

CITY OF FRANKLIN, TN



ANNEXATION FEASIBILITY STUDY NOVEMBER 2006

ANNEXATION FEASIBILITY STUDY **NOVEMBER 2006**

CITY OF FRANKLIN

FRANKLIN, TENNESSEE

Prepared by Franklin Planning Department

Franklin Board of Mayor and Aldermen

Tom Miller, Mayor

Ernie Bacon Beverly Burger
Dan Klatt Robert Kriebel
Pam Lewis Dana McLendon
Dennis Phillips Dodson Randolph

Franklin Municipal Planning Commission

Mike Hathaway, Chair

Carol Croop Scott Harrision
Roger Lindsey Alma McLemore
Ann Petersen Dennis Phillips
Chair Hall

Fred Reynolds Chris Ude

City Administrator Jay Johnson **Interim Planning Director** Jaime Groce

Project Manager

Kelly Dannenfelser Planning Department

Project Team

Candace Connell

Russ Truell

Steve Sims

Mike Lowe

Todd Horton

Administration Department

Finance Department

Finance Department

Finance Department

Finance Department

Finance Department

Lisa Clayton Parks Department
Chris Gentry Police Department
David Parker Water and Wastewater
David Parker Engineering Department
Don Green Engineering Department
Joe Williams Solid Waste Department

Joe York Streets Department

TABLE OF CONTENTS

INTRODUCTION	1
PAST AND PRESENT ANNEXATION GROWTH	1
PROJECTED GROWTH PATTERNS	
PURPOSE OF THE STUDY	3
CURRENT POLICY	
PROPERTY VALUATION	4
REVENUES AND EXPENDITURES	6
MUNICIPAL INFRASTRUCTURE	7
SEWER AVAILABILITY	
WATER AVAILABILITY	
TRANSPORTATION AND ACCESS	7
SCHOOLS	
CONCLUSIONS AND RECOMMENDATIONS	8
REVENUE BASIS AND METHODOLOGY	15
STUDY AREA APPENDIX	21
TABLES	
Table 1 Annexations	1
Table 2 Costs Comparisons: First Year Impacts to Homeowners	
Table 3 Summary of Land Uses and Services	9
Table 4 Estimated Annual Revenues by Region	10
Table 5 Estimated Annual Revenues Southern Summary	11
Table 6 Estimated Annual Revenues Eastern Summary	12
Table 7 Estimated Annual Revenues Western Summary	13
Table 8 Estimated Annual Revenues Northern Summary	14
Table 9 Estimated Annual Expenditures	17
Table 10 Estimated Annual Expenditure Methodology	18
Table 11 Estimated Annual Revenues and Expenditures Summary	
Table 12 Estimated Revenues and Expenditures Over Time	20

STUDY AREA APPENDIX

SOUTHERN BASINS

Five-Mile Creek

Douglass Glen Subdivision Ellington Park Subdivision Goose Creek Estates Subdivision Henpeck Lane East Leeland Subdivision Redwing Meadows Subdivision Spring View Estates Subdivision Summer Hill Subdivision Walnut Winds Subdivision Windsor Park Subdivision

Goose Creek

Green Valley Subdivision

Nolen Cemetery

South Carothers Road

Robinson Lake

Lockwood Property

Donelson Creek

Columbia Pike Redwing Farms Subdivision Oak Valley Baptist Church Oakwood Estates Subdivision Oakleaf Estates Subdivision

EASTERN BASINS

Mayes Creek

Hooper Property Wilson Pike East Wilson Pike West Balda/Hutcheson

Watson Branch

Breckenridge Subdivision Clovercroft Road South Clover Meadows Subdivision Ivy Glen Subdivision John Williams Road Murfreesboro Road North

WESTERN BASINS

Hatcher Spring

Rogers Properties Whitehall Farms Subdivision Carters Creek East Old Carters Creek East Gentry Properties East

