

Prepared for the City of Lithonia

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**Annexation
Feasibility Report
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Chapter 1: Executive Summary

In the summer of 2020, the City of Lithonia sought out assistance to conduct a study of the fiscal impacts of a possible annexation. This report presents the analysis of how three different scenarios for the annexation would affect the city's finances. To be specific, we estimated the additional revenues and expenditures the city would have faced if they had theoretically already incorporated the areas. This study should not be viewed as a statement supporting or discouraging annexation; rather it is an informational tool for officials and citizens of Lithonia.

The two study areas, as depicted in Figure 2.1, were identified by the ___ for the City of Lithonia. To conduct our analysis we focused on two important questions. First, how much revenue would Lithonia have collected from the study areas in FY 2019 if the land was already annexed? Second, how much would Lithonia have spent in 2019 to deliver services to the study area? In our scenarios, we assume the land had already been annexed over a year before 2019 to make our theoretical estimates. We answer these two questions in three ways based on the following scenarios: the city annexes Area 1 alone, Area 2 alone, or both together. The Areas are defined with the map in Figure 2.1.

Population, Households, and Businesses in the Study Areas

Our analysis begins with an examination of the population and households of the two study areas and Lithonia since revenues and expenditures are largely dependent on these metrics. Using the map provided, we determined the population of Area 1 to be 503 and the population of Area 2 to be 249. Using Lithonia's average household size of 2.81, we determined that Area 1 has 178 households and Area 2 has 88 households (Table 2.1 shows the estimates). We also estimated the study area's property values based on Lithonia's property value per capita. Area 1 contains property with approximately \$9,197,858 value while Area 2 contains property with approximately \$4,553,214 value.

Estimated Revenues for FY 2019 for the Scenarios

To estimate revenues that would have been generated from each scenario, we collected actual numbers for revenue categories where data was available for the study areas, and estimated other revenues using information on the study area's population, amount of households, amount of businesses, and property tax information. We estimated the first scenario (annexing only Area 1) would generate \$296,627 in new revenues, the second scenario (annexing only Area 2) would generate \$150,619 in new revenues, and the third scenario (annexing both areas) would generate \$447,246 in revenues. We assumed that the residents of the new areas would behave similarly as those in Lithonia and would be charged the same rates, fees, and charges. For many reasons, we must caution that these assumptions are unlikely to be completely true, so there would be some actual variation.

Estimated Expenditures for FY 2019 for the Scenarios

To estimate expenditures, we took a similar approach by looking at all three scenarios. However, expenditures are unique in how we must calculate them because there is no data available on how the city would deliver services to areas not currently incorporated. Therefore, we used the city's expenses reported on the FY 2019 budget to estimate the proportions they would need to increase to account for the new areas and people. We estimated the first scenario (annexing only Area 1) would cost \$152,249 in new expenditures, the second scenario (annexing only Area 2) would cost \$95,993 in new expenditures, and the third scenario (annexing both areas) would cost \$248,243 in new expenditures. We assumed that the city would not need extensive additions to personnel, equipment, or building space to account for the larger area. It is even more important to caution these numbers as it is impossible to know if the assumptions are correct until an annexation is implemented.

Net Fiscal Impact: Comparing Estimated Revenues and Expenditures in the Study Areas

Our analysis provides results for the three different annexation scenarios. Table 1.1 shows the estimated revenue and expenditure increases for all three scenarios depending on the areas chosen to be annexed.

Table 1.1 Summary of 2019 Revenue and Expenditure Estimates

	Area 1	Area 2	Area 1 and 2
Total Scenario Revenues	\$296,627	\$150,619	\$447,246
Total Scenario Expenditures	\$152,249	\$95,993	\$248,243
Revenues less Expenditures	\$144,378	\$54,626	\$199,003

Factors Favoring Higher Expenditures to Revenues

- Extension of services costs more than expected
- New buildings may need to be leased or constructed
- Revenue from property and occupation taxes is overestimated

Factors Favoring Higher Revenues to Expenditures

- The land area contained in the study areas has more value than estimated
- City already has the staff and resources to extend services
- Revenue from the annexed population is greater than estimated

Chapter 2: Background Information: Lithonia and the Study Areas

Demographic Composition

According to the U.S. Census Bureau for 2019, Lithonia is composed of:

- 2,331 people (2019 estimate) of which:
- 88% are Black
- 7% are Hispanic
- 4% are White
- 2% are two or more races

Over the past ten years, the population of Lithonia has increased from 1,987 in 2010 to 2,082 in 2015 to 2,331 in 2019. We are using the 2019 Census estimates for all our per capita calculations.

