilities impacted by the developments that have paid the fees. The City is also required to submit the transportation portion of the annual impact fee report to the Development Impact Fee Advisory Committee, who may report any perceived inequities in the expenditure of transportation impact fees to the City Council.

The City's Development Impact Fee Ordinance (Sec. 19-001, et. seq.) contains the standards and procedures relating to the development impact fee program. Key provisions of the ordinance include the circumstances under which impact fees will be imposed; administration of impact fees; method for computation of fees; rules for the issuance of development credits and development agreements; and rules for issuance of impact fee waivers and exemptions.

Study Methodology

There are two basic methodologies used in impact fee analysis, which may be called "plan-based" and "standards-based." Both approaches to calculating impact fees need to comply the statutory requirement that they "shall be calculated on the basis of levels of service … that are applicable to existing development as well as the new growth and development." Impact fees cannot be based on a higher level of service (LOS) than is provided to existing development. New development and existing development share the same set of facilities, and the benefit from a higher LOS paid for with impact fees would benefit existing development as well

As its name implies, the plan-based methodology relies on a long-range master plan to establish the nexus between growth and improvement costs. In the simplest terms, the plan-based approach divides the cost of needed improvements over the planning horizon by the anticipated growth over that same time. It uses a LOS standard that is locationally-specific, such as "every road facility shall function at LOS D or better." In order to calculate a fee with this type of LOS standard, it is necessary to project where new development will occur in order to determine what improvements will be needed to accommodate growth. It must also evaluate both existing and horizon year levels of service, and exclude costs attributable to correction of existing deficiencies or excess capacity that will not be needed to serve growth within the planning horizon. Because the LOS standard in a plan-based approach focuses on individual facilities, there are generally some facilities that are not functioning at the desired level, and thus there are generally some existing deficiencies. Impact fees based on this methodology are only as defensible as the plan that underlies it. Ideally, the two would be developed in tandem to ensure that the plan fully supports the fee calculations. The City does not currently have master plans that could serve as the basis for an impact fee calculation.

The standards-based approach uses a simple, system-wide ratio of capacity to demand, such as "5 acres of park land per 1,000 residents." The level of service used for the impact fee calculation is typically the actual existing level of service, rather than a desired future LOS. Using a higher LOS would create an existing deficiency, which would require a reduction of the fee to account for deficiency costs paid for by future development, resulting in much the same fee. Sometimes, however, the fees, or a component of the fees, are calculated based on a lower LOS to acknowledge that there is excess capacity in the system to accommodate future growth. For example, the 1993 study assumed this was the case for parks, fire and police facilities in developing the recoupment fee structure. This study uses a lower LOS for police central facilities to acknowledge the excess capacity in the police share of the new Public Safety Building. In the update, this is not intended to recoup the cost of excess capacity, but to ensure that new development does not pay for a higher LOS than the City will be likely to need.

In its simplest terms, the standards-based approach divides the replacement cost of existing facilities by the existing development being served by those facilities. In essence, the cost to maintain the existing LOS is the existing investment in capital facilities per service unit currently using those facilities. In many cases, physical or quasi-physical LOS ratios are used, but the resulting fee is the same. For example, a park fee could be calculated by dividing the replacement cost of all existing park land and improvements by the existing population. Alternatively, total costs could be divided by acres to determine a cost per acre, then multiplied by acres per person to get the same cost per person.

The 1993 study and this update both use standards-based methodologies for all four impact fee types. In the absence of long-range master plans that are designed to support the calculation of impact fees, this is the only feasible option for the City.

Level of Service

The Georgia *Development Impact Fee Act* defines level of service (LOS) as "a measure of the relationship between service capacity and service demand for public facilities in terms of demand to capacity ratios, the comfort and convenience of use or service of public facilities, or both." The *Act* requires that the levels of service on which the impact fees are based be adopted in the local government's comprehensive plan. The Georgia Department of Community Affairs, which certifies local governments as in or out of compliance with the *Development Impact Fee Act*, has released guidelines suggesting that LOS measures "be expressed in quantifiable terms or in a manner sufficient to allow future evaluation of progress in meeting capital improvements goals."[6]

One of the most fundamental principles of impact fees, rooted in case law and norms of equity, is that impact fees should not charge new development for a higher level of service than is provided existing development. This principle is reflected in the *Georgia Development Impact Fee Act*, which requires that "impact fees shall be calculated on the basis of levels of service … that are applicable to existing development as well as the new growth and development." While impact fees can be based on a higher level of service than that existing at the time of the enactment or update of the fees, another funding source must be identified to remedy the existing deficiencies. In addition, impact fees must be reduced to account for any revenue that new development will generate that is used to remedy the existing deficiencies, in order to avoid double-charging. In order to avoid these complications, typical practice with standards-based impact fee methodologies is to base the fees on a LOS that is equal to or less than the existing LOS.

Recommendation: Replace the current level of service measures based on one-dimensional physical ratios with ones that take into account the full range of the City's investments in land, buildings, equipment and other improvements.

The issue of LOS is inextricably intertwined with impact fee methodology. In this update, the transportation LOS is expressed in terms of equivalent lane-miles per service unit, which takes into account transportation-related improvements beyond vehicular travel lanes. This approach recognizes that within an urban area, traditional improvements to expanding capacity are not as feasible as expanding capacity through other improvements, such as turn lanes, intersection improvements, signalization and bicycle/pedestrian paths. The equivalency approach is also used for the park LOS, which is expressed as equivalent acres per 1,000 functional population. The equivalent acres approach captures improvements to the parks and amenities such as recreation centers, pools and other recreation facilities. The police and fire fees are based on equivalency factors that take into account central facilities: the police LOS is expressed in terms of equivalent building square feet and the fire LOS is expressed in terms of equivalent fire station square feet. As mentioned above, the updated park, fire and police fee calculations are based on the existing LOS using the standards-based approach rather than the recoupment methodology used in the prior study.

[6] Georgia Department of Community Affairs, "How to Address Georgia's Impact Fee Requirements," updated April 2008

Service Areas

The *Development Impact Fee Act* defines "service area" as "a geographic area … in which a defined set of public facilities provide service to development within the area. Service areas shall be designated on the basis of sound planning or engineering principles or both." It further provides that "Development impact fees shall be calculated and imposed on the basis of service areas." Impact fee schedules must be developed that apply to each service area, and impact fees collected in a service area must be spent on improvements located within the same service area. This update divides the city into three service areas, using the same boundaries as the park service areas.

While the standards-based methodology is relatively straight-forward and based on clear legal principles, the resulting fees may seem counter-intuitive when the multiple service area dimension is added, and the area with the most growth has the lowest potential fees. That is the case in this update for both transportation and parks. This simply reflects the fact that the City has not been investing enough in transportation and park facilities on the northside to keep up with that area's growth. Impact fees can only be used to maintain the level of service (LOS) that is already being provided in a service area, because the benefit of improvements that raise the level of service do not accrue exclusively to new development. The other areas have higher levels of service, but less need for improvements, which is an indication that these areas have some excess capacity to accommodate future growth. To avoid the potential for collecting fees that are based on existing levels of service that the City will probably not need to sustain over the long term for the other two service areas, it is recommended that the fees for all three service areas be based on the existing LOS in the Northside service area.

Service Units

To develop a level of service standard, it is necessary to define a common unit of demand, known as a "service unit." This study maintains the use of peak hour trip rates for measuring transportation demand and functional population for parks, police and fire. The trip rates in this study are updated to reflect the most recent published data on peak hour trip generation rates published in the tenth edition of the Institute of Transportation Engineers' (ITE) *Trip Generation* manual. Also, as in prior updates, the trip rates are adjusted to reflect the proportion of trips that are primary trips, as opposed to pass-by and diverted-link trips. The average length of a trip for each land use is updated in this study to reflect the most current national and local data available.

The functional population multipliers are derived from average daily trip rates, household size and employment data. The functional population factors are updated based on the most recent average household size data from the U.S. Census for residential land uses and current trip generation rates and other data for nonresidential land uses.

Proposed Methodology Summary

The methodology used in this study is the "standards-based" approach, where the fee is calculated based on the existing level of service (LOS). The existing LOS is calculated for each service area as the ratio of a common measure of existing facilities to a common measure of existing development. The common measures of existing facilities are equivalent lane-miles for transportation, equivalent

park acres for parks, and equivalent building square feet for fire and police. The common measure of existing development is the "service unit." The service units are the "equivalent dwelling unit" (peak hour vehicle-miles of travel relative to a single-family detached unit) for transportation and "functional population" for parks, fire and police. For each facility type, there is a demand schedule that determines the number of service units represented by a unit of development for various land use types. The general impact fee formula is:

Impact Fee per Development Unit = Service Units per Development Unit x Net Cost per Service Unit
Net Cost per Service Unit = Cost per Service Unit – Credit per Service Unit
Cost per Service Unit = Equivalent Facility Units per Service Unit x Cost per Facility Unit

Land Use Categories

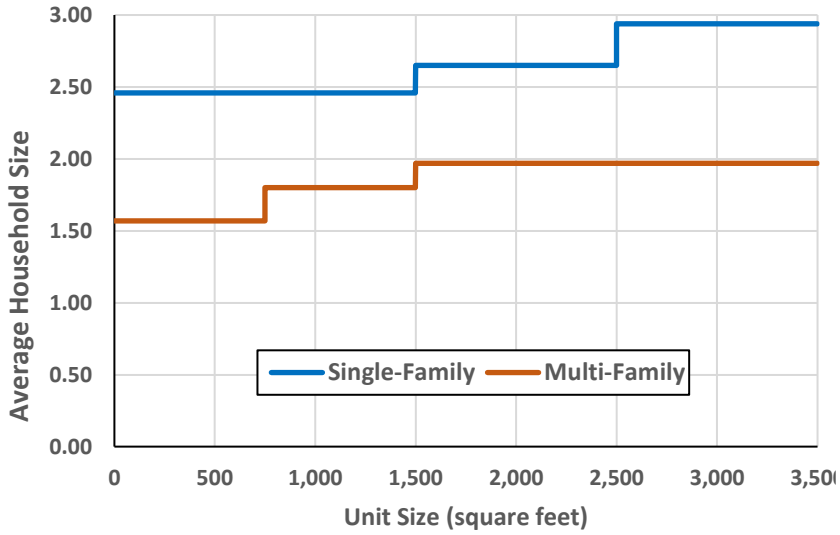
The City's current impact fee schedules have two residential categories (single-family detached and multi-family) and ten nonresidential categories (commercial, office, industry, warehousing, hotel/motel, elementary school, high school, church, hospital and nursing home). The commercial category is further broken down into eight size categories, ranging from less than 100,000 square feet to one million square feet or more, while the office category is broken down into five size categories. Counting the commercial and office size categories, Atlanta uses a total of 21 nonresidential land use categories.

Residential Categories

Currently, the City charges single-family detached and multi-family units based on a flat fee per dwelling unit. While this was standard impact fee practice for years, some communities today are switching to fees that vary by the size of the dwelling unit, whether measured in terms of bedrooms or square footage of living area. Charging residential fees based on unit size arguably provides a more accurate assessment of impacts, since the number of residents is a key indicator of the demand on public facilities, and unit size is related to the number of person in the dwelling unit. Varying the fees by dwelling size could also support the City's goal of encouraging affordable housing, since smaller units tend to be less expensive.

Indeed, national data supports the notion that larger units house more people. Figure 6 displays nation-wide data from the U.S. Department of Housing and Urban Development's 2013 *American Housing Survey* for single-family detached and multi-family units. However, the differentials between size categories are relatively modest.

Figure 6. Persons per Unit by Dwelling Unit Size, U.S., 2013



Source: U.S. Dept. of Housing and Urban Development, American Housing Survey 2013.

This report provides the option of assessing fees for single-family detached units by either a flat rate or by three size categories. The two previous update studies in 2010 and 2017 (which were not adopted) provided a similar option for multi-family housing. However, the current version of the ITE *Trip Generation Manual* no longer provides an average trip rate for multi-family. Instead, it has different trip rates for three height categories: low-rise (1-2 stories), mid-rise (3-10 stories), and high-rise (more than 10 stories). Taller residential buildings tend to have fewer persons per unit, making it difficult to disentangle the relative contributions of unit size and building height on trip generation. For these reasons it is recommended that multi-family transportation fees be based solely on building height.

The City could assess multi-family transportation fees by building height and park, fire and police fees by unit size. However, transportation fees are by far the largest fees, the fee schedule would be more complicated (it would have nine multi-family categories), the fee differentials would be small, and fee assessment more difficult. For these reasons multi-family fees that vary by unit size are not calculated in this update.

An issue that arises when residential fees are charged based on size is whether to charge residential additions that result in the size of the unit crossing a threshold. A variety of approaches are taken to this. Some communities exempt all residential additions to avoid the additional administrative effort. Others exempt additions under a certain size, such as under 500 square feet. Still others make no such exemptions.

In sum, while differential fees by single-family dwelling unit size might align the impact fees more closely with the City's affordable housing goals, the differentials between size categories in trip generation and average household size are relatively small. The resulting fee differentials would provide a relatively insignificant incentive for affordable housing, which should be weighed against the additional complexity in impact fee administration that would be entailed in such a change.

Nonresidential Categories

Currently, fees for commercial uses vary based on the size of the shopping center, with eight categories ranging from less than 100,000 square feet to one million square feet or more. Similarly, fees for office uses are based on the size of the building, with five categories ranging from less than 50,000 square feet to 500,000 square feet or more. The differential fees are based on national data from the Institute of Transportation Engineers (ITE), showing that as shopping centers and office buildings increase in size, the number of trips generated per 1,000 square feet declines. ITE also publishes data on the percentage of trips to shopping centers that are primary trips, as opposed to trips that make a stop while on a route to another destination (passby), or that make a short diversion while going to another destination (diverted-linked). However, there are no similar national data on passby and diverted-linked trips for office buildings, nor are there data on the lengths of trips to shopping centers or office buildings of various sizes.

Variable rates for shopping centers by size of the center was virtually universal in early transportation impact fee systems. One reason for this unanimity is that ITE did not publish average daily trip generation rates for all sizes of shopping centers prior to the 6th edition of the *Trip Generation* manual in 1997 (before that, average rates were given for centers of less than 570,000 square feet and larger centers). Now that average rates are available, more communities are moving away from charging fees based on the size of the shopping center.

Large, regional shopping centers tend to have a lower percentage of passby trips than smaller, more neighborhood-oriented centers, and this relationship is also likely to hold for small, neighborhood-oriented offices versus large corporate office buildings. In addition, large, regional shopping centers have a much larger market area than smaller centers, and thus attract trips from longer distances, and this factor undoubtedly also comes into play for office developments. Clearly, the lower trip generation rates of larger shopping centers and office buildings is partially and perhaps even completely offset by higher percentages of primary trips and longer trip lengths. Given this and the lack of data on all the factors required to calculate variable rates by shopping center or office building size, the consultant recommends collapsing the size categories and charging commercial and office uses based on a flat rate per 1,000 square feet.

Recommendation: Reduce the number of nonresidential land use categories in the fee schedules.

Besides commercial and office, the other major types of land uses are hotel/motel, industrial and public/institutional. The hotel/motel land use, assessed on a per room basis, is appropriate. The City's fee schedules currently distinguish between industrial and warehousing uses, and this distinction is appropriate. However, the City might want to add a category for mini-warehousing, which is a typical stand-alone use that tends to have significantly lower impacts than other warehousing uses. However, this is not the case for transportation fees that are based on peak hour trip generation, as the City's fees are. Consequently, only a single warehouse fee is calculated for transportation.

In terms of public/institutional uses, the City currently has five categories: elementary school, high school, church, hospital and nursing home. This is not an exhaustive list of such uses, and in any case a broad public/institutional category is recommended for non-transportation fees because the functional population approach is a more generalized approach that requires other inputs besides trip generation rates that are not readily available. While the 1993 study calculated functional population per development unit for each of these categories individually, this required a number of assumptions based on much less reliable data for the other inputs into the formula for specific types of public/institutional uses. This update uses a more generalized approach for parks, fire and police based on the most conservative estimate of impact for all the more specialized public/institutional uses. For transportation fees, including elementary and high schools raises the question of how to treat middle schools or schools that serve all grade levels. Because they tend to have similar transportation impacts, a combined elementary/secondary school category is recommended. Churches and nursing homes have relatively minor impacts on transportation facilities, whereas hospitals and other public/institutional uses such as colleges, libraries and government buildings tend to have larger impacts.

Based on these considerations, four categories are recommended for the public/institutional uses: hospital and other public/institutional uses, nursing homes, elementary/secondary schools, and churches. The distinction is useful for transportation fees because those fees are based exclusively on travel demand, and travel demand data are readily available.

The current land use categories are compared to the recommended categories in Figure 7. Definitions of the land use categories will be provided in the revised ordinance to assist in administering the new categories.

Figure 7. Current and Proposed Land Use Categories

Current Land Uses	Proposed Land Uses
Single-Family	Single-Family, or optional 3 size categories: Single-Family Detached, <1,500 sq. ft. Single-Family Detached, 1,500-2,499 sq. ft. Single-Family Detached, 2,500 sq. ft.+
Multi-Family	Multi-Family, Low-Rise (1-2 stories) Multi-Family, Mid-Rise (3-10 stories) Multi-Family, High-Rise (10+ stories)
Hotel/Motel	Hotel/Motel
Commercial, <100,000 sf Commercial, 100,000-199,999 sf Commercial, 200,000-299,999 sf Commercial, 300,000-399,999 sf Commercial, 400,000-499,999 sf Commercial, 500,000-599,999 sf Commercial, 600,000-999,999 sf Commercial, 1,000,000 sf+	Shopping Center/Commercial
Office, <50,000 sf Office, 50,000-99,999 sf Office, 100,000-199,999 sf Office, 200,000-499,999 sf Office, 500,000 sf+	Office
Elementary School High School	Elementary/High School
Church	Church
Nursing Home	Nursing Home
Hospital	Hospital & Other Public/Institutional
Industry	Industrial
Warehousing	Warehousing Mini-Warehousing

Exemptions

The *Development Impact Fee Act* specifically allows affordable housing and economic development projects to be wholly or partially exempted from paying impact fees, provided that the policy that supports the exemption is contained in the comprehensive plan and that the lost impact fee revenue is replaced with non-impact fee funds.

Current Exemption Policy

The City's *Development Impact Fee Ordinance* (Sec. 19-001, et. seq.) establishes criteria for exemptions, including the requirement that the City's chief financial officer must certify that funds are available to fund the exemptions. In June 2009, the City's CFO decided to halt the granting and funding of impact fee exemptions, and no impact fee exemptions have since been granted.

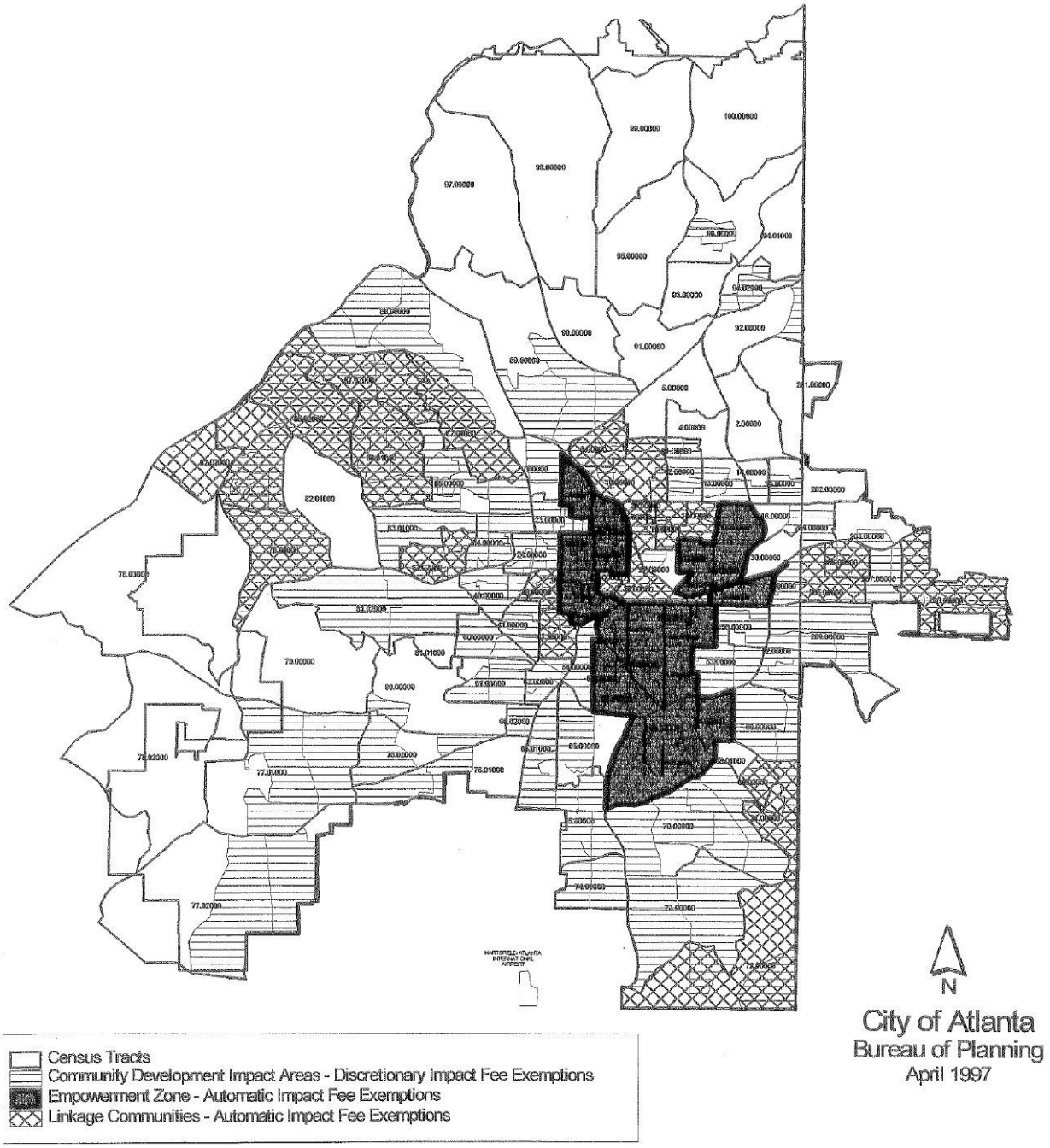
Still, the current ordinance provides that affordable housing projects may receive 50% or 100% exemption from impact fees, depending on the extent to which they are affordable to lower-income households. The only criterion is the pro-forma sales price or monthly rental rate. There are no income requirements for the buyers or renters of such housing, nor are there any requirements that the units continue to be affordable after construction.

Economic development projects are eligible for a 100% exemption. The City's ordinance defines economic development projects broadly. The most significant category includes any development located in the Atlanta Empowerment Zone or a Linkage Community. Although the City no longer uses these geographic designations, at the time exemptions were being granted these two types of automatic exemption areas covered roughly 25% of the area of the city (see Figure 8 on the next page).

A much less significant category includes the narrow types of exemptions allowed in "community development impact areas," which cover an area of the city roughly equal to the automatic exemption areas. The ordinance exempts any commercial project in this area that (1) has $0.5 million or more annual revenues, of which at least 75% is derived from sales to residents of an Empowerment Zone or Linkage Community, or (2) would create 10 or more permanent jobs, of which 75% are filled through the first source jobs program by residents of those two areas. The ordinance also exempts the construction of any new non-profit day care, vocational training or educational facility in a community development impact area.

Also defined as economic development projects, and thus eligible for a 100% exemption, is the rehabilitation or conversion of any historic building, the construction of any non-profit recreational facility, or the construction of any non-profit homeless facility. These types of projects may be exempted regardless of where they are located.

Figure 8. Impact Fee Exemption Areas



Affordable Housing Exemptions

A review of the City's records of housing exemptions granted from 2005 to the suspension of exemptions in 2009, summarized in Table 62, reveals that the City exempted 23 percent of all new housing units from impact fees. All but one of the single-family exemptions was justified based on affordability criteria, and all but two of the affordable single-family units were built by Habitat for Humanity. In contrast, 90 percent of the multi-family units exempted were based on being in an automatic exemption area (Empowerment Zone or Linkage Community), rather than meeting affordable housing criteria (although it is possible some of these projects could have met affordable housing criteria as well).

Table 62. Housing Exemptions, 2005-2009

Housing Type	Afford. Housing	Exempt Area	Total Exempted	Total Built	Percent Exempted
Single-family	161	1	162	5,234	3%
Multi-family	662	6,436	7,098	25,734	28%
Total	823	6,437	7,260	30,968	23%

Source: Exemptions from City of Atlanta, Impact Fee Waiver Reports, First Quarter 2005 through Second Quarter, 2009; total units built from U.S. Census Bureau, Monthly New Privately-Owned Residential Building Permits, January 2005 through June 2009.

Affordable housing exemptions for single-family units were relatively insignificant, amounting to about 35 units annually and accounting for about half of one percent of all new units built in the city. In addition, virtually all these units were built by Habitat for Humanity, whose process ensures that these units will be occupied by lower-income households and will remain a source of affordable housing for years.

Exemptions for multi-family housing were more problematic in terms of their promotion of affordable housing. Multi-family housing accounts for 98% of all housing units exempted. While multi-family tends to be the most affordable housing type, almost all these exemptions were based on location rather than on affordability criteria.

Even the 10% of exemptions granted on affordability criteria may not have resulted in units that continue to be affordable to lower-income residents over the long term. If affordable housing exemptions are to be funded again, they should be restricted to projects that can guarantee continued affordability. The City is developing updated criteria for affordable housing that should address this issue.

Recommendation: Restrict eligibility for affordable housing exemptions to ensure continued affordability.

Economic Development Exemptions

Less detail is available on nonresidential exemptions, particularly the justification for the exemptions, but it is safe to say that the blanket area exemption accounts for most of them. In dollar amounts, nonresidential exemptions were more than double the amount of residential exemptions during the last three years that exemptions were funded, as shown in Table 63.

Table 63. Total Fees Exempted, 1/1/2007 – 9/30/2009

Residential Exemptions, 1/1/2007 - 9/30/09	$2,694,203
Nonresidential Exemptions, 1/1/2007 - 9/30/09	$6,236,371
Total Fees Exempted, 1/1/2007 - 9/30/09	$8,930,574

Source: Residential exemptions from City of Atlanta, Impact Fee Waiver Reports, First Quarter 2007 through Second Quarter 2009 (no exemptions since); total fee exemption amount from City of Atlanta Information Technology Department, "Impact Fees Exempt" spreadsheet, January 11, 2010; nonresidential exemption amount is the difference.

Recommendation: Eliminate blanket exemptions for geographic areas.

As has been seen, only about 10% of exemptions for new housing during the last five years when exemptions were funded were granted under affordable housing criteria. The other 90% of exemptions were granted under the rubric of "economic development." The most significant of the economic development exemptions was the automatic 100% exemption for any development occurring in the Empowerment Zones or Linkage Communities. These geographic designations are no longer used by the City.

Eligibility for economic development exemptions within Linkage Communities areas is more restricted, and is limited to the following:

(a) Commercial development that, in opinion of the city council as expressed through an appropriate resolution, would either (1) generate annual revenues of $500,000.00 or more, of which at least 75 percent would be derived from the sale of goods and services to residents of the empowerment zone and linkage communities, or (2) create ten or more permanent jobs, of which at least 75 percent would be filled through the first source jobs program by qualified residents of the empowerment zone and linkage communities; or

(b) The rehabilitation or conversion of any historic building; or

(c) The construction of any new not-for-profit day care, vocational training, or educational facility; or

(d) The construction of any private not-for-profit recreational facility; or

(e) The construction of any not for profit homeless facility.

While information on the nonresidential fee amounts exempted in Linkage Communities is not available, it is likely that they were small relative to those in the automatic exemption areas, due to the restrictions imposed in Linkage Community areas. The criteria for commercial developments favor higher-revenue businesses catering to local customers in depressed area, and larger employers of local residents in those areas. The criteria for non-profit development target very specialized categories of development.

Before the granting of economic development exemption is resumed, the criteria for such exemptions needs to be updated by the City. "Economic development" is a broad term. A logical first step is to decide whether to prioritize increasing nonresidential, job-creating developments in economically-deprived areas of the city, or promoting job growth in the city regardless of where it occurs. Each approach has significant implications:

Geographic approach. The geographic approach would encourage local job creation that might be more accessible to residents in low-income areas, both in terms of transportation and skill level, than a city-wide job creation incentive. On the other hand, lower-skill jobs are likely to increase city-wide regardless of such incentives, and the accessibility of such jobs to residents of depressed areas can be improved with more investments in public transit and roadway infrastructure.

If the geographic approach is taken, and automatic exemptions are to be granted for most nonresidential development, it should be targeted to a smaller area. The current automatic exemptions for any development cover about one-fourth of the city's land area. Combined with the areas eligible for more targeted exemptions, about half the city fell in such areas. The current ordinance designations for automatic exemption areas are no longer actively used by the City. The designation of the areas that would be eligible for economic development exemptions would need to be updated prior to implementing a geographic exemption approach.

City-wide growth approach. This approach would call for incentives for nonresidential developments that would tend to fuel overall job growth. Economic theory suggests that incentives should be targeted to economic sectors that export goods and services to buyers outside the local area, such as manufacturing, technology companies, specialized financial institutions, and tourism, rather than to local-serving retail and service sectors. These are the types of industries typically targeted by economic development agencies.

In sum, economic development incentives should be targeted to promote City priorities, whether that is to bring more businesses and jobs to selected economically-depressed areas, or promoting city-wide job growth. Geographic areas would need to be defined, or criteria developed for the types of industries to be promoted. While both types of economic development could be targeted, that would necessitate a greater degree of prioritization. How to fund a more limited exemption program is addressed next.

Funding Exemptions

One way to evaluate the scale of exemptions is to compare the amount of the exemptions to total revenue that would have been received in the absence of the exemptions. While this comparison excludes in-kind developer contributions that were used to offset fees that would otherwise have been paid, it gives a good sense of the order of magnitude involved. In a period covering almost three years when exemptions were funded, they amounted to about 40% of the potential revenue that would have been collected in the absence of the exemptions, as shown in Table 64. The higher percentage of waivers for transportation impact fees is likely due to the fact that actual impact fee revenue is understated because it does not include the value of developer improvements made in lieu of impact fee payment. Nevertheless, it is clear that exemptions were granted on a substantial scale when they were funded.

Table 64. Impact Fee Exemptions and Collections, 1/1/2007 – 9/30/2009

	Roads	Parks	Fire	Police	Total
Fees Exempted, 1/1/07 - 9/30/09	$6,403,344	$1,639,570	$687,886	$199,774	$8,930,574
Actual Revenue, 1/1/07 - 9/30/09	$7,596,042	$3,749,978	$1,245,957	$363,174	$12,955,151
Total Potential Revenue	$13,999,386	$5,389,548	$1,933,843	$562,948	$21,885,725
Exemptions % of Potential Revenue	45.7%	30.4%	35.6%	35.5%	40.8%

Source: Actual revenue from City of Atlanta, December 29, 2009; fees exempted from City of Atlanta Information Technology Department, "Impact Fees Exempt" spreadsheet, January 11, 2010.

The *Development Impact Fee Act* allows impact fees to be waived for affordable housing or economic development projects, but requires that the resulting shortfall in the impact fee fund be made up with non-impact fee revenue. The need to come up with a funding source for exemptions was a consideration in designing the recoupment fee methodology for parks, fire and police impact fees in the original 1993 study. The recoupment fee approach avoided the need to fund waivers of parks, fire and police fees, since by their nature recoupment fees are recovering the cost of existing capital improvements that have already been paid for.

The transportation impact fee waivers, however, had to be funded with non-impact fee revenue. The City has used bond funding of capacity-expanding transportation improvements to offset transportation impact fee exemptions. This was an accounting exercise that documented that the City was spending more non-impact fee money on impact fee-eligible projects than it was granting in exemptions, as opposed to directly depositing these funds into the impact fee account as an explicit payment for exemptions.

Recommendation:
Track expenditures of non-impact fee revenues for capacity-expanding improvements to document that exemptions are funded by existing development.

This general approach is a reasonable way to comply with the Act's requirement that exemptions be funded. The recommended approach to funding exemptions is to track non-impact fee expenditures on impact fee-eligible capital improvement projects. This information can be used to document that the reduction in impact fee revenues is being funded by revenues generated by existing development, and not by future development. To implement the recommended approach to funding exemptions, it is necessary to clearly define the types of non-impact fee revenue sources to be tracked, as well as the impact fee-eligible projects that are funded by these sources.

Non-impact fee funding sources. The City relies primarily on three types of revenue sources to fund capital improvements – bonds or other debt instruments, which are repaid with property or sales taxes, Federal and State funding that is typically designated for specific projects, most notably for transportation, and grants that are not designated for specific projects, such as Community Development Block Grants (CDBG). These funding sources are discussed below.

As noted, the City has traditionally relied on bond funding to offset exemptions. However, bonds will be retired by both existing development as well as future development. Because of this, a credit for outstanding debt that was used to construct or acquire existing capital facilities and equipment serving existing development is provided in the impact fee calculations, to ensure that new development does not pay for the new facilities required to serve it through impact fees, while also paying to retire debt on facilities serving existing development. Similar considerations apply to the use of bond funds to offset exemptions. The portion of the debt that will be retired by future tax

payments from new development should not be used to fund exemptions, while the portion to be retired by taxes from existing development can be counted as non-impact fee revenue eligible to offset exemptions.

The transportation impact fee calculations also provide a credit for the share of Federal and State funding that that is used for capacity-expanding transportation improvements, on the theory that such funding is ultimately generated by local payments of motor fuel taxes, some of which is paid by new developments. As with debt financing, some portion of outside funding for designated capacity projects is thus attributed to new development, and should not be used to fund exemptions.

A reasonable approach to determining what proportion of debt and designated grant funding earmarked for capacity-expanding capital improvements is attributable to new development would be to rely on the approach used in the fee calculations for credits for outstanding debt and dedicated State/Federal funding. The approach would be to use the ratio of the debt and dedicated funding credits per service unit to the total cost per service unit. In this update, revenue credit percentages are 0% for fire, 9% for parks, 17% for transportation, and for police. These percentages could be used to determine the share of debt and dedicated grant funding that is attributable to existing development and eligible to be used to offset impact fee exemptions.

Recommendation: Offset impact fee exemptions by tracking non-impact fee funds spent on impact fee-eligible projects.

Discretionary grant funding, such as Community Development Block Grants, that are not earmarked for specific improvements and are not restricted to capacity-expanding improvements are not subject to impact fee credits and should be considered fully eligible to offset revenue lost due to exemptions.

The Development Impact Fee Act restricts impact fee expenditures to projects that are included in the jurisdiction's adopted Capital Improvements Element (CIE). However, not all projects that are capacity-expanding are necessarily included in the CIE. Many jurisdictions, including Atlanta, only include projects in the CIE on which they intend to spend impact fee funds. The Act also imposes additional restrictions on how the City of Atlanta spends transportation impact fees. For the purposes of offsetting exemptions, a capacity-expanding capital improvement could be considered impact fee-eligible, regardless of whether it is listed in the CIE.

Fact-Based Fee Reductions

An alternative to granting exemptions that must be funded from some other source is to reduce fees for types of development that further community goals, based on documentation that they will put less demand on infrastructure. Unlike exemptions, these kinds of reductions do not require funding.

An example of a fact-based fee reduction in the City's current impact system is the 50% reduction in transportation impact fees for projects located with 1,000 walking feet of a MARTA station, based on greater use of transit and less reliance on automobile travel. Recent research summarized in this study (see Figure 4 in the Transportaton chapter) provides support for this reduction. The City has plans for a BeltLine light rail line, which should also be eligible for this reduction. It is recommended that the reduction be expanded from MARTA stations to any rail station, so that any future light rail station would also be eligible.

Recommendation: Expand eligibility for transportation fee reduction from only MARTA stations to any rail station.

A similar fact-based reduction that could potentially promote the City's affordable housing goals would be to base fees for housing on the size of the dwelling unit, using the differences in number of residents and demand for facilities between smaller and larger units. Because smaller units tend to have smaller impacts and are also less expensive, lower fees for smaller units could help promote affordable housing. However, as discussed in greater detail in the "Land Use Categories" section of this chapter, fee reductions for smaller units are likely to be very modest, and should be weighed against the additional administrative complexity. Both flat-rate and variable rates by single-family unit size are calculated in this report. Give the modest fee differentials, retention of the flat-rate approach is recommended.

Exemptions Summary

The City has an extensive system of exemptions from impact fee payment that, when exemptions were funded, resulted in about a 40% reduction in revenue from what would otherwise have been received. The City's park, fire and police impact fees were designed as recoupment fees partially to avoid the need to fund park, fire and police fee exemptions. Transportation impact fee exemptions had been offset with capacity-expanding transportation projects paid for with general obligation bonds. Impact fee exemptions have been suspended since June 2009 because funding for such exemptions has not been certified.

Recommendation: Abandon the recoupment methodology for parks, fire and police impact fees.

The original design of parks and public safety impact fees as recoupment fees was driven in large part by the concern that the City would have difficulty coming up with general fund moneys to offset the exemptions. However, the eligible portion of bond and grant expenditures should be sufficient to offset lost revenue from a scaled-back exemption program. Our recommendation is to discontinue using the recoupment approach for any of the City's impact fees. This update bases the fees on the existing levels of service, rather than lower levels of service needed to qualify as recoupment fees.

The consultants recommend modifying the approach of tracking bond funded expenditures as an offset to lost revenues from exemptions. Because a portion of this funding will be paid for by new development in the future, only the percentage of the funding attributable to existing development should be used to offset exemptions. A similar approach should be taken with dedicated State/Federal funding.

A more limited exemption program would retain exemptions that promote affordable housing, with the requirements to make sure the units serve lower-income households and remains affordable for some period of time. The City may also desire to provide other targeted economic development exemptions that promote community objectives.

In sum, our key recommendations with respect to impact fee exemptions are:

- Discontinue the recoupment approach as a method for funding impact fee exemptions;
- Rescind blanket exemptions for large geographic areas of the city, or revise the areas to reflect current priority economic development areas;

- Modify affordable housing exemption criteria to ensure that the housing serves lower-income residents and remains affordable for some period of time; and

- Track non-impact fee revenues spent on capacity-expanding capital improvements to offset future exemptions for affordable housing or specific economic development projects.

Eligible Expenditures

Impact fees can only be used to fund improvements that expand capacity to accommodate new development, and cannot be used for operational expenses or for maintenance, replacement, renovation, or repair of existing facilities. Most capital improvements can relatively easily be distinguished as either capacity or replacement/repair. Capacity improvements add to the City's capital assets, while replacement/repair projects do not. While capacity improvements may necessitate replacement or repair of existing facilities, such as a street-widening project that cannot be accomplished without reconstructing the existing travel lanes, as long as the replacement component is a necessary part of the capacity project the entire cost of the project should be deemed capacity-related.

Some improvements, however, are a true mixture of capacity-expansion and replacement, and in such cases the percentage of the cost that is eligible for impact fee funding must be determined. While it may not always be obvious how to determine the eligible percentage, it is sufficient to establish a reasonable metric. Take the example of a new fire station that replaces an existing station that is no longer optimally located. Determining the capacity added by the replacement station in terms of improved response times would require extensive analysis, and would not be totally consistent with the level of service on which the fire impact fees are based (equivalent station square feet per functional population). A simpler and more consistent approach would be to base the percentage on the increase in station square footage. Another example would be the replacement of an existing emergency dispatch radio system with a new radio system that can accommodate higher call volumes or provide other, less quantifiable benefits in terms of improved communications and emergency response. A reasonable approach here would be to determine the replacement value of the existing radio system, and use the portion of the cost of the new system that exceeds the current cost as the eligible percentage.

Administrative Procedures

The administration of the City's impact fee program involves several departments. Departmental responsibilities are summarized as follows.

Law
- Provide legal counsel
- Review projects for compliance with state and local requirements
- Draft contracts for developers who choose to deliver system improvements in lieu of paying fees

City Planning
- Facilitate communication among all entities
- Serve as liaison for developers
- Make policy recommendations
- Establish and lead DIF Advisory Group
- Propose new projects
- Review proposals against planned and future transportation investments
- Compile information for CIE from functional departments
- Maintain records of impact fee credits in Accela
- Calculate and levy fees during permitting process

Transportation, Public Works, Parks and Recreation, Fire Rescue, and Police
- Propose new projects
- Subject matter experts review proposals
- Submit funding legislation for projects on the CIE that are chosen to move forward
- Manage funded projects
- Oversee project delivery
- Provide annual updates to include in CIE

Finance
- Maintain official book of records for financial data
- Disseminate financial reports among operating departments
- Ensure accuracy in annual CIE report
- Monitor spending to alert when refunds are due

The City's ordinance calls for the Finance Department to be responsible for the administration of major aspects of the City's impact fee ordinance, but the Finance Department has little control over the other departments involved in the process. Compounding the problem, there has been significant staff turnover within the departments administrating the impact fee program, which has eroded the institutional knowledge base relative to the program.

At the time of the 2010 impact fee study, there was no person or group with primary responsibility for the administration of the impact fee system. The study recommended that the City designate an impact fee administrator, and form a central administrative body that could make policy decisions that affect several City departments. Although the 2010 study was not adopted, the City has since designated an impact fee administrator within the City Planning Department, and created an Impact Fee Advisory Group that consists of members from all affected departments. The impact fee administrator, however, also has other unrelated responsibilities.

A dedicated position is recommended, and is currently under consideration by the City. Given that multiple departments are involved in administering the program, it might be advisable to have this position in City administration, rather than in City Planning, to better ensure coordination of departmental activities.

Recommendation: Create a dedicated position for an impact fee coordinator.