West Harpeth

Gentry Properties West

Polk Creek

Carters Creek West Old Carters Creek West

NORTHERN BASINS

Monticello West

Bone Robert Carver Subdivision Monticello Subdivision

Green Hill

Deerfield Estates Subdivision Spencer Creek Place Subdivision

Spencer Creek

Meadows Property Franklin Road West Walnut Hills Subdivision

1.0 INTRODUCTION

Population growth for the City of Franklin has resulted from a combination of inmigration, natural growth (births minus deaths), and annexation. Over the past four decades, the City has annexed almost 24,000 acres. In the last two years alone, the City annexed over 4,300 acres, resulting in a total land area of 41.11 square miles (26,310.64 acres)¹. The land within the Franklin Urban Growth Boundary (UGB) totals 79.44 square miles (50,841 acres). The rate at which Franklin expands its corporate limits will depend on several factors—particularly the availability and capacity to extend municipal services. Most of the areas identified in this study are contiguous to Franklin's current boundary and are in the City's path for growth, and several of the areas already have water and sewer services.

2.0 PAST AND PRESENT ANNEXATION GROWTH

The Town of Franklin was originally laid out with 192 lots that surrounded the town square. In 1963 Franklin contained 1,200 acres (1.2 square miles). The City of Franklin today accounts for about six percent of Williamson County's total land area (584 square miles).

Table 1 Annexations

Period	Acres Annexed	Square Miles
1965 - 1969	397	0.62
1970 – 1979	2,389	3.73
1980 - 1989	10,787	16.85
1990 – 1999	3,183	4.97
2000 - 2001	1,528	2.38
2001 - 2002	554	0.86
2002 - 2003	153	0.24
2003 - 2004	590	0.92
2004 - 2005	3,984	6.22
2005 - 2006	359 ¹	0.56
Total	23,924	37.35

Source: Franklin Planning Department

2.1 PROJECTED GROWTH PATTERNS

The population is projected to be at or near 78,000² for the City and the UGB in 2020. In its efforts to plan for future growth, the City in 2004 developed a new

² City of Franklin *Twenty-Year Urban Growth Boundary Report*, September 2000.

¹ Total acreage as of November 1, 2006.

land use plan to manage growth within the city and the Franklin UGB. The City is in the process of updating its Zoning Ordinance to improve development standards and to implement the Land Use Plan recommendations within the corporate limits.

New construction is occurring in areas throughout the city and within the county near the city. Commercial development is on the rise in the northeastern portion of the city near the Cool Springs Interchange and the McEwen Drive interchange currently under construction. The next major growth generator for Franklin is the land around the Goose Creek/I-65 Interchange at the southern edge of the city. New residential development is planned and being constructed on the east, west and south sides of the city.

3.0 PURPOSE OF THE STUDY

The purpose of this study is to determine the feasibility of annexing specific areas within Franklin's UGB by outlining the costs and benefits associated with annexation. The study areas were generally shown by watershed, or drainage basin, and divided by geographic areas. The areas of study included the following subdivisions: Douglass Glen, Ellington Park, Goose Creek Estates, Leeland, Oakwood Estates, Oakleaf Estates, Redwing Meadows, Spring View Estates, Summer Hill, Walnut Winds, Windsor Park, Green Valley, Redwing Farms, Breckenridge, Ivy Glen, Whitehall Farms, Monticello Deerfield Estates, Spencer Creek Place, Walnut Hills and Bone Robert Carver. Also included in the study were areas along South Carothers Road, Henpeck Lane, Columbia Pike, Lewisburg Pike, Wilson Pike, Clovercroft Road, Murfreesboro Road, Del Rio Pike, Carters Creek Pike, Old Carters Creek Pike and Franklin Road (see Study Area Maps). The basis for selecting these areas varied. Customarily, a municipality will annex for the following reasons:

- To protect or to enhance the municipal tax base
- To increase size and population
- To ensure unified planning and zoning
- To distribute the cost of services more equitably
- To ensure orderly future growth in accordance with City standards

The City of Franklin shares similar motivations for annexing the areas included in this study. Some of the areas possessed many of the suburban characteristics found in the City, including numerous subdivisions located along both sides of Lewisburg Pike. Other areas were undeveloped and under growth pressure. Annexation would give Franklin an opportunity to influence patterns of development through its zoning, building and stormwater management regulations. In addition, the majority of residents lives within the social

boundaries of the City and already enjoy its benefits and services, such as employment, shopping facilities, and cultural and recreational activities. Through annexation, the City would increase its physical boundary and population, as well as its tax base.