Households

Lithonia was estimated to have 827 households out of 983 housing units (84% occupied) in 2018. 72% of these households were occupied by renters. The number, 827, will be used for all household calculations. The average size of Lithonia's households is 2.81 persons per household. Lithonia's average household size was determined by dividing the total Lithonia population (2019 estimate) by the amount of households (2018 estimate). We recognize this is not the most perfect calculation because it relies on two different years, but we believe the one year difference to be negligible.

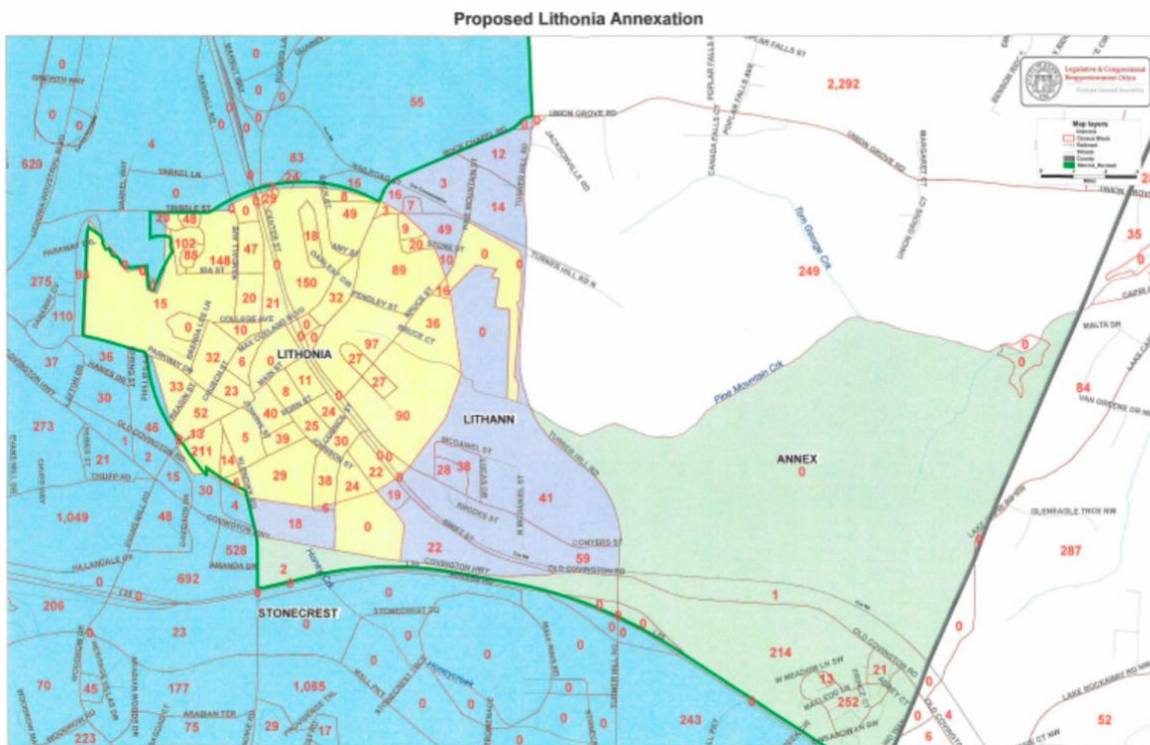
Income, Poverty, and Education

The median income for a household in the city was \$36,705 according to the 2018 Census estimates, and the per capita income equaled \$19,368. In comparison, DeKalb County's median household income in 2018 equaled \$59,280, \$22,575 more than that of Lithonia. About 37.1 percent of the population in Lithonia live below the poverty line, and 62% of children under the age of 18 do. The

percent of the adult population (25+) with a high school degree or higher is about 84.2 percent, and the percent with bachelor's degree or higher was about 13.9 percent.

Annexation Study Area

Figure 1: Boundaries of Lithonia and the Study Areas



Area 1: South Region (Green with a Population (in red) of 503)

Area 2: North Region (White section above Green with a Population of 249)

The boundaries of the possible annexation areas are shown in Figure 1. Table 2.1 lists the calculated population of the two study areas for 2019 based on the red numbers designated as people in Figure 1. To determine the households for each study area, we used Lithonia's average household size, 2.81, and divided the population by 2.81 to determine an approximate value of the amount of households.