Impact Fee Collection Process

Impact fee payments are made when building permit[7] fees are due. The impact fee rates for transportation, parks, police and fire facilities are unchanged since the adoption of the original ordinance in March 1993. The fees are based on the number of dwelling units, hotel rooms and nonresidential building square footage. These development characteristics are taken from architectural plans for the development. The permitting software system generates the impact fees that are due, along with all other applicable fees, and assigns each fee the appropriate accounting code. The permitting system uses the physical address for the permit to assign a code identifier for the appropriate parks service area (all the other fees are city-wide). Applicants show the walking distance to the nearest MARTA station on submitted plans to qualify for the reduced transportation impact fee. The applicant goes to the fee payment window at City Hall with a permit number and makes the appropriate payment. The clerk marks the permit as paid in the permitting software system and prints out the building permit, which serves as the receipt for the fees paid. At the end of the day, all payment information, including fee amounts and accounting codes, is uploaded into the revenue module of the City's accounting system. Impact fee funds appear to be properly segregated at time of collection and assigned proper account codes. Funds are immediately deposited into proper reserve accounts. These procedures appear to be working well.

The City converted from its previous KIVA permit software to the new Accela system in November 2009. The new system is made by the same company, and the impact fee collection process was not changed by the new implementation. The Accela system includes a module that is capable of interfacing with the Office of Zoning and Development's GIS system. It is currently utilized to ensure that park impact fee collections are earmarked for the appropriate service area account. Impact fee revenues and expenditures over the last three fiscal years are summarized in Table 65.

[7] According to Sec. 19-1006, "*Building permit* means any official document issued by the City of Atlanta authorizing the construction, repair, alteration or addition to a building or structure, including site work and foundation work related thereto. As used herein, the term shall include conversions, but otherwise shall not include permits required for remodeling, rehabilitation, or other improvements to: (i) an existing residential structure provided there is no increase in the number of dwelling units resulting therefrom; or (ii) an existing nonresidential structure provided there is no increase in the gross square footage."

Table 65. Impact Fee Revenues/Expenditures, FY 2017-2019

Impact Fee Fund	FY 2017	FY 2018	FY 2019
Revenues			
Parks North	$1,794,560	$1,314,185	$1,408,118
Parks South	$435,015	$625,348	$291,893
Parks West	$98,144	$135,316	$183,148
Subtotal, Parks	$2,327,719	$2,074,849	$1,883,159
Transportation	$5,436,195	$3,999,245	$5,166,683
Fire	$757,249	$777,935	$674,079
Police	$220,698	$225,798	$193,944
Total Revenue	$8,741,861	$7,077,827	$7,917,865
Expendtures			
Parks North	$2,251,005	$5,660,848	$739,487
Parks South	$12,939	$17,896	$144,179
Parks West	$146,096	$311,811	$479,028
Subtotal, Parks	$2,410,040	$5,990,555	$1,362,694
Transportation	$937,520	$2,896,941	$1,573,898
Fire	$22,385	$21,570	$91,416
Police	$432,704	$412,824	$31,530
Total Expenditures	$3,802,649	$9,321,890	$3,059,538
End-of-Year Balance			
Parks North	$7,518,824	$3,172,161	$3,840,791
Parks South	$1,946,605	$2,554,057	$2,701,771
Parks West	$1,777,946	$1,601,451	$1,302,156
Subtotal, Parks	$11,243,375	$7,327,669	$7,844,718
Transportation	$24,346,736	$25,449,040	$29,041,825
Fire	$4,390,231	$5,146,596	$5,729,260
Police	$1,750,456	$1,563,430	$1,725,844
Total End-of-Year Balance	$41,730,798	$39,486,735	$44,341,647

Source: City of Atlanta, February 20, 2020.

Appropriations and Expenditures

After being received by the Finance Department's Revenue Division, impact fees are placed into designated reserve accounts in the General Government Capital Outlay Fund. This fund is a reserve that holds impact fee and non-impact fee moneys for capital improvement projects. The impact fees are placed in "available for use" accounts (segregated by fee type and service area) until a City Council ordinance authorizes their use for specific projects, at which time the amount and type of impact fee funds designated in the ordinance is transferred to a "restricted" account.

In the past for each impact fee service area account (transportation, parks-northside, parks-southside, parks-westside, police and fire), there was also a corresponding account for the 3% administrative charge. This seemed unnecessarily cumbersome, since most administrative activities related to impact fees, other than the review of developer credit applications, are not specific as to the type of fee. As of FY 2014, these administrative accounts were combined into a single account to fund all aspects of impact fee administration.

In addition, since impact fees are intended to pay for capital improvements, it would seem reasonable to assess the administrative charge separately from the impact fee amount, rather than taking it out of the impact fee amount collected. The administrative surcharge would be assessed at the rate of 3% of any impact fee payment or impact fee credit usage.

Recommendation: Make the 3% administrative fee an additional charge, rather than taking it out of impact fees collected.

The Department of Finance maintains a summary of all impact fee appropriations dating back to 1991. The data are summarized in a chart detailing impact fee reserve activity spanning all fee types and services areas. The information is displayed in columns, including an assigned project number, authorizing City Council ordinance(s), fee type, service area(s), and reserve amounts.

Each appropriation is assigned a project number and recorded into the accounting system via journal entry. The entry identifies the funds in a restricted project line item that enables user departments to encumber the funds for specific expense purposes. A purchase order or contract number is committed against the line item's available funds, allowing for invoices to be received and processed against specific project scopes for work and contracts authorized by City Council ordinance. For example, Bakers Ferry Sidewalks was assigned the number 94-O-9156. The" 94" represents the year the ordinance was approved by the City Council, "O" represents ordinance, while "9156" is the legislative tracking number. In 1994, $70,906 was transferred from reserve status in the General Government Capital Outlay Fund Budget to an expense line item designation for Bakers Ferry sidewalk construction.

A large number of transportation impact fee projects acted as payouts to match other sources of funds designated for system improvements. In some instances, funds paid to the Georgia Department of Transportation would hold the match sources of funds via State Grant match that serve to combine the sources of funding in order to complete the design and construction elements. In all cases the agreements were detailed legislatively, and approved by the City Council.

The park, police and fire funds are technically recoupment fees, meaning that they represent a reimbursement to the City of prior capital investments. The recoupment approach was intended to avoid the need to make up for the lost revenue with general funds, but they ceased to be used for that purpose when the City suspended exemptions in 2009.

After impact fee projects are completed, no written policy currently exists that governs how remaining project balances are closed out. This is the responsibility of the real estate acquisition and project monitoring areas within the Parks and Recreation Department, the Public Works Department and the Transportation Department. The acceptance of completed projects is usually done via inspection performed by field engineers, with no established procedures for reporting this information back to the parties that manage the project. Procedures should be developed to track the completion of impact fee-funded projects and how they will be reported to respective parties. This would allow for the identification of projects where no activity has occurred or where projects came in lower than budgeted to be quickly identified. The result would allow restrictions to be released from any unspent impact fee projects in a timelier fashion, so that funds could be redirected to other capital projects.

Recommendation: Develop procedures to track the completion of impact fee projects and close out completed or inactive projects.

Accounting for the Fund

The accounting of impact fee projects is tracked and maintained within the Projects and Grants (PNG) Module of the City's Oracle accounting software. In addition, the Finance Department issues a monthly financial report documenting all impact fee activity. The monthly report includes a detailed and summarized schedule of year-to-date and life-to-date history; reflecting appropriations, collections, fund balances, expenses, encumbered or restricted funds, funds available for new projects and interest earned. Individuals reports are issued to each respective department that summarizes impact fee data by the authorized funds for transportation, parks (broken down by Northside, Southside and Westside service areas), police, fire and administration (3% of the fees collected are earmarked for the costs of administering the impact fee program). Impact fee fund balances (excluding administration) at the end of the 2019 fiscal year are summarized in Table 66.

Table 66. Impact Fee Fund Balances, FYE 2019

Impact Fee Fund	Ending Balance	Encumbered	Unencumbered
Transportation	$29,041,824	-$23,789,608	$5,252,216
Parks North	$3,840,791	-$4,238,723	-$397,932
Parks South	$2,701,771	-$102,919	$2,598,852
Parks West	$1,302,156	-$502,254	$799,902
Fire	$5,729,260	-$872,756	$4,856,504
Police	$1,725,844	-$458,066	$1,267,778
Total	$44,341,646	-$29,964,326	$14,377,320

Source: City of Atlanta, Impact Fee Final Report for FY 2019, balances as of June 30, 2019.

As a reporting tool, the format in use is adequate in terms of information needed to serve the user departments and to provide input for the compliance report submitted annually to the State of Georgia Department of Community Affairs.

Developer Credits

Developer credits represent the value of system improvements constructed by developers, most often for transportation facilities. The credits can be used to reduce the impact fees owed for the same types of facilities. Developer credits pose challenges to impact fee administration because (1) the improvements are often made at the time of subdivision or site plan approval, before there is any building permit application to which to tie them, and (2) the extended period of time required for review, approval, construction and acceptance by the City sometimes results in the credits being effective after the impact fees have already been paid. Developers may pay impact fees under protest at the time of building permit issuance if a credit application is pending. Staff could not recall any instances where credits were not properly applied.

Once the eligibility and amount of the credit has been determined and approved by the applicable department (e.g., Department of Transportation for transportation fees), developers receive an identifier and credit holder identification number. A letter is provided by the Office of Buildings stating the date the credit became active, designation as a pre- or post-ordinance credit, facility type, service area, and the dollar value of the credit. The Office maintains notations in the permitting software system reflecting when a credit is granted, and if the actual use was transferred to another development. Each use of a credit is shown as a debit subtracted from the credit balance until the balance is exhausted or the credit expires.

Pre-ordinance credits are those that were granted for developer improvements made before the 1993 effective date of the original impact fee ordinance. All pre-ordinance credits have expired. Post-ordinance credits must be used within 10 years of the date they were approved. As of February 2020, there were approximately $4.42 million in post-ordinance transportation impact credits remaining to be claimed for future use, as summarized in Table 67.

Table 67. Outstanding Developer Credits

Transportation	$4,422,979
Parks	$0
Fire	$0
Police	$0
Total	$4,422,979

Source: Atlanta Department of City Planning, February 14, 2020.

While the City tracks outstanding credits, the responsibility for claiming a credit lies with the building permit applicant. If the building permit applicant claims a credit, and the claim is verified, the amount of credit available is applied against the amount of the fee otherwise due for the building permit, up to the full amount. The credit amount applied against the permit is subtracted from the applicable credit balance. These procedures appear to be working well.

Community Work Program

The Community Work Program (CWP), formerly known as the Short-Term Work Program, is a key implementation tool of the Comprehensive Development Plan (CDP). It is a list of the major actions, both capital projects and programs, to be undertaken by the City of Atlanta to implement the CDP's recommendations over the next 15 to 20 years.

The Community Work Program includes the Capital Improvements Program (CIP) and the Capital Improvements Element (CIE). The Capital Improvements Program (CIP) is an implementation plan for the construction, maintenance, and renovation of public facilities and infrastructure projects over the next five years that are funded or partially funded. The Capital Improvement Element (CIE) sets out projected needs for system improvements during a five-year planning horizon for transportation, parks, and public safety, a schedule of capital improvements that will meet the anticipated need for system improvements, and a description of anticipated funding sources for each required improvement, including but not limited to impact fees collected.

The Community Work Program also includes a list of programs such as community and economic development initiatives, regulatory measures, and land development regulations to be adopted or amended that the City intends to complete over the next five years. Another section of the CWP contains a list of unfunded projects and programs that the City of Atlanta intends to implement beyond five years.

The Department of City Planning is responsible for the preparation of the CDP and the CWP. City Planning works with representatives from other City departments and agencies to compile the data and project information summaries making up the CWP and CIP. The CWP document is prepared at the same time as the Comprehensive Development Plan. The documents are transmitted to the Atlanta Regional Commission (ARC) and to the Georgia Department of Community Affairs (DCA)

for their review and comment, as required by the Georgia Planning Act. After their review is completed, the CDP and CWP are adopted by the Atlanta City Council. The CDP is adopted every five years by October 31st. Afterwards, DCA issues correspondence to the City stating that it has renewed its Qualified Local Government (QLG) status. QLG status makes the City of Atlanta eligible to collect impact fees and for various state and regional funding.

Exemptions

The issue of exemptions is addressed in greater detail in a previous section of this chapter. The accounting for granted exemptions consists of a list with the name of the development receiving the exemption and the amount exempted. Since June 2009, no exemptions have been granted, based on the directive from the Chief Financial Officer. In the event that the granting of exemptions is resumed, exemption reports should indicate the offsetting source being used to fund the exemption. In addition, the Department of City Planning should investigate whether an application in the new Accela permitting system can accomplish a better means of tracking exemptions and customizing periodic queries. It is recommended that the Impact Fee Administrator be the keeper of the data file for exemptions.

Administrative Procedures Summary

Some improvements are recommended to strengthen the management of the development impact fee program. There is a lack of formal procedures for some processes that can lead to a lack of continuity when staff members with informal knowledge of the system are replaced. In addition, improvements need to be made in the process of tracking expenditures of funds once they have been appropriated and moved to restricted accounts.

In summary, the following key process improvements would assist the City in developing a more effective and efficient process for administering the impact fee program:

- Procedures should be designed and established so that the expenditures of impact fee funds on projects can be tracked and any remaining funds transferred back to the available fund balance as projects are finished (or remain inactive).

- In the event that the granting of exemptions is resumed, the Department of City Planning should investigate whether an application in the new Accela permitting system can accomplish a better means of tracking exemptions and non-impact fee funding of exemptions.

Summary of Findings and Recommendations

This chapter of the report consists of an evaluation of the City's current impact fee system. Policy areas addressed include service areas, levels of service, methodology, land use categories, exemptions, and administration. The recommendations from this evaluation serve as guidelines for the impact fee calculations in this study, as well as for changes to the impact fee ordinance and administrative procedures. The major findings are summarized as follows.

- The City is under a special legislative mandate to consider in programming transportation impact fees the proximity to fee-payers and effect on level of service.

- Many of the City's planned transportation improvements are to the collector street system, which is not covered by the current transportation impact fees.

- Current road fees are calculated based strictly on vehicular improvement costs, while multi-modal improvements are increasingly required to expand the capacity of the City's transportation system.

- State law restricts transportation impact fees to road improvements. Although roads are broadly defined to include multi-modal elements within the roadway corridor, the City should seek explicit authorization before using transportation impact fees to fund public transit improvements.

- Current level-of-service measures are overly simplistic and fail to capture the full extent of the City's infrastructure investment.

- Before exemptions were put on hold in 2009, they accounted for about 40% of potential impact fee revenues, mostly from blanket exemptions granted in designated areas of the city. Criteria for affordable housing exemptions do not guarantee the housing remains affordable.

- The recoupment methodology for parks, fire and police impact fees was intended to avoid the need to fund exemptions with other revenue, but with the halt to exemptions they no longer perform that function.

- Reducing the number of nonresidential land use categories could simplify impact fee administration and avoid issues relating to change of use.

- The City has made significant strides in recent years in improving impact fee administration, but some procedures could be improved.

The major recommendations of the policy evaluation are summarized as follows:

- Implement recommended procedures to ensure that transportation impact fees are spent on projects that have the most effect on improving levels of service. Require transportation fees to be spent only on priority projects identified in the *Comprehensive Transportation Plan*, with the exception of small multi-modal projects not specifically identified that further a major goal of the Plan.

- Implement recommended procedures to ensure that transportation impact fees are spent on projects that are in closest proximity to where fees were paid. These include dividing the city into three transportation impact fee service areas, and using other techniques such as "heat maps" to visually represent where fees have been paid in evaluating proximity within service areas.

- Maintain an on-going impact fee advisory committee to review the annual impact Capital Improvement Element for transportation projects.
- Modify the transportation impact fees to include collector roads, exclude State and Federal highways, and include multi-modal improvements.
- Eliminate automatic blanket exemptions for development in designated geographic areas, or more narrowly target them to priority areas. Add criteria to affordable housing exemptions to ensure the housing remains affordable.
- Track non-impact fee expenditures on impact fee-eligible improvements to offset lost revenue from exemptions.
- Base the updated park, fire and police impact fees on the existing level of service.
- Replace the current level of service measures based on simple, physical ratios with ones that take into account the full range of the City's investments in land, buildings, equipment and other eligible improvements.
- Modify the land use categories in the fee schedules to reflect current travel demand data.
- Create an impact fee coordinator position exclusively dedicated to overseeing the impact fee program.
- Make the 3% administrative charge a separate fee, rather than having it taken out of fee revenues.
- Develop procedures to track the completion of impact fee projects and close out completed or inactive projects so that any unspent impact fee funds can be used for other projects.

APPENDIX A: EXISTING AND PROJECTED LAND USE

This appendix presents existing and projected population, dwelling units by housing type, and employment and nonresidential square footage by land use type. Data are derived from the U.S. Census for population and housing, and from Atlanta Regional Commission (ARC) estimates for 2015 and projections for 2040. Current 2020 estimates and 2025 projections are based on straight-line interpolations between 2015 and 2040.

Estimates of existing 2020 population[8] and land use, as well as 5-year and 20-year projections, are summarized in Table 68 for the entire city and for the three transportation/park service areas. The rest of the appendix provides the data and calculations used to derive the figures in this summary table.

Table 68. Summary of Existing and Projected Population and Land Use

	Transportation/Park Service Areas			City-Wide
	Northside	Southside	Westside	Total
Population, 2020	185,500	142,967	140,652	469,119
Single-Family Units, 2020	39,256	33,550	41,108	113,914
Multi-Family Units, 2020	80,612	44,114	34,750	159,476
Retail/Commercial Sq. Ft. (1,000s), 2020	81,219	40,305	12,329	133,853
Office Sq. Ft. (1,000s), 2020	56,687	25,435	4,544	86,666
Public/Institutional Sq. Ft. (1,000s), 2020	43,747	81,091	17,409	142,247
Industrial Sq. Ft. (1,000s), 2020	18,073	13,175	8,532	39,780
Warehouse Sq. Ft. (1,000s), 2020	36,543	38,817	14,693	90,053
Population, 2025	200,416	155,973	149,957	506,346
Single-Family Units, 2025	42,617	36,059	43,938	122,614
Multi-Family Units, 2025	87,365	49,925	37,362	174,652
Retail/Commercial Sq. Ft. (1,000s), 2025	84,144	41,974	13,762	139,880
Office Sq. Ft. (1,000s), 2025	60,297	26,549	4,876	91,722
Public/Institutional Sq. Ft. (1,000s), 2025	47,637	84,531	18,931	151,099
Industrial Sq. Ft. (1,000s), 2025	19,045	13,324	8,806	41,175
Warehouse Sq. Ft. (1,000s), 2025	37,480	39,130	15,235	91,845
Population, 2040	245,164	194,992	177,873	618,029
Single-Family Units, 2040	52,701	43,587	52,429	148,717
Multi-Family Units, 2040	107,623	67,358	45,199	220,180
Retail/Commercial Sq. Ft. (1,000s), 2040	92,919	46,980	18,061	157,960
Office Sq. Ft. (1,000s), 2040	71,125	29,891	5,872	106,888
Public/Institutional Sq. Ft. (1,000s), 2040	59,308	94,853	23,498	177,659
Industrial Sq. Ft. (1,000s), 2040	21,961	13,769	9,628	45,358
Warehouse Sq. Ft. (1,000s), 2040	40,292	40,071	16,861	97,224

Source: Population and housing units from Table 69; nonresidential square feet from Table 70 (2020 and 2025) and Table 71 (2040(

[8] Population projections are provided because they are required by the *Development Impact Fee Act*. However, they are not inputs into the fee calculations because impact fees are assessed based on land use, not population.

2010 Census data is used as a baseline to establish the percentage of census tract population within the City of Atlanta, as well as occupancy rates and single-family percentages by census tract. Forecasts of population and housing are based are ARC projections. Total housing units for 2015 and 2040 by census tract are based on number of households from ARC multiplied by occupancy rates and the percentage of units in Atlanta from the 2010 census. Total units are split between single-family and multi-family based on the single-family percentage from the 2010 census. The detailed data are presented later in this appendix. Table 69 summarizes existing and projected population and housing units for the three transportation/park service areas and the entire city from 2015 to 2040.

Table 69. Population and Housing Units, 2015-2040

	Transportation/Park Service Areas			City-Wide
	Northside	Southside	Westside	Total
Population, 2015	170,584	129,961	131,347	431,892
Population, 2020	185,500	142,967	140,652	469,119
Population, 2025	200,416	155,973	149,957	506,346
Population, 2040	245,164	194,992	177,873	618,029
Housing Units, 2015	109,754	69,344	70,416	249,514
Housing Units, 2020	119,868	77,664	75,858	273,390
Housing Units, 2025	129,982	85,984	81,300	297,266
Housing Units, 2040	160,324	110,945	97,628	368,897
Single-Family Units, 2015	35,895	31,041	38,278	105,214
Single-Family Units, 2020	39,256	33,550	41,108	113,914
Single-Family Units, 2025	42,617	36,059	43,938	122,614
Single-Family Units, 2040	52,701	43,587	52,429	148,717
Multi-Family Units, 2015	73,859	38,303	32,138	144,300
Multi-Family Units, 2020	80,612	44,114	34,750	159,476
Multi-Family Units, 2025	87,365	49,925	37,362	174,652
Multi-Family Units, 2040	107,623	67,358	45,199	220,180

Source: 2015 and 2040 data from Table 73; 2020 and 2025 are straight-line interpolations between 2015 and 2040; single-family and multi-family based on percent single-family from Table 72.

Estimates and projections of nonresidential employment by employment type and census tract have been compiled for the Atlanta metropolitan area by the Atlanta Regional Commission (ARC). The employment categories used in the ARC estimates have been categorized into the five proposed nonresidential land use categories, as follows: retail/commercial (retail, entertainment, hotel/restaurant, and service), office (information technology, finance, real estate, professional, management, and administration), industrial (agriculture, mining, utilities, construction, and textiles), warehouse (wholesale and warehouse), and public/institutional (education, health, and government).

Estimates of existing 2020 nonresidential land use and nonresidential 5-year and 20-year growth projections are summarized in Table 70.

Table 70. Nonresidential Square Feet, Existing and Growth Projections

Nonresidential Land Use Type	Transportation/Park Service Areas Northside	Southside	Westside	City-Wide Total
Retail/Commercial Sq. Ft. (1,000s), 2020	81,219	40,305	12,329	133,853
Office Sq. Ft. (1,000s), 2020	56,687	25,435	4,544	86,666
Public/Institutional Sq. Ft. (1,000s), 2020	43,747	81,091	17,409	142,247
Industrial Sq. Ft. (1,000s), 2020	18,073	13,175	8,532	39,780
Warehouse Sq. Ft. (1,000s), 2020	36,543	38,817	14,693	90,053
Total Nonresidential Sq. Ft. (1,000s), 2020	236,269	198,823	57,507	492,599
Retail/Commercial Sq. Ft. (1,000s), 2025	84,144	41,974	13,762	139,880
Office Sq. Ft. (1,000s), 2025	60,297	26,549	4,876	91,722
Public/Institutional Sq. Ft. (1,000s), 2025	47,637	84,531	18,931	151,099
Industrial Sq. Ft. (1,000s), 2025	19,045	13,324	8,806	41,175
Warehouse Sq. Ft. (1,000s), 2025	37,480	39,130	15,235	91,845
Total Nonresidential Sq. Ft. (1,000s), 2025	248,603	205,508	61,610	515,721
Retail/Commercial Sq. Ft. (1,000s), 2020-2025	2,925	1,669	1,433	6,027
Office Sq. Ft. (1,000s), 2020-2025	3,610	1,114	332	5,056
Public/Institutional Sq. Ft. (1,000s), 2020-2025	3,890	3,440	1,522	8,852
Industrial Sq. Ft. (1,000s), 2020-2025	972	149	274	1,395
Warehouse Sq. Ft. (1,000s), 2020-2025	937	313	542	1,792
Total Nonresidential Sq. Ft. (1,000s), 2020-2025	12,334	6,685	4,103	23,122
Retail/Commercial Sq. Ft. (1,000s), 2025-2040	8,775	5,006	4,299	18,080
Office Sq. Ft. (1,000s), 2025-2040	10,828	3,342	996	15,166
Public/Institutional Sq. Ft. (1,000s), 2025-2040	11,671	10,322	4,567	26,560
Industrial Sq. Ft. (1,000s), 2025-2040	2,916	445	822	4,183
Warehouse Sq. Ft. (1,000s), 2025-2040	2,812	941	1,626	5,379
Total Nonresidential Sq. Ft. (1,000s), 2025-2040	37,002	20,056	12,310	69,368

Source: 2020 and 2025 square feet are interpolations between 2015 and 2040 from Table 73; 5-year growth is the difference between 2020 and 2025; 20-year growth is the difference between 2020 and 2040 (from Table 73).

Employment estimates are used to derive the estimate of square feet of nonresidential land uses based on employee density ratios. The 2015 and 2040 employees and building square feet by land use type for each transportation/park service fee area are summarized in Table 71 on the following page.

Table 71. Nonresidential Employment and Square Feet, 2015 and 2040

Nonresidential Land Use Type	Transportation/Park Service Areas			City-Wide
	Northside	Southside	Westside	Total
Retail/Commercial Employees, 2015	65,767	32,454	9,153	107,374
Office Employees, 2015	112,523	51,561	8,929	173,013
Public/Institutional Employees, 2015	36,270	70,662	14,457	121,389
Industrial Employees, 2015	13,681	10,421	6,606	30,708
Warehouse Employees, 2015	17,447	18,867	6,934	43,248
Total Employment, 2015	245,688	183,965	46,079	475,732
Retail/Commercial Employees, 2040	78,052	39,463	15,171	132,686
Office Employees, 2040	150,784	63,368	12,448	226,600
Public/Institutional Employees, 2040	53,970	86,316	21,383	161,669
Industrial Employees, 2040	17,569	11,015	7,702	36,286
Warehouse Employees, 2040	19,743	19,635	8,262	47,640
Total Employment, 2040	320,118	219,797	64,966	604,881
Retail/Commercial Employees/1,000 Sq. Ft.	0.84	0.84	0.84	0.84
Office Employees/1,000 Sq. Ft.	2.12	2.12	2.12	2.12
Public/Institutional Employees/1,000 Sq. Ft.	0.91	0.91	0.91	0.91
Industrial Employees/1,000 Sq. Ft.	0.80	0.80	0.80	0.80
Warehouse Employees/1,000 Sq. Ft.	0.49	0.49	0.49	0.49
Retail/Commercial Sq. Ft. (1,000s), 2015	78,294	38,636	10,896	127,826
Office Sq. Ft. (1,000s), 2015	53,077	24,321	4,212	81,610
Public/Institutional Sq. Ft. (1,000s), 2015	39,857	77,651	15,887	133,395
Industrial Sq. Ft. (1,000s), 2015	17,101	13,026	8,258	38,385
Warehouse Sq. Ft. (1,000s), 2015	35,606	38,504	14,151	88,261
Total Nonresidential Sq. Ft. (1,000s), 2015	223,935	192,138	53,404	469,477
Retail/Commercial Sq. Ft. (1,000s), 2040	92,919	46,980	18,061	157,960
Office Sq. Ft. (1,000s), 2040	71,125	29,891	5,872	106,888
Public/Institutional Sq. Ft. (1,000s), 2040	59,308	94,853	23,498	177,659
Industrial Sq. Ft. (1,000s), 2040	21,961	13,769	9,628	45,358
Warehouse Sq. Ft. (1,000s), 2040	40,292	40,071	16,861	97,224
Total Nonresidential Sq. Ft. (1,000s), 2040	285,605	225,564	73,920	585,089

Source: Employment by land use category and service area for 2015 and 2040 from Table 74 and Table 75, Appendix A; employees per 1,000 sq. ft. from U.S. Department of Energy, *Commercial Buildings Energy Consumption Survey*, 2012 (released February 2015, revised May 2016); 2015 and 2040 square feet derived by dividing employees by employees per 1,000 square feet.

Table 72. Population and Housing by Census Tract, 2010

Census Tract	City Population	City Share of Pop.	Total Units	Percent Single-Family	House-holds	Occup. Rate
Census Tract 1, Fulton Co	4,413	100.00%	2,012	73.49%	1,893	94.09%
Census Tract 2, Fulton Co	5,449	100.00%	2,912	51.25%	2,686	92.24%
Census Tract 4, Fulton Co	1,715	100.00%	1,175	18.22%	998	84.94%
Census Tract 5, Fulton Co	4,687	100.00%	3,417	40.76%	2,498	73.11%
Census Tract 6, Fulton Co	5,203	100.00%	2,814	48.20%	2,315	82.27%
Census Tract 10.01, Fulton Co	2,272	100.00%	867	20.16%	748	86.27%
Census Tract 10.02, Fulton Co	6,315	100.00%	608	20.16%	341	56.09%
Census Tract 11, Fulton Co	3,633	100.00%	3,458	1.29%	2,664	77.04%
Census Tract 12.01, Fulton Co	3,479	100.00%	2,642	7.24%	2,361	89.36%
Census Tract 12.02, Fulton Co	3,937	100.00%	3,299	7.24%	2,826	85.66%
Census Tract 13, Fulton Co	4,073	100.00%	2,505	16.94%	2,257	90.10%
Census Tract 14, Fulton Co	2,182	100.00%	1,489	20.60%	1,409	94.63%
Census Tract 15, Fulton Co	4,326	100.00%	2,898	22.61%	2,553	88.10%
Census Tract 86.01, Fulton Co	4,917	100.00%	2,165	59.89%	1,592	73.53%
Census Tract 86.02, Fulton Co	1,285	100.00%	563	26.19%	489	86.86%
Census Tract 87 (part), Fulton Co	4,372	100.00%	2,244	49.37%	1,837	81.86%
Census Tract 88, Fulton Co	4,578	100.00%	2,265	59.43%	1,946	85.92%
Census Tract 89.02, Fulton Co	5,765	100.00%	3,947	32.30%	3,267	82.77%
Census Tract 89.03, Fulton Co	2,372	100.00%	1,085	20.90%	860	79.26%
Census Tract 89.04, Fulton Co	4,883	100.00%	2,726	20.90%	2,490	91.34%
Census Tract 90, Fulton Co	4,417	100.00%	1,987	66.78%	1,880	94.61%
Census Tract 91.01, Fulton Co	4,248	100.00%	3,241	14.20%	2,791	86.12%
Census Tract 91.02, Fulton Co	3,677	100.00%	2,511	14.20%	2,146	85.46%
Census Tract 92, Fulton Co	6,468	100.00%	4,033	32.77%	3,609	89.49%
Census Tract 93, Fulton Co	4,533	100.00%	2,704	39.42%	2,479	91.68%
Census Tract 94.02, Fulton Co	4,073	100.00%	2,927	3.73%	1,953	66.72%
Census Tract 94.03, Fulton Co	4,625	100.00%	3,233	14.11%	3,009	93.07%
Census Tract 94.04, Fulton Co	4,207	100.00%	2,671	14.11%	2,400	89.85%
Census Tract 95.01, Fulton Co	4,015	100.00%	2,058	31.47%	1,807	87.80%
Census Tract 95.02, Fulton Co	3,869	100.00%	2,970	31.47%	2,461	82.86%
Census Tract 96.01, Fulton Co	2,438	100.00%	1,731	24.07%	1,482	85.62%
Census Tract 96.02, Fulton Co	4,461	100.00%	3,124	24.07%	2,584	82.71%
Census Tract 96.03, Fulton Co	4,388	100.00%	2,986	24.07%	2,529	84.70%
Census Tract 97, Fulton Co	3,534	100.00%	1,547	61.84%	1,419	91.73%
Census Tract 98.01, Fulton Co	4,680	100.00%	1,999	68.96%	1,900	95.05%
Census Tract 98.02 (part), Fulton Co	4,020	97.08%	1,979	68.96%	1,806	91.26%
Census Tract 99, Fulton Co	4,993	100.00%	2,428	53.33%	2,213	91.14%
Census Tract 100.01 (part), Fulton Co	4,471	99.64%	2,559	48.47%	2,226	86.99%
Census Tract 100.02 (part), Fulton Co	6,027	86.09%	3,402	48.47%	2,793	82.10%
Census Tract 101.14 (part), Fulton Co	169	2.76%	64	87.65%	58	90.63%
Census Tract 102.06 (part), Fulton Co	13	0.26%	9	100.00%	7	77.78%
Census Tract 102.11 (part), Fulton Co	1,125	26.67%	387	97.95%	373	96.38%
Census Tract 201 (part), Dekalb Co	1,492	100.00%	572	84.72%	538	94.06%
Census Tract 202, Dekalb Co	1,943	100.00%	1,175	24.11%	1,051	89.45%
Census Tract 211.02 (part), Dekalb Co	0	0.00%	0	48.47%	0	0.00%
Subtotal, Northside Service Area	167,742		97,388		83,544	

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Table 72. Population and Housing by Census Tract, 2010 (continued)

Census Tract	City Population	City Share of Pop.	Total Units	Percent Single-Family	House-holds	Occup. Rate
Census Tract 16, Fulton Co	2,072	100.00%	1,392	25.62%	1,278	91.81%
Census Tract 17, Fulton Co	2,800	100.00%	1,630	25.00%	1,421	87.18%
Census Tract 18, Fulton Co	3,927	100.00%	3,002	3.74%	2,707	90.17%
Census Tract 19, Fulton Co	4,636	100.00%	2,212	3.10%	1,351	61.08%
Census Tract 21, Fulton Co	2,451	100.00%	1,282	4.93%	883	68.88%
Census Tract 28, Fulton Co	3,547	100.00%	1,579	2.05%	873	55.29%
Census Tract 29, Fulton Co	2,523	100.00%	1,564	28.17%	1,282	81.97%
Census Tract 30, Fulton Co	2,870	100.00%	1,755	41.65%	1,616	92.08%
Census Tract 31, Fulton Co	1,599	100.00%	840	69.18%	750	89.29%
Census Tract 32, Fulton Co	2,015	100.00%	1,459	42.75%	1,205	82.59%
Census Tract 35, Fulton Co	2,241	100.00%	914	0.00%	767	83.92%
Census Tract 44, Fulton Co	2,238	100.00%	1,134	13.85%	970	85.54%
Census Tract 48, Fulton Co	936	100.00%	627	5.85%	579	92.34%
Census Tract 49, Fulton Co	2,481	100.00%	1,192	61.37%	1,080	90.60%
Census Tract 50, Fulton Co	1,899	100.00%	1,022	49.76%	890	87.08%
Census Tract 52, Fulton Co	4,094	100.00%	2,158	70.53%	1,937	89.76%
Census Tract 53, Fulton Co	3,443	100.00%	1,749	72.19%	1,554	88.85%
Census Tract 55.01, Fulton Co	2,307	100.00%	1,188	55.77%	857	72.14%
Census Tract 55.02, Fulton Co	2,556	100.00%	1,327	59.30%	1,094	82.44%
Census Tract 57, Fulton Co	1,544	100.00%	907	56.72%	644	71.00%
Census Tract 58, Fulton Co	1,412	100.00%	729	60.39%	508	69.68%
Census Tract 63, Fulton Co	1,924	100.00%	1,116	63.28%	715	64.07%
Census Tract 64, Fulton Co	1,346	100.00%	565	29.36%	430	76.11%
Census Tract 65, Fulton Co	3,678	100.00%	1,694	86.51%	1,404	82.88%
Census Tract 67, Fulton Co	3,570	100.00%	1,976	60.21%	1,540	77.94%
Census Tract 68.01, Fulton Co	2,418	100.00%	18	100.00%	8	44.44%
Census Tract 68.02, Fulton Co	1,958	100.00%	525	21.33%	504	96.00%
Census Tract 69, Fulton Co	3,166	100.00%	1,530	57.60%	1,270	83.01%
Census Tract 70.01, Fulton Co	3,943	100.00%	1,736	77.30%	1,352	77.88%
Census Tract 70.02, Fulton Co	2,975	100.00%	1,277	60.91%	988	77.37%
Census Tract 71, Fulton Co	2,145	100.00%	997	53.52%	791	79.34%
Census Tract 72 (part), Fulton Co	1,706	100.00%	908	41.61%	576	63.44%
Census Tract 73 (part), Fulton Co	6,683	100.00%	3,008	45.43%	2,511	83.48%
Census Tract 74, Fulton Co	3,326	100.00%	1,435	36.96%	1,203	83.83%
Census Tract 75, Fulton Co	3,511	100.00%	1,903	39.30%	1,576	82.82%
Census Tract 108 (part), Fulton Co	0	0.00%	0	0.00%	0	0.00%
Census Tract 119, Fulton Co	2,934	37.83%	1,788	7.65%	1,509	84.40%
Census Tract 120, Fulton Co	2,918	36.26%	1,603	23.66%	1,273	79.41%
Census Tract 9800 (part), Fulton Co	0	100.00%	0	0.00%	0	0.00%
Census Tract 203, Dekalb Co	3,574	100.00%	1,623	67.30%	1,518	93.53%
Census Tract 204, Dekalb Co	2,376	100.00%	1,309	45.04%	1,222	93.35%
Census Tract 205, Dekalb Co	2,802	100.00%	1,738	66.62%	1,425	81.99%
Census Tract 206, Dekalb Co	2,000	100.00%	969	37.63%	865	89.27%
Census Tract 207, Dekalb Co	2,032	100.00%	1,133	51.39%	939	82.88%
Census Tract 208.01, Dekalb Co	2,444	100.00%	1,147	91.60%	1,045	91.11%
Census Tract 208.02, Dekalb Co	3,945	100.00%	1,926	80.71%	1,730	89.82%
Census Tract 209, Dekalb Co	5,402	100.00%	2,848	77.47%	2,500	87.78%
Census Tract 224.01 (part), Dekalb Co	0	0.00%	0	0.00%	0	0.00%
Census Tract 224.03 (part), Dekalb Co	0	0.00%	0	0.00%	0	0.00%
Census Tract 237 (part), Dekalb Co	282	11.27%	95	80.71%	91	95.79%
Subtotal, Southside Service Area	126,649		64,529		53,231	

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Table 72. Population and Housing by Census Tract, 2010 (continued)

Census Tract	City Population	City Share of Pop.	Total Units	Percent Single-Family	House-holds	Occup. Rate
Census Tract 7, Fulton Co	2,794	100.00%	401	85.86%	338	84.29%
Census Tract 23, Fulton Co	1,476	100.00%	1,282	36.36%	618	48.21%
Census Tract 24, Fulton Co	2,273	100.00%	1,331	77.53%	790	59.35%
Census Tract 25, Fulton Co	1,904	100.00%	1,237	39.24%	779	62.97%
Census Tract 26, Fulton Co	914	100.00%	595	16.69%	421	70.76%
Census Tract 36, Fulton Co	1,207	100.00%	922	3.34%	699	75.81%
Census Tract 37, Fulton Co	0	100.00%	0	12.90%	0	57.62%
Census Tract 38, Fulton Co	3,967	100.00%	361	12.90%	208	57.62%
Census Tract 39, Fulton Co	1,331	100.00%	863	48.30%	551	63.85%
Census Tract 40, Fulton Co	2,231	100.00%	1,158	86.11%	870	75.13%
Census Tract 41, Fulton Co	1,862	100.00%	1,066	52.90%	723	67.82%
Census Tract 42, Fulton Co	2,212	100.00%	1,489	12.70%	1,255	84.28%
Census Tract 43, Fulton Co	2,421	100.00%	638	24.79%	557	87.30%
Census Tract 60, Fulton Co	3,390	100.00%	1,675	65.28%	1,338	79.88%
Census Tract 61, Fulton Co	3,471	100.00%	1,722	82.29%	1,317	76.48%
Census Tract 62, Fulton Co	1,311	100.00%	684	66.78%	446	65.20%
Census Tract 66.01, Fulton Co	1,889	100.00%	969	74.66%	758	78.22%
Census Tract 66.02, Fulton Co	1,129	100.00%	574	51.95%	380	66.20%
Census Tract 76.02, Fulton Co	2,418	100.00%	1,071	67.57%	925	86.37%
Census Tract 76.03, Fulton Co	4,296	100.00%	2,440	11.88%	1,984	81.31%
Census Tract 76.04, Fulton Co	2,730	100.00%	1,444	11.88%	1,165	80.68%
Census Tract 77.03 (part), Fulton Co	3,621	93.78%	1,558	56.78%	1,418	91.01%
Census Tract 77.04 (part), Fulton Co	4,551	100.00%	2,023	56.78%	1,733	85.66%
Census Tract 77.05, Fulton Co	3,628	100.00%	2,127	42.71%	1,781	83.73%
Census Tract 77.06 (part), Fulton Co	7,669	90.97%	3,802	42.71%	3,334	87.69%
Census Tract 78.02 (part), Fulton Co	5,668	69.95%	2,622	97.73%	2,174	82.91%
Census Tract 78.05 (part), Fulton Co	1,623	47.06%	785	54.01%	658	83.82%
Census Tract 78.06 (part), Fulton Co	5,474	100.00%	2,330	71.27%	2,086	89.53%
Census Tract 78.07, Fulton Co	3,116	100.00%	1,330	58.85%	998	75.04%
Census Tract 78.08, Fulton Co	4,306	100.00%	1,786	12.51%	1,526	85.44%
Census Tract 79 (part), Fulton Co	4,289	91.78%	2,121	91.36%	1,879	88.59%
Census Tract 80, Fulton Co	4,875	100.00%	2,269	86.47%	1,869	82.37%
Census Tract 81.01, Fulton Co	977	100.00%	447	98.09%	391	87.47%
Census Tract 81.02, Fulton Co	5,925	100.00%	3,327	35.62%	2,544	76.47%
Census Tract 82.01, Fulton Co	6,083	100.00%	2,915	82.43%	2,584	88.64%
Census Tract 82.02 (part), Fulton Co	1,893	100.00%	883	49.23%	702	79.50%
Census Tract 83.01, Fulton Co	2,903	100.00%	1,591	50.22%	1,046	65.74%
Census Tract 83.02, Fulton Co	2,000	100.00%	1,220	60.48%	691	56.64%
Census Tract 84, Fulton Co	3,181	100.00%	2,017	35.89%	1,185	58.75%
Census Tract 85, Fulton Co	3,774	100.00%	1,938	61.34%	1,333	68.78%
Census Tract 103.03 (part), Fulton Co	2,175	54.79%	922	100.00%	820	88.94%
Census Tract 118, Fulton Co	2,655	62.21%	2,721	26.47%	1,493	54.87%
Subtotal, Westside Service Area	125,612		62,656		48,367	
Total, City-Wide	420,003		224,573		185,142	

Source: City population, total units and households from 2010 U.S. Census for City of Atlanta; City share of population is ratio of City population to total tract population from Atlanta Regional Commission (ARC); percent single-family is share of total units that are single-family detached, mobile home or RV/boat/van from 2000 U.S. Census for City of Atlanta; occupancy rate is ratio of households to total units.