Annexation proves also to benefit property owners being annexed. All would receive more extensive police and fire protection, lower-cost residential solid waste collection and disposal, and the right to participate in the political process at the municipal level. Almost one-third of the residents would receive lower water rates. Some residents would benefit from additional street lighting. The City has an Insurance Services Rating of 3 where water and fire hydrants are available, which is a favorable rating for keeping property insurance premiums low. Solid waste disposal is less expensive for City residents. The City charges \$3.50 per month, while most private services are about \$20 per month. Other benefits include protection of property values through zoning, subdivision and building regulations, which includes eliminating substandard structures. City property taxes can also be used as a deduction when computing federal income tax.

4.0 CURRENT POLICY

The Franklin Land Use Plan identifies policies on growth management. It is the intent of the city to manage growth in such a way as to maximize its benefits and minimize its negative impacts. The city plans to reap the economic benefits of well-planned growth and to protect and enhance the quality of life that is valued by the community. Specifically:

- The city desired to accommodate new growth in a fiscally responsible and environmentally sensitive manner.
- The city will plan for a projected year 2020 population of 78,000 persons in the city and the UGB. This population growth is expected to create a demand for approximately 9,300 new dwelling units.
- The city will plan for a projected employment increase of approximately 40,000 new employees in the UGB.
- A balance of residential and nonresidential land uses and densities will be targeted.
- Sprawling "leapfrog" land-use patterns will be discouraged. New growth will be encouraged next to existing development where infrastructure exists or can be provided efficiently.
- Community character and livability will be promoted through historic preservation, neighborhood preservation, linked open spaces and an emphasis on the pedestrian scale.

- The City of Franklin should have a separate identifiable character from nearby communities. The more intensely developed portions of the community should be surrounded by countryside with development designed to preserve rural character.
- While the city strives to promote high-quality development, the conservation of natural resources and open space, and orderly growth patterns, it recognizes that policies and regulations must be implemented on private property in a fair, predictable and reasonable manner.

5.0 PROPERTY VALUATION

Residential property in Williamson County is assessed at 25 percent of its appraised value. Other land uses, such as commercial uses, are assessed at 40 percent. The City's property tax rate is \$0.434. Properties outside of the City limits, but within the Franklin Special School District (FSSD), pay a combined property tax rate of \$3.14 per \$100 of assessed value, while properties within the City and within the FSSD pay a combined rate of \$3.03. Other areas within Williamson County within the UGB are taxed at a rate of \$2.31 per \$100 of assessed value.

A majority of the study areas are located outside of the Franklin Special School District (FSSD). Breckenridge Subdivision is one of the few in the Watson Branch watershed that is located inside the FSSD. Approximately 500 properties are provided with City of Franklin water, including the Ellington Park, Redwing Meadows, Windsor Park, Leeland, Whitehall Farms, Ivy Glen and Monticello Subdivisions. About 40 properties are served by City of Franklin sewer (part of Monticello Subdivision). The average residential property assessed value for the 1,700 properties in the study was \$295,000, which is about \$50,000 higher than the average for the city residences. Average water usage was assumed for the purposes of the Table 2 on the following page.

Based on the results of Table 2, the findings indicate that the first year pocketbook impact to a homeowner would be \$165 more when the property was not on City water and sewer. The first year impact to the homeowner would be \$220 less than current when the property was on City water and sewer. Both of these change in year two because the \$75 trash can fee would be a one-time cost in year one, so the benefits increase the second year.