Table 2.1 Estimated 2019 Population and Household Size of the Study Areas

	Population	Households
Lithonia	2,331	827
Area 1	503	178
Area 2	249	88
Area 1 and 2	752	266

Chapter 3: Estimated Revenues from Study Areas

The land and demographic characteristics presented in Chapter 2 are important to specifying how we complete our calculations to estimate the revenues and expenditures of the study areas. We will compare the estimated population and household amounts of the study areas to approximate the revenues for the areas. In this section, we present our estimates that would have been collected during FY 2019, assuming that the area was in fact annexed more than a year earlier. We assume the areas had been a part of Lithonia for over a year, allowing revenue collections timing and other accounting issues to be disregarded.

To make our calculations, we determined three possible scenarios for annexation. The first scenario includes only annexing Area 1; the second includes only annexing Area 2; and the third includes annexing them both. Because the third scenario is a summation of the first two, it is left out of the graphs but included in the final calculations. The expenditure calculations themselves are based on analyzing the city of Lithonia's FY 2019 budget. We look at the revenues received by the city and estimate how those revenues may have increased in these scenarios.

Some of the areas of revenue expected to increase include: Real and Personal Property taxes, Motor Vehicle taxes, Franchise Fees paid by utility companies, Insurance Premium taxes, Intangible Recording and Real Estate Transfers taxes, Occupational taxes, Permit Authorizations, Court Receipts and Probation Services, the Local Maintenance & Improvement Grant (LMIG), and Other fees and Miscellaneous taxes. We also included Public Utilities in our calculation, but we will revisit the necessary assumptions there later. Using relevant data on the study areas, we determine how the revenues would increase in each of these areas.

Because we are making estimates for an event that has not occurred, we must make assumptions in determining the factors that influence revenue collections. Our most common assumption is that people in the study areas behave similarly to those living in the City of Lithonia. This assumption is necessary to extrapolate our data from the city of Lithonia to these possible annexation areas. Any other assumptions required for a specific revenue source will be listed with it.

General Fund Revenues

Most of the revenue in Lithonia is captured in the General Fund. This section will feature our discussion of revenues flowing into the General Fund. Public Utilities will be grouped later as an enterprise fund.

Real and Personal Property Tax Revenue

Generally speaking, property taxes have many favorable features. They are collected through a well-established process once a year. Cities deposit these revenues into their general funds and can spend them on any city service. Using the city's 2019 tax digest, we show in Table 3.1 a calculation of the city's Gross Property Value per capita which will be used to estimate the Property Value of the study areas. We also calculate in Table 3.1 the Property Tax Revenue per Property Value which will be used to predict expected property tax revenue from the study areas. We show in Table 3.2 how much revenue we predict would be generated in the annexation study areas.

Table 3.1 Gross Tax Digest Value of Real and Personal Property and Revenue for Lithonia

Gross Property Value	Population	Property Value per Capita	Tax Revenue	Tax Revenue /Property Value
\$42,626,515	2,331	\$18,286	\$413,000	0.009688

Table 3.2 Estimated Real and Personal Property Tax Revenue in Study Areas

	Population	Property Value	Revenue
Area 1	503	\$9,197,858	\$89,116
Area 2	249	\$4,553,214	\$44,115

Motor Vehicle Tax Revenue

Motor vehicles are subject to an ad valorem tax levied on their assessed value. The revenue is derived by applying the population ratio and assumes car ownership will be consistent across the annexed area. We show in Table 3.3 how much revenue would be generated from the collection of motor vehicle taxes in the proposed annexation area. We determined the average amount of Motor Vehicle tax revenue based on households in Lithonia to extrapolate to the study area as we see households as the best available measure related to the amount of motor vehicles. Our calculation for this revenue included Motor Vehicle, MV Ad Valorem, and Mobile Home from the budget.

Table 3.3 2019 Estimated Motor Vehicle Tax Revenue for the Study Area

	Area 1	Area 2
Households	178	88
Lithonia Rev/Household	\$28.42	\$28.42
Total	\$5,058.76	\$2,500.96

Franchise Fees

Georgia cities are permitted by law to enter into franchise agreements with utilities within their borders that generate fees for the cities in exchange for granting rights of occupancy to municipal rights-of-

way. In 2015, the City of Lithonia collected \$96,500 in franchise fees on cable, natural gas, telecommunications, and electricity. Typically, revenue estimates for the first three services are relatively stable and population driven, and therefore can be calculated on a per household basis. Table 3.4 shows Lithonia's total and per capita franchise fee collection for cable, natural gas, and telecommunications in 2015 and Table 3.5 applies that per capita revenue to the study area.