Table 73. Population and Housing Units by Census Tract, 2015-2040

	Total Population		Total Units		Single-Fam. Units		Multi-Fam. Units	
Census Tract	2015	2040	2015	2040	2015	2040	2015	2040
Census Tract 1, Fulton Co	3,693	4,438	2,072	2,513	1,523	1,847	549	666
Census Tract 2, Fulton Co	4,871	5,774	3,058	3,698	1,567	1,895	1,491	1,803
Census Tract 4, Fulton Co	1,982	4,011	1,498	3,297	273	601	1,225	2,696
Census Tract 5, Fulton Co	5,047	12,014	4,212	10,080	1,717	4,109	2,495	5,971
Census Tract 6, Fulton Co	5,496	9,243	3,283	5,560	1,582	2,680	1,701	2,880
Census Tract 10.01, Fulton Co	2,564	4,067	1,360	2,232	274	450	1,086	1,782
Census Tract 10.02, Fulton Co	9,298	14,320	1,027	1,434	207	289	820	1,145
Census Tract 11, Fulton Co	4,329	5,269	3,718	4,463	48	58	3,670	4,405
Census Tract 12.01, Fulton Co	4,064	5,863	3,215	4,717	233	342	2,982	4,375
Census Tract 12.02, Fulton Co	4,164	5,365	3,828	5,007	277	363	3,551	4,644
Census Tract 13, Fulton Co	3,728	5,081	2,740	3,781	464	641	2,276	3,140
Census Tract 14, Fulton Co	2,126	2,664	1,600	2,013	330	415	1,270	1,598
Census Tract 15, Fulton Co	3,915	4,603	3,126	3,737	707	845	2,419	2,892
Census Tract 86.01, Fulton Co	4,543	6,238	2,302	3,133	1,379	1,876	923	1,257
Census Tract 86.02, Fulton Co	1,698	2,805	598	976	157	256	441	720
Census Tract 87 (part), Fulton Co	5,147	7,693	2,483	3,689	1,226	1,821	1,257	1,868
Census Tract 88, Fulton Co	4,869	6,876	2,568	3,597	1,526	2,138	1,042	1,459
Census Tract 89.02, Fulton Co	6,925	10,924	4,967	7,780	1,605	2,513	3,362	5,267
Census Tract 89.03, Fulton Co	2,023	2,429	1,085	1,289	227	269	858	1,020
Census Tract 89.04, Fulton Co	4,497	5,040	2,852	3,212	596	671	2,256	2,541
Census Tract 90, Fulton Co	3,885	5,463	2,190	3,173	1,462	2,119	728	1,054
Census Tract 91.01, Fulton Co	4,320	5,115	3,582	4,322	509	614	3,073	3,708
Census Tract 91.02, Fulton Co	3,477	4,040	2,835	3,334	403	474	2,432	2,860
Census Tract 92, Fulton Co	7,390	13,960	5,163	9,882	1,692	3,238	3,471	6,644
Census Tract 93, Fulton Co	4,570	8,411	3,159	5,870	1,245	2,314	1,914	3,556
Census Tract 94.02, Fulton Co	5,171	7,995	3,146	5,443	117	203	3,029	5,240
Census Tract 94.03, Fulton Co	4,569	5,319	3,570	4,214	504	594	3,066	3,620
Census Tract 94.04, Fulton Co	4,071	4,809	2,930	3,525	413	497	2,517	3,028
Census Tract 95.01, Fulton Co	3,802	5,796	2,202	3,387	693	1,066	1,509	2,321
Census Tract 95.02, Fulton Co	3,846	5,618	3,398	5,025	1,069	1,581	2,329	3,444
Census Tract 96.01, Fulton Co	2,444	3,557	1,863	2,801	448	674	1,415	2,127
Census Tract 96.02, Fulton Co	4,314	6,666	3,492	5,378	840	1,294	2,652	4,084
Census Tract 96.03, Fulton Co	4,068	5,137	3,331	4,201	802	1,011	2,529	3,190
Census Tract 97, Fulton Co	3,188	4,096	1,632	2,144	1,009	1,326	623	818
Census Tract 98.01, Fulton Co	4,386	4,946	2,132	2,406	1,470	1,659	662	747
Census Tract 98.02 (part), Fulton Co	3,830	4,212	2,048	2,247	1,412	1,550	636	697
Census Tract 99, Fulton Co	4,344	4,986	2,530	2,926	1,349	1,561	1,181	1,365
Census Tract 100.01 (part), Fulton Co	4,024	6,741	2,771	4,866	1,343	2,359	1,428	2,507
Census Tract 100.02 (part), Fulton Co	5,585	8,252	3,708	5,727	1,797	2,776	1,911	2,951
Census Tract 101.14 (part), Fulton Co	167	177	92	100	81	88	11	12
Census Tract 102.06 (part), Fulton Co	14	17	7	9	7	9	0	0
Census Tract 102.11 (part), Fulton Co	827	853	381	404	373	396	8	8
Census Tract 201 (part), Dekalb Co	1,509	1,760	753	924	638	783	115	141
Census Tract 202, Dekalb Co	1,804	2,521	1,247	1,808	301	436	946	1,372
Census Tract 211.02 (part), Dekalb Co	0	0	0	0	0	0	0	0
Subtotal, Northside Service Area	170,584	245,164	109,754	160,324	35,895	52,701	73,859	107,623

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Table 73. Population and Housing by Census Tract, 2015-2040 (continued)

	Total Population		Total Units		Single-Fam. Units		Multi-Fam. Units	
Census Tract	2015	2040	2015	2040	2015	2040	2015	2040
Census Tract 16, Fulton Co	2,252	3,650	1,738	2,859	445	733	1,293	2,126
Census Tract 17, Fulton Co	2,795	7,136	1,843	4,967	461	1,242	1,382	3,725
Census Tract 18, Fulton Co	5,005	8,887	3,736	6,490	140	243	3,596	6,247
Census Tract 19, Fulton Co	2,623	6,443	2,608	6,574	81	204	2,527	6,370
Census Tract 21, Fulton Co	2,153	5,283	1,826	4,735	90	233	1,736	4,502
Census Tract 28, Fulton Co	4,745	8,742	2,545	5,372	52	110	2,493	5,262
Census Tract 29, Fulton Co	2,436	2,972	1,696	2,074	478	584	1,218	1,490
Census Tract 30, Fulton Co	2,781	3,270	1,869	2,232	778	930	1,091	1,302
Census Tract 31, Fulton Co	1,723	2,081	885	1,093	612	756	273	337
Census Tract 32, Fulton Co	2,176	2,696	1,671	2,101	714	898	957	1,203
Census Tract 35, Fulton Co	3,079	7,631	1,188	3,872	0	0	1,188	3,872
Census Tract 44, Fulton Co	2,081	2,433	1,162	1,382	161	191	1,001	1,191
Census Tract 48, Fulton Co	1,599	3,925	766	1,967	45	115	721	1,852
Census Tract 49, Fulton Co	2,171	2,722	1,256	1,636	771	1,004	485	632
Census Tract 50, Fulton Co	2,025	2,695	1,168	1,601	581	797	587	804
Census Tract 52, Fulton Co	4,122	4,878	2,196	2,636	1,549	1,859	647	777
Census Tract 53, Fulton Co	3,415	4,143	1,881	2,339	1,358	1,689	523	650
Census Tract 55.01, Fulton Co	2,418	2,872	1,267	1,558	707	869	560	689
Census Tract 55.02, Fulton Co	2,438	2,928	1,374	1,716	815	1,018	559	698
Census Tract 57, Fulton Co	1,612	2,057	917	1,214	520	689	397	525
Census Tract 58, Fulton Co	1,481	3,097	740	1,599	447	966	293	633
Census Tract 63, Fulton Co	1,730	2,230	1,202	1,595	761	1,009	441	586
Census Tract 64, Fulton Co	1,492	2,809	603	1,059	177	311	426	748
Census Tract 65, Fulton Co	3,799	5,293	1,707	2,469	1,477	2,136	230	333
Census Tract 67, Fulton Co	3,866	5,583	2,050	3,063	1,234	1,844	816	1,219
Census Tract 68.01, Fulton Co	3,307	5,163	29	70	29	70	0	0
Census Tract 68.02, Fulton Co	1,818	1,923	525	569	112	121	413	448
Census Tract 69, Fulton Co	3,333	4,872	1,596	2,409	919	1,388	677	1,021
Census Tract 70.01, Fulton Co	3,851	5,582	1,809	2,732	1,398	2,112	411	620
Census Tract 70.02, Fulton Co	3,570	4,930	1,373	1,927	836	1,174	537	753
Census Tract 71, Fulton Co	2,352	3,515	1,018	1,548	545	829	473	719
Census Tract 72 (part), Fulton Co	2,033	3,677	1,116	2,086	464	868	652	1,218
Census Tract 73 (part), Fulton Co	6,817	8,941	3,062	4,148	1,391	1,884	1,671	2,264
Census Tract 74, Fulton Co	3,762	4,143	1,473	1,631	544	603	929	1,028
Census Tract 75, Fulton Co	3,485	6,303	2,365	4,495	929	1,766	1,436	2,729
Census Tract 108 (part), Fulton Co	0	0	0	0	0	0	0	0
Census Tract 119, Fulton Co	1,674	3,941	920	2,271	70	174	850	2,097
Census Tract 120, Fulton Co	1,092	1,932	638	1,200	151	284	487	916
Census Tract 9800 (part), Fulton Co	0	0	0	0	0	0	0	0
Census Tract 203, Dekalb Co	3,171	3,839	1,730	2,179	1,164	1,466	566	713
Census Tract 204, Dekalb Co	2,114	2,773	1,371	1,879	617	846	754	1,033
Census Tract 205, Dekalb Co	3,368	4,133	1,779	2,267	1,185	1,510	594	757
Census Tract 206, Dekalb Co	2,444	3,391	1,034	1,481	389	557	645	924
Census Tract 207, Dekalb Co	2,304	3,424	1,160	1,794	596	922	564	872
Census Tract 208.01, Dekalb Co	2,801	3,839	1,242	1,788	1,138	1,638	104	150
Census Tract 208.02, Dekalb Co	3,901	4,541	2,003	2,456	1,617	1,982	386	474
Census Tract 209, Dekalb Co	6,010	6,860	2,932	3,498	2,271	2,710	661	788
Census Tract 224.01 (part), Dekalb Co	0	0	0	0	0	0	0	0
Census Tract 224.03 (part), Dekalb Co	0	0	0	0	0	0	0	0
Census Tract 237 (part), Dekalb Co	737	814	275	314	222	253	53	61
Subtotal, Southside Service Area	129,961	194,992	69,344	110,945	31,041	43,587	38,303	67,358

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Table 73. Population and Housing by Census Tract, 2015-2040 (continued)

	Total Population		Total Units		Single-Fam. Units		Multi-Fam. Units	
Census Tract	2015	2040	2015	2040	2015	2040	2015	2040
Census Tract 7, Fulton Co	4,406	6,827	469	731	403	628	66	103
Census Tract 23, Fulton Co	2,386	2,867	2,282	2,740	830	996	1,452	1,744
Census Tract 24, Fulton Co	2,022	2,663	1,585	2,099	1,229	1,627	356	472
Census Tract 25, Fulton Co	1,959	2,509	1,709	2,242	671	880	1,038	1,362
Census Tract 26, Fulton Co	1,146	2,330	813	1,682	136	281	677	1,401
Census Tract 36, Fulton Co	1,405	1,890	1,039	1,472	35	49	1,004	1,423
Census Tract 37, Fulton Co	234	580	153	392	20	51	133	341
Census Tract 38, Fulton Co	2,739	4,794	554	1,359	71	175	483	1,184
Census Tract 39, Fulton Co	1,343	3,671	946	1,944	457	939	489	1,005
Census Tract 40, Fulton Co	1,946	2,569	1,174	1,612	1,011	1,388	163	224
Census Tract 41, Fulton Co	1,855	2,544	1,154	1,657	610	877	544	780
Census Tract 42, Fulton Co	2,409	2,915	1,583	1,985	201	252	1,382	1,733
Census Tract 43, Fulton Co	4,439	6,427	652	696	162	173	490	523
Census Tract 60, Fulton Co	3,139	3,312	1,699	1,874	1,109	1,223	590	651
Census Tract 61, Fulton Co	3,213	3,333	1,740	1,891	1,432	1,556	308	335
Census Tract 62, Fulton Co	1,129	1,711	724	1,150	483	768	241	382
Census Tract 66.01, Fulton Co	2,217	4,216	1,231	2,435	919	1,818	312	617
Census Tract 66.02, Fulton Co	1,147	2,237	731	1,465	380	761	351	704
Census Tract 76.02, Fulton Co	2,232	2,327	1,073	1,162	725	785	348	377
Census Tract 76.03, Fulton Co	3,959	5,764	2,586	3,658	307	434	2,279	3,224
Census Tract 76.04, Fulton Co	2,445	2,460	1,445	1,526	172	181	1,273	1,345
Census Tract 77.03 (part), Fulton Co	3,373	3,421	1,589	1,669	902	948	687	721
Census Tract 77.04 (part), Fulton Co	4,138	4,847	2,073	2,561	1,177	1,454	896	1,107
Census Tract 77.05, Fulton Co	3,799	5,047	2,257	3,103	964	1,325	1,293	1,778
Census Tract 77.06 (part), Fulton Co	7,835	8,387	3,969	4,427	1,695	1,891	2,274	2,536
Census Tract 78.02 (part), Fulton Co	5,917	6,219	2,738	3,016	2,676	2,948	62	68
Census Tract 78.05 (part), Fulton Co	1,675	2,611	830	1,398	448	755	382	643
Census Tract 78.06 (part), Fulton Co	5,025	5,925	2,332	2,864	1,662	2,041	670	823
Census Tract 78.07, Fulton Co	2,681	3,168	1,381	1,700	813	1,000	568	700
Census Tract 78.08, Fulton Co	3,838	3,987	1,792	1,951	224	244	1,568	1,707
Census Tract 79 (part), Fulton Co	4,846	6,132	2,332	3,084	2,131	2,818	201	266
Census Tract 80, Fulton Co	4,840	5,889	2,466	3,099	2,132	2,680	334	419
Census Tract 81.01, Fulton Co	916	1,077	454	560	445	549	9	11
Census Tract 81.02, Fulton Co	5,771	9,112	3,534	5,839	1,259	2,080	2,275	3,759
Census Tract 82.01, Fulton Co	5,889	7,700	2,944	3,815	2,427	3,145	517	670
Census Tract 82.02 (part), Fulton Co	2,551	4,488	1,255	2,082	618	1,025	637	1,057
Census Tract 83.01, Fulton Co	2,946	4,856	1,895	3,141	952	1,578	943	1,563
Census Tract 83.02, Fulton Co	2,252	3,634	1,797	2,926	1,087	1,770	710	1,156
Census Tract 84, Fulton Co	3,824	5,694	2,865	4,301	1,028	1,544	1,837	2,757
Census Tract 85, Fulton Co	4,191	8,082	2,486	4,820	1,525	2,957	961	1,863
Census Tract 103.03 (part), Fulton Co	5,345	7,182	2,269	3,235	2,269	3,235	0	0
Census Tract 118, Fulton Co	1,925	2,469	1,816	2,265	481	600	1,335	1,665
Subtotal, Westside Service Area	131,347	177,873	70,416	97,628	38,278	52,429	32,138	45,199
Total, City-Wide	431,892	618,029	249,514	368,897	105,214	148,717	144,300	220,180

Source: Total population is projected population from Atlanta Regional Commission (ARC) times Atlanta percentage from Table 72; total units is projected households from ARC divided by occupancy rate and multiplied by Atlanta percentage from Table 72; single-family units is total units times single-family percentage from Table 72; multi-family units is difference between total units and single-family units.

Table 74. Employment by Census Tract, 2015

Census Tract	Retail/ Comm.	Office	Indus- trial	Ware- house	Public/ Instit.	Total
Census Tract 1, Fulton Co	259	186	139	10	183	777
Census Tract 2, Fulton Co	1,851	1,153	110	88	741	3,943
Census Tract 4, Fulton Co	3,444	10,425	237	2,093	226	16,425
Census Tract 5, Fulton Co	4,011	10,234	689	76	471	15,481
Census Tract 6, Fulton Co	2,020	814	145	627	782	4,388
Census Tract 10.01, Fulton Co	3,655	7,585	599	148	1,031	13,018
Census Tract 10.02, Fulton Co	1,163	1,396	48	8	7,257	9,872
Census Tract 11, Fulton Co	1,269	6,152	88	45	647	8,201
Census Tract 12.01, Fulton Co	569	226	12	10	148	965
Census Tract 12.02, Fulton Co	2,322	8,883	1,285	448	1,297	14,235
Census Tract 13, Fulton Co	1,914	390	15	9	2,941	5,269
Census Tract 14, Fulton Co	588	265	158	9	621	1,641
Census Tract 15, Fulton Co	1,019	357	28	39	318	1,761
Census Tract 86.01, Fulton Co	112	65	19	30	391	617
Census Tract 86.02, Fulton Co	346	498	1,100	400	142	2,486
Census Tract 87 (part), Fulton Co	83	512	261	547	403	1,806
Census Tract 88, Fulton Co	248	886	1,376	1,931	416	4,857
Census Tract 89.02, Fulton Co	3,853	3,773	2,634	2,734	841	13,835
Census Tract 89.03, Fulton Co	290	204	51	66	123	734
Census Tract 89.04, Fulton Co	306	1,137	971	397	120	2,931
Census Tract 90, Fulton Co	533	386	2	48	46	1,015
Census Tract 91.01, Fulton Co	1,419	1,943	123	63	9,000	12,548
Census Tract 91.02, Fulton Co	417	344	460	354	621	2,196
Census Tract 92, Fulton Co	2,490	1,776	459	160	466	5,351
Census Tract 93, Fulton Co	632	563	21	241	8	1,465
Census Tract 94.02, Fulton Co	2,049	3,471	19	1,101	26	6,666
Census Tract 94.03, Fulton Co	871	856	27	38	183	1,975
Census Tract 94.04, Fulton Co	123	476	0	25	70	694
Census Tract 95.01, Fulton Co	535	553	6	12	215	1,321
Census Tract 95.02, Fulton Co	3,095	3,347	171	49	219	6,881
Census Tract 96.01, Fulton Co	1,340	1,989	323	245	147	4,044
Census Tract 96.02, Fulton Co	9,053	10,862	42	525	600	21,082
Census Tract 96.03, Fulton Co	3,023	3,313	181	241	563	7,321
Census Tract 97, Fulton Co	546	470	203	18	738	1,975
Census Tract 98.01, Fulton Co	813	1,103	30	67	1,634	3,647
Census Tract 98.02 (part), Fulton Co	677	3,434	1,085	3,421	333	8,950
Census Tract 99, Fulton Co	1,053	582	22	118	201	1,976
Census Tract 100.01 (part), Fulton Co	2,695	13,862	224	677	1,216	18,674
Census Tract 100.02 (part), Fulton Co	4,706	7,723	254	323	487	13,493
Census Tract 101.14 (part), Fulton Co	16	12	0	2	9	39
Census Tract 102.06 (part), Fulton Co	1	7	0	0	0	8
Census Tract 102.11 (part), Fulton Co	39	122	9	3	100	273
Census Tract 201 (part), Dekalb Co	25	129	32	0	2	188
Census Tract 202, Dekalb Co	294	59	23	1	287	664
Census Tract 211.02 (part), Dekalb Co	0	0	0	0	0	0
Subtotal, Northside Service Area	65,767	112,523	13,681	17,447	36,270	245,688

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Table 74. Employment by Census Tract, 2015 (continued)

Census Tract	Retail/ Comm.	Office	Indus- trial	Ware- house	Public/ Instit.	Total
Census Tract 16, Fulton Co	1,125	275	7	64	83	1,554
Census Tract 17, Fulton Co	287	786	232	23	2,334	3,662
Census Tract 18, Fulton Co	149	2,029	2,203	4	158	4,543
Census Tract 19, Fulton Co	7,262	16,829	427	1,084	8,375	33,977
Census Tract 21, Fulton Co	2,215	1,912	3,932	1	782	8,842
Census Tract 28, Fulton Co	1,552	2,694	6	1	2,085	6,338
Census Tract 29, Fulton Co	521	376	52	38	409	1,396
Census Tract 30, Fulton Co	483	223	59	31	362	1,158
Census Tract 31, Fulton Co	74	101	121	28	64	388
Census Tract 32, Fulton Co	261	307	105	134	19	826
Census Tract 35, Fulton Co	5,175	8,439	151	2,560	24,613	40,938
Census Tract 44, Fulton Co	120	127	30	77	123	477
Census Tract 48, Fulton Co	0	180	0	0	8	188
Census Tract 49, Fulton Co	419	209	134	106	298	1,166
Census Tract 50, Fulton Co	200	126	71	28	319	744
Census Tract 52, Fulton Co	535	231	38	18	212	1,034
Census Tract 53, Fulton Co	367	87	87	74	380	995
Census Tract 55.01, Fulton Co	0	15	9	48	87	159
Census Tract 55.02, Fulton Co	52	75	27	105	265	524
Census Tract 57, Fulton Co	25	11	20	7	39	102
Census Tract 58, Fulton Co	74	189	333	170	16	782
Census Tract 63, Fulton Co	128	79	26	229	68	530
Census Tract 64, Fulton Co	117	62	0	9	376	564
Census Tract 65, Fulton Co	38	204	12	59	1,892	2,205
Census Tract 67, Fulton Co	101	121	189	29	458	898
Census Tract 68.01, Fulton Co	1	83	0	0	1,076	1,160
Census Tract 68.02, Fulton Co	2	0	0	0	6	8
Census Tract 69, Fulton Co	664	213	11	2	90	980
Census Tract 70.01, Fulton Co	149	40	0	2	181	372
Census Tract 70.02, Fulton Co	38	203	356	398	105	1,100
Census Tract 71, Fulton Co	25	125	0	231	106	487
Census Tract 72 (part), Fulton Co	835	1,995	355	947	769	4,901
Census Tract 73 (part), Fulton Co	371	227	309	869	229	2,005
Census Tract 74, Fulton Co	478	260	0	10	2,466	3,214
Census Tract 75, Fulton Co	708	204	27	299	180	1,418
Census Tract 108 (part), Fulton Co	0	0	0	0	0	0
Census Tract 119, Fulton Co	3,125	7,892	297	109	14,631	26,054
Census Tract 120, Fulton Co	111	70	9	60	253	503
Census Tract 9800 (part), Fulton Co	2,020	2,283	182	10,925	5,355	20,765
Census Tract 203, Dekalb Co	359	260	116	6	42	783
Census Tract 204, Dekalb Co	36	507	5	13	101	662
Census Tract 205, Dekalb Co	1,116	566	32	1	104	1,819
Census Tract 206, Dekalb Co	4	196	425	0	146	771
Census Tract 207, Dekalb Co	143	61	6	18	48	276
Census Tract 208.01, Dekalb Co	61	159	4	4	3	231
Census Tract 208.02, Dekalb Co	154	64	9	2	586	815
Census Tract 209, Dekalb Co	724	330	7	33	350	1,444
Census Tract 224.01 (part), Dekalb Co	0	0	0	0	0	0
Census Tract 224.03 (part), Dekalb Co	0	0	0	0	0	0
Census Tract 237 (part), Dekalb Co	50	136	0	11	10	207
Subtotal, Southside Service Area	32,454	51,561	10,421	18,867	70,662	183,965

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Table 74. Employment by Census Tract, 2015 (continued)

Census Tract	Retail/ Comm.	Office	Indus- trial	Ware- house	Public/ Instit.	Total
Census Tract 7, Fulton Co	98	666	413	134	1,133	2,444
Census Tract 23, Fulton Co	26	94	189	0	445	754
Census Tract 24, Fulton Co	133	93	4	66	78	374
Census Tract 25, Fulton Co	207	77	4	37	184	509
Census Tract 26, Fulton Co	377	384	184	4	64	1,013
Census Tract 36, Fulton Co	54	314	157	4	42	571
Census Tract 37, Fulton Co	2	8	2	2	0	14
Census Tract 38, Fulton Co	180	555	0	0	1,386	2,121
Census Tract 39, Fulton Co	35	27	0	3	207	272
Census Tract 40, Fulton Co	176	86	13	0	51	326
Census Tract 41, Fulton Co	147	109	180	0	90	526
Census Tract 42, Fulton Co	661	406	8	38	361	1,474
Census Tract 43, Fulton Co	108	452	2	6	1,988	2,556
Census Tract 60, Fulton Co	254	37	0	0	95	386
Census Tract 61, Fulton Co	43	34	0	6	98	181
Census Tract 62, Fulton Co	21	25	12	8	24	90
Census Tract 66.01, Fulton Co	33	98	759	219	177	1,286
Census Tract 66.02, Fulton Co	14	58	0	4	3	79
Census Tract 76.02, Fulton Co	119	44	8	1	165	337
Census Tract 76.03, Fulton Co	168	90	17	0	297	572
Census Tract 76.04, Fulton Co	17	13	4	0	3	37
Census Tract 77.03 (part), Fulton Co	231	53	0	43	104	431
Census Tract 77.04 (part), Fulton Co	96	112	56	1	265	530
Census Tract 77.05, Fulton Co	1,177	304	4	6	111	1,602
Census Tract 77.06 (part), Fulton Co	600	228	75	23	236	1,162
Census Tract 78.02 (part), Fulton Co	225	72	31	0	119	447
Census Tract 78.05 (part), Fulton Co	788	1,371	1,471	2,350	223	6,203
Census Tract 78.06 (part), Fulton Co	71	65	23	0	198	357
Census Tract 78.07, Fulton Co	84	88	6	0	72	250
Census Tract 78.08, Fulton Co	120	53	0	0	115	288
Census Tract 79 (part), Fulton Co	833	205	18	1	386	1,443
Census Tract 80, Fulton Co	238	53	32	27	292	642
Census Tract 81.01, Fulton Co	0	3	17	7	0	27
Census Tract 81.02, Fulton Co	486	317	10	57	2,550	3,420
Census Tract 82.01, Fulton Co	89	14	0	12	116	231
Census Tract 82.02 (part), Fulton Co	39	228	918	275	1,158	2,618
Census Tract 83.01, Fulton Co	81	28	0	0	218	327
Census Tract 83.02, Fulton Co	0	59	0	3	580	642
Census Tract 84, Fulton Co	52	256	68	5	314	695
Census Tract 85, Fulton Co	165	233	156	0	236	790
Census Tract 103.03 (part), Fulton Co	672	771	1,662	3,486	194	6,785
Census Tract 118, Fulton Co	233	746	103	106	79	1,267
Subtotal, Westside Service Area	9,153	8,929	6,606	6,934	14,457	46,079
Total, City-Wide	107,374	173,013	30,708	43,248	121,389	475,732

Source: 2015 estimates from Atlanta Regional Commission multiplied by Atlanta share from Table 72.

Table 75. Employment by Census Tract, 2040

Census Tract	Retail/ Comm.	Office	Indus- trial	Ware- house	Public/ Instit.	Total
Census Tract 1, Fulton Co	295	218	150	13	283	959
Census Tract 2, Fulton Co	2,487	1,907	167	103	2,005	6,669
Census Tract 4, Fulton Co	3,489	14,863	300	2,040	392	21,084
Census Tract 5, Fulton Co	5,354	14,946	924	85	757	22,066
Census Tract 6, Fulton Co	2,316	926	178	656	1,081	5,157
Census Tract 10.01, Fulton Co	4,262	14,473	850	169	1,585	21,339
Census Tract 10.02, Fulton Co	1,316	1,547	53	10	12,299	15,225
Census Tract 11, Fulton Co	1,700	8,037	190	142	852	10,921
Census Tract 12.01, Fulton Co	633	238	11	15	157	1,054
Census Tract 12.02, Fulton Co	2,441	10,737	1,259	626	1,765	16,828
Census Tract 13, Fulton Co	2,187	443	21	13	3,112	5,776
Census Tract 14, Fulton Co	688	351	158	13	635	1,845
Census Tract 15, Fulton Co	1,128	399	28	49	469	2,073
Census Tract 86.01, Fulton Co	128	68	30	39	457	722
Census Tract 86.02, Fulton Co	416	580	1,487	439	219	3,141
Census Tract 87 (part), Fulton Co	125	891	597	553	613	2,779
Census Tract 88, Fulton Co	273	1,145	1,832	2,102	560	5,912
Census Tract 89.02, Fulton Co	4,304	4,917	3,133	3,133	1,024	16,511
Census Tract 89.03, Fulton Co	345	258	69	76	157	905
Census Tract 89.04, Fulton Co	378	1,427	1,087	476	149	3,517
Census Tract 90, Fulton Co	612	500	2	52	80	1,246
Census Tract 91.01, Fulton Co	1,604	2,162	141	48	9,884	13,839
Census Tract 91.02, Fulton Co	471	375	584	407	2,181	4,018
Census Tract 92, Fulton Co	3,228	2,632	585	182	819	7,446
Census Tract 93, Fulton Co	754	854	29	289	21	1,947
Census Tract 94.02, Fulton Co	3,766	4,431	43	1,125	102	9,467
Census Tract 94.03, Fulton Co	1,253	1,836	45	43	372	3,549
Census Tract 94.04, Fulton Co	175	875	0	28	149	1,227
Census Tract 95.01, Fulton Co	653	779	10	17	524	1,983
Census Tract 95.02, Fulton Co	3,482	4,699	197	61	451	8,890
Census Tract 96.01, Fulton Co	1,359	2,935	428	294	250	5,266
Census Tract 96.02, Fulton Co	9,758	13,086	54	696	969	24,563
Census Tract 96.03, Fulton Co	3,719	4,295	230	287	1,008	9,539
Census Tract 97, Fulton Co	596	557	229	20	1,387	2,789
Census Tract 98.01, Fulton Co	1,026	1,131	39	76	2,528	4,800
Census Tract 98.02 (part), Fulton Co	746	3,886	1,632	4,183	649	11,096
Census Tract 99, Fulton Co	1,337	930	31	131	357	2,786
Census Tract 100.01 (part), Fulton Co	3,160	16,860	299	676	2,224	23,219
Census Tract 100.02 (part), Fulton Co	5,733	9,217	357	370	889	16,566
Census Tract 101.14 (part), Fulton Co	19	13	0	2	14	48
Census Tract 102.06 (part), Fulton Co	2	8	0	0	0	10
Census Tract 102.11 (part), Fulton Co	43	135	12	3	143	336
Census Tract 201 (part), Dekalb Co	26	152	57	0	4	239
Census Tract 202, Dekalb Co	265	65	41	1	394	766
Census Tract 211.02 (part), Dekalb Co	0	0	0	0	0	0
Subtotal, Northside Service Area	78,052	150,784	17,569	19,743	53,970	320,118

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Table 75. Employment by Census Tract, 2040 (continued)

Census Tract	Retail/ Comm.	Office	Indus- trial	Ware- house	Public/ Instit.	Total
Census Tract 16, Fulton Co	1,335	376	10	64	114	1,899
Census Tract 17, Fulton Co	301	807	262	32	2,472	3,874
Census Tract 18, Fulton Co	180	2,191	1,832	6	223	4,432
Census Tract 19, Fulton Co	9,059	19,432	474	1,268	10,145	40,378
Census Tract 21, Fulton Co	2,955	2,821	4,085	1	1,115	10,977
Census Tract 28, Fulton Co	1,670	3,049	8	1	2,373	7,101
Census Tract 29, Fulton Co	653	558	60	42	673	1,986
Census Tract 30, Fulton Co	599	384	88	48	402	1,521
Census Tract 31, Fulton Co	94	153	123	36	133	539
Census Tract 32, Fulton Co	298	331	137	144	19	929
Census Tract 35, Fulton Co	6,047	10,684	169	2,666	28,986	48,552
Census Tract 44, Fulton Co	110	143	32	77	154	516
Census Tract 48, Fulton Co	2	461	0	0	15	478
Census Tract 49, Fulton Co	585	347	140	126	560	1,758
Census Tract 50, Fulton Co	224	146	96	36	472	974
Census Tract 52, Fulton Co	750	382	43	24	409	1,608
Census Tract 53, Fulton Co	371	101	107	83	462	1,124
Census Tract 55.01, Fulton Co	0	24	12	66	148	250
Census Tract 55.02, Fulton Co	61	96	41	113	444	755
Census Tract 57, Fulton Co	32	21	23	19	57	152
Census Tract 58, Fulton Co	109	294	339	209	80	1,031
Census Tract 63, Fulton Co	147	95	26	240	110	618
Census Tract 64, Fulton Co	130	77	0	9	403	619
Census Tract 65, Fulton Co	44	382	14	70	2,370	2,880
Census Tract 67, Fulton Co	111	149	212	31	542	1,045
Census Tract 68.01, Fulton Co	1	143	0	0	1,021	1,165
Census Tract 68.02, Fulton Co	10	1	0	0	12	23
Census Tract 69, Fulton Co	862	346	17	3	209	1,437
Census Tract 70.01, Fulton Co	181	61	0	3	288	533
Census Tract 70.02, Fulton Co	43	259	372	402	210	1,286
Census Tract 71, Fulton Co	26	148	0	232	151	557
Census Tract 72 (part), Fulton Co	1,076	3,091	415	1,054	1,251	6,887
Census Tract 73 (part), Fulton Co	424	271	329	904	305	2,233
Census Tract 74, Fulton Co	548	312	0	15	3,383	4,258
Census Tract 75, Fulton Co	872	342	27	358	276	1,875
Census Tract 108 (part), Fulton Co	0	0	0	0	0	0
Census Tract 119, Fulton Co	3,638	9,088	406	127	17,651	30,910
Census Tract 120, Fulton Co	271	111	10	65	566	1,023
Census Tract 9800 (part), Fulton Co	2,218	2,539	264	10,961	5,387	21,369
Census Tract 203, Dekalb Co	525	466	286	6	97	1,380
Census Tract 204, Dekalb Co	43	599	10	19	259	930
Census Tract 205, Dekalb Co	1,261	594	57	1	155	2,068
Census Tract 206, Dekalb Co	6	360	439	0	327	1,132
Census Tract 207, Dekalb Co	219	131	16	21	106	493
Census Tract 208.01, Dekalb Co	94	283	8	4	7	396
Census Tract 208.02, Dekalb Co	339	119	17	3	1,173	1,651
Census Tract 209, Dekalb Co	874	456	8	35	573	1,946
Census Tract 224.01 (part), Dekalb Co	0	0	0	0	0	0
Census Tract 224.03 (part), Dekalb Co	0	0	0	0	0	0
Census Tract 237 (part), Dekalb Co	65	144	1	11	28	249
Subtotal, Southside Service Area	39,463	63,368	11,015	19,635	86,316	219,797

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Table 75. Employment by Census Tract, 2040 (continued)

Census Tract	Retail/ Comm.	Office	Indus- trial	Ware- house	Public/ Instit.	Total
Census Tract 7, Fulton Co	113	810	477	143	1,272	2,815
Census Tract 23, Fulton Co	35	171	254	0	670	1,130
Census Tract 24, Fulton Co	207	159	4	72	138	580
Census Tract 25, Fulton Co	248	101	4	40	278	671
Census Tract 26, Fulton Co	4,379	704	158	4	126	5,371
Census Tract 36, Fulton Co	178	438	163	4	64	847
Census Tract 37, Fulton Co	6	10	4	2	2	24
Census Tract 38, Fulton Co	259	656	0	0	2,287	3,202
Census Tract 39, Fulton Co	40	35	0	3	400	478
Census Tract 40, Fulton Co	262	215	28	0	106	611
Census Tract 41, Fulton Co	167	117	266	0	117	667
Census Tract 42, Fulton Co	744	483	6	42	512	1,787
Census Tract 43, Fulton Co	127	512	2	6	3,338	3,985
Census Tract 60, Fulton Co	290	41	0	0	124	455
Census Tract 61, Fulton Co	44	38	0	8	128	218
Census Tract 62, Fulton Co	55	51	11	10	75	202
Census Tract 66.01, Fulton Co	40	111	796	260	372	1,579
Census Tract 66.02, Fulton Co	27	104	0	4	5	140
Census Tract 76.02, Fulton Co	152	64	8	1	245	470
Census Tract 76.03, Fulton Co	206	266	55	0	828	1,355
Census Tract 76.04, Fulton Co	17	17	6	0	5	45
Census Tract 77.03 (part), Fulton Co	264	53	0	48	134	499
Census Tract 77.04 (part), Fulton Co	129	170	90	1	517	907
Census Tract 77.05, Fulton Co	1,338	323	3	9	165	1,838
Census Tract 77.06 (part), Fulton Co	698	275	126	24	357	1,480
Census Tract 78.02 (part), Fulton Co	269	91	48	0	169	577
Census Tract 78.05 (part), Fulton Co	935	1,887	1,662	2,623	464	7,571
Census Tract 78.06 (part), Fulton Co	85	68	32	0	247	432
Census Tract 78.07, Fulton Co	106	125	10	0	130	371
Census Tract 78.08, Fulton Co	129	58	0	0	144	331
Census Tract 79 (part), Fulton Co	899	251	29	1	551	1,731
Census Tract 80, Fulton Co	259	59	47	29	345	739
Census Tract 81.01, Fulton Co	1	5	24	5	0	35
Census Tract 81.02, Fulton Co	554	363	10	60	2,823	3,810
Census Tract 82.01, Fulton Co	96	21	0	12	174	303
Census Tract 82.02 (part), Fulton Co	72	274	1,116	582	1,295	3,339
Census Tract 83.01, Fulton Co	102	43	0	0	392	537
Census Tract 83.02, Fulton Co	0	92	0	3	1,149	1,244
Census Tract 84, Fulton Co	188	558	103	5	336	1,190
Census Tract 85, Fulton Co	300	531	325	0	456	1,612
Census Tract 103.03 (part), Fulton Co	736	934	1,730	4,141	270	7,811
Census Tract 118, Fulton Co	415	1,164	105	120	173	1,977
Subtotal, Westside Service Area	15,171	12,448	7,702	8,262	21,383	64,966
Total, City-Wide	132,686	226,600	36,286	47,640	161,669	604,881

Source: 2015 estimates from Atlanta Regional Commission multiplied by Atlanta share from Table 72

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APPENDIX B: AVERAGE HOUSEHOLD SIZE

An important input into the impact fee calculations is the number of persons associated with the single-family and multi-family housing units. The most current available data source is the U.S. Census Bureau's 5% sample data for 2013-2017 (aggregated annual 1% samples). As shown in Table 76, average household sizes for Atlanta are estimated to be 2.66 residents per single-family unit and 1.74 persons per multi-family unit.

Table 76. Average Household Size by Housing Type

Housing Type	Total Units	Occupied Units	Household Population	Average HH Size
Single-Family*	105,932	92,030	245,209	2.66
Multi-Family	129,968	107,687	187,478	1.74
Total	235,900	199,717	432,687	2.17

* includes single-family attached, mobile home, and boat/RV/van

Source: U.S. Census Bureau, American Community Survey, 2013-2017 5-Year 5% sample data for the City of Atlanta, tabular data from Census website; average household size is ratio of household population to occupied units.

National data are available on average household size by square feet from the 2013 American Housing Survey. These data can be used to estimate the relative household sizes for the optional tiered single-family impact fee categories used in this study. As can be seen in Table 77, national average household size for the smallest size category is about 7% less than the average for all size units.

Table 77. Tiered Single-Family Average Household Size, U.S.

Housing Type/Size	Sample	Persons	Households	AHHS
Single-Family Detached, <1,500 sq. ft.	12,448	64,602,402	25,822,959	2.50
Single-Family Detached, 1,500-2,499 sq. ft.	13,962	83,167,828	30,885,794	2.69
Single-Family Detached, 2,500 sq. ft. +	8,410	52,573,162	17,613,975	2.98
Single-Family Detached, Total	34,820	200,343,392	74,322,728	2.70

Source: US Department of Housing and Urban Development, 2013 American Housing Survey, weighted microdata.

For Atlanta, the tiered average household size for single-family units can be estimated by multiplying the ratio of Atlanta average household size for all units of the housing type to the national average household size for all units of the housing type. The tiered average household size data used in this study are summarized in Table 78.

Table 78. Tiered Single-Family Average Household Size, Atlanta

Housing Type/Size	National Average	Ratio to National Average	Atlanta Tiered AHHS
Single-Family Detached, <1,500 sq. ft.	2.50	0.985	2.46
Single-Family Detached, 1,500-2,499 sq. ft.	2.69	0.985	2.65
Single-Family Detached, 2,500 sq. ft. +	2.98	0.985	2.94
Single-Family Detached, Total	2.70	0.985	2.66

Source: National average from Table 77; Atlanta total average from Table 76; ratio is Atlanta average to national average; Atlanta tiered is product of national average household size and Atlanta/national ratio.