Table 2 Costs Comparison: First Year Impacts to Homeowners

	INSIDE FR	ANKLIN	OUTSIDE F	RANKLIN
	FSSD	Wlm Co Schools	FSSD	Wlm Co Schools
PROPERTY TAX				
(1) APPRAISED VALUE	\$290,651	\$290,651	\$290,651	\$290,651
ASSESSED VALUE (@25%)	\$72,663	\$72,663	\$72,663	\$72,663
WILLIAMSON COUNTY TAX RATE	\$3.03	\$2.20	\$3.14	\$2.31
ESTIMATED PROPERTY TAX - COUNTY	\$2,202	\$1,599	\$2,282	\$1,679
CITY OF FRANKLIN TAX RATE	\$0.434	\$0.434	\$0.000	\$0.000
ESTIMATED PROPERTY TAX - CITY	\$315	\$315	\$0	\$0
TOTAL PROPERTY TAX	\$2,517	\$1,914	\$2,282	\$1,679
WATER (impact only if City of Franklin is the water pro	vider)			
AVERAGE RESIDENTIAL USAGE (7,200 gallons/mor	nth)			
RATE (per 1,000 gallons)	\$38.64	\$38.64	\$66.24	\$66.24
ESTIMATED WATER COST	\$278.21	\$278.21	\$476.93	\$476.93
SEWER (impact only if City of Franklin is the sewer prov AVERAGE RESIDENTIAL USAGE (7,200 gallons/mor	•			
RATE (per 1,000 gallons)	\$36.60	\$36.60	\$62.52	\$62.52
ESTIMATED SEWER COST	\$263.52	\$263.52	\$450.14	\$450.14
SOLID WASTE (impact only if City of Franklin is provide	der @ \$3.50/m	onth)		
CONTAINER FEE (ONE TIME)	\$75.00	\$75.00	\$0.00	\$0.00
MONTHLY SERVICE	\$42.00	\$42.00	\$240.00	\$240.00
(2) ESTIMATED SOLID WASTE COST	\$117.00	\$117.00	\$240.00	\$240.00
STORMWATER (assume impervious area for large resid	ential @ \$4.3	8/month)		
(3) ESTIMATED STORMWATER COST	\$52.56	\$52.56	\$0.00	\$0.00
TOTAL	\$3,228.32	\$2,625.22	\$3,208.68	\$2,845.58

⁽¹⁾ **Appraised Value** is the average residential property value of the total area that potentially could be annexed using the 2006 appraisal values

Solid Waste is not provided by COF outside the city. Private providers average $\sim $20/$ month for once/week service

⁽³⁾ Stormwater management is for provided for properties inside the city by the City of Franklin

5.1 REVENUES AND EXPENDITURES

Estimated annual revenues and expenditures were depicted in Tables 4 through 11 on the following pages of this report. Please see the tables for specific information. The assumptions that were made in deriving the numbers for revenues and expenditures are as follows:

Revenue assumptions:

- 1. All future development will be residential. (Residential is taxed at about half the rate of commercial properties.)
- 2. No sales tax was included.
- 3. Impact fees and facilities tax were not included because they generally cover capital costs.
- 4. The state shared revenues were based on FY05 receipts while FY07 expenses were used for forecasting.
- 5. The Hall income tax revenues included in the state shared forecast excluded the portion retained by the State in FY 03 to be returned to cities in FY07.
- 6. Population growth was estimated at 3% and has annually been 3-5%.

Expenditure assumptions:

- 1. Total annexation of all study areas upon passage rather than a phased, incremental annexation of study areas, which would spread the cost across more time.
- 2. There is no timing delay for expenditures even though there would be a delay in hiring new police, fire and solid waste personnel, and the extension of parks and street services.
- 3. The expenditures do not include capital expenses that are generally recovered by facilities tax and impact fees.
- 4. If a subdivision is located within the current response radius of an existing fire station, no incremental cost will be incurred.

General assumptions:

- 1. Rate of inflation = 2% for both revenues and expenditures.
- 2. Rate of infill = 3%.
- 3. Rate of population growth = 3% until year 25. Afterwards, growth = 1%
- 4. Infill (the rate of increasing population density without raising incremental services) drops in year 16 from 3% to 2%, and from 2% to 1% in year 20, and from 1% to 0% in year 25.

6.0 MUNICIPAL INFRASTRUCTURE

6.1 SEWER AVAILABILITY

The City of Franklin sanitary sewer system extends throughout several areas in this study, including the Ivy Glen Subdivision and part of Monticello Subdivision and Winstead Elementary School. Additionally, there are extensions of the sanitary sewer system underway that will provide service to the Clovercroft Road Area and the Five-Mile Creek Basin. Most of the other study areas, while not connected to City sanitary sewer, are in proximity of existing sewer lines or pump stations that make sewer extension highly possible, although at a greater cost. Current City policy is to require development to extend sanitary sewer service to new developments and for existing subdivisions to pay for sanitary sewer extensions through a special assessment district established for this purpose.