Table 3.4 Cable, Natural Gas, and Telecommunications Franchise Fees for Lithonia

	Lithonia Revenue	Households	Lithonia Per Household
Cable	\$7,500	827	\$9.07
Natural Gas	\$8,000	827	\$9.67
Telephone	\$5,000	827	\$6.05

Table 3.5 Estimated Cable, Natural Gas, and Telecommunications Franchise Fee Revenue for the Study Areas

	Revenue Per Household	Area 1	Area 2
Households		178	88
Cable	\$9.07	\$1,614.46	\$798.16
Natural Gas	\$9.67	\$1,721.26	\$850.96
Telephone	\$6.05	\$1,076.90	\$532.40
Total		\$4,412.62	\$2,181.52

Our estimation for the electrical use component of franchise fees accounts for the differences in energy use in the study areas and Lithonia. Electrical use in communities is driven by the mix of electrical users. On average, industrial users tend to use more power than commercial users, and commercial users tend to use more than residential users. The assessed values of the various areas capture this stratification as commercial and industry have a higher property value. Table 3.6 shows our determination of the average Electrical Franchise Fee Revenue for Lithonia, and Table 3.7 shows our extrapolation of that onto the study areas based on their own estimated property values. This particular method is limited by assuming that the stratification of property (between commercial, industrial, and residential) is similar to that of the city of Lithonia. A more detailed analysis of specific parcels in the areas would be more adequate.

Table 3.6 2019 Lithonia Property Value and Electrical FF Revenue

Revenue Source	Revenue	Lithonia Property Value (in \$1,000's)	Lithonia Rev/ Property Value (in \$1,000s)
GA Power Fee	\$76,000	42,627	1.783

Table 3.7 2019 Estimated Electrical FF Revenue for Study Areas

	Estimated Property Value (in \$1,000s)	Lithonia Rev/ Property Value (in \$1,000s)	Revenue
Area 1	\$9,198	1.783	\$16,400
Area 2	\$4,553	1.783	\$8,118

Table 3.8 below depicts a summary of all estimated Franchise Fee Revenues for the study areas.

Table 3.8 Total 2019 Estimated Franchise Fees for Study Areas

	Cable	Natural Gas	Telephon e	Electricity	Total
Area 1	\$1,614.46	\$1,721.26	\$1,076.90	\$16,400	\$20,812
Area 2	\$798.16	\$850.96	\$532.40	\$8,118	\$10,229

Insurance Premium Tax

Another source of revenue from the study areas would be the Insurance Premium taxes. These taxes are levied by city and county governments on life insurance (1 percent) and on other types of insurance (no more than 2.5 percent). The insurance premium tax is based on a percentage of gross direct premiums received by each insurer writing insurance policies within the city. Taxes are collected by the Georgia Commissioner of Insurance and distributed on a per capita basis among the government levying the taxes in the county. The distribution is updated with the update U.S. Census figures. If the annexed areas had been a part of Lithonia for an entire year prior, the population figure would have increased, so Table 3.9 shows the calculation for estimated Insurance Premium tax collections for Lithonia and the study areas. Note, Life Insurance Tax was the only Insurance Premium Tax listed accordingly in the FY 2019 Budget.

Table 3.9 2019 Estimated Insurance Premium Tax Collections

	Estimated Population	Tax per Capita	Total Revenue
Lithonia	2,331	\$61.35	\$143,000

Area 1	503	\$61.35	\$30,859
Area 2	249	\$61.35	\$15,276

Intangible Recording Taxes and Real Estate Transfer Taxes

Every holder (lender) of a long-term note secured by real estate must record the security instrument in the county in which the real estate is located. Before recording the security instrument with the superior court clerk, the security instrument must be presented to the collecting officer of the county in which the real estate is located. The officer collects the intangible recording tax due from the holder of the security instrument. The intangible recording tax is based upon the face amount of the note. The real estate transfer tax is an excise tax on transactions involving the sale of real property where title to the property is transferred from the seller to the buyer. Before a deed, security instrument, or other writing can be recorded with the superior court's clerk, the real estate transfer tax must be paid. The real estate transfer tax is based upon the sales price of the property.