In this update, multi-family units are tiered by building height (number of stories) rather than by unit size. An analysis similar to that used for single-family detached units is employed, where national data are used to develop average household sizes for the low-rise (1-2 stories), mid-rise (3-10 stories) and high-rise (more than 10 stories) multi-family categories used for transportation impact fees. As can be seen in Table 79, national average household size for a low-rise building is about 3% more than the average for all multi-family units, while high-rise units average about 18% fewer residents per unit.

Table 79. Tiered Multi-Family Average Household Size

	Low-Rise	Mid-Rise	High-Rise	Total
Household Residents	37,500,248	24,618,297	3,293,352	65,411,898
÷ Occupied Units	17,429,250	12,072,456	1,935,578	31,437,285
National Avg. Household Size	2.15	2.04	1.70	2.08
x Ratio, Atlanta to National Average	0.837	0.837	0.837	0.837
National Avg. Adjusted to Atlanta	1.80	1.71	1.42	1.74

Source: US Department of Housing and Urban Development, 2017 American Housing Survey, weighted microdata (due to data limitations, the tallest building category of 7 or more stories is used as an approximation of high-rise); ratio is Atlanta average to national average; Atlanta total average household size from Table 76, Atlanta tiered is product of national average household size and Atlanta/national ratio for all multi-family units.

APPENDIX C: FUNCTIONAL POPULATION

The two most common methodologies used in calculating public safety service units and impact fees are the "calls-for-service" approach and the "functional population" approach. As in the 1993 study, this update utilizes the "functional population" approach to calculate and assess the fire, police and park and recreation impact fees. This approach is a generally-accepted methodology for these impact fee areas and is based on the observation that demand for public safety facilities tends to be proportional to the presence of people at a particular site.

Functional population is analogous to the concept of "full-time equivalent" employees. It represents the number of "full-time equivalent" people present at the site of a land use, and it is used for the purpose of determining the impact of a particular development on the need for facilities. For residential development, functional population is simply average household size times the percent of time people spend at home. For nonresidential development, functional population is based on a formula that factors trip generation rates, average vehicle occupancy and average number of hours spent by visitors at a land use.

Residential Functional Population

For residential land uses, the impact of a dwelling unit on the need for capital facilities is generally proportional to the number of persons residing in the dwelling unit. This can be measured for different housing types in terms of either average household size (average number of persons per occupied dwelling unit) or persons per unit (average number of persons per dwelling unit, including vacant as well as occupied units). In this analysis, average household size is used to develop the functional population multipliers, as it avoids the need to make assumptions about occupancy rates.

The housing types developed in this update include separating both the single-family and multi-family land use categories into three categories. The average household size associated with each general housing category is shown in Appendix B. As mentioned above, the average household size is based on the occupied units and household population. These city-wide average multipliers will be used for the updated park, fire and police impact fees.

Determining residential functional population multipliers is considerably simpler than the nonresidential component. It is generally estimated that people spend one-half to two-thirds of their time at home and the rest of each 24-hour day away from their place of residence. In developing the residential component of 24-hour functional population, the 1993 study estimated that people, on average, spend 16 hours, or 67 percent, of each 24-hour day at their place of residence and the other 33 percent away from home. This estimate is also used in this update. A similar approach is used for the hotel/motel category. The functional population per unit for these uses is shown in Table 80.

Table 80. Functional Population per Unit for Residential Uses

Housing Type	Unit	Average HH Size	Occupancy	Func. Pop./Unit
Single-Family Detached (Avg.)	Dwelling	2.66	0.67	1.782
Less than 1,500 sf	Dwelling	2.46	0.67	1.648
1,500 to 2,499 sf	Dwelling	2.65	0.67	1.776
2,500 sf or greater	Dwelling	2.94	0.67	1.970
Multi-Family (Avg.)	Dwelling	1.74	0.67	1.166
Low-Rise (1-2 stories)	Dwelling	1.80	0.67	1.206
Mid-Rise (3-6 stories)	Dwelling	1.71	0.67	1.146
High-Rise (7+ stories)	Dwelling	1.42	0.67	0.951
Hotel/Motel	Room	1.57	0.50	0.785

Source: Average household size from Table 78 (single-family) and Table 79 (multi-family); hotel/motel room occupancy based on one-half of average vehicle occupancy on vacation trips from U.S. Department of Transportation, *National Household Travel Survey*, 2009; occupancy factor for hotel/motel assumed.

Nonresidential Functional Population

The functional population methodology for nonresidential land uses is based on trip generation data utilized in developing the transportation demand schedule prepared for the updated transportation impact fee update. Functional population per 1,000 square feet is derived by dividing the total number of hours spent by employees and visitors during a weekday by 24 hours. Employees are estimated to spend eight hours per day at their place of employment; and visitors are estimated to spend one hour per visit. The formula used to derive the nonresidential functional population estimates is summarized in Figure 9.

Figure 9. Nonresidential Functional Population Formula

Functional population/unit = (employee hours/1000 sf + visitor hours/1000 sf) ÷ 24 hours/day

Functional population/employee = functional population/unit ÷ employee/unit

Where:

Employee hours = employees x 8 hours/day

Visitor hours/1000 sf = visitors/1000 sf x 1 hour/visit

Visitors/1000 sf = weekday ADT/1000 sf x avg. vehicle occupancy – employees/1000 sf

Weekday ADT/1000 sf = one way average daily trips (total trip ends ÷ 2)

Using this formula and information on trip generation rates used the transportation impact fee update, vehicle occupancy rates from the *National Household Travel Survey* and employee densities from a national survey, nonresidential functional population estimates per 1,000 square feet of gross floor area are calculated in Table 81.

Table 81. Functional Population per Unit for Nonresidential Uses

Land Use	Unit	Trip Rate	Persons/ Trip	Employee/ Unit	Visitors/ Unit	Functional Pop./Unit
Retail/Commercial	1,000 sq. ft.	18.87	1.92	0.84	35.39	1.755
Office	1,000 sq. ft.	4.87	1.28	2.11	4.12	0.875
Public/Institutional	1,000 sq. ft.	3.32	1.98	0.91	5.66	0.539
Industrial	1,000 sq. ft.	1.95	1.28	0.81	1.69	0.340
Warehouse	1,000 sq. ft.	0.87	1.28	0.49	0.62	0.189
Mini-Warehouse	1,000 sq. ft.	0.75	2.02	0.05	1.47	0.078

Source: Trip rates based on one-half of average daily trip rate from ITE, *Trip Generation*, 10th ed., 2017 (retail/commercial based on shopping center, public/institutional based on nursing home, industrial based on manufacturing); persons/trip is average vehicle occupancy from Federal Highway Administration, *Nationwide Household Travel Survey*, 2017; employees/unit from U.S. Department of Energy, *Commercial Buildings Energy Consumption Survey*, 2012; visitors/unit is trips times persons/trip minus employees/unit; functional population/unit calculated based on formula from Figure 9.

Functional Population Summary

The City's current impact fee schedules have 23 different land use categories; this update would reduce that number. This update proposes consolidating the nonresidential fee categories into 6 broader categories that are consistent among all of the updated impact fees addressed in this report. It also provides the option of assessing residential fees by the size of the unit. The functional population multipliers for the recommended residential and nonresidential land use categories are summarized in Table 82.

Table 82. Functional Population Multipliers

Land Use	Unit	Functional Pop./Unit
Single-Family Detached (avg.)	Dwelling	1.782
Less than 1,500 sq. ft.	Dwelling	1.648
1,500 to 2,499 sq. ft.	Dwelling	1.776
2,500 sq. ft. or greater	Dwelling	1.970
Multi-Family (avg.)	Dwelling	1.166
Low-Rise (1-2 stories)	Dwelling	1.206
Mid-Rise (3-10 stories)	Dwelling	1.146
High-Rise (>10 stories)	Dwelling	0.951
Hotel/Motel	Room	0.785
Retail/Commercial	1,000 sq. ft.	1.755
Office	1,000 sq. ft.	0.875
Public/Institutional	1,000 sq. ft.	0.539
Industrial	1,000 sq. ft.	0.340
Warehouse	1,000 sq. ft.	0.189
Mini-Warehouse	1,000 sq. ft.	0.078

Source: Residential dwelling unit functional population per unit from Table 80; nonresidential functional population per unit from Table 81.

Current and 2040 projections of functional population by park service area and city-wide are based on current and projected housing and employment data from Appendix A. As shown in Table 83, the current functional population is 0 city-wide, and it is expected to grow to just over a million by 2040, an increase of over 20%.

Table 83. Functional Population, 2020-2040

Land Use Type	Unit	Units 2020	Units 2025	Units 2040	Func. Pop. per Unit	Functional Population 2020	Functional Population 2025	Functional Population 2040
Northside								
Single-Family Detached	Dwelling	39,256	42,617	52,701	1.782	69,954	75,943	93,913
Multi-Family	Dwelling	80,612	87,365	107,623	1.166	93,994	101,868	125,488
Retail/Commercial	1,000 sq. ft.	81,219	84,144	92,919	1.755	142,539	147,673	163,073
Office	1,000 sq. ft.	56,687	60,297	71,125	0.875	49,601	52,760	62,234
Public/Institutional	1,000 sq. ft.	43,747	47,637	59,308	0.539	23,580	25,676	31,967
Industrial	1,000 sq. ft.	18,073	19,045	21,961	0.340	6,145	6,475	7,467
Warehouse	1,000 sq. ft.	36,543	37,480	40,292	0.134	4,897	5,022	5,399
Northside Total						390,710	415,417	489,541
Southside								
Single-Family Detached	Dwelling	33,550	36,059	43,587	1.782	59,786	64,257	77,672
Multi-Family	Dwelling	44,114	49,925	67,358	1.166	51,437	58,213	78,539
Retail/Commercial	1,000 sq. ft.	40,305	41,974	46,980	1.755	70,735	73,664	82,450
Office	1,000 sq. ft.	25,435	26,549	29,891	0.875	22,256	23,230	26,155
Public/Institutional	1,000 sq. ft.	81,091	84,531	94,853	0.539	43,708	45,562	51,126
Industrial	1,000 sq. ft.	13,175	13,324	13,769	0.340	4,480	4,530	4,681
Warehouse	1,000 sq. ft.	38,817	39,130	40,071	0.134	5,201	5,243	5,370
Southside Total						257,603	274,699	325,993
Westside								
Single-Family Detached	Dwelling	41,108	43,938	52,429	1.782	73,254	78,298	93,428
Multi-Family	Dwelling	34,750	37,362	45,199	1.166	40,519	43,564	52,702
Retail/Commercial	1,000 sq. ft.	12,329	13,762	18,061	1.755	21,637	24,152	31,697
Office	1,000 sq. ft.	4,544	4,876	5,872	0.875	3,976	4,267	5,138
Public/Institutional	1,000 sq. ft.	17,409	18,931	23,498	0.539	9,383	10,204	12,665
Industrial	1,000 sq. ft.	8,532	8,806	9,628	0.340	2,901	2,994	3,274
Warehouse	1,000 sq. ft.	14,693	15,235	16,861	0.134	1,969	2,041	2,259
Westside Total						153,639	165,520	201,163
City-Wide								
Single-Family Detached	Dwelling	113,914	122,614	148,717		202,994	218,498	265,013
Multi-Family	Dwelling	159,476	174,652	220,180		185,950	203,645	256,729
Retail/Commercial	1,000 sq. ft.	133,853	139,880	157,960		234,911	245,489	277,220
Office	1,000 sq. ft.	86,666	91,722	106,888		75,833	80,257	93,527
Public/Institutional	1,000 sq. ft.	142,247	151,099	177,659		76,671	81,442	95,758
Industrial	1,000 sq. ft.	39,780	41,175	45,358		13,526	13,999	15,422
Warehouse	1,000 sq. ft.	90,053	91,845	97,224		12,067	12,306	13,028
City-Wide Total						801,952	855,636	1,016,697

Source: Units from Table 68, Appendix A; functional population per unit from Table 82 (warehouse is average of warehouse and mini-warehouse; functional population is product of units and functional population per unit.

APPENDIX D: MAJOR STREET INVENTORY

Table 84. Major Street Inventory

Street	From	To	Func. Class	Miles	Thru Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 Pk Hr Trips	2015 Pk Hr VMT
10th St	Howell Mill Rd	Fowler St	Coll	1.013	4	4.05	0.00	0.00	0.00	1	2.04	0.00	1,360	1,378
10th St	Fowler St	Techwood Dr	Coll	0.094	4	0.38	0.00	0.00	0.00	2	0.19	0.00	*1,390*	131
10th St	Techwood Dr	Williams St	Coll	0.079	5	0.40	0.00	0.00	0.00	4	0.16	0.00	*1,390*	110
10th St	Williams St	Spring St	Coll	0.082	6	0.49	0.00	0.08	0.00	0	0.16	0.00	*1,390*	114
10th St	Spring St	Peachtree St	Coll	0.301	4	1.20	0.00	0.08	0.00	5	0.61	0.00	*1,390*	418
10th St	Peachtree St	Monroe Dr	Coll	0.883	4	3.53	0.00	0.00	0.00	4	1.75	0.71	1,420	1,254
14th St	W Peachtree St	W of Cresent Av	Coll	0.268	4	1.07	0.00	0.00	0.00	0	0.54	0.00	2,070	555
14th St	Peachtree St	Juniper St	Coll	0.057	4	0.23	0.00	0.06	0.00	1	0.11	0.00	*1,720*	98
14th St	Juniper St	Piedmont Ave	Coll	0.232	2	0.46	0.00	0.06	0.00	3	0.47	0.00	1,720	399
14th St	Howell Mill Rd	Northside Dr	Coll	0.246	4	0.98	0.00	0.00	0.00	0	0.49	0.00	*1,805*	444
17th St	Peachtree St	W. Peachtree St	Coll	0.092	2	0.18	0.00	0.00	0.00	2	0.19	0.00	*1,805*	166
17th St	W. Peachtree St	Market St	Coll	0.437	4	1.75	0.00	0.00	0.00	9	0.88	0.88	1,890	826
17th St	Market St	State St	Coll	0.205	5	1.03	0.00	0.00	0.21	4	0.42	0.42	*1,890*	387
17th St	State St	Village St	Coll	0.274	4	1.10	0.00	0.28	0.00	3	0.55	0.55	*1,890*	518
17th St	Village St	Northside Dr	Coll	0.365	6	2.19	0.00	0.00	0.37	6	0.73	0.73	*1,890*	690
17th St	Northside Dr	Howell Mill Rd	Coll	0.249	2	0.50	0.00	0.00	0.09	2	0.17	0.00	121	30
Barnett St	Ponce De Leon Av	Virginia Ave	Coll	0.570	2	1.14	0.00	0.00	0.00	0	1.13	0.00	*358*	204
Beverly Rd	W Peachtree St	Montgom. Ferry	Coll	0.563	2	1.13	0.00	0.00	0.00	0	1.12	0.00	427	240
Bishop St	17th St	Mecaslin St	Coll	0.380	2	0.76	0.00	0.00	0.00	0	0.38	0.00	361	137
Blackland Rd	Roswell Rd	midpoint	Coll	0.294	2	0.59	0.00	0.00	0.00	2	0.00	0.00	*53*	16
Blackland Rd	midpoint	Northside Dr	Coll	1.058	2	2.12	0.00	0.00	0.00	0	0.00	1.07	53	56
Bohler Rd	Defoors Ferry Rd	W W.	Coll	1.140	2	2.28	0.00	0.00	0.00	0	1.16	1.16	452	515
Bolton Rd	Marietta Blvd	Moores Mill Rd	Coll	0.205	2	0.41	0.00	0.00	0.00	0	0.41	0.00	1,170	240
Boulevard	Ponce De Leon	North Ave	PA	0.443	4	1.77	0.00	0.00	0.00	2	0.89	0.00	1,610	713
Carroll Dr	Marietta Rd	Chattahoochee	Coll	0.261	2	0.52	0.00	0.00	0.00	0	0.26	0.00	*719*	188
Chattahoochee	Howell Mill Rd	Marietta Blve	Coll	1.658	4	6.63	0.00	0.00	0.00	2	1.21	0.00	1,240	2,056
Cheshire Br. Rd	N of Sheriden Rd	Lavista	PA	0.139	4	0.56	0.00	0.00	0.00	1	0.28	0.00	*1,840*	256
Cheshire Br. Rd	Lavista	Piedmont Rd	PA	1.178	4	4.71	0.00	0.00	0.00	3	2.35	0.00	1,840	2,168
Cheshire Br. Rd	Lenox Rd	N of Sheriden Rd	PA	0.206	5	1.03	0.00	0.00	0.00	2	0.42	0.00	3,250	670
Clifton Rd	DeKalb Ave	Ponce De Leon	Coll	0.847	2	1.69	0.00	0.00	0.00	1	1.67	0.00	500	424
Collier Rd	Chattahoochee	Defoors Ave	Coll	0.370	2	0.74	0.00	0.00	0.00	0	0.00	0.70	963	356
Collier Rd	Defoors Ave	Woodland Hills	Coll	0.451	2	0.90	0.00	0.00	0.00	0	0.60	0.90	*942*	425
Collier Rd	Woodland Hills	W of Emery St	Coll	0.293	2	0.59	0.00	0.00	0.00	2	0.59	0.59	*942*	276
Collier Rd	W of Emery St	Howell Mill Rd	Coll	0.091	2	0.18	0.00	0.00	0.00	2	0.18	0.00	*942*	86
Collier Rd	Howell Mill Rd	Ardmore Rd	Coll	0.940	2	1.88	0.00	0.00	0.00	4	1.88	0.87	920	865
Collier Rd	Ardmore Rd	Peachtree Rd	Coll	0.260	3	0.78	0.00	0.00	0.00	2	0.51	0.00	920	239
Deering Rd	Northside Dr	Mcaslin st	Coll	0.462	2	0.92	0.00	0.00	0.00	0	0.45	0.00	*944*	436
Deering Rd	Mcaslin St	Peachtree St	Coll	0.528	2	1.06	0.00	0.00	0.00	0	1.05	0.00	944	498
Defoor Ave	Collier Rd	Howell Mill Rd	Coll	1.102	2	2.20	0.00	0.00	0.00	0	1.11	0.00	*719*	792
Defoors Ferry	Bolton Rd	Collier Rd	Coll	2.003	2	4.01	0.00	0.00	0.00	2	1.59	1.22	808	1,618
E Morningside Dr	Piedmont Ave	E Rock Springs	Coll	0.757	2	1.51	0.00	0.00	0.00	0	1.51	0.00	*719*	544
E Paces Ferry Rd	Park Circle	Piedmont Rd	MA	0.158	2	0.32	0.00	0.00	0.00	0	0.32	0.00	*831*	131
E Paces Ferry Rd	Piedmont Rd	Grand View RD	MA	0.444	4	1.78	0.00	0.00	0.00	8	0.88	0.00	831	369
E Paces Ferry Rd	Grand View Rd	Peachtree Rd	MA	0.199	2	0.40	0.00	0.00	0.00	2	0.40	0.00	*831*	165
E Paces Ferry Rd	GA 400	Roxboro Rd	MA	0.686	3	2.06	0.29	0.00	0.00	6	1.38	0.00	621	426
E Rock Spgs Rd	E Morningside Dr	W Sussex Rd	Coll	0.415	2	0.83	0.00	0.00	0.00	2	0.84	0.53	*886*	368
E Rock Spgs Rd	W Sussex Rd	Johnson Rd	Coll	0.286	2	0.57	0.00	0.00	0.00	0	0.57	0.57	886	253
E Rock Spgs Rd	Johnson Rd	Beech Valley Wy	Coll	0.310	2	0.62	0.00	0.00	0.00	2	0.31	0.00	*886*	275
E Wesley Rd	Peachtree St	W Boiling Rd	Coll	0.192	2	0.38	0.00	0.00	0.00	0	0.38	0.00	*719*	138

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 PHT	Pk Hr VMT
E Wesley Rd	W Boiling Rd	Acorn Ave	Coll	0.325	2	0.65	0.00	0.00	0.00	0	0.32	0.00	*719*	234
E Wesley Rd	Acorn Ave	Ellwood Dr	Coll	0.157	2	0.31	0.00	0.16	0.00	0	0.16	0.00	*719*	113
E Wesley Rd	Ellwood Dr	Piedmont Rd	Coll	0.601	2	1.20	0.00	0.00	0.00	0	0.62	0.00	*719*	432
Garmon Rd	Mt Paran Rd	City Limit	Coll	0.615	2	1.23	0.00	0.00	0.00	0	0.00	0.00	*719*	442
Habersham Rd	Peachtree Battle	W Paces Ferry	Coll	1.759	2	3.52	0.00	0.00	0.00	0	0.00	3.53	*1,010*	1,777
Habersham Rd	W Paces Ferry	Roswell Rd	Coll	1.072	2	2.14	0.00	0.00	0.00	0	1.07	2.15	1,010	1,083
Habersham Rd	Roswell Rd	Piedmont Rd	Coll	0.064	2	0.13	0.00	0.00	0.00	4	0.12	0.00	*1,010*	65
Habersham Rd	Piedmont Rd	Old Ivy Rd	Coll	0.089	2	0.18	0.00	0.00	0.00	0	0.09	0.00	*1,010*	90
Hemphill Ave	Ferst St	10th St	Coll	0.274	2	0.55	0.00	0.00	0.00	0	0.55	0.00	*719*	197
Hemphill Ave	10th	Ethel St	Coll	0.227	3	0.68	0.00	0.00	0.00	0	0.23	0.00	*1,161*	264
Hemphill Ave	Ethel St	Northside Dr	Coll	0.194	4	0.78	0.00	0.00	0.00	0	0.20	0.00	*1,288*	250
Hills Ave	Collier Rd	Chattahoochee	Coll	0.266	2	0.53	0.00	0.00	0.00	1	0.04	0.00	*719*	191
Hillside Dr	Powers Ferry Rd	Northside Dr	Coll	0.798	2	1.60	0.00	0.00	0.00	0	0.80	0.00	*719*	574
Howell Mill Rd	W Marietta St	14th St	PA	0.505	3	1.52	0.00	0.00	0.00	0	1.02	0.00	*1,980*	1,000
Howell Mill Rd	14th St	Huff Rd	PA	0.136	4	0.54	0.00	0.00	0.00	0	0.27	0.00	*1,980*	269
Howell Mill Rd	Huff Rd	Trabert Ave	PA	0.427	3	1.28	0.00	0.00	0.00	0	0.42	0.00	1,980	845
Howell Mill Rd	Trabert Ave	Forrest St	PA	0.209	4	0.84	0.00	0.00	0.00	0	0.41	0.00	2,765	578
Howell Mill Rd	Forrest St	Chattahoochee	PA	0.241	3	0.72	0.00	0.00	0.00	1	0.48	0.00	2,765	666
Howell Mill Rd	Chattahoochee Av	Ridgeway Ave	PA	0.162	2	0.32	0.00	0.00	0.00	3	0.32	0.00	2,765	448
Howell Mill Rd	Ridgeway Ave	Shop Ctr Ent	PA	0.160	4	0.64	0.00	0.00	0.00	1	0.32	0.00	3,550	568
Howell Mill Rd	Shop Ctr Ent	I-75 ramps	PA	0.076	4	0.30	0.00	0.00	0.00	3	0.15	0.00	*2,780*	211
Howell Mill Rd	I-75 ramps	Beck St	PA	0.153	4	0.61	0.00	0.00	0.00	4	0.30	0.00	*2,780*	425
Howell Mill Rd	Beck St	Collier Rd	PA	0.169	3	0.51	0.00	0.00	0.00	2	0.34	0.00	*2,780*	470
Howell Mill Rd	Collier Rd	Norfleet Rd	PA	0.111	2	0.22	0.00	0.00	0.00	1	0.22	0.00	*2,780*	309
Howell Mill Rd	Norfleet Rd	Nawench Rd	PA	1.620	2	3.24	0.00	0.04	0.00	11	1.62	3.25	2,010	3,256
Howell Mill Rd	Nawench Rd	Robert Dr	PA	0.520	2	1.04	0.00	0.00	0.00	0	0.52	0.52	527	274
Howell Mill Rd	Robert Dr	Howell Mill Plant.	PA	0.144	2	0.29	0.00	0.00	0.00	0	0.15	0.15	*554*	80
Howell Mill Rd	Howell Mill Plant.	Northside Pkwy	PA	0.589	2	1.18	0.00	0.00	0.00	3	0.59	0.05	581	342
Huff Rd	Marietta Blvd	Howell Mill Rd	Coll	0.988	2	1.98	0.00	0.00	0.00	0	0.99	0.00	854	844
Juniper St	14th St	10th St	MA	0.329	3	0.99	0.00	0.00	0.00	4	0.67	0.00	*1,560*	513
Juniper St	10th St	Peachtree Pl	MA	0.075	4	0.30	0.00	0.00	0.00	1	0.15	0.00	*1,560*	117
Juniper St	Peachtree Pl	Courtland St	MA	0.648	4	2.59	0.00	0.00	0.00	8	1.30	0.00	1,560	1,011
Lake Forrest Dr	Powers Ferry Rd	Interlochen Dr	Coll	0.657	2	1.31	0.00	0.00	0.00	0	0.66	1.32	*719*	472
Lake Forrest Dr	Interlochen Dr	Lake Forrest Ln	Coll	0.186	2	0.37	0.00	0.00	0.00	0	0.00	0.37	*719*	134
Lake Forrest Dr	Lake Forrest Ln	City Limit	Coll	0.699	2	1.40	0.00	0.00	0.00	0	0.00	0.00	*719*	503
Jett Rd	Powers Ferry Rd	Jettridge Dr	Coll	0.645	2	1.29	0.00	0.00	0.00	0	0.66	0.00	*719*	464
Johnson Rd NE	E Rock Springs	Pasadena Ave	Coll	0.196	2	0.39	0.00	0.00	0.00	4	0.39	0.00	*1,070*	210
Johnson Rd NE	Pasadena Ave	Helen Dr	Coll	0.575	2	1.15	0.00	0.00	0.00	0	1.15	0.00	1,070	615
Johnson Rd NE	Helen Dr	Briarcliff	Coll	0.117	3	0.35	0.00	0.00	0.00	4	0.23	0.00	*1,070*	125
Lenox Rd	Cheshire Br Rd	Lenox Pt	Coll	0.262	4	1.05	0.00	0.00	0.00	12	0.53	0.00	4,210	1,103
Lenox Rd	Lenox Pt	Canteberry	Coll	0.076	3	0.23	0.00	0.00	0.00	2	0.15	0.00	*3,550*	270
Lenox Rd	Canteberry	Burke Rd	Coll	0.514	2	1.03	0.52	0.00	0.00	8	0.52	0.52	*3,550*	1,825
Lenox Rd	Burke Rd	Center Rd	Coll	0.492	2	0.98	0.00	0.00	0.00	0	0.50	0.97	2,890	1,422
Lenox Rd	Center Rd	Peachtree Rd	Coll	0.680	4	2.72	0.00	0.00	0.00	10	0.00	0.00	*2,890*	1,965
Lindbergh Dr	Peachtree Rd	Glenwood Dr	MA	0.188	2	0.38	0.00	0.00	0.00	3	0.38	0.00	*1,300*	244
Lindbergh Dr	Glenwood Dr	Peachtree Hills	MA	0.665	2	1.33	0.00	0.00	0.00	0	1.34	0.00	1,300	865
Lindbergh Dr	Peachtree Hills	Garason Dr	MA	0.168	3	0.50	0.00	0.00	0.00	2	0.34	0.00	*1,300*	218
Mecaslin St	17th St	Richards St	Coll	0.114	2	0.23	0.00	0.00	0.00	0	0.23	0.00	*719*	82
Mecaslin St	Richards St	14th st	Coll	0.169	2	0.34	0.00	0.00	0.00	0	0.34	0.00	*719*	122
Monroe Dr	Piedmont Ave	Monroe Cir NE	Coll	1.294	4	5.18	0.00	0.00	0.00	0	2.58	0.00	2,420	3,131
Monroe Dr	Monroe Cir NE	Boulevard	Coll	0.381	3	1.14	0.00	0.00	0.00	16	0.76	0.00	*2,420*	922

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 PHT	Pk Hr VMT
Montgom. Ferry	Piedmont Ave	Polo Dr	Coll	0.555	2	1.11	0.00	0.00	0.00	1	0.56	0.00	705	391
Montgom. Ferry	Beverly Rd	The Prado	Coll	0.287	2	0.57	0.00	0.00	0.00	0	0.47	0.00	*719*	206
Moores Mill Rd	Bolton Rd	W. W.	Coll	1.367	2	2.73	0.00	0.00	0.00	0	1.38	0.00	1,330	1,818
Moores Mill Rd	W. W. Rd	I-75	Coll	0.388	2	0.78	0.00	0.00	0.00	3	0.52	0.78	*1,180*	458
Moores Mill Rd	I-75	Howell Mill Rd	Coll	0.480	3	1.44	0.00	0.00	0.00	1	0.49	0.95	1,030	494
Moores Mill Rd	Howell Mill Rd	W Paces Ferry	Coll	1.077	2	2.15	0.00	0.00	0.00	5	0.64	2.17	986	1,062
Loridans Dr	Wieuca Rd	P'tree Dunwoody	Coll	0.976	2	1.95	0.00	0.00	0.00	0	0.98	0.00	305	298
Marietta Blvd	Bolton Rd	Coronet Rd	PA	0.515	4	2.06	0.36	0.00	0.00	4	1.03	0.00	*2,410*	1,241
Marietta Blvd	Coronet Rd	Chattahoochee	PA	0.724	4	2.90	0.00	0.00	0.00	2	1.45	0.00	2,410	1,745
Marietta Blvd	Chattahoochee	Thomas St	PA	0.628	4	2.51	0.00	0.00	0.00	10	0.63	0.00	*1,850*	1,162
Marietta Blvd	Thomas St	Huff Rd	PA	1.008	4	4.03	0.00	0.00	0.00	1	0.54	0.00	1,290	1,300
Marietta Rd	Thomas St	Bolton Rd	Coll	1.767	2	3.53	0.00	0.00	0.00	0	1.42	0.00	*719*	1,270
Marietta St	Peachtree St	Forsyth St	Coll	0.109	4	0.44	0.00	0.11	0.00	0	0.21	0.00	1,600	174
Mt Paran Rd	I-75 Entrance	City Limit	Coll	2.078	3	6.23	0.00	0.00	0.00	0	0.00	0.00	1,090	2,265
N Highland Ave	E Rock Springs	Cumberland Rd	Coll	0.086	3	0.26	0.00	0.00	0.00	2	0.17	0.00	*1,390*	120
N Highland Ave	Cumberland Rd	University Dr	Coll	0.185	2	0.37	0.00	0.00	0.00	0	0.37	0.00	*1,390*	257
N Highland Ave	University Dr	Wessyngton Rd	Coll	0.216	2	0.43	0.00	0.00	0.00	0	0.44	0.00	*1,390*	300
N Highland Ave	Wessyngton Rd	Virginia Ave	Coll	0.663	2	1.33	0.00	0.00	0.00	1	1.32	0.00	1,390	922
N Highland Ave	Virginia Ave	Highland View	Coll	0.229	2	0.46	0.00	0.00	0.00	6	0.44	0.00	*1,076*	246
N Highland Ave	Highland View	St Augustine Pl	Coll	0.333	2	0.67	0.00	0.00	0.00	0	0.66	0.00	*1,076*	358
N Highland Ave	St Augustine Pl	Ponce De Leon	Coll	0.043	3	0.13	0.00	0.00	0.00	0	0.09	0.00	*1,076*	46
N Highland Ave	Ponce De Leon	Freedom Pkwy.	Coll	0.322	3	0.97	0.00	0.00	0.00	6	0.64	0.00	*1,076*	346
North Ave	Piedmont	N Angier St	Coll	0.977	6	5.86	0.00	0.00	0.00	4	1.95	0.00	1,610	1,573
Northside Dr	Northside Pkwy	W Paces Ferry	PA	0.624	2	1.25	0.00	0.00	0.00	3	0.43	0.00	354	221
Northside Dr	W Paces Ferry	Blackland Rd	PA	0.937	2	1.87	0.00	0.00	0.00	1	0.00	1.59	*682*	639
Northside Dr	Blackland Rd	Highcourt Rd	PA	1.442	2	2.88	0.00	0.00	0.00	1	0.11	0.00	1,010	1,456
Oakdale Rd	Ponce De Leon	Fairview Rd	Coll	0.165	2	0.33	0.00	0.00	0.00	0	0.33	0.00	*719*	119
Oakdale Rd	Fairview Rd	North Ave	Coll	0.111	2	0.22	0.00	0.00	0.00	0	0.11	0.00	*719*	80
Old Ivy Rd	Roswell Rd	Wieuca rd	Coll	1.300	2	2.60	0.00	0.00	0.00	0	1.65	1.30	*719*	935
Paces Ferry Rd	W Paces Ferry	Northgate Dr	Coll	1.608	2	3.22	0.00	0.00	0.00	2	0.15	0.00	1,000	1,608
Peachtree Battle	Peachtree St	Dellwood Dr	Coll	0.591	1	0.59	0.00	0.61	0.00	1	0.22	1.18	*376*	222
Peachtree Battle	Dellwood Dr	Haven Ridge Dr	Coll	0.091	2	0.18	0.00	0.00	0.00	0	0.09	0.18	*376*	34
Peachtree Battle	Haven Ridge Dr	Northside Dr	Coll	0.527	2	1.05	0.00	0.00	0.00	2	0.54	1.03	*376*	198
Peachtree Battle	Northside Dr	Howell Mill Rd	Coll	0.559	2	1.12	0.00	0.00	0.00	2	0.56	0.56	376	210
Peachtree Battle	Howell Mill Rd	Moores Mill Rd	Coll	1.427	2	2.85	0.00	0.00	0.00	0	1.43	0.00	*376*	537
P'tree Dunwoody	Peachtree Rd	Haven Rd	PA	0.428	4	1.71	0.00	0.00	0.00	8	0.85	0.04	*1,130*	484
P'tree Dunwoody	Haven Rd	Brookhaven Sps	PA	1.629	4	6.52	0.00	0.00	0.00	2	1.64	0.34	1,130	1,841
Peachtree St	Pine St	Ponce De Leon	PA	0.332	5	1.66	0.00	0.00	0.00	0	0.66	0.08	*2,050*	681
Peachtree St	Ponce De Leon	11th St	PA	0.761	4	3.04	0.00	0.00	0.00	2	1.53	0.00	2,050	1,560
Peachtree St	11th st	W Peachtree st	PA	0.858	4	3.43	0.00	0.17	0.09	14	1.73	0.00	2,035	1,746
Pharr Rd	Slanton Dr	East of Pharr Ct	Coll	0.289	2	0.58	0.00	0.00	0.00	0	0.58	0.00	*719*	208
Pharr Rd	East of Pharr Ct	Piedmont Rd	Coll	0.770	3	2.31	0.00	0.00	0.00	11	1.56	0.00	*1,161*	894
Piedmont Ave	Ponce De Leon	Cheshire Bridge	PA	2.704	4	10.82	0.00	0.00	0.02	45	5.43	0.92	1,710	4,624
Polo Dr	Mont'y Ferry Dr	Beverly Rd	Coll	0.239	2	0.48	0.00	0.00	0.00	0	0.24	0.00	*719*	172
Ponce De Leon	Juniper	Peachtree St	Coll	0.096	3	0.29	0.00	0.00	0.00	0	0.19	0.00	1,600	154
Ponce De Leon	Peachtree St	Spring St	Coll	0.228	2	0.46	0.00	0.00	0.00	0	0.45	0.00	*1,600*	365
Powers Ferry Rd	Roswell Rd	W Wieuca Rd	Coll	1.462	2	2.92	0.00	0.00	0.00	1	1.49	1.45	567	829
Powers Ferry Rd	W Wieuca Rd	Stella Dr	Coll	0.285	3	0.86	0.00	0.00	0.00	0	0.37	0.13	*567*	162
Powers Ferry Rd	Stella Dr	Whitemere Ln	Coll	0.120	2	0.24	0.00	0.00	0.00	0	0.19	0.00	*567*	68
Ridgewood Rd	Paces Ferry Rd	Moores Mill Rd	Coll	2.634	2	5.27	0.00	0.00	0.00	0	0.00	0.00	73	192

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Thru Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 Pk Hr Trips	2015 Pk Hr VMT
Roxboro Rd	Peachtree Rd	Wieuca rd	MA	0.146	4	0.58	0.00	0.00	0.00	6	0.00	0.00	*1,910*	279
Roxboro Rd	Wieuca Rd	City Limit	MA	0.779	4	3.12	0.00	0.44	0.00	14	1.56	0.79	1,910	1,488
S Atlanta Rd	Chatt. River Br	Bolton Rd	PA	0.311	4	1.24	0.00	0.00	0.32	1	0.63	0.63	2,270	706
Sidney Marcus	Piedmont Rd	Buford Hwy	PA	0.651	4	2.60	0.00	0.65	0.00	20	1.31	0.00	4,280	2,786
Spring St	14th	10th st	PA	0.356	4	1.42	0.00	0.00	0.00	0	0.71	0.00	1,610	573
Tech Pky	North Ave	Northside Dr	Coll	0.925	2	1.85	0.00	0.00	0.93	5	0.00	0.00	754	697
Techwood Dr	16th St	14th	PA	0.210	3	0.63	0.00	0.00	0.00	3	0.21	0.00	*1,647*	346
Techwood Dr	14th	10th St	PA	0.355	3	1.07	0.00	0.00	0.00	6	0.36	0.00	*1,647*	585
The Prado	Piedmont Ave	Montgom. Ferry	Coll	0.430	2	0.86	0.00	0.00	0.00	0	0.85	0.00	*719*	309
The Prado	Montgom. Ferry	Peachtree Circle	Coll	0.344	2	0.69	0.00	0.00	0.00	0	0.69	0.00	*719*	247
Virginia Ave	I-85 bridge	Int'l Blvd	Coll	0.239	4	0.96	0.25	0.00	0.00	11	0.48	0.00	*1,288*	308
W Paces Ferry	Peachtree Rd	E Andrews	PA	0.320	4	1.28	0.00	0.00	0.00	4	0.63	0.00	*1,750*	560
W Paces Ferry	E Andrews	Chatham Rd	PA	0.452	2	0.90	0.00	0.00	0.00	5	0.46	0.00	*1,750*	791
W Paces Ferry	Chatham Rd	Northside Dr	PA	0.968	2	1.94	0.00	0.00	0.00	4	0.98	0.98	1,750	1,694
W Paces Ferry	Northside Dr	Randall Mill	PA	0.971	2	1.94	0.00	0.00	0.00	8	0.99	0.99	*1,750*	1,699
W Paces Ferry	Randall Mill	Northside Pkwy	PA	0.416	2	0.83	0.42	0.00	0.00	14	0.42	0.42	*1,750*	728
W Paces Ferry	Northside Pkwy	I-75	PA	0.087	4	0.35	0.00	0.00	0.00	2	0.09	0.09	1,930	168
W Paces Ferry	I-75	Paces Ferry Rd	PA	0.054	3	0.16	0.00	0.00	0.00	2	0.11	0.00	*1,109*	60
W Paces Ferry	Paces Ferry Rd	Ridgewood Rd	PA	1.020	2	2.04	0.00	0.00	0.00	1	0.08	0.00	287	293
W Peachtree St	5th St	10th St	PA	0.363	4	1.45	0.00	0.00	0.00	2	0.73	0.30	1,830	664
W Wesley Rd	Ridgewood Rd	Sequoyah Dr	Coll	0.562	2	1.12	0.00	0.00	0.00	0	0.00	0.00	*571*	321
W Wesley Rd	Sequoyah Dr	Northside Dr	Coll	2.187	2	4.37	0.00	0.00	0.00	3	2.20	0.26	*571*	1,249
W Wesley Rd	Northside Dr	Peachtree Rd	Coll	1.153	2	2.31	0.00	0.00	0.00	4	1.16	2.30	571	658
W Wieuca Rd	Wieuca Rd	Lake Forrest Dr	Coll	0.834	2	1.67	0.00	0.00	0.00	0	1.67	0.00	962	802
W Wieuca Rd	Lake Forrest Dr	Powers Ferry Rd	Coll	0.600	2	1.20	0.00	0.00	0.00	0	0.60	0.00	*962*	577
Wieuca Rd	City Limit	Phipps Blvd	PA	0.293	4	1.17	0.00	0.00	0.00	11	0.59	0.00	*971*	285
Wieuca Rd	Phipps Blvd	Statewood Rd	PA	0.647	2	1.29	0.00	0.00	0.00	1	0.86	0.98	*1,340*	867
Wieuca Rd	Statewood Rd	W Wieuca Rd	PA	1.055	2	2.11	0.00	0.00	0.00	0	2.12	2.12	1,100	1,161
Total, Northside				99.505		263.40	1.84	2.74	2.03	467	119.91	46.29		115,483
Atlanta Ave	Hank Aaron	Hill St	Coll	0.543	2	1.09	0.00	0.00	0.00	0	1.09	0.00	121	66
Atlanta Ave	Hill St	Cherokee Ave	Coll	0.281	2	0.56	0.00	0.00	0.00	0	0.56	0.00	*719*	202
Atlanta Ave	Cherokee Ave	Boulevard	Coll	0.305	2	0.61	0.00	0.00	0.00	0	0.61	0.00	*719*	219
Auburn Ave	Peachtree St	Piedmont Ave	Coll	0.376	3	1.13	0.00	0.00	0.00	0	0.75	0.38	381	143
Auburn Ave	Piedmont Ave	Randolph St	Coll	0.827	2	1.65	0.00	0.00	0.00	0	1.65	0.00	225	186
Auburn Ave	Randolph St	Lake Ave/Irwin	Coll	0.183	2	0.37	0.00	0.00	0.00	0	0.36	0.00	225	41
Austin Ave	Euclid Ave	Lake Ave	Coll	0.301	2	0.60	0.00	0.02	0.00	1	0.61	0.02	*719*	216
Baker Highland	Central Park Pl	Weldon Pl	Coll	0.251	2	0.50	0.00	0.00	0.00	6	0.50	0.00	*719*	180
Baker St	Marietta St	Cent. Olymp. Prk	MA	0.255	4	1.02	0.00	0.00	0.00	1	0.51	0.00	*1,375*	351
Baker St	Cent. Olymp. Prk	Piedmont Ave	MA	0.572	4	2.29	0.00	0.00	0.00	0	1.15	0.00	*1,375*	787
Bell St	Irwin St	Edgewood Ave	MA	0.217	2	0.43	0.00	0.00	0.00	0	0.22	0.00	*554*	120
Berne St	Boulevard	Moreland Ave	Coll	1.092	2	2.18	0.00	0.00	0.00	0	2.15	0.84	126	138
Boulevard	North Ave	Wabash Ave	PA	0.495	4	1.98	0.00	0.00	0.00	8	0.99	0.00	1,725	854
Boulevard	Wabash Ave	Freedom Pkwy.	PA	0.168	4	0.67	0.00	0.00	0.00	2	0.33	0.00	*1,723*	289
Boulevard	Freedom Pkwy.	Edgewood Ave	PA	0.232	4	0.93	0.00	0.00	0.00	2	0.16	0.00	1,720	399
Boulevard	Edgewood Ave	Gartrell St	PA	0.053	3	0.16	0.00	0.00	0.00	0	0.00	0.00	*1,900*	101
Boulevard	Gartrell St	Decatur St	PA	0.312	2	0.62	0.00	0.00	0.00	0	0.47	0.00	*1,900*	593
Boulevard	Gartrell St	N of Reinhardt St	PA	0.140	2	0.28	0.00	0.00	0.00	2	0.14	0.00	2,080	291
Boulevard	N of Reinhardt St	Reinhardt St	PA	0.089	2	0.18	0.00	0.09	0.00	1	0.18	0.00	*2,170*	193
Boulevard	Reinhardt St	Carroll St	PA	0.168	2	0.34	0.00	0.00	0.00	1	0.34	0.00	2,260	380