6.2 WATER AVAILABILITY

The City of Franklin's water district extends throughout its City boundary and to areas in Williamson County. Some areas in this study are served by Franklin's water district, although many others that receive water from Mallory Valley Utility District, H. B. & T. S. Utility District, or the Milcrofton Utility District. Each area would continue to be served within its current utility district after annexation.

6.3 TRANSPORTATION AND ACCESS

The study area for the 2004 Major Thoroughfare Plan Update included a study of major roadways throughout the UGB and the potential impacts of development. The Major Thoroughfare Plan recommends specific roadway construction and improvements within the City that will eventually affect areas in this study, particularly the extension of Mack Hatcher Parkway.

6.4 SCHOOLS

No changes to existing boundaries between the FSSD and Williamson County Schools will occur as a result of annexation. The respective school board will establish school assignment boundaries for each district.

7.0 CONCLUSIONS AND RECOMMENDATIONS

This study is intended to provide information by individual study areas to the Franklin Municipal Planning Commission and the Board of Mayor and Aldermen. Based upon this information, recommendations for individual areas can be considered.

Studies for annexation feasibility should continue to ensure the implementation of the future (now draft) City zoning regulations within the city's identified growth area, the Franklin UGB. Hillside and hilltop preservation has been identified as an important community amenity to protect, and annexation is a tool that should be utilized to help control and protect the hillsides surrounding Franklin. The transfer of development rights concept (being studied at the task force level) is another means of controlling and directing growth in certain areas and shifting growth away from others. Annexation is a tool that should be used in order to implement such a program.

Table 3 Summary of Land Uses and Services

					Cons	straints			Services to be expa	nded and maintained or f	acilities constructed	by the City		
AREA	Dwelling Units	Total Acres	Estimated Population	Road LF	Flood- Plain	Significant Slopes	Police	Fire	Water	Sewer	Schools	Streets	Streetlights	Refuse Collection
SOUTHERN														
Five-Mile Creek	500	1,241.35	1,396	59,435	Yes	Yes	Yes	Yes	City, H.B.&T.S	Septic, Private Sanitary	County	Yes	Yes	Yes
Goose Creek	186	249.58	520	21,200	Yes	No	Yes	Yes	H.B.&T.S	Septic	County	Yes	Yes	Yes
Nolen Cemetery	19	231.78	48	5,525	No	Yes	Yes	Yes	Milcrofton	Septic	County	Yes	Yes	Yes
Robinson Lake	. 7	61.11	19	3,125	Yes	Yes	Yes	Yes	Milcrofton	Septic	County	Yes	Yes	Yes
Donelson Creek	796	1,543.73	1,320	60,645	Yes	Yes	Yes	Yes	City, H.B.&T.S	City, Septic	County	Yes	Yes	Yes
TOTAL	1,508	3,327.55	3,303	149,930										
EASTERN														
Mayes Creek	64	893.29	179	17,245	No	Yes	Yes	Yes	Milcrofton	Septic	County	Yes	Yes	Yes
Watson Branch	258	615.45	721	29,583	No	Yes	Yes	Yes	City, Milcrofton	City, Septic	FSSD and County	Yes	Yes	Yes
TOTAL	322	1,508.74	900	46,828										
WESTERN														
Hatcher Spring	157	1,232.06	395	16,597	Yes	Yes	Yes	Yes	City, H.B.&T.S	City, H.B.&T.S, Septic	County	Yes	Yes	Yes
West Harpeth	3	302.61	9	7,850	Yes	No	Yes	Yes	H.B.&T.S.	Septic	County	Yes	Yes	Yes
Polk Creek	33	444.97	83	7,290	No	Yes	Yes	Yes	City, H.B.&T.S	City	County	Yes	Yes	Yes
TOTAL	193	1,979.64	487	31,737										
NORTHERN														
Monticello West	152	160.73	425	17,610	Yes	Yes	Yes	Yes	City, Mallory Valley	City, Septic	County	Yes	Yes	Yes
Green Hill	47	394.36	131	10,795	No	Yes	Yes	Yes	City, Mallory Valley	Septic	County	Yes	Yes	Yes
Spencer Creek	34	221.75	93	1,415	No	Yes	Yes	Yes	City, Mallory Valley	Septic	County	Yes	Yes	Yes
TOTAL	233	776.84	649	29,820										
GRAND TOTAL	2,256	7,592.77	5,339	258,315										