Table 3.10 shows our determination of revenue from each tax per property value for Lithonia. Table 3.11 and Table 3.12 contain our estimations for the revenue of these taxes expected from the study areas based on their property value. We determined that property value is the best estimator for this extrapolation; however, as said earlier, different land uses could change how much revenue could be expected from these two taxes. More detailed analysis of the specific parcels would give a more precise estimation.

Table 3.10 FY 2019 Lithonia Assessed Value and Property Tax Revenue

Revenue Source	Revenue	Lithonia Property Value	Lithonia Rev/ Property Value
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		(in \$1,000s)	(in \$1,000s)
Intangible Recording	\$13,000	42,627	0.305
Real Estate Transfer	\$10,000	42,627	0.235

Table 3.11 2019 Estimated Intangible Recording Revenue for Study Areas

	Estimated Property Value (in \$1,000s)	Lithonia Rev/ Property Value (in \$1,000s)	Study Area Revenue
Area 1	9,198	0.305	\$2,805
Area 2	4,553	0.305	\$1,388

Table 3.12 2019 Estimated Real Estate Transfer Revenue for Study Areas

	Estimated Property Value (in \$1,000s)	Lithonia Rev/ Property Value (in \$1,000s)	Study Area Revenue
Area 1	9,198	0.235	\$2,157
Area 2	4,553	0.235	\$1,068

Occupation Taxes

We estimated the occupational taxes by first calculating the revenue per business license collected by Lithonia in 2019. An approximate amount of businesses was determined from counting the total businesses in Lithonia featured on City-Data.com.¹ We found that there are about 140 businesses in the city of Lithonia, and the revenue from business licenses for FY 2019 was \$49,000. Therefore, the estimated revenue from each business license was \$350. We applied this \$350 revenue to the estimated number of businesses in the study areas. The estimated number of businesses in the area was determined by the aerial view of Google Maps. More updated counts for both businesses in Lithonia and the study areas would be ideal. Table 3.13 shows our calculation for the estimated revenue brought in by the additional businesses licenses.

Table 3.13 2019 Estimated Occupation Taxes for Study Areas

	Estimated Businesses	Lithonia Rev/ Business License	Study Area Revenue
Area 1	10	\$350	\$3,500
Area 2	6	\$350	\$2,100

Permit Authorizations

We estimated the permit authorizations by first calculating the permit per value of property in Lithonia. Lithonia collected \$67,650 for permit authorizations in 2019. The Property Value of all property in Lithonia, according to the Tax Digest, was \$42,626,515. This yielded a revenue per property value (in \$1,000s) of \$1.586. We used this amount and applied it to the property values of each study area to calculate the estimated revenue as shown in Table 3.14.

Table 3.14 2019 Estimated Permit Authorization Revenue for the Study Areas

¹ <http://www.city-data.com/city/Lithonia-Georgia.html>

	Estimated Property Value (in \$1,000s)	Lithonia Rev/ Property Value (in \$1,000s)	Study Area Revenue
Area 1	9,198	1.586	\$14,588
Area 2	4,553	1.586	\$7,221

Court Receipts and Probation Services

The city of Lithonia collects court receipts (included here as court fines and bonds) and revenue from probation services. In 2019, this amounted to \$250,000 for court fines and bonds and \$135,000 for probation. Court days are held on the second and third Fridays of each month.² This distribution means that there are typically 24 court dates during a year. We calculated the average revenue of Lithonia per court date for court receipts (\$10,417) and probation services (\$5,625) based on the 24 days. In assuming that the citizens in the study areas would be no different, we estimate the city of Lithonia might need to increase the number of court dates a year. We do not foresee the need for an additional date a month, so we estimated it by how many days per year might need to be added. Table 3.15 and 3.16 show the predicted increase in revenue from these additional court dates.

Table 3.15 2019 Estimated Court Receipt Revenue for Study Areas

	Additional Court Days per Year	Lithonia Receipt Revenue per Court Day	Study Area Revenue
Area 1	4	\$10,417	\$41,667

² <http://www.town-court.com/GA/dekalb-county/lithonia-municipal-court>

Area 2	2	\$10,417	\$20,833
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Table 3.16 2019 Estimated Probation Revenue for Study Areas

	Additional Court Days per Year	Lithonia Probation Revenue per Court Day	Revenue
Area 1	4	\$5,625	\$22,500
Area 2	2	\$5,625	\$11,250

Interest and Miscellaneous

With any proposed annexation, the city's financial resources will increase in that the city will have more cash coming into the organization. We expect that Lithonia would seek to maintain the same proportion of fund balance to operating expenses after the annexation as it currently maintains, thereby resulting in a proportional increase in investment revenue. We also expect the additional land area and population will cause an proportional increase in miscellaneous revenue sources. According to the FY 2019 budget, the city of Livonia had \$130 of Interest Revenue and \$9,050 of Miscellaneous Revenue. Using the population of Lithonia, we determined that the Interest Revenue per Capita was \$0.0558 and the Miscellaneous Revenue per Capita was \$3.88. We used these numbers to determine the expected revenues from the study areas, and those results are shown in Table 3.17.