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Thru Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 Pk Hr Trips	2015 Pk Hr VMT
Boulevard	Carroll St	Memorial Dr	PA	0.117	4	0.47	0.00	0.00	0.00	22	0.23	0.00	*1,769*	207
Boulevard	Memorial Dr	Woodward Ave	PA	1.981	4	7.92	0.00	0.00	0.00	0	3.97	0.00	1,278	2,532
Browns Mill Rd	Jonesboro Rd	Harper St	Coll	0.464	2	0.93	0.00	0.00	0.00	0	0.93	0.00	*223*	103
Browns Mill Rd	Harper St	McWilliams St	Coll	0.557	2	1.11	0.00	0.00	0.00	0	0.00	0.44	223	124
Browns Mill Rd	McWilliams St	Cleveland Ave	Coll	0.887	2	1.77	0.00	0.00	0.00	0	0.24	0.87	*267*	237
Browns Mill Rd	Cleveland Ave	midblock	Coll	0.320	2	0.64	0.00	0.00	0.00	1	0.00	0.32	*267*	85
Browns Mill Rd	midblock	Ruby Harper Bvd	Coll	0.892	2	1.78	0.00	0.00	0.00	0	0.00	1.40	310	277
Capitol Ave	Fulton St	Clarke St	PA	0.085	4	0.34	0.09	0.00	0.00	2	0.17	0.00	*1,870*	159
Capitol Ave	Clarke St	Memorial Dr	PA	0.264	6	1.58	0.26	0.00	0.00	3	0.54	0.00	1,870	494
Capitol Ave	Memorial Dr	MLK Jr Dr	PA	0.172	4	0.69	0.00	0.00	0.00	5	0.35	0.00	1,330	229
Capitol Sq	Capitol Ave	Washington St	Coll	0.111	6	0.67	0.00	0.00	0.00	2	0.18	0.00	*1,630*	181
Cent'l Olymp Prk	North ave	Ivan Allen Blvd	Coll	0.461	4	1.84	0.00	0.00	0.00	2	0.92	0.00	*1,150*	530
Cent'l Olymp Prk	Ivan Allen Blvd	Baker St	Coll	0.165	5	0.83	0.00	0.00	0.00	0	0.34	0.00	*464*	77
Cent'l Olymp Prk	Baker St	Marietta St	Coll	0.338	3	1.01	0.00	0.00	0.00	4	0.68	0.00	*464*	157
Central Ave	Pryor St	Dodd Ave	PA	0.068	3	0.20	0.00	0.00	0.00	0	0.14	0.00	*1,647*	112
Central Ave	Dodd Ave	Bass St	PA	0.161	2	0.32	0.00	0.00	0.00	0	0.32	0.00	*1,340*	216
Central Ave	Bass St	Glenn St	PA	0.165	3	0.50	0.00	0.00	0.00	0	0.33	0.00	*1,647*	272
Central Ave	Glenn St	Richardson St	PA	0.187	2	0.37	0.00	0.00	0.00	0	0.18	0.00	*1,340*	251
Central Ave	Richardson St	Rawson St	PA	0.127	3	0.38	0.00	0.00	0.00	0	0.25	0.00	*1,647*	209
Central Ave	Rawson St	Memorial Dr	PA	0.311	4	1.24	0.00	0.00	0.00	0	0.31	0.00	*1,687*	525
Cherokee Ave	Memorial Dr	Glenwood Ave	Coll	0.259	2	0.52	0.00	0.00	0.00	1	0.51	0.00	*398*	103
Cherokee Ave	Glenwood Ave	Atlanta Ave	Coll	0.882	2	1.76	0.00	0.00	0.00	0	1.75	0.00	398	351
Claire Dr	Pryor Rd	Lakewood Ave	Coll	0.884	2	1.77	0.00	0.00	0.00	2	1.77	0.00	423	374
Cleveland Ave	City Limit	I-85 NB Ramps	PA	0.246	4	0.98	0.24	0.00	0.00	9	0.49	0.00	1,750	431
Cleveland Ave	I-85 NB Ramps	Steele Ave	PA	0.838	4	3.35	0.84	0.00	0.00	15	1.69	0.00	2,060	1,726
Cleveland Ave	Steele Ave	Old Hapeville Rd	PA	0.150	3	0.45	0.00	0.00	0.00	1	0.30	0.00	*1,530*	230
Cleveland Ave	Old Hapeville Rd	Macon Dr	PA	0.286	3	0.86	0.00	0.00	0.00	0	0.57	0.00	*1,530*	438
Cleveland Ave	Macon Dr	Jonesboro Rd	PA	1.278	2	2.56	0.00	0.00	0.00	4	2.56	0.00	1,000	1,278
Coca-Cola Plz	Jesse Hill Jr	Bell St	MA	0.092	2	0.18	0.00	0.00	0.00	0	0.00	0.00	*554*	51
College Ave	Howard	Sisson	Coll	0.579	2	1.16	0.00	0.00	0.00	0	0.58	0.00	823	477
Confederate Av	Boulevard	Underwood Ave	Coll	1.053	2	2.11	0.00	0.00	0.00	2	2.11	1.15	587	618
Conley Rd	Jonesboro Rd	City Limit	Coll	0.725	2	1.45	0.00	0.00	0.00	0	0.72	0.00	*719*	521
Constitution Rd	Jonesboro Rd	Forest Park Rd	Coll	0.399	2	0.80	0.00	0.00	0.00	0	0.40	0.00	*611*	244
Constitution Rd	Forest Park Rd	Moreland Ave	Coll	0.628	2	1.26	0.00	0.00	0.00	0	0.00	0.00	611	384
Courtland St	North Ave	Edgewood Ave	PA	1.166	5	5.83	0.00	0.00	0.00	30	2.35	0.00	1,130	1,318
Courtland St	Edgewood Ave	Decatur St	PA	0.195	4	0.78	0.00	0.00	0.00	6	0.38	0.00	*1,130*	220
Courtland St	Decatur St	MLK	PA	0.193	4	0.77	0.00	0.00	0.00	2	0.39	0.00	*1,130*	218
Custer Ave	Boulevard	Moreland Ave	Coll	1.123	2	2.25	0.00	0.00	0.00	2	1.80	2.07	641	720
Decatur St	Krog St	Jackson St	PA	0.592	3	1.78	0.22	0.00	0.00	0	0.61	0.00	1,400	829
Decatur St	Jackson St	Hilliard St	PA	0.182	4	0.73	0.00	0.00	0.00	2	0.36	0.00	*1,400*	255
Decatur St	Hilliard St	Bell St	PA	0.167	4	0.67	0.00	0.00	0.00	2	0.33	0.00	*1,400*	234
Decatur St	Bell St	Jesse Hill Jr	PA	0.289	4	1.16	0.00	0.00	0.00	0	0.58	0.00	*1,400*	405
Decatur St	Jesse Hill Jr	Peachtree St	PA	0.409	3	1.23	0.00	0.00	0.17	8	0.83	0.00	*1,400*	573
Dekalb Ave	City Limit	Arizona Ave	PA	0.954	4	3.82	0.00	0.00	0.00	0	0.95	0.00	*1,770*	1,689
Dekalb Ave	Arizona Ave	Oaldale Ave	PA	0.642	3	1.93	0.00	0.00	0.00	0	0.65	0.00	1,770	1,136
Dekalb Ave	Oaldale Ave	Krog St	PA	1.428	2	2.86	0.91	0.00	0.00	12	1.59	0.00	*1,770*	2,528
Dodd Ave	Cooper St	Central Ave	MA	0.207	2	0.41	0.00	0.00	0.00	0	0.41	0.00	*554*	115
E Confederate	Underwood Ave	Moreland Ave	Coll	0.500	2	1.00	0.00	0.00	0.00	1	1.00	0.55	*719*	360
Edgewood Ave	Hurt St	Delta Pl	PA	0.314	2	0.63	0.00	0.00	0.00	0	0.63	0.63	*1,050*	330
Edgewood Ave	Delta Pl	Boulevard	PA	0.768	2	1.54	0.00	0.00	0.06	3	1.50	1.42	*1,050*	806

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Thru Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 Pk Hr Trips	2015 Pk Hr VMT
Edgewood Ave	Boulevard	Jackson St	PA	0.129	2	0.26	0.13	0.00	0.00	2	0.26	0.26	*1,050*	135
Edgewood Ave	Jackson St	Fort St	PA	0.211	2	0.42	0.00	0.00	0.00	2	0.42	0.27	*1,050*	222
Edgewood Ave	Fort St	Jesse Hill Jr Dr	PA	0.129	2	0.26	0.00	0.05	0.02	4	0.26	0.13	1,050	135
Edgewood Ave	Jesse Hill Jr Dr	Piedmont Ave	PA	0.116	2	0.23	0.00	0.00	0.00	1	0.24	0.11	*981*	114
Edgewood Ave	Piedmont Ave	Peachtree Ctr	PA	0.238	2	0.48	0.00	0.00	0.03	3	0.47	0.24	*981*	233
Edgewood Ave	Peachtree Ctr	Peachtree St	PA	0.184	2	0.37	0.00	0.00	0.00	3	0.37	0.13	912	168
Empire Blvd	Browns Mill Rd	Mt Zion Rd	Coll	1.161	2	2.32	0.00	0.00	0.00	0	0.43	0.00	*719*	835
Euclid Ave	Edgewood Ave	Moreland Ave	Coll	0.937	2	1.87	0.00	0.04	0.00	1	1.88	0.00	201	188
Flat Shoals Ave	Glenwood Ave	May Ave	Coll	0.111	2	0.22	0.00	0.00	0.00	0	0.22	0.11	*608*	67
Flat Shoals Ave	May Ave	Bouldercrest Rd	Coll	0.730	2	1.46	0.00	0.00	0.00	0	1.44	0.00	608	444
Forrest Park Rd	Thomasville Dr	Constitution Rd	Coll	0.393	2	0.79	0.00	0.00	0.00	0	0.39	0.00	282	111
Forrest Park Rd	Constitution Rd	Natham Dr	Coll	0.133	2	0.27	0.00	0.00	0.00	0	0.13	0.27	*213*	28
Forrest Park Rd	Natham Dr	S River Ind Blvd	Coll	0.693	2	1.39	0.00	0.00	0.00	0	0.00	1.39	*213*	148
Forrest Park Rd	S River Ind Blvd	Conley Rd	Coll	2.372	2	4.74	0.00	0.00	0.00	0	0.00	0.00	143	339
Forsyth St	Garnett St	Marietta St	Coll	0.509	4	2.04	0.00	0.00	0.00	0	1.02	0.00	*1,288*	656
Forsyth St	Marietta St	Poplar St	Coll	0.099	3	0.30	0.00	0.00	0.00	0	0.19	0.00	*1,161*	115
Forsyth St	Poplar St	Peachtree St	Coll	0.151	3	0.45	0.00	0.00	0.00	4	0.30	0.00	*1,161*	175
Fulton St	Humphries st	McDaniel St	Coll	0.154	2	0.31	0.00	0.00	0.00	0	0.31	0.00	*893*	138
Fulton St	McDaniel St	Whitehall Terr	Coll	0.069	2	0.14	0.00	0.00	0.00	2	0.14	0.00	*893*	62
Fulton St	Whitehall Terr	Pryor St	Coll	0.425	4	1.70	0.00	0.00	0.00	1	0.85	0.00	893	380
Fulton St	Pryor St	I-75/85 ramps	Coll	0.193	4	0.77	0.00	0.00	0.00	4	0.38	0.00	*893*	172
Fulton St	I-75/85 ramps	Martin St	Coll	0.412	5	2.06	0.00	0.00	0.00	2	0.83	0.00	*893*	368
Fulton St	Martin St	Glenwood Ave	Coll	0.147	4	0.59	0.00	0.00	0.00	0	0.29	0.00	*893*	131
Georgia Ave	Hank Aaron	Martin St	Coll	0.216	5	1.08	0.00	0.00	0.00	1	0.43	0.00	*315*	68
Georgia Ave	Martin St	Hills St	Coll	0.329	3	0.99	0.00	0.00	0.00	0	0.66	0.00	315	104
Georgia Ave	Hills St	Cherokee Ave	Coll	0.275	4	1.10	0.00	0.00	0.00	2	0.55	0.00	*315*	87
Gilbert Rd	Southside Ind	Conley Rd	Coll	0.273	2	0.55	0.00	0.00	0.00	0	0.00	0.00	*719*	196
Glen Iris Dr	Freedom Pkwy	Ponce De Leon	Coll	0.912	2	1.82	0.00	0.00	0.00	3	1.76	0.00	986	899
Glenn St	Metro. Pkwy	McDaniel St	Coll	0.379	2	0.76	0.00	0.00	0.00	0	0.76	0.00	704	267
Glenn St	McDaniel St	Central Ave	Coll	0.474	2	0.95	0.00	0.00	0.00	0	0.95	0.00	704	334
Glenwood Ave	Boulevard	Cherokee Ave	MA	0.307	2	0.61	0.00	0.00	0.00	0	0.31	0.00	*719*	221
Hank Aaron Dr	McDonough Bvd	Little St	PA	0.779	4	3.12	0.00	0.00	0.00	0	1.54	0.00	690	538
Hank Aaron Dr	Little St	George St	PA	0.269	5	1.35	0.00	0.00	0.00	0	0.53	0.00	*915*	246
Hank Aaron Dr	George St	Fulton St	PA	0.347	4	1.39	0.35	0.00	0.00	1	0.69	0.00	1,140	396
Hapeville Rd	Cleveland Ave	Mt Zion Rd	Coll	0.570	2	1.14	0.00	0.00	0.00	0	0.57	0.00	295	168
Harris St	Cent'l Olym. Prk	Piedmont Rd	Coll	0.570	3	1.71	0.00	0.00	0.00	0	1.13	0.00	478	272
Hill St	Milton St	Ormond st	MA	0.973	2	1.95	0.00	0.00	0.00	1	1.95	0.00	205	199
Hosea L Wms. Dr	Howard St	Candler Rd	Coll	1.836	2	3.67	0.00	0.00	0.00	2	3.65	2.60	*719*	1,320
Howard St	College St	Dunwoody St	Coll	0.490	2	0.98	0.00	0.00	0.00	0	0.98	0.00	369	181
Howard St	Dunwoody St	Hosea L Wms	Coll	0.087	2	0.17	0.00	0.00	0.00	0	0.17	0.00	*369*	32
Howell St	Decatur St	Auburn Ave	Coll	0.251	2	0.50	0.00	0.00	0.00	0	0.50	0.00	*719*	180
Howell St	Auburn Ave	Irwin Sr	Coll	0.149	2	0.30	0.00	0.00	0.00	0	0.29	0.00	*719*	107
Hutchens Rd	Jonesboro Rd	Forest Park Rd	Coll	1.158	2	2.32	0.00	0.00	0.00	0	0.00	0.00	234	271
International Blv	Piedmont	Peachtree Ctr Av	PA	0.223	2	0.45	0.00	0.00	0.00	1	0.44	0.00	*1,340*	299
International Blv	Peachtree Ctr Av	Williams St	PA	0.259	1	0.26	0.00	0.00	0.00	4	0.52	0.00	*1,340*	347
International Blv	Williams St	Cent. Olym Prk	PA	0.087	2	0.17	0.00	0.00	0.00	0	0.17	0.00	*1,340*	117
Irwin St	Auburn/Lake Av	Fort St	Coll	0.848	4	3.39	0.00	0.00	0.00	1	1.69	0.00	731	620
Jackson St	Freedom Pkwy.	Edgewood Ave	Coll	0.365	2	0.73	0.37	0.00	0.00	7	0.72	0.72	625	228
Jackson St	Edgewood Ave	Decatur St	Coll	0.257	2	0.51	0.00	0.00	0.00	0	0.51	0.51	*625*	161
John W. Dobbs	Fort St	Jesse Hill Jr Dr	Coll	0.136	4	0.54	0.00	0.00	0.00	0	0.27	0.00	795	108

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Thru Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 Pk Hr Trips	2015 Pk Hr VMT
John W. Dobbs	Jesse Hill Jr Dr	Piedmont Ave	Coll	0.116	4	0.46	0.00	0.00	0.00	2	0.23	0.00	*795*	92
John W. Dobbs	Piedmont Ave	Peachtree St	Coll	0.330	4	1.32	0.00	0.00	0.00	0	0.65	0.00	*795*	262
Krog St	Decatur St	Irwin St	MA	0.282	2	0.56	0.00	0.00	0.00	0	0.57	0.00	*554*	156
Lake Ave	Irwin St	Austin Ave	Coll	0.419	2	0.84	0.00	0.00	0.00	0	0.84	0.00	598	251
Lakewood Ave	Jonesboro Rd	Pecan St	Coll	1.129	5	5.65	0.21	0.00	0.00	6	2.26	0.00	1,120	1,264
Lakewood Ave	Pecan St	Nelms St	Coll	0.371	2	0.74	0.00	0.00	0.00	0	0.33	0.00	*719*	267
Langston Ave	Sylvan Rd	Murphy Ave	Coll	0.967	2	1.93	0.00	0.00	0.00	0	0.96	0.00	171	165
Lee St	W Whitehall St	RDA Blvd	PA	0.465	5	2.33	0.00	0.00	0.00	0	0.93	0.00	*1,346*	626
Linden Ave	Spring St	Piedmont Ave	MA	0.400	2	0.80	0.00	0.00	0.00	12	0.80	0.00	*554*	222
Luckie St	Peachtree St	Cent. Olym Prk	Coll	0.294	2	0.59	0.00	0.00	0.00	0	0.58	0.00	*719*	211
Macon Dr	Cleveland Ave	Peter Rock Rd	MA	1.201	2	2.40	0.00	0.07	0.00	0	0.40	0.00	382	459
Macon Dr	Peter Rock Rd	Lakewood Way	MA	0.361	4	1.44	0.00	0.18	0.00	1	0.19	0.00	*382*	138
Marietta St	Forsyth St	Cent. Olym Prk	Coll	0.222	4	0.89	0.00	0.15	0.00	3	0.45	0.00	*1,508*	335
Marietta St	Cent. Olym Prk	Howell Mill	Coll	1.804	4	7.22	0.00	0.09	0.00	2	3.61	0.00	1,415	2,553
MLK, Jr. Dr	Oakland Ave	Hilliard St	PA	0.086	2	0.17	0.00	0.00	0.00	0	0.17	0.00	*692*	60
MLK, Jr. Dr	Hilliard St	Bell St	PA	0.460	4	1.84	0.00	0.00	0.00	2	0.92	0.00	*692*	318
MLK, Jr. Dr	Bell St	King St	PA	0.270	5	1.35	0.00	0.00	0.00	8	0.54	0.00	*692*	187
MLK, Jr. Dr	King St	Jesse Hill Jr Dr	PA	0.090	5	0.45	0.00	0.00	0.00	1	0.18	0.00	*692*	62
MLK, Jr. Dr	Jesse Hill Jr Dr	Washington St	PA	0.260	5	1.30	0.00	0.00	0.00	4	0.52	0.00	*692*	180
Maynard Ter	Van Epps Ave	Memorial Dr	Coll	0.738	2	1.48	0.00	0.00	0.00	0	0.00	0.00	*719*	531
McDaniel St	Whitehall St	Fulton St	Coll	0.149	4	0.60	0.00	0.00	0.00	3	0.30	0.00	*704*	105
McDaniel St	Fulton St	Glenn St	Coll	0.249	3	0.75	0.00	0.00	0.00	3	0.50	0.50	704	175
McDaniel St	Glenn St	University Ave	Coll	1.103	2	2.21	0.00	0.00	0.00	0	2.22	0.15	704	777
McLendon Ave	City Limit	Claire Ave	Coll	0.492	2	0.98	0.00	0.00	0.00	0	0.98	0.15	*781*	384
McLendon Ave	Claire Ave	Candler Park Dr	Coll	0.815	2	1.63	0.00	0.00	0.00	0	1.63	0.19	781	637
McLendon Ave	Candler Park Dr	Moreland Ave	Coll	0.563	2	1.13	0.00	0.00	0.57	0	1.13	0.00	*781*	440
McWilliams Rd	Browns Mill Rd	Jonesboro Rd	Coll	0.571	2	1.14	0.00	0.00	0.00	0	1.14	0.00	*719*	411
Mitchell St	Washington St	Spring St	MA	0.436	2	0.87	0.00	0.00	0.00	1	0.86	0.00	*554*	242
Mt Zion Rd	Browns Mill Rd	Macon Dr	Coll	0.341	2	0.68	0.00	0.00	0.00	0	0.33	0.00	*254*	87
Mt Zion Rd	Macon Dr	Waters Rd	Coll	0.398	2	0.80	0.00	0.00	0.00	0	0.41	0.00	254	101
Mt Zion Rd	Waters RD	Comm. Way SE	Coll	0.149	4	0.60	0.00	0.00	0.00	0	0.30	0.00	*254*	38
Murphy Ave	Whitehall St	Brookline Rd	MA	0.946	2	1.89	0.00	0.00	0.00	7	0.94	0.00	*307*	290
Murphy Ave	Brookline Rd	Sylvan Rd	MA	0.175	2	0.35	0.00	0.00	0.00	1	0.18	0.00	307	54
Murphy Ave	Sylvan Rd	Dill Ave	MA	0.681	2	1.36	0.00	0.00	0.00	0	1.36	0.00	*307*	209
Murphy Ave	Dill Ave	Arden Ave	MA	0.080	2	0.16	0.00	0.00	0.00	0	0.16	0.00	*307*	25
Murphy Ave	Arden Ave	Dead End	MA	0.363	2	0.73	0.00	0.00	0.00	0	0.37	0.00	*307*	111
N Highland Ave	Freedom Pkwy	S of Cleburen	Coll	0.182	3	0.55	0.00	0.00	0.00	5	0.37	0.00	*1,076*	196
N Highland Ave	S of Cleburen	Washita Ave NE	Coll	0.141	2	0.28	0.00	0.00	0.00	0	0.28	0.00	*1,076*	152
N Highland Ave	Washita Ave NE	Alaska Ave	Coll	0.545	2	1.09	0.00	0.00	0.00	0	1.08	0.00	*1,076*	586
N Highland Ave	Alaska Ave	MacKenzie Dr	Coll	0.447	2	0.89	0.00	0.00	0.00	3	0.90	0.00	762	341
N Highland Ave	MacKenzie Dr	Parkway Dr	Coll	0.216	2	0.43	0.00	0.00	0.00	3	0.43	0.00	*762*	165
N Highland Ave	Parkway Dr	Central Park Pl	Coll	0.209	2	0.42	0.00	0.00	0.00	7	0.42	0.00	*762*	159
North Ave	N Angier St	Bonaventure Ave	Coll	0.227	4	0.91	0.00	0.00	0.00	5	0.46	0.00	*1,530*	347
North Ave	Bonaventure Av	Freedom Pkwy	Coll	0.085	3	0.26	0.00	0.00	0.00	1	0.17	0.00	1,450	123
North Ave	Freedom Pkwy	Moreland Ave	Coll	0.607	2	1.21	0.62	0.00	0.00	28	1.22	0.00	*1,450*	880
Oakdale Rd	North Ave	DeKalb Ave	Coll	0.651	2	1.30	0.00	0.00	0.00	1	1.32	0.00	*719*	468
Old Hapeville Rd	Cleveland Ave	Macon Dr	Coll	0.593	2	1.19	0.00	0.00	0.00	0	0.97	0.00	*719*	426
Ormond St	Washington St	Hill St	Coll	0.716	2	1.43	0.00	0.00	0.00	0	0.00	0.00	107	77
Ormond St	Hill St	Cherokee Ave	Coll	0.280	2	0.56	0.00	0.00	0.00	0	0.56	0.00	*107*	30
Park Ave	Glenwood Ave	Berne St	Coll	0.393	2	0.79	0.00	0.00	0.00	0	0.79	0.00	*719*	283

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Thru Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 Pk Hr Trips	2015 Pk Hr VMT
Parkway Dr	Highland ave	Freedom Pkwy	Coll	0.122	2	0.24	0.00	0.00	0.00	0	0.24	0.00	*377*	46
Parkway Dr	Freedom Pkwy	Ponce De Leon	Coll	0.819	4	3.28	0.00	0.00	0.00	2	1.65	0.00	377	309
Peachtree Ctr	Decatur St	Baker St	Coll	0.657	3	1.97	0.00	0.00	0.00	10	1.33	0.00	*1,161*	763
Peachtree Ctr	Baker St	Peachtree St	Coll	0.143	4	0.57	0.00	0.00	0.00	1	0.29	0.00	*1,288*	184
Piedmont Ave	MLK	Edgewood Ave	PA	0.453	4	1.81	0.00	0.00	0.00	1	0.90	0.00	759	344
Piedmont Ave	Edgewood Ave	Auburn Ave	PA	0.077	3	0.23	0.00	0.00	0.00	0	0.15	0.00	1,040	80
Piedmont Ave	Auburn Ave	And. Young Int'l	PA	0.284	4	1.14	0.00	0.00	0.00	0	0.58	0.00	*1,020*	290
Piedmont Ave	And. Young Int'l	Ponce De Leon	PA	0.885	4	3.54	0.00	0.00	0.00	7	1.77	0.00	1,000	885
Pryor Rd	Lakewood Way	Fair Dr	PA	0.152	4	0.61	0.00	0.00	0.00	0	0.16	0.00	*1,090*	166
Pryor Rd	Fair Dr	Pryor Cir	PA	0.178	4	0.71	0.00	0.00	0.00	0	0.22	0.00	*1,090*	194
Pryor Rd	Pryor Cir	Claire Dr	PA	0.459	2	0.92	0.00	0.00	0.00	0	0.93	0.00	*1,090*	500
Pryor Rd	Claire Dr	University	PA	0.845	4	3.38	0.00	0.00	0.00	3	1.68	0.00	1,090	921
Pryor Rd	University Ave	Hendrix Ave	PA	0.736	4	2.94	0.00	0.00	0.00	8	1.10	0.00	825	607
Pryor St	Decatur St	Memorial Dr	PA	0.571	4	2.28	0.00	0.00	0.00	0	1.15	0.00	427	244
Pryor St	Memorial Dr	Bass St	PA	0.780	4	3.12	0.00	0.00	0.00	0	0.79	0.00	*325*	254
Pryor St	Bass St	Hendrix Ave	PA	0.238	3	0.71	0.00	0.00	0.00	0	0.24	0.00	222	53
Pulliam St	Central Ave	I-75/85 S ramps	MA	0.530	4	2.12	0.00	0.00	0.00	0	0.13	0.00	*1,375*	729
Pulliam St	I-75/85 S ramps	Dodd Ave	MA	0.289	2	0.58	0.00	0.00	0.00	0	0.00	0.00	*554*	160
Ralph D. Abrnthy	Capitol Ave	I-75/85 ramps	Coll	0.193	4	0.77	0.00	0.00	0.00	2	0.39	0.00	*876*	169
Ralph D. Abrnthy	I-75/85 ramps	Pulliam St	Coll	0.101	4	0.40	0.00	0.00	0.00	2	0.20	0.00	876	88
Ralph D. Abrnthy	Pulliam St	McDaniel St	Coll	0.522	4	2.09	0.00	0.53	0.00	18	1.04	1.03	*904*	472
Ralph D. Abrnthy	McDaniel St	Metro. Pkwy	Coll	0.418	4	1.67	0.00	0.00	0.42	0	0.85	0.80	931	389
Ralph D. Abrnthy	Courtland St	GA Power	Coll	0.146	4	0.58	0.00	0.00	0.00	0	0.29	0.00	*1,288*	188
Ralph Mcgill Blv	GA Power	Central Park Pl	Coll	0.209	5	1.05	0.00	0.00	0.00	0	0.42	0.00	*778*	163
Ralph Mcgill Blv	Central Park Pl	Boulevard	Coll	0.346	4	1.38	0.00	0.00	0.00	0	0.69	0.00	778	269
Ridge Ave	Capitol Ave	Pryor St	MA	0.483	2	0.97	0.00	0.00	0.00	3	0.90	0.00	267	129
Ruby Harper Bvd	Browns Mill Rd	Conley Rd	Coll	0.882	2	1.76	0.00	0.00	0.00	0	0.19	0.00	*719*	634
Sside Ind'l Pky	Browns Mill Rd	Jonesboro Rd	Coll	1.645	4	6.58	0.00	0.00	0.00	0	3.29	0.00	355	584
Sydney St	Fulton St	Cherokee Ave	Coll	0.582	1	0.58	0.00	0.00	0.00	1	1.15	0.00	74	43
Sylvan Rd	Langford Pkwy	Harte Dr	Coll	0.821	3	2.46	0.00	0.00	0.00	36	1.65	0.00	1,400	1,149
Sylvan Rd	Harte Dr	Dill Ave	Coll	0.629	2	1.26	0.00	0.00	0.00	10	1.26	0.00	508	320
Sylvan Rd	Dill Ave	Warner St	Coll	0.423	2	0.85	0.00	0.00	0.00	5	0.86	0.00	*508*	215
Sylvan Rd	Warner St	Murphy Ave	Coll	0.128	2	0.26	0.00	0.00	0.00	1	0.26	0.00	*508*	65
W Peachtree St	Baker St	Pine St	PA	0.351	1	0.35	0.00	0.00	0.00	0	0.70	0.00	*1,340*	470
W Peachtree St	Pine St	5th St	PA	0.620	4	2.48	0.00	0.00	0.00	5	1.24	0.00	3,440	2,133
Washington St	MLK	Alice St	MA	0.583	4	2.33	0.00	0.00	0.00	1	0.51	0.00	1,470	857
Wells St	RDA Blvd	Metrop. Pkwy	Coll	0.138	2	0.28	0.00	0.00	0.00	0	0.27	0.00	1,110	153
Wells St	Metrop. Pkwy	Humphries St	Coll	0.190	2	0.38	0.00	0.00	0.00	0	0.38	0.00	*1,110*	211
Whitefoord Ave	Memorial Dr	DeKalb Ave	Coll	0.979	2	1.96	0.00	0.00	0.00	2	1.95	0.00	898	879
Williams St	Spring St	And. Young Int'l	PA	0.398	3	1.19	0.00	0.00	0.00	7	0.40	0.00	*1,647*	656
Williams St	And. Young Int'l	Peachtree St	PA	0.246	4	0.98	0.00	0.00	0.00	5	0.25	0.00	*1,687*	415
Windsor St	Whitehall St	I-20 Ramps	PA	0.272	4	1.09	0.00	0.00	0.15	0	0.55	0.00	*2,140*	582
Windsor St	I-20 Ramps	Fulton St	PA	0.154	4	0.62	0.00	0.00	0.15	6	0.31	0.00	*2,140*	330
Windsor St	Fulton St	Doane St	PA	0.856	2	1.71	0.00	0.00	0.00	0	1.71	0.00	2,140	1,832
Total Southside				98.24		271.86	4.24	1.22	1.57	464	155.15	19.65		81,800
Avon Ave	Lee st/SR 139	Westmont Rd	Coll	0.841	2	1.68	0.00	0.00	0.00	0	1.69	0.56	187	157
Avon Ave	Westmont Rd	Cascade Ave	Coll	0.745	2	1.49	0.00	0.00	0.00	0	0.76	0.76	187	139
Baker Rd	Ham'n E Holmes	Eliz. Pl	Coll	1.359	2	2.72	0.00	0.00	0.00	0	0.00	0.00	218	296
Bakers Ferry Rd	MLK	Midblock	Coll	1.636	2	3.27	0.00	0.00	0.00	19	1.74	0.00	*719*	1,176

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Thru Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 Pk Hr Trips	2015 Pk Hr VMT
Bakers Ferry Rd	Midblock	MLK	Coll	0.706	2	1.41	0.00	0.00	0.00	0	0.00	0.00	*719*	508
Barge Rd	Fairburn Rd	Campbelton Rd	Coll	0.640	2	1.28	0.00	0.00	0.00	0	0.38	0.00	344	220
Barge Rd	Campbelton Rd	Valeland Ave	Coll	0.186	2	0.37	0.00	0.00	0.00	2	0.37	0.00	497	92
Barge Rd	Valeland Ave	Stone Rd	Coll	0.617	2	1.23	0.00	0.00	0.00	0	0.00	0.00	650	401
Beecher Rd	Cascade Rd	Benj. E Mays Rd	Coll	0.032	2	0.06	0.00	0.00	0.00	0	0.06	0.00	*358*	11
Beecher Rd	Benj. E Mays Rd	Church Parking	Coll	0.177	2	0.35	0.00	0.00	0.00	1	0.35	0.00	*358*	63
Beecher Rd	Church Parking	Shirley St (west)	Coll	0.960	2	1.92	0.00	0.00	0.00	0	0.31	0.00	358	344
Beecher St	Shirley (west)	S Gordon St	Coll	0.325	2	0.65	0.00	0.00	0.00	0	0.32	0.00	*358*	116
Beecher St	S Gordon St	Waters St	Coll	0.211	2	0.42	0.00	0.00	0.00	0	0.00	0.00	*358*	76
Beecher St	Waters St	Donnelly Ave	Coll	0.954	2	1.91	0.00	0.00	0.00	0	1.69	0.00	*358*	342
Ben Hill Rd	Grass Valley Rd	City Limit	Coll	0.173	2	0.35	0.00	0.00	0.00	1	0.17	0.35	*719*	124
Benj. E Mays Dr	Cascade Rd	Lynfield Dr	Coll	2.365	2	4.73	0.00	0.00	0.00	1	2.79	0.62	343	811
Bolton Rd	MLK	Collier Rd	Coll	0.333	2	0.67	0.00	0.00	0.00	0	0.67	0.00	*331*	110
Bolton Rd	Collier Rd	Don L. Hollowell	Coll	1.587	2	3.17	0.00	0.00	0.00	1	1.61	0.00	209	332
Bolton Rd	Don L Hollowell	Fulton Ind'l Blvd	Coll	0.331	2	0.66	0.00	0.00	0.00	0	0.66	0.00	115	38
Boulder Park Dr	Bakers Ferry Rd	MLK	Coll	2.947	2	5.89	0.00	0.00	0.00	2	0.64	0.00	275	810
Butner Rd	Campbellton Rd	Tell Rd	Coll	1.418	2	2.84	0.00	0.00	0.00	0	0.00	0.00	304	431
Campbellton Rd	Lee St	Oakland Dr	PA	0.138	4	0.55	0.14	0.00	0.00	2	0.28	0.00	*853*	118
Campbellton Rd	Oakland Dr	Venitian Dr	PA	0.442	4	1.77	0.00	0.00	0.00	2	0.90	0.00	853	377
Campbellton Rd	Venitian Dr	Stanton Rd	PA	0.587	2	1.17	0.00	0.00	0.00	0	0.67	0.00	*882*	518
Campbellton Rd	Stanton Rd	Fort Valley Dr	PA	0.448	2	0.90	0.00	0.00	0.00	2	0.91	0.00	911	408
Campbellton Rd	Fort Valley Dr	Willis Mill Rd	PA	0.867	4	3.47	0.86	0.00	0.00	6	1.75	0.00	*930*	806
Campbellton Rd	Willis Mill Rd	Wells Dr	PA	0.259	3	0.78	0.00	0.00	0.00	2	0.52	0.00	948	246
Campbellton Rd	Wells Dr	Dodson Dr	PA	0.436	2	0.87	0.00	0.00	0.00	1	0.19	0.00	*903*	394
Campbellton Rd	Dodson Dr	Star Mist	PA	0.952	4	3.81	0.75	0.00	0.00	7	1.91	0.00	858	817
Campbellton Rd	Star Mist	Greenbriar Pkwy	PA	0.128	3	0.38	0.00	0.00	0.00	3	0.26	0.00	*1,259*	161
Campbellton Rd	Greenbriar Pkwy	SR 154	PA	0.160	2	0.32	0.00	0.00	0.00	3	0.17	0.00	1,660	266
Cascade Ave	RDA	Fontaine Ave	PA	2.316	3	6.95	0.00	0.00	0.00	2	4.03	0.81	1,270	2,941
Cascade Rd	Fontaine Ave	Blvd Granada	PA	0.091	2	0.18	0.00	0.00	0.00	6	0.17	0.00	*1,030*	94
Cascade Rd	Blvd Granada	Willis Mill Rd	PA	0.307	2	0.61	0.00	0.00	0.00	0	0.62	0.00	1,030	316
Cascade Rd	Willis Mill Rd	Lynhurst Rd	PA	1.101	2	2.20	0.00	0.00	0.00	2	0.68	2.22	1,150	1,266
Cascade Rd	Lynhurst Rd	City Limit	PA	0.466	2	0.93	0.00	0.00	0.00	2	0.19	0.82	*1,150*	536
Centra Villa	Cascade Rd	Campbelton Rd	Coll	1.055	2	2.11	0.00	0.00	0.00	0	0.58	0.00	464	490
Chappell Rd	MLK	Don L Hollowell	Coll	1.245	2	2.49	0.00	0.00	0.00	0	2.49	0.00	1,034	1,287
Childress Dr	Grass valley Dr	Campbelton Rd	Coll	0.226	2	0.45	0.00	0.00	0.00	0	0.00	0.00	*410*	93
Childress Dr	Campbelton rd	Panther Trl	Coll	0.152	2	0.30	0.00	0.00	0.00	1	0.30	0.00	*410*	62
Childress Dr	Panther Trl	Cascade Rd	Coll	1.570	2	3.14	0.00	0.00	0.00	0	1.57	0.00	410	644
Cont'l Colony Py	Hogan Rd	Greenbriar Pkwy	Coll	0.639	4	2.56	0.00	0.00	0.00	0	1.28	0.00	614	392
Delowe Dr	Cascade Rd	Campbelton Rd	Coll	1.323	2	2.65	0.00	0.00	0.00	1	0.19	2.64	*1,230*	1,627
Delowe Dr	Campbelton Rd	SR 166	Coll	0.497	2	0.99	0.00	0.00	0.00	7	0.88	0.50	1,230	611
Dodson Dr	Cascade Rd	Langford Pkwy	Coll	1.685	2	3.37	0.00	0.00	0.00	0	0.00	0.00	101	170
Donnelly Ave	Cascade	Lee St	Coll	1.266	2	2.53	0.00	0.00	0.00	0	2.52	0.00	442	560
Elizabeth Place	Baker St	Don L Hollowell	Coll	0.281	2	0.56	0.00	0.00	0.00	0	0.00	0.00	*719*	202
Fair St	Jos. E.Lowery	Webster St	Coll	0.132	2	0.26	0.00	0.00	0.00	0	0.00	0.00	*422*	56
Fair St	Webster St	Walker St	Coll	0.742	2	1.48	0.00	0.00	0.00	0	0.00	0.00	422	313
Fairburn Rd	Ginnis Rd	Boulder Park Rd	Coll	1.254	2	2.51	0.00	0.00	0.00	0	1.41	0.31	796	998
Fairburn Rd	Boulder Park Rd	Bakers Ferry Rd	Coll	0.758	2	1.52	0.00	0.00	0.00	0	0.75	0.00	*566*	429
Fairburn Rd	Bakers Ferry Rd	MLK	Coll	0.026	2	0.05	0.00	0.00	0.00	1	0.03	0.00	*566*	15
Fairburn Rd	MLK	Collier Dr	Coll	0.750	2	1.50	0.00	0.00	0.02	16	0.92	0.00	*566*	425
Fairburn Rd	Collier Dr	Midblock	Coll	0.204	2	0.41	0.00	0.00	0.00	0	0.37	0.00	*566*	115