Table 4 Estimated Annual Revenues by Region

BASIN	NUMBER OF PARCELS	ACRES	2006 RESIDENTIAL MARKET APPRAISAL	2006 RESIDENTIAL ASSESSMENT	2006 COMMERCIAL APPRAISAL	2006 COMMERCIAL ASSESSMENT	PROPERTY TAX REVENUE - RESIDENTIAL	PROPERTY TAX REVENUE - COMMERCIAL	TOTAL BUSINESS TAX REVENUE	STATE SHARED (Incl Hall Income)	FRANCHISE FEES	WATER REVENUE IMPACT (ANNUAL)	SEWER REVENUE IMPACT (ANNUAL)	STORM WATER REVENUE (ANNUAL)	SOLID WASTE REVENUE (ANNUAL)	SOLID WASTE REVENUE (one time container)	TOTAL
FIVE MILE CREEK	533	1,163.83	\$170,598,600	\$42,649,650	\$2,062,900	\$825,160	\$185.099	\$3,581	\$350	\$177,934	\$25,050	(\$4,670)	\$0	\$26,838	\$21.420	\$38.250	\$435,604
TIVE WHILE CREEK	333	1,100.03	ψ170,330,000	\$ 12,017,030	\$2,002,500	ψ023,100	\$103,033	ψ5,301	ψ330	ψ177,554	\$25,030	(\$4,070)	\$0	Ψ20,030	Ψ21,420	\$30,230	φ455,004
GOOSE CREEK	186	224.93	\$40,635,800	\$10,158,950	\$0	\$0	\$44,090	\$0	\$0	\$66,279	\$9,100	\$0	\$0	\$9,566	\$7,644	\$13,650	\$136,679
NOLEN CEMETARY	19	227.97	\$4,355,000	\$1,088,750	\$0	\$0	\$4,725	\$0	\$0	\$6,118	\$900	\$0	\$0	\$946	\$756	\$1,350	\$13,445
ROBINSON LAKE	6	58.24	\$2,326,900	\$581,725	\$0	\$0	\$2,525	\$0	\$0	\$2,422	\$250	\$0	\$0	\$263	\$210	\$375	\$5,669
DONELSON CREEK	490	987.12	\$135,962,500	\$33,936,825	\$345,200	\$138,080	\$147,287	\$599	\$25	\$168,247	\$23,850	(\$3,362)	(\$389)	\$25,176	\$20,160	\$36,000	\$381,593
		'					,					(4.7)					
TOTAL - SOUTHERN BASINS	1,234	2,662.09	\$353,878,800	\$88,415,900	\$2,408,100	\$963,240	\$383,726	\$4,180	\$375	\$421,000	\$59,150	(\$8,032)	(\$389)	\$62,789	\$50,190	\$89,625	\$972,990
MAYES CREEK	80	794.40	\$19,296,800	\$4,841,240	\$300,300	\$120,120	\$21,011	\$521	\$25	\$22,815	\$3,600	\$0	\$0	\$3,732	\$2,982	\$5,325	\$54,686
WATSON BRANCH	282	574.95	\$84,712,400	\$21,178,100	\$186,200	\$74,480	\$91,913	\$323	\$0	\$91,899	\$13,300	\$0	\$0	\$14,244	\$11,382	\$20,325	\$223,061
TOTAL - EASTERN BASINS	362	1,369.35	\$104,009,200	\$26,019,340	\$486,500	\$194,600	\$112,924	\$845	\$25	\$114,714	\$16,900	\$0	\$0	\$17,976	\$14,364	\$25,650	\$277,747
HATCHER SPRING	131	1,084.63	\$39,287,800	\$9,821,950	\$971,700	\$388,680	\$42,628	\$1,687	\$125	\$50,347	\$5,950	(\$1,242)	\$0	\$6,465	\$5,166	\$9,225	\$111,126
WEST HARPETH	5	387.72	\$1,436,900	\$359,225	\$0	\$0	\$1,559	\$0	\$0	\$1,147	\$150	\$0	\$0	\$158	\$126	\$225	\$3,140
POLK CREEK	40	477.66	\$4,383,100	\$1,095,775	\$0	\$0	\$4,756	\$0	\$0	\$10,579	\$2,000	\$0	\$0	\$2,050	\$1,638	\$2,925	\$21,023
TOTAL - WESTERN BASINS	176	1,950.01	\$45,107,800	\$11,276,950	\$971,700	\$388,680	\$48,943	\$1,687	\$125	\$62,073	\$8,100	(\$1,242)	\$0	\$8,673	\$6,930	\$12,375	\$135,289
MONTICELLO WEST	158	139.08	\$43,111,100	\$10,777,775	\$0	\$0	\$46,776	\$0	\$0	\$54,171	\$7,650	(\$2,534)	(\$642)	\$8,042	\$6,426	\$11,475	\$119,888
GREEN HILL	57	389.18	\$29,101,100	\$7,275,275	\$0	\$0	\$31,575	\$0	\$0	\$16,697	\$2,650	(\$17)	(\$15)	\$2,681	\$2,142	\$3,825	\$55,713
SPENCER CREEK	36	254.61	\$8,521,000	\$2,130,250	\$0	\$0	\$9,246	\$318	\$0	\$11,854	\$1,750	\$0	\$0	\$1,893	\$1,512	\$2,700	\$26,573
TOTAL - NORTHERN BASINS	251	782.87	\$80,733,200	\$20,183,300	\$0	\$0	\$87,596	\$318	\$0	\$82,722	\$12,050	(\$2,550)	(\$657)	\$12,615	\$10,080	\$18,000	\$202,174
GRAND TOTAL	2,023	6,764.32	\$583,729,000	\$145,895,490	\$3,866,300	\$1,546,520	\$633,189	\$7,030	\$525	\$680,510	\$96,200	(\$11,824)	(\$1,046)	\$102,052	\$81,564	\$145,650	\$1,588,200