Table 3.17 2019 Estimated Interest and Misc. Revenue for Study Areas

	Lithonia Interest Rev per Capita	Interest Revenue	Lithonia Miscellaneous Rev per Capita	Miscellaneous Revenue

Area 1	\$0.0558	\$28.05	\$3.88	\$1,952
Area 2	\$0.0558	\$13.89	\$3.88	\$966

Local Maintenance and Improvement Grant (LMIG)

General purpose local governments in Georgia annually receive a road improvement grant from the Georgia Department of Transportation (GDOT), referred to as the LMIG. The grant's distribution is based on a local government's population and road miles. With annexation, both of these factors would increase for the City of Avondale Estates and concomitantly its LMIG award. We were able to locate GDOT's 2019 grant award distribution and use this figure. The city of Lithonia is reported to have received \$24,210.10 in 2019 from this grant. The specific formula is as follows:

- 1) LMIG Formula Factor x State Allocation = Local Govt. Grant; whereas
- 2) LMIG Formula Factor = (local government population/state total population) x $\frac{1}{3}$ + (local government road miles/ total local government road miles) x $\frac{2}{3}$

Table 3.18 depicts our determination of the LMIG Formula Factor and expected revenue for the study areas. Georgia's 2019 population was approximately 10,620,000 with a total local government road miles of 108,300. The total appropriation for the state was \$169,400,000. We used these figures along with the figures in the boxes to make our estimations. Road mile length was estimated by using Google Maps distances for the roads in the annex area.

Table 3.18 2019 Estimated LMIG Revenue for Study Area

	Population	Road Miles	LMIG Formula Factor	LMIG Revenue

Area 1	503	10	0.00007734	\$13,102
Area 2	249	8	0.00005706	\$9,666

Other Revenues

The City of Lithonia has several other revenues which will increase with an annexation. These include charges for services (\$15,050), railroad equipment (\$250), transfer in (Stormwater Fund) (\$34,500), and the tax anticipation note (\$125,000), which was fairly significant in 2019. The revenue collected by Lithonia in 2015 for these categories summed to \$174,800. The per capita revenue from these other sources for Lithonia was determined to be \$74.99. The expected revenue for the study areas was calculated on a per capita basis, but we give a strong word of caution as an increase in population does not necessarily mean these categories would increase proportionally. It only is the most appropriate measure given the situation of predicting the results of something that had not happened.. Table 3.19 below shows the additional revenue expected to be generated in each study area.

Table 3.19 2019 Estimated Other Tax Revenue for the Study Area

	Population	Lithonia Other Rev per Capita	Revenue
Area 1	503	\$74.99	\$37,720
Area 2	249	\$74.99	\$18,672

Enterprise Fund Revenues

The FY 2019 budget listed the revenues brought in by public utilities, and we attributed those revenues to this section alone. Lithonia brought in \$50,000 of revenue for public utilities during 2019. Using the amount of households in Lithonia, we determined how much revenue was generated by the

households. In Table 3.20, we present the estimated enterprise revenues for the study areas based on the estimated households in the area. Again, this measure requires a lot of caution because of the necessary assumptions that the areas would have negligible differences from Lithonia.

Table 3.20 2019 Estimated Enterprise Fund Revenue - Public Utility

	Households	Lithonia Revenue per Household	Revenue
Area 1	178	\$60.46	\$10,762
Area 2	88	\$60.46	\$5,320

Summary of Revenues

In Table 3.21, we present the estimated revenues that would have been collected from the study area if they had been in Lithonia in FY 2019. This table is a summary of all of the preceding tables showing the different types of revenues that would have been collected in each scenario.