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Thru Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 Pk Hr Trips	2015 Pk Hr VMT
Fairburn Rd	Midblock	Bolton Rd	Coll	0.468	2	0.94	0.00	0.00	0.00	2	0.47	0.00	335	157
Fairburn Rd	Sommerset Trl	Redwine Pkwy	Coll	0.783	2	1.57	0.00	0.00	0.00	0	0.31	0.00	*182*	143
Fairburn Rd	Redwine Pkwy	N Camp Creek	Coll	0.541	2	1.08	0.00	0.05	0.00	0	0.39	0.00	*182*	98
Fairburn Rd	N Camp Creek	Arlington School	Coll	0.847	2	1.69	0.00	0.00	0.00	1	0.00	0.00	182	154
Fairburn Rd	Arlington School	Stone Rd	Coll	0.187	2	0.37	0.00	0.00	0.00	0	0.37	0.37	182	34
Fairburn Rd	Stone Rd	Campbelton Rd	Coll	0.294	2	0.59	0.00	0.00	0.00	2	0.59	0.00	*434*	128
Fairburn Rd	Campbelton Rd	Hill Acres Rd	Coll	0.750	2	1.50	0.00	0.00	0.00	2	0.75	0.00	*686*	515
Fairburn Rd	Hill Acres Rd	Garrison Dr	Coll	0.916	2	1.83	0.00	0.00	0.00	0	0.93	0.00	1,190	1,090
Forsyth St	Whitehall St	Brotherton St	Coll	0.114	3	0.34	0.00	0.00	0.00	0	0.23	0.00	*1,161*	132
Forsyth St	Brotherton St	Garnett St	Coll	0.085	4	0.34	0.00	0.00	0.00	0	0.17	0.00	*1,288*	109
Greenbriar Pky	Cont'l Colony	Barge Rd	Coll	0.964	4	3.86	0.00	0.00	0.00	0	0.96	0.00	695	670
Greenbriar Pky	Campbellton Rd	SR 154/166	Coll	0.091	6	0.55	0.00	0.00	0.00	0	0.18	0.00	*2,410*	219
Greenbriar Pky	SR 154/166	Cont'l Colony	Coll	0.401	5	2.01	0.00	0.00	0.00	5	0.68	0.00	2,410	966
Harbin Rd	Campbellton Rd	Cascade Rd	Coll	1.350	2	2.70	0.00	0.00	0.00	0	0.00	0.00	*719*	971
Harwell Rd	Don L Hollowell	Skipper Pl	Coll	0.295	2	0.59	0.00	0.00	0.00	2	0.59	0.30	*221*	65
Harwell Rd	Skipper Pl	Collier Dr	Coll	1.054	2	2.11	0.00	0.00	0.00	0	1.20	1.06	221	233
Hightower Rd	Jms Jackson Py	Hollywood	Coll	1.203	2	2.41	0.00	0.00	0.00	0	1.23	0.00	255	307
Hogan Rd	Cont'l Colony	City Limit	Coll	0.499	2	1.00	0.00	0.00	0.00	0	0.00	0.00	206	103
Hogan Rd	Fairburn Rd	N Camp Crk Py	Coll	0.309	2	0.62	0.00	0.00	0.00	0	0.31	0.00	*719*	222
Hogan Rd	N Camp Crk Py	Stone Rd	Coll	0.327	2	0.65	0.00	0.00	0.00	0	0.00	0.00	*719*	235
Hollywood Rd	Don L Hollowell	Hightower Rd	Coll	1.680	4	6.72	0.00	0.00	0.00	6	2.04	0.00	277	465
Johnson Rd NW	Marietta Rd	Hollywood Rd	Coll	1.353	2	2.71	0.00	0.00	0.00	4	1.36	1.28	230	311
Jos. E Lowery	RDA Blvd	Oak St	Coll	0.186	4	0.74	0.00	0.00	0.00	1	0.37	0.00	1,440	268
Jos. E Lowery	Oak St	Washington St	Coll	0.895	4	3.58	0.00	0.00	0.00	2	1.79	0.00	1,760	1,575
Jos. E Lowery	Washington St	MLK	Coll	0.079	4	0.32	0.00	0.00	0.00	2	0.15	0.00	*1,495*	118
Jos. E Lowery	MLK	Don L Hollowell	Coll	1.262	4	5.05	0.00	0.00	0.00	4	2.53	0.00	1,230	1,552
Jos. E Lowery	Don L Hollowell	Railroad	Coll	0.177	2	0.35	0.00	0.00	0.00	3	0.35	0.00	*961*	170
Jos. E Lowery	Railroad	W Marietta St	Coll	0.493	3	1.48	0.00	0.00	0.00	0	0.99	0.00	692	341
Kimberly Rd	Campbellton Rd	Kimberly Way	Coll	1.611	2	3.22	0.00	0.00	0.00	0	0.00	0.00	*719*	1,158
Kimberly Rd	Kimberly Way	City Limit	Coll	0.317	2	0.63	0.00	0.00	0.00	0	0.32	0.00	*719*	228
Lee St	RDA Blvd	Westview Dr	PA	0.424	4	1.70	0.00	0.00	0.00	0	0.84	0.00	*1,687*	715
Lynhurst Dr	Cascade Rd	Mid block	Coll	0.745	2	1.49	0.00	0.00	0.00	0	0.91	0.00	*485*	361
Lynhurst Dr	Mid block	Benj. E Mays	Coll	0.176	2	0.35	0.00	0.00	0.00	0	0.18	0.00	*485*	85
Lynhurst Dr	Benj. E Mays	MLK	Coll	1.341	2	2.68	0.00	0.00	0.00	0	2.44	0.00	485	650
Marietta Blvd	Huff Rd	W Marietta St	PA	0.153	3	0.46	0.00	0.00	0.00	3	0.15	0.00	*1,290*	197
Marietta Blvd	W Marietta St	Don L Hollowell	PA	1.087	5	5.44	0.00	0.00	0.00	3	0.00	0.00	*1,290*	1,402
Marietta Rd	W Marietta St	N of W Marietta	Coll	0.437	2	0.87	0.00	0.00	0.00	0	0.88	0.00	*719*	314
Marietta Rd	N of W Marietta	Thomas St	Coll	0.563	2	1.13	0.00	0.00	0.00	0	0.00	0.00	*719*	405
MLK, Jr. Dr	Washington St	Spring St	PA	0.091	5	0.46	0.00	0.00	0.00	0	0.18	0.00	692	63
MLK, Jr. Dr	Spring St	Cent. Olym Prk	PA	0.234	4	0.94	0.00	0.00	0.00	1	0.46	0.00	1,070	250
MLK, Jr. Dr	Cent. Olym Prk	Northside	PA	0.243	0	0.00	0.00	0.00	0.00	0	0.16	0.00	*1,070*	260
MLK, Jr. Dr	Northside	Walnut St	PA	0.212	5	1.06	0.00	0.00	0.21	2	0.43	0.00	*1,070*	227
MLK, Jr. Dr	Walnut St	Jos Lowery Blvd	PA	0.639	4	2.56	0.00	0.00	0.00	3	1.28	0.00	*1,070*	684
MLK, Jr. Dr	Jos Lowery Blvd	Booker St	PA	0.133	3	0.40	0.00	0.00	0.00	2	0.27	0.00	*1,070*	142
MLK, Jr. Dr	Booker St	RDA Blvd	PA	1.548	4	6.19	0.00	0.00	0.00	3	3.00	0.00	*1,070*	1,656
Mayson Turner	MLK	Simpson Rd	Coll	0.831	2	1.66	0.00	0.00	0.00	0	1.66	0.00	180	150
McDaniel St	Northside Dr	Whitehall St	Coll	0.242	2	0.48	0.00	0.00	0.00	3	0.48	0.00	*704*	170
Mitchell St	Spring St	Northside Dr	MA	0.445	2	0.89	0.00	0.03	0.00	7	0.89	0.16	*554*	247
Mt Gilead Rd	Fairburn Rd	Briar Glenn Ln	Coll	0.453	2	0.91	0.00	0.00	0.00	0	0.00	0.00	*353*	160
Mt Gilead Rd	Briar Glenn Ln	Panther Trl	Coll	0.389	2	0.78	0.00	0.00	0.00	0	0.40	0.00	353	137

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Table 84. Major Street Inventory (continued)

Street	From	To	Func. Class	Miles	Thru Lns	Ln-Mi.	Median Type: TW LTL (mi.)	Median Type: Land-Scape (mi.)	Median Type: Conc-rete (mi.)	Turn Lns	Side Wlk (mi.)	Bike Ln (mi.)	2015 Pk Hr Trips	2015 Pk Hr VMT
Mt Gilead Rd	Panther Trl	Campbellton Rd	Coll	0.443	2	0.89	0.00	0.00	0.00	0	0.00	0.00	378	167
N Camp Crk Pky	Fairburn Rd	Hogan Rd	Coll	0.371	4	1.48	0.00	0.00	0.00	0	0.36	0.00	*1,288*	478
New Hope Rd	Danforth Rd	Heatherland Dr	Coll	0.335	2	0.67	0.00	0.00	0.00	0	0.33	0.00	525	176
Niskey Lake Rd	Butner Rd	Campbelton Rd	Coll	0.474	2	0.95	0.00	0.00	0.00	0	0.00	0.00	*719*	341
Niskey Lake Rd	Campbelton Rd	Brooks Dr	Coll	0.467	2	0.93	0.00	0.00	0.00	0	0.47	0.00	*719*	336
Niskey Lake Rd	Brooks Dr	Lyon Blvd	Coll	0.212	2	0.42	0.00	0.00	0.00	0	0.43	0.00	*719*	152
Niskey Lake Rd	Lyon Blvd	County Line Rd	Coll	0.516	2	1.03	0.00	0.00	0.00	0	0.79	0.00	*719*	371
North Ave	Jos. E.Lowery	Northside Dr	Coll	0.737	2	1.47	0.00	0.00	0.00	0	0.76	0.00	*719*	530
Northwest Dr	Hightower Rd	Jms Jackson Pky	MA	0.263	2	0.53	0.00	0.00	0.00	0	0.00	0.00	*575*	151
Northwest Dr	Jms Jackson Pky	Bolton Rd	MA	1.228	2	2.46	0.00	0.00	0.00	0	1.41	0.00	139	171
Oakland Dr	Van Buren St	Donnelly Ave	Coll	1.069	2	2.14	0.00	0.00	0.00	0	2.12	0.00	233	249
Old Fairburn Rd	Camp Crk Pkwy	Sommerset Trl	Coll	0.271	2	0.54	0.00	0.00	0.00	0	0.00	0.00	*719*	195
Old Gordon Rd	M.L.K.Jr. Dr	N of Collier Dr	MA	0.196	2	0.39	0.00	0.00	0.00	0	0.20	0.00	*208*	41
Old Gordon Rd	N of Collier Dr	Fulton Ind. Blvd	MA	0.219	2	0.44	0.22	0.00	0.00	0	0.44	0.00	208	46
Perry Blvd	Hollywood Rd	Marietta Rd	Coll	2.430	2	4.86	0.00	0.21	0.00	3	2.65	1.44	506	1,230
Peyton Rd	Midblock	H.E. Holmes	Coll	1.609	2	3.22	0.00	0.00	0.00	0	1.62	0.00	*719*	1,157
Peyton Rd	Benjamin E Mays	midblock	Coll	0.656	3	1.97	0.00	0.00	0.00	4	0.66	0.00	*1,161*	762
S Gordon St	RDA Blvd	Beecher ST	Coll	1.121	2	2.24	0.00	0.00	0.00	0	2.24	1.12	*719*	806
Sandtown Rd	Cascade Rd	Venetian Dr	Coll	1.074	2	2.15	0.00	0.00	0.00	0	0.00	0.00	132	142
Spring St	10th St	Windsor St	PA	2.716	4	10.86	0.00	0.00	0.03	6	5.28	0.00	1,085	2,947
Stone Rd	Fairburn Rd	N Camp Crk Pwy	Coll	1.170	2	2.34	0.00	0.00	0.00	0	0.00	0.00	95	111
Tatnal St	MLK	Mitchell St	Coll	0.081	3	0.24	0.00	0.00	0.00	2	0.16	0.00	875	71
Van Buren St	Campbelton Rd	Lee St	Coll	0.249	2	0.50	0.00	0.00	0.00	0	0.50	0.00	*719*	179
Venetian Dr	Cascade Rd	Fontaine Ave	Coll	0.301	2	0.60	0.00	0.00	0.00	0	0.53	0.00	*719*	216
Venetian Dr	Fontaine Ave	Central Villa Dr	Coll	0.692	2	1.38	0.00	0.00	0.00	0	0.00	0.00	*719*	498
Venetian Dr	Centra Villa	Willow Trl	Coll	0.789	2	1.58	0.00	0.00	0.00	0	0.31	0.00	*719*	567
Venetian Dr	Willow Trl	Campbellton Rd	Coll	0.327	2	0.65	0.00	0.00	0.00	0	0.66	0.00	*719*	235
W Lake Ave	RDA Blvd	Don L Hollowell	Coll	1.655	2	3.31	0.00	0.00	0.00	0	3.10	0.01	890	1,473
W Marietta St	Howell Mill Rd	Longley Ave	Coll	0.990	4	3.96	0.00	0.00	0.00	0	1.97	0.00	1,620	1,604
W Marietta St	Longley Ave	Marietta Blvd	Coll	0.781	4	3.12	0.00	0.00	0.00	0	0.00	0.00	1,430	1,117
Walker St	Nelson St	Peters St	MA	0.427	2	0.85	0.00	0.00	0.00	0	0.87	0.00	*554*	237
Welcome All Rd	Fairburn Rd	City Limit	Coll	0.497	2	0.99	0.00	0.00	0.00	0	0.00	0.00	223	111
Westmont Rd	Cascade Rd	Venetian Dr	Coll	1.298	2	2.60	0.00	0.00	0.00	0	0.00	0.00	*719*	933
White St	RDA/Langhorn	Jos Lowery Bvd	Coll	1.042	2	2.08	0.00	0.00	0.00	0	2.08	1.05	217	226
White St	Jos Lowery Bvd	Lee St	Coll	0.129	4	0.52	0.00	0.00	0.00	0	0.26	0.00	*1,288*	166
Whitehall St	Murphy Av/I-20	Memorial Dr	PA	0.936	4	3.74	0.00	0.00	0.00	0	1.86	0.01	971	909
Willis Mill Rd	Campbellton Rd	Cascade Rd	Coll	1.326	2	2.65	0.00	0.00	0.00	0	0.00	0.00	*719*	953
Willis Mill Rd	Cascade Rd	Benj. E Mays	Coll	0.407	2	0.81	0.00	0.00	0.00	0	0.00	0.00	*719*	293
Total, Westside				100.47		244.40	1.97	0.29	0.26	171	106.68	16.39		65,709
City-Wide Total				298.21		779.66	8.05	4.25	3.86	1,102	381.74	82.33		262,992

Notes: "Func Class" is functional classification (Coll = collector, MA = minor arterial, PA = principal arterial); "Miles" is segment length; "Thru Lns" is number of through travel lanes; "TWLTL" is two-way left turn lane; "Landscape" is landscaped median; "Turn Lns" is number of turn lanes; "Side Wlk" is sidewalk; "Bike Ln" is bike lane; "Pk Hr" is evening peak hour; "VMT" is vehicle-miles of travel.
Source: Duncan Associates, based on data provided by Kimley Horn, peak hour trips are estimates based on 10% of annual average daily trips (italicized counts are estimates based on adjacent segments with counts or on the average count for segments with counts of the same functional classification and number of lanes); VMT is product of segment length and peak hour trips.

APPENDIX E: OUTSTANDING DEBT

Proceeds from debt issues are one of the primary sources of funding for City capital projects. The City can issue $8 million in general obligation (GO) bonds annually without a referendum; these GO bond issues are referred to as the Annual Bond. The voters through bond referendum are responsible for approving any additional GO bonds beyond the statutory limits. Other types of debt instruments used by the City include Park Improvement Bonds, Public Safety Revenue Bonds, and capital leases. As part of this update, the consultant worked with the City of Atlanta Finance Department to identify outstanding debt issues and determine how the funds from each outstanding issue were distributed among the impact fee-related capital facilities. A summary of this analysis is presented in Table 85.

Table 85. Outstanding Debt Summary

Year	Transportation	Parks	Fire	Police	Total
2009 Refunding	$22,730,000	$0	$0	$0	$22,730,000
2014 Refunding	$15,175,000	$0	$0	$0	$15,175,000
2014AB Park Imp. Refunding	$0	$56,915,000	$0	$0	$56,915,000
2015 Infrastruture Bond	$233,845,000	$0	$0	$0	$233,845,000
2016 APSJFA Rev Refunding	$0	$0	$0	$22,495,000	$22,495,000
Motorola Capital Lease	$0	$0	$0	$10,906,886	$10,906,886
1998 COPS Installment Sale	$0	$0	$0	$9,200,000	$9,200,000
Total	$271,750,000	$56,915,000	$0	$42,601,886	$371,266,886

Source: City of Atlanta Finance Department, February 10, 2020.

APPENDIX F: PARK INVENTORY

Table 86. Park Inventory

Park Name	Acres	Service Area	Type	Playground	Picnic Shelter	Basketball Court	Tennis Court	Baseball Field	Soccerl Field	Pavilion/Gazebo (sf)	Trail, Hard (Mi.)	Trail, Natural (Mi.)
17th Street Park	2.30	N	N	0	0	0	0	0	0	0	0.00	0.00
25th Street Beauty Spot	0.11	N	G	0	0	0	0	0	0	0	0.00	0.00
3162 Lenox Rd	2.40	N	G	0	0	0	0	0	0	0	0.00	0.00
Alexander Park	11.60	N	V	0	0	0	0	0	0	0	0.00	0.25
Ansley Park	6.11	N	N	0	0	0	0	0	0	0	0.00	0.00
Ardmore Park	1.74	N	B	1	0	0	0	0	0	0	0.00	0.00
Atlanta Memorial Park	49.87	N	R	1	0	0	23	0	0	144	0.00	1.00
Avery-E. Park Lane Triangle	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Barclay Median	0.32	N	G	0	0	0	0	0	0	0	0.00	0.00
Beaverbrook Park	6.80	N	N	1	0	0	0	0	0	0	0.00	0.00
Beech Valley Triangle	0.36	N	G	0	0	0	0	0	0	0	0.00	0.00
Benton Place Garden	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Beverly-Avery Circle	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Beverly-Avery Triangle	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Beverly-Montgomery Ferry Triangle	0.02	N	G	0	0	0	0	0	0	0	0.00	0.00
Beverly-Polo Triangle	0.02	N	G	0	0	0	0	0	0	0	0.00	0.00
Birchwood-Arlene Triangle	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Blue Heron Nature Preserve	11.03	N	P	0	0	0	0	0	0	0	0.00	2.75
Broadland and West Conway Park	0.09	N	G	0	0	0	0	0	0	0	0.00	0.00
Castlewood Triangle	0.41	N	G	0	0	0	0	0	0	0	0.00	0.00
Channing Valley Park	0.58	N	B	1	0	0	0	0	0	0	0.00	0.00
Charles Allen Median	0.33	N	G	0	0	0	0	0	0	0	0.00	0.00
Charlie Loudermilk Park	0.52	N	G	0	0	0	0	0	0	0	0.00	0.00
Chastain Memorial Park	268.00	N	R	1	0	0	9	6	0	6,217	2.86	0.00
Chattahoochee Park	3.21	N	N	0	0	1	0	0	0	0	0.00	0.00
Chattahoochee Trail	49.19	N	V	0	0	0	0	0	0	0	0.00	0.00
Club Drive Park	0.08	N	G	0	0	0	0	0	0	0	0.00	0.00
Daniel Johnson Nature Preserve	8.00	N	P	0	0	0	0	0	0	0	0.00	0.25
Darlington Circle Park	0.06	N	G	0	0	0	0	0	0	0	0.00	0.00
Davidson and Lakehaven Park	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Dellwood Park	1.36	N	N	0	0	0	0	0	0	0	0.00	0.00
E. Club and Lakehaven Park	0.01	N	G	0	0	0	0	0	0	0	0.00	0.00
E. Pine Valley and W. Pine Valley Park	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
E. Rock Springs Triangle	0.13	N	G	0	0	0	0	0	0	0	0.00	0.00
East Andrews and Roswell Park	0.01	N	G	0	0	0	0	0	0	0	0.00	0.00
East Brookhaven and Lakehaven Park	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Ellsworth Park	1.27	N	B	1	0	0	0	0	0	0	0.00	0.00
Emma Lane	8.80	N	V	0	0	0	0	0	0	0	0.00	0.00
Eubanks (The Prado) Park	1.37	N	B	0	0	0	0	0	0	0	0.00	0.00
Fort Peachtree Landings	15.00	N	P	0	1	0	0	0	0	1,120	0.00	0.25
Frankie Allen Park	21.63	N	C	1	0	0	4	1	0	462	0.00	0.00

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Table 86. Park Inventory (continued)

Park Name	Acres	Service Area	Type	Playground	Picnic Shelter	Basketball Court	Tennis Court	Baseball Field	Soccerl Field	Pavilion/Gazebo (sf)	Trail, Hard (Mi.)	Trail, Natural (Mi.)
Garden Hills Park	3.60	N	N	1	0	0	0	0	0	0	0.00	0.00
Greenwood-Charles Allen Triangle	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Haynes Manor Park	2.98	N	N	0	0	0	0	0	0	0	0.25	0.00
Helen Drive Park	0.02	N	G	0	0	0	0	0	0	0	0.00	0.00
Herbert Taylor Park	26.00	N	N	0	0	0	0	0	0	0	0.00	2.25
Hickory Grove Park	0.41	N	G	0	0	0	0	0	0	0	0.00	0.00
Hillside at Northside Drive Park	0.38	N	G	0	0	0	0	0	0	0	0.00	0.00
Home Park	1.80	N	B	1	0	0	0	0	0	0	0.00	0.00
Homestead Park	0.15	N	G	0	0	0	0	0	0	0	0.00	0.00
Howell Mill at Beaverbrook Park	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Howell Mill at Glenbrook Park	0.02	N	G	0	0	0	0	0	0	0	0.00	0.00
Inman Circle at 17th St Park	0.03	N	G	0	0	0	0	0	0	0	0.00	0.00
J. Allen Couch Park	6.41	N	N	0	0	0	0	0	0	0	0.00	0.00
John Howell Memorial Park	2.80	N	N	2	0	0	0	0	0	0	0.00	0.00
Lafayette-15th Street Triangle	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Lanier Boulevard Parkway	2.10	N	G	0	0	0	0	0	0	0	0.00	0.00
Lenox and Johnson Road Park	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Lenox Beauty Spot	0.08	N	G	0	0	0	0	0	0	0	0.00	0.00
Lenox-Wildwood Park	8.47	N	N	1	0	0	2	0	0	0	0.00	0.30
Little Nancy Creek Park	4.96	N	P	1	0	0	0	0	0	0	0.00	1.20
Loridans	1.00	N	C	0	0	0	0	0	0	0	1.00	0.00
Loring Heights Park	1.90	N	B	1	0	0	0	0	0	0	0.00	0.00
Louise G. Howard Park	5.52	N	N	0	0	0	0	0	0	200	0.20	0.00
Maddox-Avery Triangle	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Mantissa Road	1.87	N	B	0	0	0	0	0	0	0	0.00	0.00
Mayson Park	3.10	N	V	0	0	0	0	0	0	0	0.00	0.00
Mayson Ravine	2.70	N	V	0	0	0	0	0	0	0	0.00	0.00
McClatchey Park	5.00	N	N	1	0	0	3	0	0	509	0.00	0.00
McKinley-Wilson Circle	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Montgomery Ferry/Golf Cir. Triangle	0.03	N	G	0	0	0	0	0	0	0	0.00	0.00
Moores Mill-Northside Pkwy Triangle	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Morningside Nature Preserve	36.04	N	P	1	0	0	0	0	0	0	0.00	2.00
Mornington Circle	0.16	N	G	0	0	0	0	0	0	0	0.00	0.00
Mountain Way Commons	11.50	N	C	0	0	0	0	0	0	0	0.00	0.33
Mt. Paran and Northside Park	0.22	N	G	0	0	0	0	0	0	0	0.00	0.00
Mt. Paran Rd. at Cave Rd. Triangle	0.23	N	G	0	0	0	0	0	0	0	0.00	0.00
Noble Park	0.41	N	B	1	0	0	0	0	0	0	0.00	0.00
North Buckhead Park	0.13	N	G	0	0	0	0	0	0	0	0.00	0.00
North Highland Terrace Park	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Northcliffe and Brookview Park	0.02	N	G	0	0	0	0	0	0	0	0.00	0.00
Oak Grove Park	3.43	N	N	0	0	0	0	0	0	0	0.45	0.00
Old Ivy Road Park	0.66	N	N	0	0	0	0	0	0	0	0.00	0.00

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Table 86. Park Inventory (continued)

Park Name	Acres	Service Area	Type	Playground	Picnic Shelter	Basketball Court	Tennis Court	Baseball Field	Soccerl Field	Pavilion/Gazebo (sf)	Trail, Hard (Mi.)	Trail, Natural (Mi.)
Orme Park	6.60	N	N	1	0	0	0	0	0	0	0.00	0.10
Orme Triangle	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Peachtree at 15th St. Park	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Peachtree Battle Parkway	4.22	N	G	0	0	0	0	0	0	0	0.00	0.00
Peachtree Cir. at 15th St. Triangle	0.11	N	G	0	0	0	0	0	0	0	0.00	0.00
Peachtree Hills Park	7.20	N	C	1	1	0	3	1	0	875	0.00	0.18
Pelham Road Park	0.09	N	G	0	0	0	0	0	0	0	0.00	0.00
Pershing Point Park	0.33	N	G	0	0	0	0	0	0	0	0.00	0.00
Pharr Circle Park	0.28	N	G	0	0	0	0	0	0	0	0.00	0.00
Piedmont Heights Park	0.03	N	G	0	0	0	0	0	0	0	0.00	0.00
Piedmont Park	193.40	N	R	2	0	0	12	4	2	5,733	4.50	1.50
Piedmont Road Triangle	0.01	N	G	0	0	0	0	0	0	0	0.00	0.00
Piedmont-Avery Triangle	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Pinetree and Brentwood Park	0.08	N	G	0	0	0	0	0	0	0	0.00	0.00
Prado at 17th St Triangle	0.13	N	G	0	0	0	0	0	0	0	0.00	0.00
Prado at Inman Circle Park	0.40	N	G	0	0	0	0	0	0	0	0.00	0.00
Prado-Maddox Triangle	0.13	N	G	0	0	0	0	0	0	0	0.00	0.00
Prado-Peachtree Circle Triangle	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Prado-Piedmont Beauty Spot	0.12	N	G	0	0	0	0	0	0	0	0.00	0.00
Prado-South Prado Circle	0.03	N	G	0	0	0	0	0	0	0	0.00	0.00
Prado-Westminster Triangle	0.07	N	G	0	0	0	0	0	0	0	0.00	0.00
Ranier Circle	0.01	N	G	0	0	0	0	0	0	0	0.00	0.00
Ray Kluka Memorial Park	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Riverside	6.85	N	P	0	0	0	0	0	0	0	0.00	0.00
Robin Lane Park	0.02	N	G	0	0	0	0	0	0	0	0.00	0.00
Rumson and Pinetree Park	0.01	N	G	0	0	0	0	0	0	0	0.00	0.00
Rumson Road Circle	0.03	N	G	0	0	0	0	0	0	0	0.00	0.00
Sara J. Gonzalez Park	1.41	N	B	1	0	0	0	0	0	0	0.00	0.00
Shady Valley Park	11.08	N	C	1	0	1	3	1	0	0	0.00	0.00
Shadyside Park	4.08	N	N	0	0	0	0	0	0	0	0.00	0.00
Sibley Park	1.60	N	V	0	0	0	0	0	0	0	0.00	0.00
Sidney Marcus Park	2.69	N	N	1	0	0	0	0	0	0	0.00	0.00
Smith Park	0.41	N	G	0	0	0	0	0	0	0	0.00	0.00
Spink-Collins Park	25.49	N	N	1	0	0	0	0	0	0	0.00	1.00
Spring Valley Jewish Corner	0.07	N	G	0	0	0	0	0	0	0	0.00	0.00
Spring Valley Park	3.55	N	V	0	0	0	0	0	0	0	0.00	0.00
Springdale Park	5.25	N	N	1	0	0	0	0	0	0	0.00	0.00
Springlake Park	5.20	N	V	0	0	0	0	0	0	0	0.00	0.00
Sunken Garden Park	0.92	N	B	1	0	0	0	0	0	0	0.00	0.00
Sunnybrook Park	2.40	N	N	0	0	0	0	0	0	0	0.00	0.00
Tanyard Creek Park	14.50	N	N	1	0	0	0	0	0	0	0.90	0.00
Tanyard Creek Urban Forest	6.29	N	P	0	0	0	0	0	0	0	0.00	0.00
Tennyson Circle	0.03	N	G	0	0	0	0	0	0	0	0.00	0.00

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Table 86. Park Inventory (continued)

Park Name	Acres	Service Area	Type	Playground	Picnic Shelter	Basketball Court	Tennis Court	Baseball Field	Soccerl Field	Pavilion/Gazebo (sf)	Trail, Hard (Mi.)	Trail, Natural (Mi.)
Todd Street Triangle	0.02	N	G	0	0	0	0	0	0	0	0.00	0.00
Underwood Hills Park	10.70	N	N	2	1	1	2	1	0	392	0.00	0.00
Valley Road and Habersham Park	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Vedado-Greenwood Triangle	0.08	N	G	0	0	0	0	0	0	0	0.00	0.00
Vermont Road Park	2.00	N	N	0	0	0	0	0	0	0	0.00	0.00
Virgilee Park	3.50	N	N	0	0	0	0	0	0	0	0.25	0.00
Virginia Highland Triangle	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
West Wesley Park	1.13	N	V	0	0	0	0	0	0	0	0.00	0.00
Westminster Park	0.01	N	G	0	0	0	0	0	0	0	0.00	0.00
Whetstone Creek Park	2.33	N	P	0	0	0	0	0	0	0	0.20	0.00
Whittier Mills Park	22.00	N	N	1	0	0	0	0	0	0	0.00	0.25
Wildwood Gardens Park	1.56	N	B	0	0	0	0	0	0	0	0.00	0.00
Wildwood Place	0.05	N	G	0	0	0	0	0	0	0	0.00	0.00
Wilson Park Triangle	0.12	N	G	0	0	0	0	0	0	0	0.00	0.00
Winn Park	10.30	N	N	1	0	0	0	0	0	0	0.00	0.00
Yonah Park	1.90	N	B	0	0	0	0	0	0	0	0.00	0.00
Zimmer Drive Circle	0.04	N	G	0	0	0	0	0	0	0	0.00	0.00
Total, Northside Service Area	968.77			32	3	3	61	14	2	15,652	10.61	13.61
Adair Park I	6.39	S	N	1	0	1	0	1	0	88	0.00	0.00
Adair Park II	10.60	S	N	1	0	1	2	1	0	36	0.00	0.00
Arbor Park	0.36	S	G	0	0	0	0	0	0	0	0.00	0.00
Arthur Langford Jr Park	9.90	S	C	1	0	2	2	1	0	0	0.00	0.35
Avery Park-Gilbert House	11.03	S	S	0	0	0	0	0	0	0	0.00	0.00
Bass Recreation Center	1.00	S	S	0	0	0	0	0	0	0	0.00	0.00
Benoit	1.09	S	B	0	0	0	0	0	0	0	0.00	0.00
Benteen Park	9.81	S	N	1	0	0	0	1	1	0	0.00	0.00
Bessie Branham Park	6.58	S	C	1	0	1	2	1	0	225	0.00	0.00
Billings Circle	0.03	S	G	0	0	0	0	0	0	0	0.00	0.00
Bonnie Brae Park	0.19	S	B	1	0	0	0	0	0	0	0.00	0.00
Boulevard Crossing	21.79	S	N	0	0	0	0	0	0	0	0.00	0.00
Boulevard-Angier Park	0.18	S	G	0	0	0	0	0	0	0	0.00	0.00
Brookline Park	0.06	S	G	0	0	0	0	0	0	0	0.00	0.00
Browns Mill/McWilliams Park	0.04	S	G	0	0	0	0	0	0	0	0.00	0.00
Brownwood Park	12.33	S	C	1	0	1	3	0	0	1,760	0.00	0.00
Cabbagetown Park	3.66	S	N	1	0	0	0	0	0	0	0.00	0.00
Candler Park	55.30	S	C	1	0	1	4	1	1	640	1.00	0.00
Central Park	17.37	S	C	1	0	2	4	2	0	0	0.00	0.00
Chosewood Park	15.32	S	N	1	0	0	1	1	0	0	0.00	0.25
Cleveland Avenue Park	5.86	S	N	1	0	1	1	1	0	0	0.00	0.00
Coan Park	13.26	S	C	1	0	2	4	1	0	309	0.40	0.00
D.H. Stanton Park	8.32	S	N	2	1	0	0	1	0	2,000	0.00	0.00

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Table 86. Park Inventory (continued)

Park Name	Acres	Service Area	Type	Playground	Picnic Shelter	Basketball Court	Tennis Court	Baseball Field	Soccerl Field	Pavilion/Gazebo (sf)	Trail, Hard (Mi.)	Trail, Natural (Mi.)
Delta Park	0.22	S	G	0	0	0	0	0	0	0	0.00	0.00
Dill Avenue Park	0.09	S	G	0	0	0	0	0	0	0	0.00	0.00
East Lake Park	10.30	S	C	1	4	1	2	1	0	877	0.00	0.00
Eastwood/Emerson Triangle	0.03	S	G	0	0	0	0	0	0	0	0.00	0.00
Emma Millican Park	12.48	S	N	1	1	0	0	0	0	960	0.00	0.00
Empire Park	11.80	S	N	1	0	1	2	1	0	0	0.00	0.00
Esther Peachey Lefever	0.70	S	B	1	0	0	0	0	0	0	0.00	0.00
Findley Plaza	0.11	S	B	0	0	0	0	0	0	0	0.00	0.00
Folk Art (Courtland) Park	0.50	S	G	0	0	0	0	0	0	0	0.00	0.00
Folk Art (Piedmont) Park	0.50	S	G	0	0	0	0	0	0	0	0.00	0.00
Four Corners Park	4.80	S	N	1	0	0	0	0	0	330	0.00	0.00
Freedom Park	188.59	S	R	2	0	0	0	0	0	0	5.35	0.00
Fulton-Pryor Island	0.12	S	G	0	0	0	0	0	0	0	0.00	0.00
Gilliam Park	2.60	S	N	0	0	0	0	0	0	0	0.20	0.10
Glenwood Triangle	0.05	S	G	0	0	0	0	0	0	0	0.00	0.00
Goldsboro Park	2.50	S	N	0	0	1	2	0	0	0	0.00	0.00
Grant Park	131.50	S	R	2	2	1	4	2	1	5,658	2.00	0.00
Hardy Ivy Park	0.56	S	G	0	0	0	0	0	0	0	0.00	0.00
Harold Avenue Place	0.52	S	G	0	0	0	0	0	0	0	0.00	0.00
Harper Park	13.57	S	N	1	1	2	2	1	0	200	0.00	0.00
Heritage (Founder's) Park	0.67	S	G	0	0	0	0	0	0	0	0.00	0.00
Historic Fourth Ward Park	18.20	S	N	2	0	0	0	0	0	0	0.00	0.00
Hurt Park	1.87	S	B	0	0	0	0	0	0	0	0.00	0.00
Inman Park	0.28	S	G	0	0	0	0	0	0	0	0.00	0.00
Iverson Park	2.01	S	N	1	0	0	0	1	1	0	0.00	0.00
J.D. Sims Recreation Center	0.85	S	C	1	0	1	0	0	0	0	0.00	0.00
Jacci Fuller Woodland Garden Park	0.64	S	B	1	0	0	0	0	0	0	0.00	0.00
John C. Burdine Center	4.27	S	CC	0	0	0	0	0	0	0	0.00	0.00
John Calhoun Park	0.28	S	B	0	0	0	0	0	0	0	0.00	0.00
John Wesley Dobbs Park	1.30	S	N	0	0	0	0	0	0	0	0.00	0.00
Jonesboro Triangle	0.17	S	G	0	0	0	0	0	0	0	0.00	0.00
Kimpson Park	0.38	S	B	0	0	0	0	0	0	0	0.00	0.00
Kirkwood Urban Forest	6.64	S	V	0	0	0	0	0	0	0	0.00	0.60
Lake Claire Park	5.40	S	N	1	1	0	1	1	0	260	0.00	0.00
Lakewood Fairgrounds & HiFi Buys Amp	113.30	S	S	0	0	0	0	0	0	0	0.00	0.00
Lang-Carson Park	3.24	S	C	1	1	1	0	0	0	400	0.00	0.00
M.L.K. Center	5.20	S	C	1	0	0	0	0	0	0	0.00	0.00
Macon Drive Park	1.00	S	N	0	0	0	0	0	0	0	0.00	0.00
Manigault Street Playlot	0.22	S	B	0	0	0	0	0	0	0	0.00	0.00
Margaret Mitchell Square	0.04	S	G	0	0	0	0	0	0	0	0.00	0.00
Marietta Street Island	0.17	S	G	0	0	0	0	0	0	0	0.00	0.00

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Table 86. Park Inventory (continued)

Park Name	Acres	Service Area	Type	Playground	Picnic Shelter	Basketball Court	Tennis Court	Baseball Field	Soccerl Field	Pavilion/Gazebo (sf)	Trail, Hard (Mi.)	Trail, Natural (Mi.)
Mayor's #1 Park	0.22	S	G	0	0	0	0	0	0	0	0.00	0.00
McKay Circle	0.04	S	G	0	0	0	0	0	0	0	0.00	0.00
Memorial Drive Greenway	1.66	S	G	0	0	0	0	0	0	0	0.00	0.00
Monument Beauty Spot	0.03	S	G	0	0	0	0	0	0	0	0.00	0.00
Moreland Avenue Planters	0.06	S	G	0	0	0	0	0	0	0	0.00	0.00
Morgan-Boulevard Park	0.39	S	B	1	0	1	0	0	0	0	0.00	0.00
Oak Knoll I Park	1.07	S	G	0	0	0	0	0	0	0	0.00	0.00
Oak Knoll II Park	0.56	S	G	0	0	0	0	0	0	0	0.00	0.00
Oakland Cemetery	47.70	S	C	0	0	0	0	0	0	0	0.00	0.00
Oakview I Park	0.45	S	G	0	0	0	0	0	0	0	0.00	0.00
Oakview II Park	0.61	S	G	0	0	0	0	0	0	0	0.00	0.00
Ormond-Grant Park	1.30	S	B	1	0	0	0	0	0	0	0.00	0.00
Parkway-Angier Park	0.50	S	B	0	0	1	0	0	0	0	0.00	0.00
Parkway-Merritts Park	0.68	S	B	0	0	1	0	0	0	0	0.00	0.00
Parkway-Wabash Park	0.60	S	B	1	0	1	0	0	0	0	0.00	0.00
Perkerson Park	49.90	S	C	1	1	2	6	3	0	3,392	0.00	0.75
Phoenix II Park	7.30	S	N	1	0	2	2	1	0	600	0.00	0.00
Phoenix III Park	4.00	S	N	1	0	0	0	0	0	0	0.00	0.00
Pittman Park	14.10	S	C	1	1	2	3	2	0	422	0.00	0.00
Pryor-Tucker Playlot	0.19	S	B	1	0	0	0	0	0	0	0.00	0.00
Ralph David Abernathy Median	0.29	S	G	0	0	0	0	0	0	0	0.00	0.00
Ralph David Abernathy Plaza	0.33	S	G	0	0	0	0	0	0	0	0.00	0.00
Rawson-Washington Park	4.49	S	N	1	0	1	2	0	0	0	0.00	0.00
Rebel Valley Playlot	1.37	S	B	1	1	1	0	0	0	110	0.00	0.00
Renaissance Park	5.40	S	N	0	0	0	0	0	0	0	0.00	0.00
Robert W. Woodruff Park	3.30	S	C	1	0	0	0	0	0	452	0.00	0.00
Rosa L. Burney Park (Dunbar Pool)	13.73	S	C	2	0	0	2	1	0	625	0.00	0.00
Rosel Fann Park	20.08	S	C	1	0	0	0	1	0	1,335	1.00	0.00
Roseland Cemetery	0.22	S	S	0	0	0	0	0	0	0	0.00	0.00
Selena S. Butler Park (MLK Jr Recreatio	5.14	S	N	1	0	1	2	0	0	0	0.00	0.00
South Atlanta Park	11.05	S	N	1	0	1	3	1	0	631	0.00	0.25
South Bend Park	76.60	S	C	1	1	2	2	3	1	6,043	0.52	0.00
Southside Park	211.44	S	R	0	0	0	0	0	0	0	0.00	0.00
Springvale Park	4.60	S	N	1	0	0	0	0	0	0	0.20	0.20
Stoney Point Park	0.19	S	G	0	0	0	0	0	0	0	0.00	0.00
Summerhill Triangle	0.27	S	G	0	0	0	0	0	0	0	0.00	0.00
Swann Preserve	34.28	S	P	0	0	0	0	0	0	0	0.96	0.00
Sylvan Circle Playlot	0.51	S	B	1	0	0	0	0	0	0	0.00	0.00
Thomasville Park	44.09	S	C	1	1	1	1	1	0	18,438	0.00	0.00
Tullwater Park	5.37	S	N	1	0	0	0	0	0	0	0.00	0.00
Walker Park	7.02	S	N	1	0	0	0	1	1	0	0.00	0.00
Walton Spring Park	0.18	S	G	0	0	0	0	0	0	0	0.00	0.00
Welch Street Park	0.18	S	G	0	0	0	0	0	0	0	0.00	0.00

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Table 86. Park Inventory (continued)

Park Name	Acres	Service Area	Type	Playground	Picnic Shelter	Basketball Court	Tennis Court	Baseball Field	Soccerl Field	Pavilion/Gazebo (sf)	Trail, Hard (Mi.)	Trail, Natural (Mi.)
Windsor Street Park	1.09	S	B	1	0	1	0	0	0	0	0.00	0.00
Total, Southside Service Area	1,340.72			56	16	38	59	33	6	45,791	10.96	2.50
A.D. Williams Park	11.00	W	C	1	0	1	0	2	0	0	0.00	0.00
Abner Place Park	0.37	W	G	1	0	0	0	0	0	0	0.00	0.00
Adams Park	158.44	W	R	1	4	0	4	0	0	2,312	0.00	0.00
Adamsville Park (Old)	1.43	W	S	0	0	0	0	0	0	0	0.00	0.00
Adamsville Recrecreation Center	11.00	W	R	1	0	0	0	0	0	0	0.00	0.00
Adamsville Triangle	0.05	W	G	0	0	0	0	0	0	0	0.00	0.00
Anderson Park	56.70	W	C	1	0	0	3	2	0	1,088	0.50	0.25
Arlington Circle Beauty Spot	0.86	W	G	1	0	0	0	0	0	0	0.00	0.00
Arlington Circle Playlot	0.49	W	B	1	0	0	0	0	0	0	0.00	0.00
Ashby Circle Playlot	0.87	W	B	1	0	0	0	0	0	0	0.00	0.00
Ashview Triangle	0.11	W	G	0	0	0	0	0	0	0	0.00	0.00
Atwood Street Park	0.05	W	G	0	0	0	0	0	0	0	0.00	0.00
Barbara A. McCoy Park	8.50	W	N	1	0	0	0	0	0	166	0.00	0.00
Beecher Park	5.80	W	V	1	0	0	0	0	0	0	0.00	0.00
Beecher Triangle	0.02	W	G	0	0	0	0	0	0	0	0.00	0.00
Ben Hill Park	21.97	W	C	1	1	1	2	3	0	660	0.00	0.00
Boone and West Lake	1.24	W	N	0	0	0	0	0	0	0	0.00	0.00
Campbellton Road Park	10.20	W	C	0	0	0	0	0	0	0	0.00	0.00
Carver Circle	0.02	W	G	0	0	0	0	0	0	0	0.00	0.00
Cascade Springs Nature Preserve	120.00	W	P	0	0	0	0	0	0	0	0.00	1.90
Cativo and Dogwood Beauty Spot	0.03	W	G	0	0	0	0	0	0	0	0.00	0.00
Cativo Circle	0.03	W	G	0	0	0	0	0	0	0	0.00	0.00
Center Hill Park	46.00	W	C	1	1	2	1	1	0	6,088	0.00	0.00
Charles L. Harper Memorial Park	1.10	W	G	0	0	0	0	0	0	0	0.00	0.00
Chatham and Avon Park	0.05	W	G	0	0	0	0	0	0	0	0.00	0.00
Cleopas R. Johnson Park	4.30	W	N	1	0	1	2	0	0	0	1.00	0.00
Collier Park	16.17	W	C	2	1	1	2	1	0	368	0.00	0.00
Collum Circle Beauty Spot	0.05	W	G	0	0	0	0	0	0	0	0.00	0.00
Coventry Station CE	28.32	W	P	0	0	0	0	0	0	0	0.00	0.00
Cumberlander	8.67	W	V	0	0	0	0	0	0	0	0.00	0.00
Dale Creek Park	3.20	W	V	0	0	0	0	0	0	0	0.00	0.00
Dean Rusk Park	6.00	W	N	2	0	0	0	1	0	0	0.30	0.00
Deerwood Park	17.40	W	N	2	2	1	2	1	0	1,200	0.00	0.00
Doctors Park	0.08	W	C	0	0	0	0	0	0	0	0.00	0.00
Dollar Mill Median	0.24	W	G	0	0	0	0	0	0	0	0.00	0.00
Edgewater Circle	0.03	W	G	0	0	0	0	0	0	0	0.00	0.00
Edwin Place Park	4.29	W	N	0	0	0	0	0	0	0	0.00	0.00
Elinor Place Park	0.61	W	G	0	0	0	0	0	0	0	0.00	0.00
Ella Mae Wade Brayboy Memorial Park	2.33	W	C	0	0	0	0	0	0	0	0.25	0.00

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Table 86. Park Inventory (continued)

Park Name	Acres	Service Area	Type	Playground	Picnic Shelter	Basketball Court	Tennis Court	Baseball Field	Soccerl Field	Pavilion/Gazebo (sf)	Trail, Hard (Mi.)	Trail, Natural (Mi.)
English Park	9.50	W	N	2	0	1	1	1	0	646	0.00	0.00
Enota Place Park	2.90	W	B	1	0	0	0	0	0	0	0.00	0.00
Falling Water	25.84	W	V	0	0	0	0	0	0	0	0.00	0.00
Fire Station #5 Park	0.08	W	G	0	0	0	0	0	0	0	0.00	0.00
Fountain Drive #1	0.01	W	G	0	0	0	0	0	0	0	0.00	0.00
Fountain Drive #2	0.02	W	G	0	0	0	0	0	0	0	0.00	0.00
Fountainebleau Beauty Spot	0.05	W	G	0	0	0	0	0	0	0	0.00	0.00
Gertrude Place	1.13	W	G	0	0	0	0	0	0	88	0.00	0.00
Gordon-White Park	1.70	W	G	0	0	0	0	0	0	0	0.23	0.00
Green Leaf Circle	0.99	W	G	0	0	0	0	0	0	0	0.00	0.00
Greenbriar	7.05	W	V	0	0	0	0	0	0	0	0.00	0.00
Grove Park	17.35	W	C	1	2	0	2	1	0	1,560	0.00	0.00
Gun Club Park	28.93	W	V	0	0	0	0	0	0	0	0.00	0.00
Havilon Triangle	0.27	W	G	0	0	0	0	0	0	0	0.00	0.00
Herbert Greene	56.44	W	P	0	0	0	0	0	0	0	0.00	0.00
Holderness/Lucile Park	0.18	W	G	0	0	0	0	0	0	0	0.00	0.00
Howell Park	2.10	W	N	1	0	1	0	0	0	585	0.00	0.00
Isabel Gates Webster Park	15.69	W	N	1	2	0	2	1	0	368	0.00	0.25
J.F. Kennedy Park	4.80	W	C	1	1	0	0	1	0	400	0.00	0.00
Jennie Drake Park	5.27	W	G	0	0	0	0	0	0	0	0.00	0.00
John A. White Park	112.00	W	R	1	6	0	8	1	1	2,220	0.00	0.00
Knight Park	2.69	W	N	1	0	1	1	0	0	0	0.00	0.00
Larchmont Circle	0.02	W	G	0	0	0	0	0	0	0	0.00	0.00
Leathers Circle	0.06	W	G	0	0	0	0	0	0	0	0.00	0.00
Lillian Cooper Shepherd Park	2.30	W	N	2	0	1	0	0	0	0	0.00	0.25
Lindsay Street Park	1.20	W	B	1	0	0	0	0	0	0	0.00	0.00
Lionel Hampton	48.44	W	P	1	0	0	0	0	0	0	0.70	0.00
Maddox Park	51.50	W	C	1	0	2	1	1	0	900	0.00	0.00
Magnum and Lynhurst Park	0.10	W	G	0	0	0	0	0	0	0	0.00	0.00
Mary Shy Scott	23.40	W	C	1	0	1	3	1	0	422	0.00	0.00
Matilda Place Park	1.27	W	G	0	0	0	0	0	0	0	0.00	0.00
Mayflower Beauty Spot	0.25	W	G	0	0	0	0	0	0	0	0.00	0.00
Melvin Drive Park	48.90	W	C	0	1	1	2	1	0	260	0.00	0.00
Mitchell-Haynes Park	0.08	W	G	0	0	0	0	0	0	0	0.00	0.00
Mozley Park (Powell Pool)	28.15	W	C	1	0	1	2	2	2	2,852	1.10	0.20
North Camp Creek Parkway NP	66.30	W	P	0	0	0	0	0	0	0	0.50	0.00
North Evelyn Place Park	0.87	W	G	0	0	0	0	0	0	0	0.00	0.00
Ontario Park	0.07	W	G	0	0	0	0	0	0	0	0.00	0.00
Oriole Park	0.10	W	G	0	0	0	0	0	0	0	0.00	0.00
Outdoor Activity Center	21.76	W	P	0	0	0	0	0	0	144	0.00	0.75
Pollard and Albany Beauty Spot	0.09	W	G	0	0	0	0	0	0	0	0.00	0.00
Prairie View Beauty Spot	0.03	W	G	0	0	0	0	0	0	0	0.00	0.00
Proctor Village Park	2.50	W	C	0	0	0	0	0	0	0	0.00	0.00

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Table 86. Park Inventory (continued)

Park Name	Acres	Service Area	Type	Playground	Picnic Shelter	Basketball Court	Tennis Court	Baseball Field	Soccerl Field	Pavilion/Gazebo (sf)	Trail, Hard (Mi.)	Trail, Natural (Mi.)
Queen and White Beauty Spot	0.04	W	G	0	0	0	0	0	0	0	0.00	0.00
Rev. James Orange Park at Oakland City	15.40	W	C	1	1	0	2	1	0	3,725	0.00	0.00
Rockdale Park	63.00	W	P	0	0	0	0	0	0	0	0.00	0.00
Rodney Cook Sr. Park in Historic Vine C	14.00	W	C	0	0	0	0	0	0	0	0.00	0.00
Rose Circle Park	2.70	W	N	1	1	1	0	0	0	509	0.22	0.00
Rose Circle Triangle	0.21	W	G	0	0	0	0	0	0	0	0.00	0.00
Sandpiper Circle	0.06	W	G	0	0	0	0	0	0	0	0.00	0.00
Sandtown Triangle	0.14	W	G	0	0	0	0	0	0	0	0.00	0.00
Shirley Place Park	5.66	W	G	0	0	0	0	0	0	0	0.00	0.00
South Evelyn Place Park	1.01	W	G	0	0	0	0	0	0	0	0.00	0.00
South Gordon Triangle	0.01	W	G	0	0	0	0	0	0	0	0.00	0.00
Spellman-Morehouse Beauty Spot	0.04	W	G	0	0	0	0	0	0	0	0.00	0.00
Stafford Circle Park	0.04	W	G	0	0	0	0	0	0	0	0.00	0.00
Stafford Street Park	0.12	W	G	0	0	0	0	0	0	0	0.00	0.00
Stephanie Drive Park	0.37	W	G	0	0	0	0	0	0	0	0.00	0.00
Stone Hogan Park	10.50	W	N	1	0	1	0	0	0	1,420	0.00	0.00
Torrence Circle	0.05	W	G	0	0	0	0	0	0	0	0.00	0.00
Tremont Playlot	0.18	W	B	1	0	0	0	0	0	0	0.00	0.00
Tucson Trail Park	2.77	W	N	1	0	0	0	1	0	238	0.00	0.00
Veltre Circle	0.18	W	G	0	0	0	0	0	0	0	0.00	0.00
Verbena Street Playlot	0.69	W	B	1	0	0	0	0	0	0	0.00	0.00
Vine City Park	1.44	W	B	1	0	0	0	0	0	0	0.00	0.00
Washington Park	20.43	W	C	2	0	0	8	2	0	4,040	1.00	0.00
Watkins Park	0.80	W	N	0	0	0	0	0	0	0	0.00	0.00
West End Park	6.37	W	N	1	0	1	2	1	0	0	0.00	0.00
West Manor Park	11.20	W	C	1	1	0	2	1	0	304	0.00	0.00
Westside Park	10.41	W	R	0	0	0	0	0	0	0	0.00	0.00
Willard and Gordon Park	0.07	W	G	0	0	0	0	0	0	0	0.00	0.00
Wilson Mill Park	35.50	W	C	2	1	1	2	3	0	88	0.00	0.00
Total, Westside Service Area	1,343.79			48	25	20	54	30	3	32,651	5.80	3.60
Total, City-Wide	3,653.28			136	44	61	174	77	11	94,094	27.37	19.71

Notes: For service area, N = Northside, S = Southside, W = Westside; for park type, B = Block, C = Community, CC = Community Center, G = Garden, N = Neighborhood, P = Nature Preserve, R = Regional, S = Special, V = Conservation
Source: City of Atlanta Department of Parks and Recreation, January 27, 2017.

APPENDIX G: COMPARATIVE FEES

This appendix presents comparisons of Atlanta's current and updated impact fees with those currently assessed by five nearby jurisdictions and five peer cities. Fees shown are for non-utility fees (that is, they don't include water and wastewater connection fees).

It is easy to compare impact fee amounts charged by local jurisdictions, and it is natural to be interested in how Atlanta's impact fees compare. But it would be a mistake to conclude that differences between Atlanta's impact fees and those charged by neighboring or similar jurisdictions are a significant factor in the City's ability to attract new development. Too many other factors are involved, most of them much more difficult to quantify and compare than impact fees. These include the availability of jobs, total housing costs (of which impact fees are only a small part), the quality of transportation infrastructure, schools, recreational amenities, entrepreneurial opportunities, economic synergies resulting from a concentration of workers, suppliers and customers, etc.

The cost of impact fees is not like the cost of shoes. One cannot comparison-shop for the jurisdiction that charges less to obtain a building permit, and use that permit to build somewhere else. The purchase of a building permit entails the commitment to locate one's home or business in that community, and that decision is seldom made solely or even primarily on the basis of the lowest impact fees. Instead, the three-rule mantra of real estate – location, location, location – applies equally to the ability of a community to attract development. The overall attractiveness of the community is a far greater factor in competitiveness for new development than impact fee amounts.

The argument typically made against impact fees by the development community is straight-forward. The effect of impact fees is more like a tax, where no special benefit is provided in return, than a user fee, which purchases specific services. Impact fees, by raising the local cost of construction, steer housing development and job creation to neighboring or competing jurisdictions, and make housing more expensive and less affordable.

While the actual effects of impact fees on growth and housing affordability are not completely understood, economic theory and empirical evidence paint a much more nuanced picture.[9] Impact fees are not just an additional cost on construction that comes with no corresponding benefits, because the revenues are earmarked to be used only for infrastructure (roads, parks, fire and police facilities and equipment, etc.) required to serve the new development. Studies comparing impact fees and growth rates between jurisdictions, both in terms of residential construction and jobs, have not found consistent, statistically-significant effects of impact fee levels on the pace of growth and development. Finally, while impact fees may raise housing purchase prices, they also reduce the need for property tax increases to fund the expansion of infrastructure needed to serve growth, which in turn tends to reduce long-term housing costs.

[9] For a recent review of the economic literature on the effects of impact fees on growth rates and housing prices, see Gregory Burge, "Impact Fees in Relation to Housing Prices and Affordable Housing Supply," May 2016, https://www.researchgate.net/publication/265228760_Impact_Fees_in_Relation_to_Housing_Prices_and_Affordable_Housing_Supply.

Nearby Jurisdictions

Current impact fees charged by Forsyth County and the Georgia municipalities of Alpharetta, Milton, Roswell and Sandy Springs are summarized in Table 87 and compared with Atlanta's current and updated fees. The table shows Atlanta's current fees for the Northside, which has somewhat higher park fees than the rest of the city, and retail and office fees assume a 100,000 sq. ft. shopping center of office building. The jurisdictions are listed in order of ascending total fee amount for each of four major land use categories: single-family, multi-family, retail and office. Note that Forsyth County's fees are very low for retail and office uses because the County exempts all nonresidential development from its road impact fees. The comparisons of total impact fees by land use are displayed graphically in the figures on the following pages.

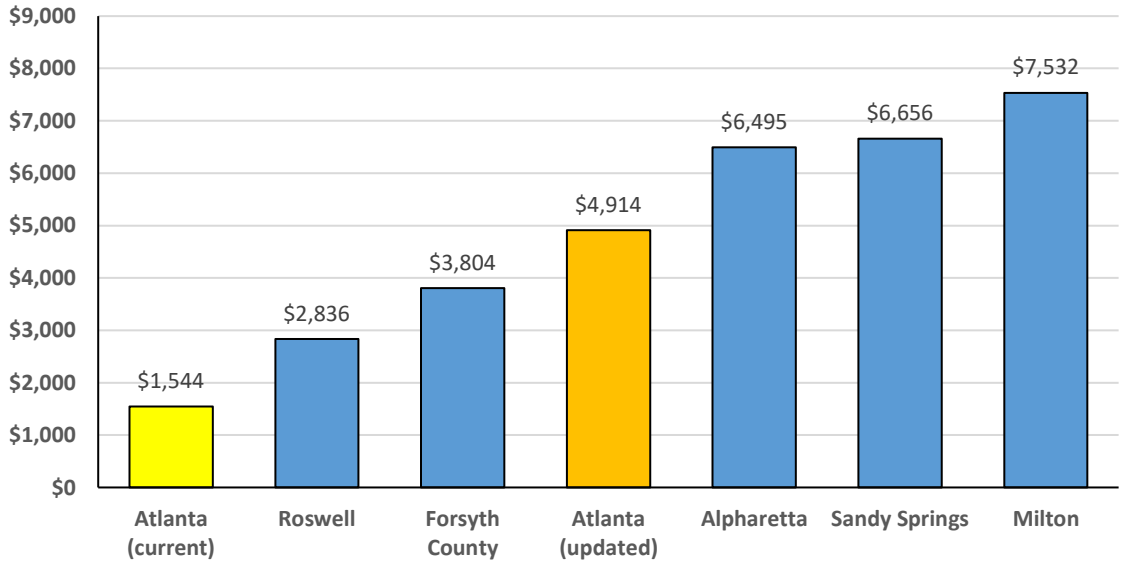
Table 87. Impact Fees, Atlanta and Nearby Jurisdictions

Jurisdiction	Roads	Parks	Fire	Police	Library	Total
Single-Family Detached (per Unit)						
Atlanta (current)	$987	$410	$114	$33		$1,544
Roswell	$1,514	$501	$821			$2,836
Forsyth County	$1,968	$1,178	$510		$148	$3,804
Atlanta (updated)	$3,128	$1,221	$282	$283		$4,914
Alpharetta	$1,403	$4,963	$129			$6,495
Sandy Springs	$1,667	$4,544	$445			$6,656
Milton	$678	$6,215	$544	$95		$7,532
Multi-Family (per Unit)						
Atlanta (current)	$470	$285	$114	$33		$902
Roswell	$964	$318	$521			$1,803
Forsyth County	$1,247	$748	$324		$94	$2,413
Atlanta (updated)	$1,752	$826	$191	$192		$2,961
Sandy Springs	$1,351	$4,544	$445			$6,340
Alpharetta	$1,403	$4,963	$129			$6,495
Milton	$678	$6,215	$544	$95		$7,532
Retail (per 1,000 sq. ft.)						
Forsyth County			$532			$532
Alpharetta	$1,350	$130	$100			$1,580
Atlanta (current)	$1,189	$584	$163	$47		$1,983
Milton	$1,990	$0	$340	$60		$2,390
Roswell	$2,718	$0	$260			$2,978
Atlanta (updated)	$4,129	$1,202	$277	$279		$5,887
Sandy Springs	$7,140	$470	$400			$8,010
Office (per 1,000 sq. ft.)						
Forsyth County			$227			$227
Alpharetta	$430	$260	$190			$880
Milton	$630	$0	$680	$120		$1,430
Roswell	$1,176	$0	$320			$1,496
Atlanta (current)	$1,608	$241	$67	$19		$1,935
Atlanta (updated)	$2,064	$599	$138	$139		$2,940
Sandy Springs	$2,250	$930	$790			$3,970

Source: Atlanta's fees from Table 1 (current total fee in Northside) and Table 2 (updated); other fees from internet survey, February 24, 2020.

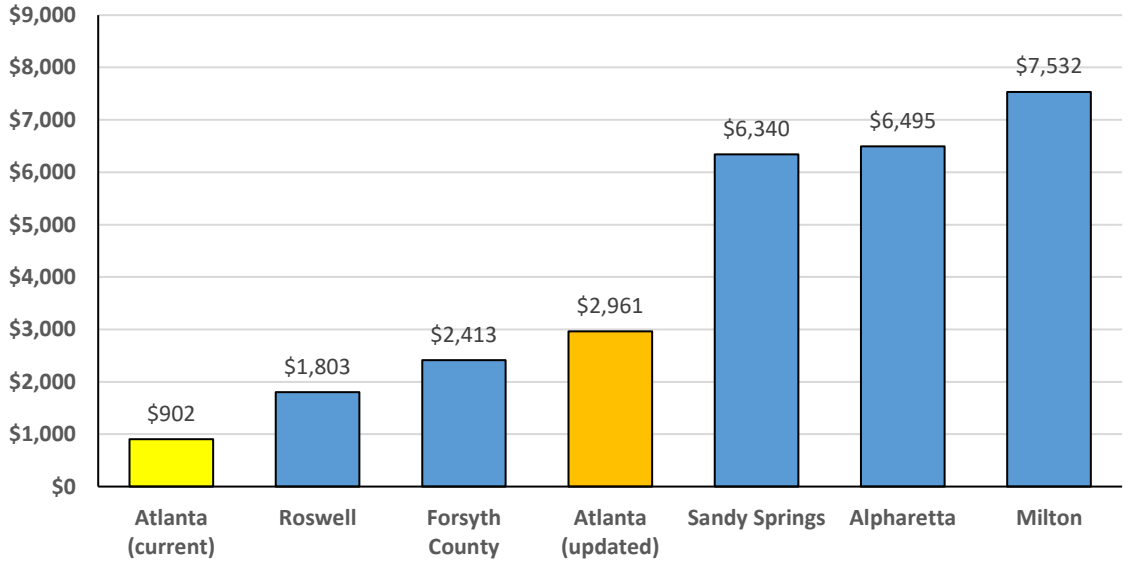
The City of Atlanta's current and proposed total non-utility impact fees for an average single-family unit are compared with total non-utility impact fees charged by five nearby jurisdictions in Figure 10 Atlanta's total single-family fee is currently the lowest, but would be more mid-range under the proposed fees.

Figure 10. Single-Family Fees, Atlanta and Nearby Jurisdictions



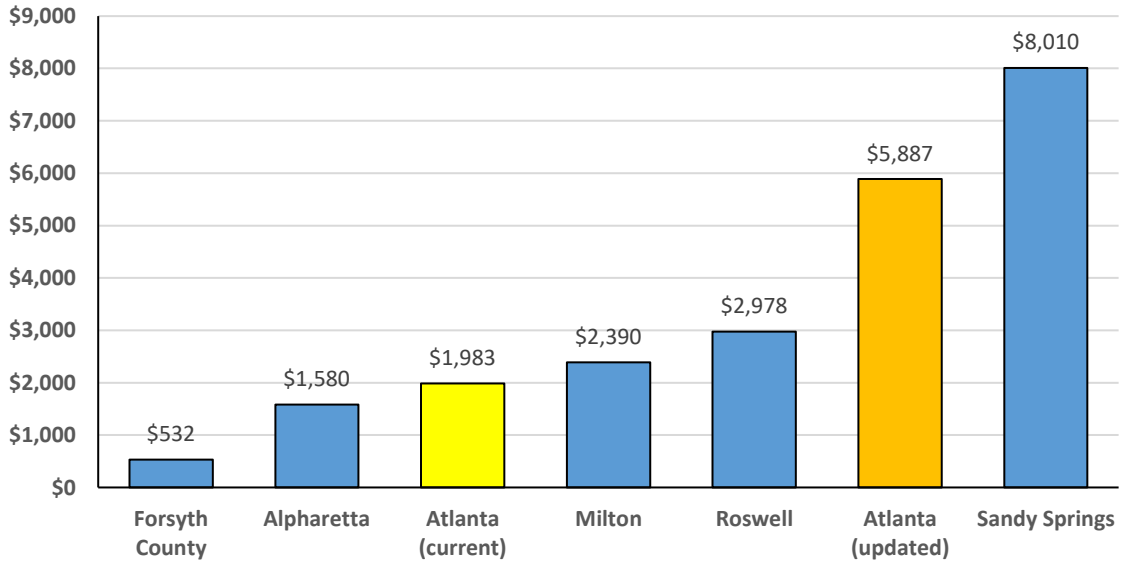
The comparison reveals a similar pattern for total multi-family impact fees, as can be seen in Figure 11.

Figure 11. Multi-Family Fees, Atlanta and Nearby Jurisdictions



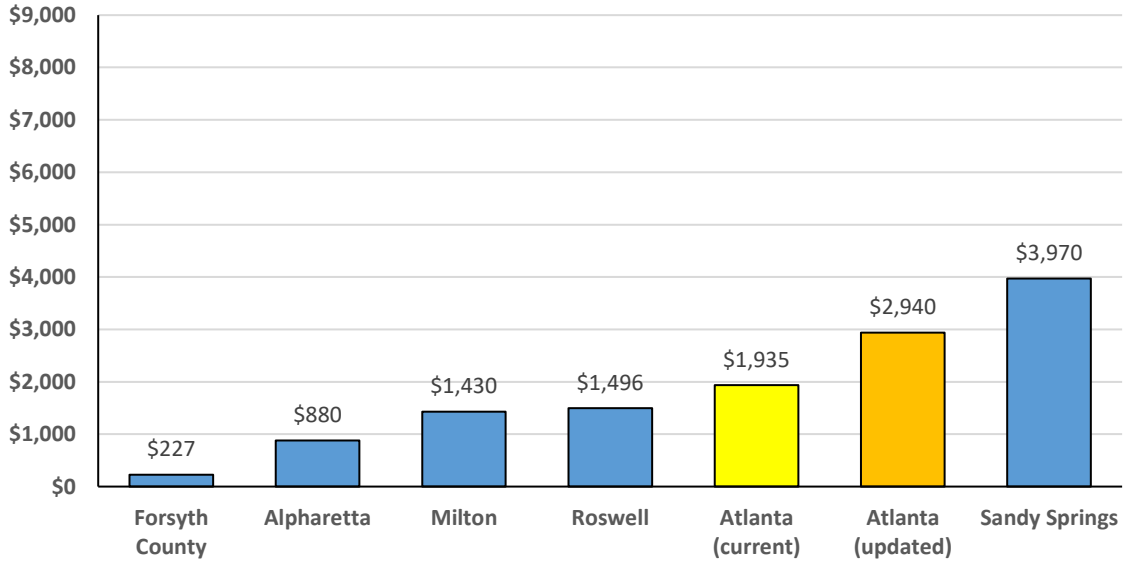
The comparison with nearby jurisdictions looks quite different for nonresidential land uses. Total non-utility impact fees for retail are compared in Figure 12. Atlanta's proposed total retail fee is the second-highest of the group. This is because total nonresidential fees in the region tend to be dominated by road impact fees, and Atlanta's updated road fees are the second-highest after Sandy Springs. Forsyth County has the lowest total retail fee because it assesses road fees only on residential uses, making up for the lost revenue by tracking non-impact fee funding.[10]

Figure 12. Retail Fees per 1,000 sq. ft., Atlanta and Nearby Jurisdictions



A similar pattern holds for office fees, although these are much lower, as can be seen in Figure 13.

Figure 13. Office Fees per 1,000 sq. ft., Atlanta and Nearby Jurisdictions



[10] Communication with David Gruen, Chief Financial Officer, Forsyth County, February 22, 2017.

Peer Cities

Current impact fees charged by five other major cities (Durham, NC; Fort Worth, Texas; Miami, Florida; Phoenix, Arizona; and Raleigh, North Carolina) are summarized in Table 88 along with Atlanta's current and updated fees. The table shows Atlanta's current fees for the Northside, which has somewhat higher park fees than the rest of the city, and retail and office fees that assume a 100,000 sq. ft. shopping center of office building. The jurisdictions are listed in order of ascending total fee amount for each of four major land use categories: single-family, multi-family, retail and office. The comparisons of total impact fees by land use are displayed graphically in the figures on the following pages.

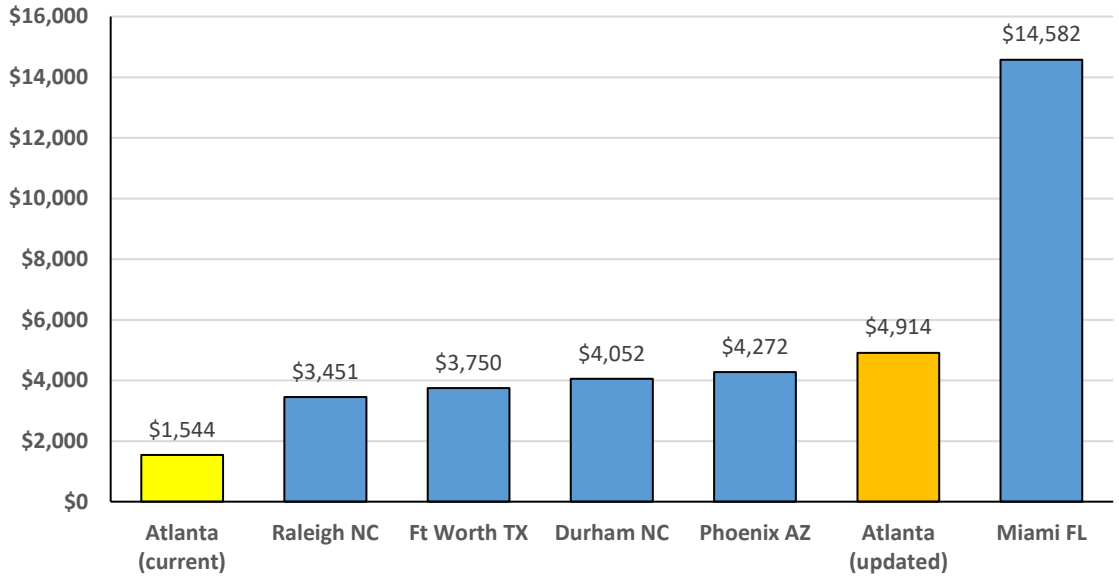
Table 88. Impact Fees, Atlanta and Peer Cities

Jurisdiction	Roads	Parks	Fire	Police	Schools	Total
Single-Family Detached (per Unit)						
Atlanta (current)	$987	$410	$114	$33		$1,544
Raleigh NC	$1,924	$1,527				$3,451
Ft Worth TX	$3,750					$3,750
Durham NC	$1,405	$647			$2,000	$4,052
Phoenix AZ	$2,208	$1,120	$444	$500		$4,272
Atlanta (updated)	$3,128	$1,221	$282	$283		$4,914
Miami FL	$9,770	$3,185	$440	$575	$612	$14,582
Multi-Family (per Unit)						
Atlanta (current)	$470	$285	$114	$33		$902
Ft Worth TX	$2,118					$2,118
Raleigh NC	$1,286	$1,107				$2,393
Durham NC	$862	$513			$1,155	$2,530
Atlanta (updated)	$1,752	$826	$191	$192		$2,961
Phoenix AZ	$1,546	$728	$289	$325		$2,888
Miami FL	$6,860	$1,936	$440	$575	$612	$10,423
Retail (per 1,000 sq. ft.)						
Atlanta (current)	$1,189	$584	$163	$47		$1,983
Raleigh NC	$3,123					$3,123
Ft Worth TX	$3,295					$3,295
Phoenix AZ	$3,027	$56	$346	$390		$3,819
Durham NC	$5,008					$5,008
Atlanta (updated)	$4,129	$1,202	$277	$279		$5,887
Miami FL	$13,701		$327	$326		$14,354
Office (per 1,000 sq. ft.)						
Atlanta (current)	$1,608	$241	$67	$19		$1,935
Phoenix AZ	$1,389	$78	$315	$355		$2,137
Raleigh NC	$2,381					$2,381
Durham NC	$2,476					$2,476
Atlanta (updated)	$2,064	$599	$138	$139		$2,940
Ft Worth TX	$3,234					$3,234
Miami FL	$13,572		$350	$399		$14,321

Source: Atlanta's fees from Table 1 (current total fee in Northside) and Table 2 (updated); other city fees from internet survey, March 29, 2020.

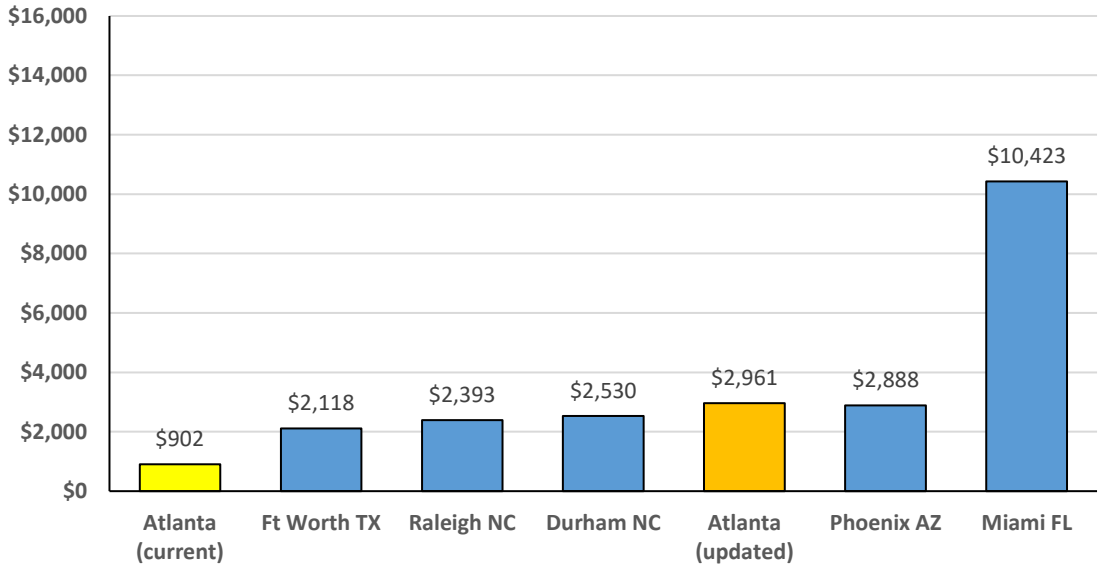
The City of Atlanta's current and proposed total non-utility impact fees for an average single-family unit are compared with total non-utility impact fees charged by five other major cities in Figure 14. Atlanta's fees are currently the lowest, and would be the second-highest after Miami under the proposed fees, although only modestly higher than Raleigh, Durham, Fort Worth and Phoenix.

Figure 14. Single-Family Fees, Atlanta and Peer Jurisdictions



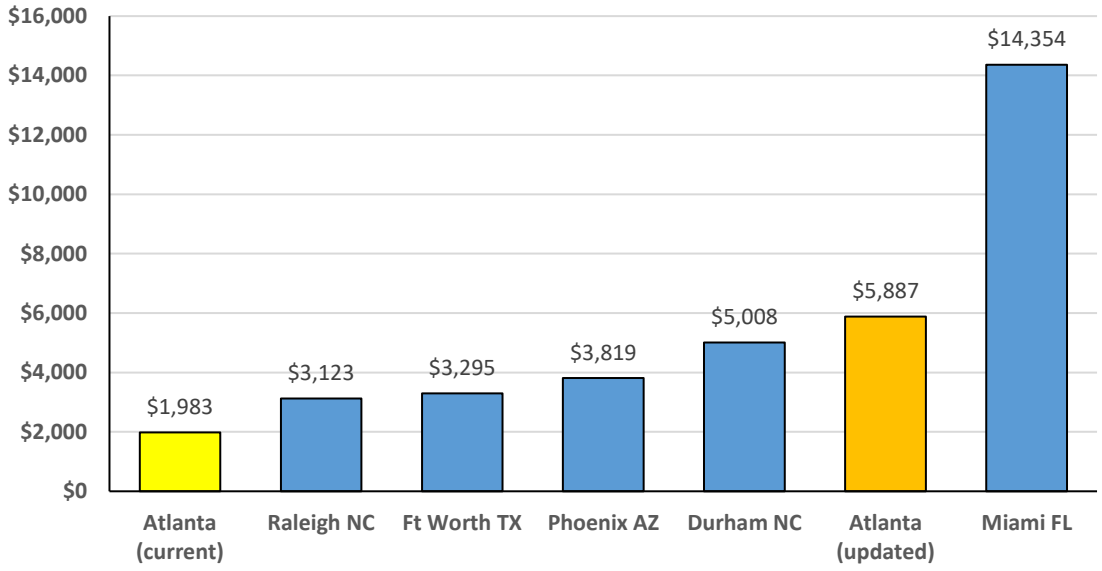
The pattern looks similar for multi-family fees, although they are significantly lower than single-family fees, as can be seen in Figure 15.

Figure 15. Multi-Family Fees, Atlanta and Peer Jurisdictions



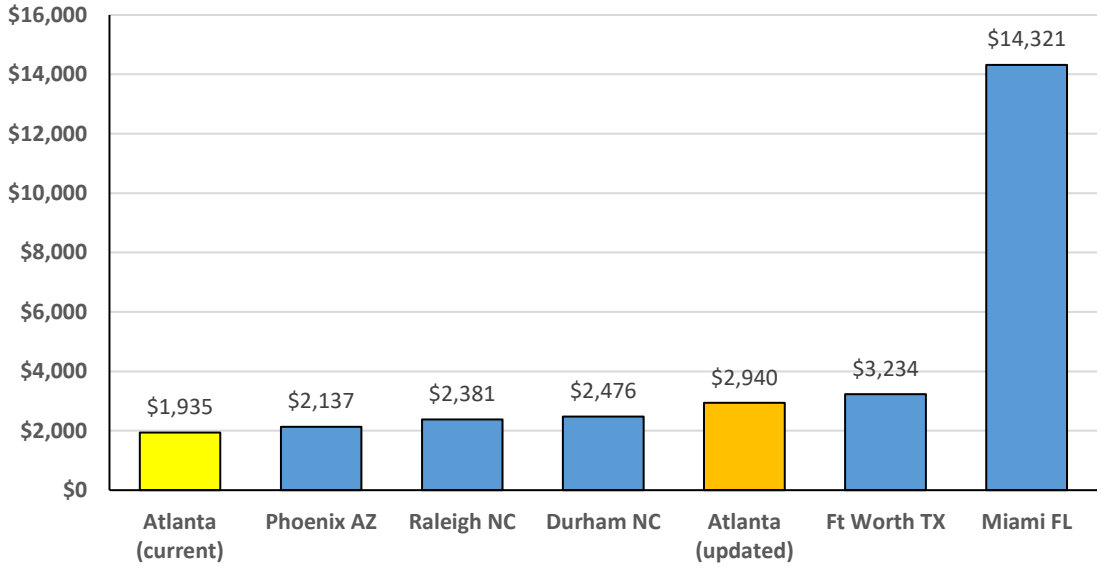
The peer city comparison looks similar for nonresidential land uses as well. Total non-utility impact fees for retail are compared in Figure 16.

Figure 16. Retail Fees per 1,000 sq. ft., Atlanta and Peer Jurisdictions



A similar pattern holds for office fees, as can be seen in Figure 17.

Figure 17. Office Fees per 1,000 sq. ft., Atlanta and Peer Jurisdictions



APPENDIX H: IMPLEMENTATION

The Council for Quality Growth has suggested that Atlanta increase fees by the rate of inflation since 1993, and phase in that increase over three to four years.[11] They put the inflation adjustment at about 78%, which appears to be based on the change in the Consumer Price Index (CPI). If one were going to use cost inflation as a guide, it would seem more appropriate to use a construction cost index rather than the consumer price index. The *Engineering News-Record* Construction Cost Index (CCI) for the Atlanta area increased by 125% from January 1993 to January 2020.

Using that suggestion as a starting point, the important point to keep in mind is that the existing fees should not simply be adjusted upward to account for inflation. That would keep the fees based on the 1993 study, rather than on the updated study. Instead, the updated fees that initially go into effect should be based on a uniform percentage of the updated fees that applies to all land use categories. Table 89 below illustrates how the updated fees could be phased in over three years. This is not a recommended phasing schedule, but simply an illustration of how a phase-in should be implemented. Note that if a phase-in were to start at 45%, office fees would go down initially (although they would increase in subsequent years), while they would go up initially for most land uses.

Given the wide variation in percentage changes by land use, an inflation adjustment can only be approximated. It would seem that the 78% CPI increase would be roughly approximated by adoption of fees at 60%, while the 125% CCI increase would be similar to adoption at 80%. Obviously, different annual percentages would be used if the phase-in is to be spread over four years instead of three, or if the fees were to top out at 60% or 80%, rather than at 100%. This general approach could also be applied differently for the individual fees types, rather than applied uniformly to all fees.

Table 89. Example of Phase-in to 100% over Three Years

Land Use	Unit	Current Fees*	Updated Fees by Adoption %			
			45%	60%	80%	100%
			Impact Fees			
Single-Family	Dwelling	$1,544	$2,211	$2,948	$3,931	$4,914
Multi-Family	Dwelling	$857	$1,332	$1,777	$2,369	$2,961
Commercial	1,000 sq. ft.	$1,983	$2,649	$3,532	$4,710	$5,887
Office	1,000 sq. ft.	$1,935	$1,323	$1,764	$2,352	$2,940
Industrial	1,000 sq. ft.	$1,255	$1,364	$1,819	$2,425	$3,031
			Year-to-Year Change			
Single-Family	Dwelling		$667	$737	$983	$983
Multi-Family	Dwelling		$475	$445	$592	$592
Commercial	1,000 sq. ft.		$666	$883	$1,178	$1,177
Office	1,000 sq. ft.		-$612	$441	$588	$588
Industrial	1,000 sq. ft.		$109	$455	$606	$606
			Cumulative Percentage Change			
Single-Family	Dwelling		43%	91%	155%	218%
Multi-Family	Dwelling		55%	107%	176%	246%
Commercial	1,000 sq. ft.		34%	78%	138%	197%
Office	1,000 sq. ft.		-32%	-9%	22%	52%
Industrial	1,000 sq. ft.		9%	45%	93%	142%

Source: Current fees from Table 1 (assume north service area and 100,000 sq. ft. shopping center/ office building; updated fees at 100% from Table 2.

[11] Letter distributed at the Development Impact Fee Advisory Committee's March 12, 2020 meeting.

APPENDIX I: CAPITAL IMPROVEMENT PLANS

The City's five-year and twenty-year capital improvement plans are presented on the following pages.