Table 3.21 Summary of 2019 Estimated Study Area Revenues

	Area 1	Area 2	Area 1 and 2
General Fund (GF) Revenue	\$285,865	\$145,299	\$431,164
Real and Personal Property	\$89,116	\$44,115	\$133,231
Motor Vehicle	\$5,059	\$2,501	\$7,560
Franchise Fees	\$20,812	\$10,229	\$31,041

Insurance Premium	\$30,859	\$15,276	\$46,135
Intangible Recording	\$2,805	\$1,388	\$4,193
Real Estate Transfers	\$2,157	\$1,068	\$3,225
Occupational Taxes	\$3,500	\$2,100	\$5,600
Permit Authorizations	\$14,588	\$7,221	\$21,809
Court Receipts	\$41,667	\$20,833	\$62,500
Probation Services	\$22,500	\$11,250	\$33,750
Interest Earnings	\$28	\$14	\$42
Miscellaneous	\$1,952	\$966	\$2,918
LMIG	\$13,102	\$9,666	\$22,768
Other	\$37,720	\$18,672	\$56,392
Enterprise Fund Revenue	\$10,762	\$5,320	\$16,082
Total Revenues	\$296,627	\$150,619	\$447,246

Chapter 4: Estimated Expenditures for the Study Areas

In this section, we address how much the city of Lithonia would have spent in FY 2019 to extend services in each of the three scenarios. Our categories are divided by how expenses are listed on the city of Lithonia's budget report for FY 2019. We discuss in detail how each of the areas would face increased costs based on annexation. All of our cost estimates are based on proportional increases from Lithonia's current expense report. Since Area 1 is larger than Area 2 by population, it will require more proportionally. Table 4.1 contains the final product of all of our estimates.

Personal Salaries and Benefits

This section of the budget includes the salary and benefits given to all employees of the city. This includes full-time, part-time, and overtime work as well as workers' compensation, Medicare, Social Security, group insurance, retirement, and unemployment. We expect this section to have a noticeable increase because of the extended land area, new roads, and larger population. We expect there will be an increase in the need for public safety employees as well as office workers to handle the additional paperwork. New workers might have to be hired, or part-time workers will need to become full-time or full-time workers will need to work overtime. Either way, we expect a fair increase in this expenditure. We estimate annexing Area 1 alone would increase these expenses by 1/10, annexing Area 2 alone would increase these expenses by 1/15, and annexing both would increase these expenses by 1/6.

Professional and Technical Services

This section of the budget includes a wide variety of professional services including judges, public defenders, solicitors, building inspectors, auditors, and accountants to name a few. As described in the first section, a larger population will need an increased amount of professional services. In addition, Chapter 3 proposed that there would be a few more court dates, so there would certainly be more expenses for court-associated personnel to work more times in the year. We estimate annexing Area 1

alone would increase these expenses by $\frac{1}{6}$, annexing Area 2 alone would increase these expenses by $\frac{1}{12}$, and annexing both would increase these expenses by $\frac{1}{4}$.

Purchased/Property Services

This section of the budget includes strictly maintenance, repair, and rentals. The group of expenses is heavily centered on equipment. We expect the increased land area that the city would be responsible for would add additional wear to vehicles or require more rentals. Accordingly, we expect a fairly significant increase in these costs since they are already relatively low. We estimate annexing Area 1 alone would increase these expenses by $\frac{1}{5}$, annexing Area 2 alone would increase these expenses by $\frac{1}{10}$, and annexing both would increase these expenses by $\frac{3}{10}$.

Other Purchased Services

This section of the budget includes additional services meant to assist the city's workforce. The services include: liability insurance, training, sanitation, travel, and communication to name a few. Because these are so directly tied with the personnel, we thought it was most appropriate to estimate they would increase at the same rate as the Personal Salaries and Benefits. Therefore, we estimate annexing Area 1 alone would increase these expenses by $\frac{1}{10}$, annexing Area 2 alone would increase these expenses by $\frac{1}{15}$, and annexing both would increase these expenses by $\frac{1}{6}$.

General Supplies and Materials

This section of the budget contains all of the supplies needed to run the government offices and services from gasoline to office supplies to electricity. While these costs may increase marginally with additional employees, we do not expect a significant increase unless the annexation featured the opening of new buildings and spaces for the city of Lithonia. As we have not used that assumption up to this point, we do not make it here. We estimate annexing Area 1 alone would increase these

expenses by 1/15, annexing Area 2 alone would increase these expenses by 1/20, and annexing both would increase these expenses by 7/60.