2021-2025 Impact Fee Capital Improvements Element

CIE Public Facility Type: Fire

Department: Fire and Rescue

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
Fire Station 22	New Fire Station 22	Building- New	Citywide	9	01/01/2010	12/31/2021	$8,000,000	$5,800,000	Impact Fees (72.5%): $5,800,000 Other (27.5%): $2,200,000	01. Planning	05-O-1540, 12-R-1351, 12-O-0899, 17-O-1345

CIE Public Facility Type: Parks North

Department: Parks and Recreation

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
Blue Heron "Blueway" Trail Initiative	For Blueway Trail Initiative Project Site Development & Improvements	Site Improvements	North	7	07/01/2019	07/01/2024	$363,910	$363,910	Impact Fees (100%): $363,910	09. Construction	19-R-3698
North Impact Fee Capital and System Improvements	Improvements for Chastain Golf Course, Chastain Art Center, Chastain Amphitheatre, Piedmont Park and other N.I.F, ADA park projects.	Land Acquisition	North	06, 08	06/01/2017	07/01/2019	$2,000,000	$1,600,000	Impact Fees (80%): $1,600,000 Trust Fund (20%): $400,000	10. Closeout	TBD
North Impact Fee Capital and System Improvements for Lenox and Old Ivy Parks	Improvements for Lenox and Old Ivy Parks	Land Acquisition	North	7	06/01/2017	07/01/2019	$3,000,000	$3,000,000	Impact Fees (100%): $3,000,000	10. Closeout	TBD
Parkland Acquisitions & Site Works - North Park Impact Fee (Holly Street)	For Acquisition & Site Development of Parks & Recreation	Land Acquisition	North	3	07/01/2019	07/01/2024	$308,500	$308,500	Impact Fees (100%)	07. Property Acquisition/ROW	19-O-1574

CIE Public Facility Type: Parks South

Department: Parks and Recreation

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
NEW 770 Shadowridge Dr Acquisition	Acquisition of park land at 770 Shadowridge (20- O-1447) (entered on behalf of CM Archibong).	Land Acquisition	South	5	07/06/2020	06/30/2021	$400,000	$400,000	Impact Fees (100%)	07. Property Acquisition/ROW	20-O-1447
Browns Mill Food Forest	For Acquisition & Site Development of Parks & Recreation	Land Acquisition	South	1	05/01/2018	07/01/2024	$157,384	$157,384	Impact Fees (100%): $157,384	07. Property Acquisition/ROW	19-O-1251
Parkland Acquisitions & Site Works - South Park Impact Fee, Boulevard Crossing	For Acquisition & Site Development of Parks & Recreation	Land Acquisition	South	1	07/01/2019	07/01/2024	$800,000	$800,000	Impact Fees (100%)	07. Property Acquisition/ROW	19-O-1583

CIE Public Facility Type: Parks West

Department: Parks and Recreation

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
205, 209, 211, 221, 272, 283 Elm Street	For Acquisition & Site Development of Parks & Recreation	Land Acquisition	West	3	01/01/2018	07/01/2024	$450,000	$450,000	Impact Fees (100%): $450,000	07. Property Acquisition/ROW	17-O-1168 & 18- O-1425
Kathryn Johnston Memorial Park Acquisition & Site Work	For Acquisition & Site Development of Parks & Recreation	Land Acquisition	West	3	02/01/2018	11/21/2019	$252,350	$252,350	Impact Fees (100%): $252,350	07. Property Acquisition/ROW	18-O-1552
Parkland Acquisitions & Site Works - (Westside Park) West Park Impact Fee	For Acquisition & Site Development of Parks & Recreation	Land Acquisition	West	9	07/01/2019	07/01/2024	$500,000	$500,000	Impact Fees (100%)	07. Property Acquisition/ROW	17-O-1776

2021-2025 Impact Fee Capital Improvements Element

CIE Public Facility Type: Police

Department: Police

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
APD Zone 3 Precinct Replacement	Construction of a new Zone 3 Precinct	Building- New	Citywide	12	08/01/2018	12/31/2020	$11,000,000	$1,500,000	Impact Fees (13.6%): $1,500,000 Capital Finance Fund (86.4%): $9,500,000	09. Construction	13-O-0169/16-R-3195/16-R-3195/20-O-1502
Police (Joint) Academy Expansion	New facility training complex to support Police, Fire, and Corrections	Building- New	Citywide	ALL	01/30/2021	12/31/2023	$100,000,000	$1,000,000	Impact Fees (1%): $1,000,000 Capital Finance Fund (99%): $99,000,000	01. Planning	97-O-0822, new TBD
SWAT Expansion	New facility to support expanded staff of the Police SWAT Unit	Building- New	Citywide	ALL	01/30/2021	12/31/2021	$600,000	$600,000	Impact Fees (100%): $600,000	01. Planning	97-O-0822, new TBD

CIE Public Facility Type: Transportation

Department: Public Works

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
*Atlanta Traffic Control Center - ITS	This project will provide a noninvasive detection system for the identified intersections, which include presence detection, vehicle counts, classification, occupancy, and speed information to the City's Intelligent Information Management Systems (ITS)	Signals	Citywide	04, 08	01/28/2020	10/12/2021	$680,971	$680,971	$680,971 ($453,981 federal - proposed, 113,495 local match, 113,495 17-O-1207 not eligible toward federal match but necessary for design)	05. Design/Procurement	17-O-1207 Impact Fees
*Boulevard Pedestrian Improvements	Pedestrian Improvements along the corridor	Multi-Modal	Citywide	1	07/01/2019	06/30/2022	$1,210,000	$210,000	Impact Fees (17.4%) - $210,000 Federal (82.6%) - $1,000,000	06. Design	17-O-1418
*Cleveland Avenue Pedestrian Mobility Improvements	Pedestrian mobility improvements include pedestrian signal upgrades to meet ADA requirements, new (PHBs) and (RRFBs) , refuge islands, crosswalks, speed detection, minor intersection geometry changes , new sidewalks, and landscaping.	Multi-Modal	Citywide	12	01/01/2021	12/30/2023	$1,460,000	$210,000	Impact Fees (14.4%) - $210,000 Federal (75.3%) - $1,100,000 Local (10.3%) - $150,000	05. Design/Procurement	17-O-1418
*Cycle Atlanta Phase 1.0 Bicycle Mobility Impr.	This project will connect proposed bicycle facilities to existing transit facilities, thus improving mobility between transportation modes within the City of Atlanta.	Bicycle and Pedestrian Improvements	Citywide	01, 02, 03, 04, 05	07/01/2019	10/18/2021	$2,500,000	$500,000	Impact Fees (20%) - $500,000 Federal (80%) - $2,000,000	05. Design/Procurement	16-O-0154,17-O-1483,18-O-1608,19-O-1258,19-R-3096, 19-R-5308
*D. L. Hollowell/Westlake LCI Projects	Pedestrian improvements between West Lake Ave and Proctor Creek	Streetscape	Citywide	9	01/05/2015	06/30/2022	$8,111,860	$3,946,959	Impact Fees (48.7%) - $3,946,959 Federal (51.3%) - $4,164,902	06. Design	15-R-3798
*Glenwood/Moreland LCI Project	SR 260/GLENWOOD AVE. @ US 23/SR 42/MORELAND AVE. INTERSECTION IMPROVEMENTS (P.I. 0010323)	Streetscape	Citywide	01, 05	07/01/2012	03/19/2021	$4,845,440	$3,802,033	Impact Fees (70%) - $3,802,033 Federal (30%) - $1,589,981	08. Construction/Procurement	15-R-3798
*Huff Road Widening	Road widening project	Multi-Modal	Citywide	9	10/19/2017	07/02/2021	$2,096,480	$1,983,576	Impact Fees (80%) - $1,983,576 Local/Private (20%) - $516,424	06. Design	16-O-1054, 17-O-1207,17-O-1205,17-O-1419, 17-R-4276;19-R-4575;

2021-2025 Impact Fee Capital Improvements Element

CIE Public Facility Type: Transportation

Department: Public Works

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
*Juniper Street	Project limits extend from 14th St to Ponce de Leon Ave on Juniper Street. Improvements are a buffered SB cycle track, sidewalk and streetscapes improvements, ADA, landscaping, and on-street parking	Multi-Modal	Citywide	2	12/16/2016	12/12/2022	$6,477,577	$1,272,785	Impact Fees (30.2%) - $1,272,785 Federal (50.1%) - $3,347,200 Local (29.7%) - $1,950,015	06. Design	16-O-1433
*MLK Corridor Improvement Initiative (Tiger 8)	The Martin Luther King Jr. Drive Corridor Improvement Initiative is an approximately 6.2- mile complete streets project from Ollie Street to Fulton Industrial Blvd.	Complete Streets	Citywide	03, 04, 10	04/15/2015	11/09/2020	$43,429,392	$6,000,000	Impact Fees (13.8%) - $6,000,000 Federal (29.2%) - $12,677,275 Local (57%) - $24,752,117	09. Construction	16-O-1433,17O1418
*Moores Mill Multi Modal Roadway Ext.	The purpose of this project is to improve multimodal access, mobility, operations and safety between Bolton/Adams Crossing neighborhood, businesses, and transit bus stops in the Marietta Boulevard area	Multi-Modal	Citywide	9	07/01/2020	12/30/2023	$3,050,000	$1,525,000	Impact Fees (50%) - $1,525,000 Federal (50%) - $1,525,000	05. Design/Procurement	16-O-1658
NEW Marietta Blvd and Huff Rd Turn Lane	Marietta Blvd/Huff Rd intersection improvement-add dedicated left turn lane through restriping from SB Marietta Blvd onto EB Huff Rd.	Intersection Improvements/Re construction	Citywide	9	12/31/2023	12/31/2025	$300,000	$300,000	Impact Fees (100%)	01. Planning	TBD
*Peachtree /Stratford Turn Lane	Install turn lane	Streetscape	Citywide	7	12/01/2018	03/31/2020	$250,000	$250,000	Impact Fees (100%) - $250,000	10. Closeout	19-O-1003
*Smart Lighting Pilot	Installation of LED lighting and 200 Smart nodes	Streetscape	Citywide	ALL	04/04/2017	01/31/2019	$904,660	$1,715,048	Impact Fees (88.4%) - $1,715,048 Partner Est. (11.6%) - $224,952	10. Closeout	17-O-1207
*US19 Spring Street Pedestrian Mobility	Pedestrian and bicycle improvements along the corridor	Bicycle and Pedestrian Improvements	Citywide	3	09/10/2018	05/01/2023	$2,435,000	$1,500,000	Impact Fees (50%) - $1,500,000 Federal (50%) - $1,500,000	06. Design	16-O-1433
12th St Two-way Conversion	2019-2023 Capital Improvements Program - City of Atlanta Impact Fee Funded Projects - Schedule of Improvements	Two Way Conversion	Citywide	2	09/01/2016	11/01/2023	$110,000	$110,000	Impact Fees (27%): - $30,000 Local/Private (72.7%): - $80,000	01. Planning	16-O-1054
1824 Defoor Avenue	2019-2023 Capital Improvements Program - City of Atlanta Impact Fee Funded Projects - Schedule of Improvements	Multi-Modal	Citywide	9	09/01/2016	11/01/2023	$350,000	$175,000	Impact Fees (50%): - $175,000 Local (50%): $175,000	01. Planning	15-O-1034
AUC Pedestrian	Atlanta University Center Gateway project	Multi-Modal	Citywide	4	09/01/2016	06/01/2021	$1,368,750	$275,000	Impact Fees (20.1%)- $275,000 Federal (79.9%)- $1,093,750	10. Closeout	16-O-1054
Bicycle Rack Project	2019-2023 Capital Improvements Program - City of Atlanta Impact Fee Funded Projects - Schedule of Improvements	Bicycle and Pedestrian Improvements	Citywide	ALL	10/01/2015	11/01/2023	$100,000	$100,000	Impact Fees (100%): - $100,000	09. Construction	TBD

2021-2025 Impact Fee Capital Improvements Element

CIE Public Facility Type: Transportation

Department: Public Works

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
Bolton Rd/ Hollywood Rd Intersection Improvements	Add left-turn lane capacity on Bolton Road at Hollywood Road intersection (This segment of Bolton Is SR70)	Intersection Improvements/Re construction	North	9	12/01/2024	12/01/2028	$3,000,000	$180,000	Impact Fees (6%) - $180,000 Other (94%) - $2,820,000	01. Planning	TBD
Boone/H.E. Holmes Drive	Roundabout at Simpson Road/JE Boone and H.E. Holmes Drive	Intersection Improvements/Re construction	North	10	12/01/2024	12/01/2028	$3,200,000	$420,000	Impact Fees (11%) - $420,000 Other (89%) - $3,780,000	01. Planning	TBD
Buckhead Pedestrian Mobility Enhancements	2019-2023 Capital Improvements Program - City of Atlanta Impact Fee Funded Projects - Schedule of Improvements	Bicycle and Pedestrian Improvements	Citywide	7	04/01/2017	11/01/2023	$1,200,000	$650,000	Impact Fees (54.2%): - $650,000 Local (45.8%):- $550,000	01. Planning	TBD
Grant Street Extension	Extend Grant Street to connect across the Beltline (public and private initiative)	Street Network/New Street	South	1	12/01/2024	12/01/2028	$1,500,000	$1,100,000	Impact Fees (10%): $1,100,000 Other (90%): $13,900,000	01. Planning	TBD
Loring Heights Neighborhood Plan Transportation Projects	2019-2023 Capital Improvements Program - City of Atlanta Impact Fee Funded Projects - Schedule of Improvements	Multi-Modal	Citywide	8	09/01/2013	11/01/2023	$800,000	$800,000	Impact Fees (100%): - $800,000	01. Planning	13-O-1393 - 14- O-1178
Northside Dr/ RDA/Metropolitan Pkwy Intersection Improvement	Consolidate approaches to intersection to increase capacity	Intersection Improvements/Re construction	South	9	12/01/2024	12/01/2028	$9,000,000	$360,000	Impact Fees (4%) - $360,000 Other (96%) - $8,640,000	01. Planning	TBD
Piedmont Road between Monroe Drive and I-85	2019-2023 Capital Improvements Program - City of Atlanta Impact Fee Funded Projects - Schedule of Improvements	Multi-Modal	Citywide	6	09/01/2016	11/01/2023	$100,000	$50,000	Impact Fees (50%): - $50,000 State (50%): - $50,000	01. Planning	TBD
Shady Valley Park Sidewalk	2019-2023 Capital Improvements Program - City of Atlanta Impact Fee Funded Projects - Schedule of Improvements	Sidewalks	Citywide	7	01/01/2017	11/01/2023	$200,000	$200,000	Impact Fees (100%): - $200,000	01. Planning	TBD
West Paces Ferry signal and sidewalks between E. Andrews and Valley Rd	2019-2023 Capital Improvements Program - City of Atlanta Impact Fee Funded Projects - Schedule of Improvements	Multi-Modal	Citywide	8	09/01/2013	11/01/2023	$1,200,000	$625,000	Impact Fees (50%): - $625,000 State (10%): - $125,000 Local (40%): - $500,00	01. Planning	13-O-1283
Whittington Drive School Sidewalk	2019-2023 Capital Improvements Program - City of Atlanta Impact Fee Funded Projects - Schedule of Improvements	Sidewalks	Citywide	7	01/01/2017	11/01/2023	$75,000	$75,000	Impact Fees (100%): - $75,000	01. Planning	TBD

2021-2025 Impact Fee Capital Improvements Element

CIE Public Facility Type: Transportation

Department: Renew Atlanta

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
NEW Buckhead Emergency Vehicle Pre-emption Installation	Install emergency vehicle preemption at approximately 80 signalized intersections in the Buckhead area surrounding Peachtree street. The project also includes adding preemption on board units on fire trucks.	Traffic Light Synchronization/ATM/ITS	North	7	03/20/2020	06/20/2021	$500,000	$400,000	RA-Local (20%), Impact Fees (80%)	08. Construction/Procurement	TBD
NEW Intersection improvement for Flat Shoals Ave, Arkwright Place, Walthall St, and Howell Dr intersection.	Intersection improvement for Flat Shoals Ave, Arkwright Place, Walthall St, and Howell Dr intersection. Roundabout implementation.	Intersection Improvements/Reconstruction	South	5	09/23/2019	09/20/2023	$750,000	$600,000	Local Bond (%20), Impact Fees (80%)	06. Design	TBD
NEW Joseph E. Lowery Complete St project	Intersection improvement at Joseph Lowery Blvd and Maynard Terrace.	Intersection Improvements/Reconstruction	North	3	08/15/2015	08/31/2022	$5,124,745	$750,000	RA-Bond (10.4%), RA-TSPLOST (75%), Impact Fees (14.6%)	06. Design	TBD
NEW Lenox Road and Johnson Road	Intersection improvement for Johnson and Lenox Road. Roundabout Installation. This intersection improvement was part of the 2018 Morningside Lenox Park Master Plan.	Intersection Improvements/Reconstruction	North	6	07/10/2017	03/30/2022	$743,000	$543,000	Local Bond (20%), Impact Fees (80%)	02. Concept	TBD
NEW Lenox Road Pinch / Gdot Group B	Lenox Road @ Heathbrooke Lane	Road Widening	North	7	12/09/2019	04/09/2021	$350,000	$290,000	RA-TSPLOST (20%), Impact Fees (80%)	09. Construction	TBD
NEW Monroe Drive/Blvd Complete Streets	The intersection of Virginia and Monroe Drive re-configuration. This would be a removal of the designated right slip lane along with it's signal from Virginia while re-aligning the other portions to standard T- intersection.	Complete Streets	North	2	05/10/2016	10/04/2024	$10,242,126	$2,000,000	RA-TSPLOST (80%), Impact Fees (20%)	05. Design/Procurement	15-R-1234
NEW Moores Mill Rd @ W. Wesley Rd Intersection Improvements	Includes improvements to relieve congestion at the Moores Mill Rd/W. Wesley Rd intersection, Utility relocations.	Intersection Improvements/Reconstruction	North	8	01/07/2016	09/30/2022	$3,787,028	$1,400,000	RA-Bond (6.5%), RA TSPLOST (56.5%), Impact Fees (37%)	06. Design	19-R-3699
10th St Communication Corridor	Fiber Installation and signal upgrades along 10th St, from Monroe Dr to Piedmont Ave, to optimize signal operations and communications network to ATCC.	Signals	Citywide	3	04/30/2017	09/01/2022	$600,000	$240,000	Impact Fees (40%) - $240000 TSPLOST (60%)- $360,000	08. Construction/Procurement	17-O-1000
10th St New Signals	Install Pedestrian Hybrid Beacons and Rectangular Rapid Flashing Beacons on 10th St	Signals	Citywide	2	08/26/2016	06/29/2021	$436,598	$120,000	Impact Fees (27%)- $120,000 RENEW BOND(73%)- $316,598	08. Construction/Procurement	17-O-1000
15th Street Extension	15th Street Extension project scope includes the extension of 15th Street west two blocks from West Peachtree St. to Spring St. and Williams St. to provide better circulation for vehicles, bicycles, and pedestrians through the Midtown area.	Complete Streets	Citywide	2	12/16/2017	12/31/2021	$3,688,625	$1,250,000	Impact Fees (33.88%)- $1,250,000 TSPLOST (66.12%)- $2,438,625	06. Design	17-O-1109
Barnett Street @ Saint Charles Avenue	Signal removal. This intersection does not meet the warrant of traffic signal and is recommended for conversion for side street two way stop control	Intersection Improvements/ Reconstruction	Citywide	6	10/10/2017	01/31/2023	$15,000	$15,000	RENEW BOND (0%)- $0 Impact Fees (100%)- $15,000	08. Construction/Procurement	19-O-1491; 20- O-1380

2021-2025 Impact Fee Capital Improvements Element

CIE Public Facility Type: Transportation

Department: Renew Atlanta

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
Campbellton Road Fiber Corridor	The Campbellton Road Smart Transit Corridor project will identify existing safety and transit efficiency opportunities and implement enhancements to improve mobility, safety, and quality of life for all users.	Complete Streets	Citywide	11	12/01/2017	12/01/2024	$2,000,000	$250,000	Impact Fees (12.5%)- $250,000 TSPLOST (87.5%)- $1,750,000	06. Design	18-O-1608
Cheshire Bridge Rd and Lenox Rd New Signal	Pedestrian hybrid beacon signal	Signals	Citywide	7	12/15/2016	12/31/2022	$200,000	$110,000	Impact Fees : $110,000 Renew Bond : $90,000	03. Scoping	17-O-1000
Howell Mill Rd @ Moores Mill rd Intersection Improvement	Intersection Improvement, change 4 way stop to signalized intersections with two additional right turning lanes	Intersection Improvements/Reconstruction	Citywide	8	01/01/2016	09/01/2022	$1,055,000	$805,000	Impact Fees (76.3%)- $805,000 RENEW BOND (23.7%)- $250,000	06. Design	20-O-1380
Howell Mill Rd Communication Corridor	Fiber Installation and signal upgrades along Howell Mill Road, from W Marietta St to Norfleet Rd, to optimize signal operations and communications network to ATCC.	Signals	Citywide	03, 08, 09	06/10/2016	11/13/2023	$2,200,000	$1,700,000	RENEW BOND (22.72%)- $500,000 Impact Fees (77.27%)- $ 1,700,000	06. Design	17-O-1000/20-O-1380
Johnson Rd/ Perry Blvd Intersection Improvements (Part of Traffic Combo 4)	Add left turn lanes on Perry Boulevard using existing travel lanes	Intersection Improvements/Reconstruction	North	9	01/01/2017	01/20/2023	$267,000	$45,000	Impact Fees (15%) - $45,000 City Wide Bond (85%) - $34,500 TSPLOST $187,500	08. Construction/Procurement	TBD
Midtown Traffic Signals	This project includes the construction of three (3) new traffic signals. The intersections to be signalized include West Peachtree St NW at 13th Street NW, Peachtree St NE at 13th Street NE, and Juniper St NE at 13th Street NE	Signals	North	2	03/01/2017	05/01/2022	$740,000	$140,000	Impact Fees (81%)- $600,000 Other (19%)- $140,000	06. Design	TBD
Monroe Dr. Communication Corridor	Fiber Installation on Monroe Dr from 10th St to Piedmont Circle, to optimize signal operations and communications network to ATCC.	Signals	Citywide	6	08/26/2016	12/27/2022	$756,000	$720,000	Impact Fees (92.23%)- $720,000 RENEW BOND (7.77%)- $36,000	09. Construction	17-O-1000
Monroe Drive Intersection Improvements at 10th Street and Armour Drive	Intersection capacity improvement to the intersections of Armour Dr and Monroe Dr and 10th street and Monroe Dr	Intersection Improvements/Reconstruction	Citywide	6	05/17/2016	01/12/2023	$7,169,124	$585,000	Impact Fees (8.16%)- $585,000 RENEW BOND (91.84%)- $6,584,124	06. Design	20-O-1380
Moores Mill Rd @ W Wesley Rd Intersection Improvement	Includes improvements to relieve congestion at the Moores Mill Rd/W. Wesley Rd intersection, Utility relocations	Intersection Improvements/Reconstruction	Citywide	8	01/07/2016	09/30/2022	$3,787,028	$1,400,000	RENEW BOND (6.5%), TSPLOST (56.5%), Impact Fees (37%)- $1,400,000	06. Design	19-R-3699
Mt Paran Rd and Northside Pkwy Intersection Capacity project	Geometric and Signals Intersection Improvements adding a right turn lane	Complete Streets	Citywide	8	04/11/2016	12/31/2022	$1,000,000	$750,000	Impact Fees (75%)- $750,000 RENEW BOND (25%)- $250,000	08. Construction/Procurement	17-O-1000
N Highland Ave and Inman Village Pkwy new Signal	Install Rectangular Rapid Flashing Beacon (RRFB) and improve pedestrian mobility	Signals	Citywide	2	10/09/2017	09/17/2021	$360,000	$65,000	Impact Fees (18.05%)- $65,000 RENEW BOND (81.95%)- $295,000	06. Design	17-O-1000

2021-2025 Impact Fee Capital Improvements Element

CIE Public Facility Type: Transportation

Department: Renew Atlanta

Name	Project Description	Project Type	CIE Service Area	Council District	Project Start Date	Estimated Project End Date	Estimated Project Cost	Portion Chargeable to Impact Fees	CIE Funding Source(s) and Shares	Project Phase	Resolution / Ordinance
North Ave and Somerset Terrace Intersection Improvement	Scoping study for possible intersection improvements for traffic and pedestrian mobility	Intersection Improvements/Reconstruction	Citywide	2	12/15/2016	07/15/2021	$300,000	$65,000	Impact Fees (21.7%): $65,000 Renew Bond (78.3): $235,000	03. Scoping	17-O-1000
Park Avenue @ Monroe Drive Intersection Improvement	Intersection Improvement- Upgrade intersection geometry to provide better capacity and pedestrian mobility	Intersection Improvements/Reconstruction	Citywide	6	05/01/2016	12/01/2022	$945,000	$695,000	Impact Fees (73.5%)- $695,000 RENEW BOND (26.5%)- $250,000	06. Design	20-O-1380
Peachtree St Communication Corridor	Fiber Installation and signal upgrades along Peachtree Street from Spring Street to Memorial Drive, to optimize signal operations and communications network to ATCC.	Signals	Citywide	02, 03, 04, 05, 06	08/26/2016	05/13/2022	$2,300,000	$1,211,400	Impact Fees (52.66%)- $ 1,211,400 TSPLOST (47.34%)- $ 1,088,600	06. Design	17-O-1000
Piedmont Ave and Linden Ave New Signal	Install Pedestrian Hybrid Beacons (HAWK) and improve pedestrian mobility	Signals	Citywide	2	08/26/2016	12/10/2020	$350,535	$65,000	Impact Fees (18%) - $65,000 TSPLOST (66%)- $230,000 Renew Bond (16%)- $55,535	08. Construction/Procurement	17-O-1000
Piedmont Ave Communication Corridor	Fiber Installation and signal upgrades along Piedmont Ave from 14th St to Monroe Dr, to optimize signal operations and communications network to ATCC.	Signals	Citywide	01, 02, 04, 05	08/26/2016	09/26/2021	$350,000	$200,000	Impact Fees - $200,000 RENEW BOND -$150,000	09. Construction	17-O-1000
Roxboro Rd Communication Corridor	Fiber Installation and signal upgrades along Roxboro Rd, from Peachtree Rd to W Roxboro Rd, to optimize signal operations and communications network to ATCC.	Signals	Citywide	7	12/25/2017	12/31/2022	$833,516	$368,516	Impact Fees (44.22%)- $368,516 RENEW BOND (55.78%)- $465,000	08. Construction/Procurement	17-O-1000
Wieuca Rd and Phipps Blvd Intersection Capacity Project	Remove intersection signals and replace with a dual lane round about for capacity and mobility improvements	Intersection Improvements/Reconstruction	Citywide	7	04/03/2017	03/14/2023	$2,250,000	$1,000,000	Impact Fees (44.44%)- $1,000,000 TSPLOST (55.56%)- $1,250,000	06. Design	17-O-1000

20-Yr Capacity Expansion Projects, 2020-2040

Project Description by Service Facility	Years	Estimated Cost	Responsible Party
Transportation			
Battle of Atlanta Greenway Trail	2021-2023	$ 1,824,250.00	Transportation
Boulevard Pedestrian Improvements	2019-2022	$ 1,210,000.00	Transportation
Cycle Atlanta Phase 1.0	2019-2021	$ 2,500,000.00	Transportation
Cycle Atlanta Phase 2.0	2021-2025	$ 2,500,000.00	Transportation
D.L. Hollowell/Westlake LCI Projects	2015-2022	$ 8,111,860.00	Transportation
Glenwood/Moreland LCI Projects	2012-2021	$ 4,845,440.00	Transportation
Huff Road Widening	2017-2021	$ 2,096,480.00	Transportation
MLK Corridor Complete Streets	2015-2020	$ 4,573,300.00	Transportation
Smart Lighting Pilot	2025-2030	$ 1,715,048.00	Transportation
US19 Spring Street Pedestrian Mobility	2018-2020	$ 2,435,000.00	Transportation
10th St Communication Corridor	2017-2021	$ 600,000.00	Transportation
10th St New Signals	2016-2021	$ 436,598.00	Transportation
15th St Extension	2017-2021	$ 3,688,625.00	Transportation
Barnett St @ Saint Charles Avenue Signal Removal	2017-2020	$ 15,000.00	Transportation
Campbellton Road Fiber Corridor	2017-2022	$ 2,000,000.00	Transportation
Cheshire Bridge Road and Lenox Road New Signal	2016-2020	$ 200,000.00	Transportation
Howell Mill Rd @ Moores Mill Rd Intersection Improvements	2016-2022	$ 1,055,000.00	Transportation
Howell Mill Rd Communication Corridor	2016-2023	$ 2,200,000.00	Transportation
Monroe Dr. communication Corridor	2016-2022	$ 756,000.00	Transportation
Moores Mill Rd @ W Wesley Rd Intersection Improvement	2016-2022	$ 3,050,000.00	Transportation
Mt. Paran Rd and Northside Pkwy Intersection Capacity Project	2016-2020	$ 1,000,000.00	Transportation
N Highland Ave and Inman Village Pkwy new signal	2017-2020	$ 360,000.00	Transportation
North Ave and Somerset Terrace Intersection Improvement	2016-2020	$ 300,000.00	Transportation
Park Ave @ Monroe Dr Intersection Improvement	2016-2022	$ 945,000.00	Transportation
Peachtree St Communication Corridor	2016-2022	$ 2,300,000.00	Transportation
Piedmont Ave and Linden Ave New Signal	2016-2020	$ 350,535.00	Transportation
Wieuca Rd and Phipps Blvd Intersection Capacity Project	2017-2023	$ 2,250,000.00	Transportation
Peachtree Rd Redesign	2022-2024	$ 2,000,000.00	Transportation
Ponce de Leon Bike/Ped Facilities & ABI Connection	2025-2027	$ 5,000,000.00	Transportation

20-Yr Capacity Expansion Projects, 2020-2040

Project Description by Service Facility	Years	Estimated Cost	Responsible Party
Transportation			
Cleveland Ave Pedestrian Mobility Improvement	2025-2027	$ 1,250,000.00	Transportation
Campbellton Road Pedestrian Mobility Improvements	2020-2022	$ 1,250,000.00	Transportation
US23 Moreland Avenue Multi-modal Intersection Improvements	2022-2024	$ 1,250,000.00	Transportation
Fairburn Road Complete Street	2024-2026	$ 1,747,300.00	Transportation
Forsyth St Complete Street	2022-2024	$ 811,100.00	Transportation
J E Boone Blvd Complete Street	2022-2024	$ 1,104,200.00	Transportation
J E Lowery Blvd Complete Street	2022-2024	$ 718,000.00	Transportation
Piedmont Ave Multimodal Street	2020-2022	$ 1,322,400.00	Transportation
University Ave Complete Street	2024-2026	$ 1,012,200.00	Transportation
R D Abernathy/Georgia Ave Complete Street	2022-2024	$ 1,500,000.00	Transportation
Kelson Drive Roadway Extension	2030-2032	$ 26,000.00	Transportation
W Peachtree St Multimodal Improvements	2025-2027	$ 2,000,000.00	Transportation
17th Street Redesign	2025-2027	$ 2,000,000.00	Transportation
Ralph McGill Blvd Multimodal Street Reconstruction	2025-2027	$ 2,000,000.00	Transportation
Buford Highway/Peachtree Connector	2027-2029	$ 1,500,000.00	Transportation
Williams-Spring Ramp Reconfiguration	2030-2032	$ 1,000,000.00	Transportation
I-75/85 NB HOV Piedmont Ave Off-Ramp Reconfiguration	2032-2034	$ 1,000,000.00	Transportation
Moreland Ave and I-20 Interchange Reconfiguration	2032-2034	$ 1,500,000.00	Transportation
I-75/85 University Interchange	2034-2036	$ 1,500,000.00	Transportation
North Avenue Alternative Freeway Access and Corridor enhancement	2038-2040	$ 1,000,000.00	Transportation
Hollowell/I-285 Interchange Widening	2035-2037	$ 1,500,000.00	Transportation
I-85/Lindbergh Dr HOV Ramps	2038-2040	$ 1,000,000.00	Transportation
Jefferson Street Extension	2030-2032	$ 500,000.00	Transportation
Sheridan Road Extension	2032-2034	$ 500,000.00	Transportation
Phipps Boulevard Extension	2030-2032	$ 500,000.00	Transportation
Fulton Industrial/Bolton Road Connector	2035-2037	$ 1,500,000.00	Transportation
Watts Road Extension	2038-2040	$ 500,000.00	Transportation
Habershal Dr. Extension	2038-2040	$ 500,000.00	Transportation

20-Yr Capacity Expansion Projects, 2020-2040

Project Description by Service Facility	Years	Estimated Cost	Responsible Party
Transportation			
Bennett Street Bridge	2036-2038	$ 5,000,000.00	Transportation
Garson Drive Bridge	2038-2040	$ 5,000,000.00	Transportation
Citywide Trail Masterplan	2022-2024	$ 500,000.00	Transportation
Northside Parkway Trail	2026-2028	$ 5,000,000.00	Transportation
Stone Mountain Trail - Ponce Spur and bike/ped bridge	2028-2030	$ 5,000,000.00	Transportation
Southtowne Trail	2028-2030	$ 5,000,000.00	Transportation
Northeast BeltLine Trail	2020-2026	$ 5,000,000.00	Transportation
Proctor Creek Greenway	2022-2024	$ 5,000,000.00	Transportation
Eastside Trolley Trail	2019-2023	$ 3,000,000.00	Transportation
Westside Trail	2021-2023	$ 5,000,000.00	Transportation
Lee Street Trail	2022-2024	$ 8,196,300.00	Transportation
Mt. Paran Road Trail	2021-2023	$ 4,578,093.00	Transportation
Path 400 Trail Extension - Wieuca Rd to Loridans	2025-2027	$ 2,000,000.00	Transportation
Path 400 Trail Extension - Loridans to City Limits	2027-2029	$ 2,000,000.00	Transportation
Citywide Signals Upgrades	2019-2023	$ 3,000,000.00	Transportation
Peachtree/Stratford Turn Lane	2018-2019	$ 250,000.00	Transportation
Northern Avenue SE Road Construction (Gravel Conversion)	2023-2025	$ 489,390.00	Transportation
Brewster Street Road Construction (Gravel Conversion)	2023-2025	$ 500,000.00	Transportation
Narrow Street Road Construction (Gravel Conversion)	2023-2025	$ 500,000.00	Transportation
Sloan Circle Road Construction (Gravel Conversion)	2023-2025	$ 1,000,000.00	Transportation
Rosalyn Street NW Road Construction (Gravel Conversion)	2023-2025	$ 1,000,000.00	Transportation
Old Decatur Road NE Road Construction (Gravel Conversion)	2023-2025	$ 500,000.00	Transportation
Meldrum Street Road Construction (Gravel Conversion)	2023-2025	$ 500,000.00	Transportation
Blanton Ave SW Road Construction	2023-2025	$ 500,000.00	Transportation
Roswell Street and Ewings Street Road Construction (Gravel Conversions)	2023-2025	$ 1,000,000.00	Transportation
Pelham Street SW Road Construction (Gravel Conversions)	2023-2025	$ 700,000.00	Transportation
Baylor Street NW Road Construction (Gravel Conversion)	2023-2025	$ 500,000.00	Transportation
Lynwood Street SE Gravel Road and Trail Connection to Beltline	2026-2028	$ 500,000.00	Transportation
Northside Drive Bridge over CSX	2030-2032	$ 3,900,000.00	Transportation

20-Yr Capacity Expansion Projects, 2020-2040

Project Description by Service Facility	Years	Estimated Cost	Responsible Party
Transportation			
Piedmont Road Bridge over CSX	2030-2032	$ 4,000,000.00	Transportation
Thomas Street Improvements and New Signals	2024-2026	$ 2,000,000.00	Transportation
Beltline Northeast LRT	2028-2030	$ 100,000,000.00	Transportation
Beltline Southwest LRT	2028-2030	$ 100,000,000.00	Transportation
Beltline West LRT	2026-2028	$ 100,000,000.00	Transportation
Beltline Southeast LRT	2028-2030	$ 100,000,000.00	Transportation
Campbellton Road LRT	2026-2028	$ 100,000,000.00	Transportation
Clifton Corridor LRT	2028-2030	$ 100,000,000.00	Transportation
Summerhill BRT	2024-2026	$ 13,000,000.00	Transportation
North Ave/Hollowell BRT	2024-2026	$ 13,000,000.00	Transportation
Northside Drive BRT	2026-2028	$ 13,000,000.00	Transportation
Peachtree Road ART	2024-2026	$ 10,000,000.00	Transportation
Cleveland Avenue ART	2024-2026	$ 10,000,000.00	Transportation
Metropolitan Pkwy ART	2024-2026	$ 10,000,000.00	Transportation
Signal Enhancement Projects I	2021-2026	$ 4,427,835.00	Transportation
Signal Enhancement Projects II	2021-2026	$ 6,527,346.00	Transportation
Signal Enhancement Projects -III	2021-2026	$ 2,200,000.00	Transportation

Project Description by Service Facility	Years	Estimated Cost	Responsible Party
Parks			
Blue Heron Trail Improvements	2021-2041	$ 750,000	Department of Parks & Recreation
Paul Ave. Property Acquisition	2021-2041	$ 3,000,000	Department of Parks & Recreation
Holly St. Property Improvements	2021-2041	$ 750,000	Department of Parks & Recreation

20-Yr Capacity Expansion Projects, 2020-2040

Project Description by Service Facility	Years	Estimated Cost	Responsible Party
Parks			
Parks North Improvements (Chastain)	2021-2041	$ 2,000,000	Department of Parks & Recreation
Parks North Land Acquisitions	2021-2041	$ 40,000,000	Department of Parks & Recreation
Lake Charlotte (Accessibility & Connectivity)	2021-2041	$ 10,000,000	Department of Parks & Recreation
Browns Mill Golf Course Improvements	2021-2041	$ 14,000,000	Department of Parks & Recreation
Memorial Greenway (Acquisition & Development)	2021-2041	$ 18,000,000	Department of Parks & Recreation
Southside Sports Complex Improvements	2021-2041	$ 15,000,000	Department of Parks & Recreation
Parks South Land Acquisitions	2021-2041	$ 35,000,000	Department of Parks & Recreation
Danforth Property Improvements	2021-2041	$ 2,000,000	Department of Parks & Recreation
Westside Trail Connection Acquisition & Development	2021-2041	$ 4,000,000	Department of Parks & Recreation
Enota Park Land Acquisition	2021-2041	$ 2,000,000	Department of Parks & Recreation
Parks West Land Acquisitions	2021-2041	$ 40,000,000	Department of Parks & Recreation

20-Yr Capacity Expansion Projects, 2020-2040

Project Description by Service Facility	Years	Estimated Cost	Responsible Party
Fire			
Fire Rescue Training Academy - New Build	2021- 2031	$ 120,000,000	Department of Enterprise Assets Management
Fire Station 22 - New Build	2021-2022	$ 9,000,000	Department of Enterprise Assets Management
Fire Station 36 - New Build	2021-2022	$ 10,000,000	Department of Enterprise Assets Management
Fire Station 31 - New Build	2022-2025	$ 10,000,000	Department of Enterprise Assets Management
Fire Station 30 - Demo/New Build	2022-2025	$ 10,000,000	Department of Enterprise Assets Management
Fire Station 34 - Renovation- Kitchen	2021-2022	$ 160,000	Department of Enterprise Assets Management
Fire Station 26 - New Build	2022-2027	$ 10,000,000	Department of Enterprise Assets Management
Fire Station 01 - New Build	2024- 2030	$ 20,000,000	Department of Enterprise Assets Management
Fire Station 25 - Demo/New Build	2024-2026	$ 11,000,000	Department of Enterprise Assets Management
Fire Station 23 - New Build	2024-2026	$ 11,000,000	Department of Enterprise Assets Management
AFRD Fleet Covered Vehicle Storage - New Build	2022-2027	$ 2,500,000	Department of Enterprise Assets Management
AFRD Air Shop - New Build	2022-2027	$ 1,500,000	Department of Enterprise Assets Management
AFRD Central Laundry Facility (Renovation/Repurpose)	2023-2028	$ 1,000,000	Department of Enterprise Assets Management
Fire Station 20 - New Build	2024-2030	$ 11,000,000	Department of Enterprise Assets Management
AFRD Training Burn Building Modules	2020-2021	$ 250,000	Department of Enterprise Assets Management

20-Yr Capacity Expansion Projects, 2020-2040

Project Description by Service Facility	Years	Estimated Cost	Responsible Party
Police			
Public Safety Training Academy (Key Road)	2021-2032	$ 80,000,000	Atlanta Police Department/ Department of Enterprise Assets Management
SOS Facility Purchase	2021-2032	$ 5,000,000	Atlanta Police Department/ Department of Enterprise Assets Management
New Zone 3	2021-2032	$ 12,000,000	Atlanta Police Department/ Department of Enterprise Assets Management
New Zone 4	2021-2032	$ 11,000,000	Atlanta Police Department/ Department of Enterprise Assets Management
New Zone 6 (Currently leased)	2021-2032	$ 11,000,000	Atlanta Police Department/ Department of Enterprise Assets Management
New Zone 2 (Currently leased)	2021-2032	$ 11,000,000	Atlanta Police Department/ Department of Enterprise Assets Management
New Zone 1	2021-2032	$ 11,000,000	Atlanta Police Department/ Department of Enterprise Assets Management
OPS (Buildout for leased facility)	2021-2032	$ 1,000,000	Atlanta Police Department/ Department of Enterprise Assets Management
New SWAT Facility	2021-2032	$ 600,000	Atlanta Police Department/ Department of Enterprise Assets Management