Debt Service and Other Costs

This section of the budget includes all of the remaining expenses. Some of these are court payments to Dekalb, the Tax Anticipation Loan, interest on building mortgages, and a few others. Just like with general supplies and materials, we do not expect this section to go up unless the city of Lithonia decided to open new locations which would require further property payments. We estimate annexing Area 1 alone would increase these expenses by 1/15, annexing Area 2 alone would increase these expenses by 1/20, and annexing both would increase these expenses by 7/60.

Table 4.1 Expenditures Per Area Estimates

Expenditure Area	Lithonia's Total Expense In 2019	Estimated Increase with Area 1	Estimated Increase with Area 2	Estimated Increase with Both
Personal Salaries and Benefits	\$786,090	\$78,609	\$52,406	\$131,015
Professional and Technical Services	\$154,000	\$25,667	\$12,833	\$38,500
Purchased/ Property Services	\$35,000	\$7,000	\$3,500	\$10,500
Other Purchased Services	\$139,000	\$13,900	\$6,950	\$20,850

General Supplies and Materials	\$102,750	\$6,850	\$5,137	\$11,988
Debt Service and Other Costs	\$303,340	\$20,223	\$15,167	\$35,390
Total	\$1,520,180	\$152,249	\$95,993	\$248,243

Chapter 5: Comparing Revenues and Expenditures from Annexation of the Study Areas

In Chapter 3, we estimated the revenues that would have been collected from the study areas if they had been in the City of Lithonia in FY 2019, and in Chapter 4, we estimated the expenditures that would have been needed to provide services to those areas. A comparison of the estimated revenues and expenditures is presented in Table 5.1 for the different scenarios for annexation. We used certain assumptions up to this point that have inherent limits. Before listing our findings in the table, we think it is appropriate to discuss how the factors influencing those limitations could either tilt the finances more in favor of expenditures or more in favor of revenues.

Factors Favoring Higher Expenditures to Revenues

There is an inherent imprecise nature to our expenditure calculations. We assumed that the current expenditures for the city of Lithonia would only need to be proportionally extended by a subjective amount based on the areas in question. If it actually costs much more to extend services to those areas, then the expenditures would certainly rise. We also discussed briefly that new buildings may need to be utilized for the extension of services. On the reverse, there are factors that could limit the expected revenues. We heavily based our revenue estimations on the current state of Lithonia which may be very different from the study areas. If there is less valuable property per person in those areas than in the city currently, all of our revenue calculations will be overestimations. The people living in those areas might also have inherent differences which cause our per capita predictions to be overestimates as well.

Factors Favoring Higher Revenues to Expenditures

Just as we could have overestimated the proportional revenues for the areas in question, there is also the possibility that we underestimated the revenues. Because of the sheer size of these possible areas, there is a fair chance that they have a far greater property value than we attributed. We used population

to determine property value which has inherent flaws. A more precise determination of property value would give a much better idea. Property taxes are such a huge slice of the incoming revenues, so a possible underestimation would greatly downplay the revenue benefits of annexing the property. On the reverse, there is the possibility that we overestimated the expenses of annexing. The city of Lithonia could already have adequate resources to expand services and would need a small increase in personnel and supplies. This possibility would substantially lower the expenses which would favor the revenues.

Table 5.1 Net Fiscal Impact: Comparing Estimated Revenues and Expenditures in the Study

Areas

	Area 1	Area 2	Area 1 and 2
Total Scenario Revenues	\$296,627	\$150,619	\$447,246
Total Scenario Expenditures	\$152,249	\$95,993	\$248,243
Revenues less Expenditures	\$144,378	\$54,626	\$199,003

Chapter 6: Impact on DeKalb County

By incorporating either or both of our study areas, we expect some fiscal impact on DeKalb County. We chose to instead focus on Lithonia, so we did not develop exact cost estimates on how the annexation might impact DeKalb County government. We do expect there will be some form of balance where, for the most part, revenues gained by the city will be lost by the county and expenses taken by the city will be relieved from the county. Of course, the county will not be fully removed from the affairs of the two annexed areas. Below, we list some of the more specific ways we might see how these potential annexations impact the county.

Countywide services would not be affected by the annexation. As residents of the county, property owners would still continue to pay for countywide services regardless of whether they live in Lithonia or not. For example, the fire department is through the county, so residents and business owners would continue to need this service and pay for it through their property taxes. On the other hand, Lithonia does have a police department that could offload some of the burden in the study areas which would reduce expenditures at the county level. Other similar services provided by the city to these new potential city residents would take on more of the county's administrative burden. Ultimately, the county would lose revenues from insurance premiums, franchise fees, fines and forfeitures, occupational taxes, and regulatory fee.