Table 5 Estimated Annual Revenues Southern Summary

BASIN	NAME	NUMBER OF PARCELS	ACRES	2006 RESIDENTIAL MARKET APPRAISAL	2006 RESIDENTIAL ASSESSMENT	2006 COMMERCIAL APPRAISAL	2006 COMMERCIAL ASSESSMENT	PROPERTY TAX REVENUE - RESIDENTIAL	PROPERTY TAX REVENUE COMMERCIAL	TOTAL BUSINESS TAX REVENUE	STATE SHARED (Incl Hall Income)	FRANCHISE FEES	WATER REVENUE	SEWER REVENUE (ANNUAL)	STORM WATER REVENUE (ANNUAL)	SOLID WASTE REVENUE (ANNUAL)	SOLID WASTE REVENUE (one time container)	TOTAL
FIVE MILE CREEK	DOUGLASS GLEN	43	75.63	\$17,550,900	\$4,387,725	\$0	\$0	\$19,043	\$0	\$0	\$14,276	\$2,100	\$0	\$0	\$2,188	\$1,722	\$3,075	\$39,328
FIVE MILE CREEK	ELLINGTON PARK	123	193.53	\$30,985,100	\$7,746,275	\$0	\$0	\$33,619	\$0	\$0	\$42,699	\$6,100	(\$1,904)	\$0	\$6,412	\$5,124	\$9,150	\$92,050
FIVE MILE CREEK	GOOSE CREEK ESTATES	68	74.01	\$26,540,700	\$6,635,175	\$0		\$28,797	\$0	\$0	\$24,217	\$3,400	\$0	\$0	\$3,574	\$2,856	\$5,100	\$62,844
FIVE MILE CREEK	HENPECK LN EAST	31	420.08	\$7,893,400	\$1,973,350	\$2,062,900	\$825,160	\$8,564	\$3,581	\$350	\$8,157	\$1,150	(\$66)	\$0	\$1,629	\$1,302	\$2,325	\$24,668
FIVE MILE													, ,					
CREEK FIVE MILE	LEELAND	29	84.37	\$8,508,300	\$2,127,075	\$0	\$0	\$9,232	\$0	\$0	\$8,922	\$1,250	(\$414)	\$0	\$1,314	\$1,050	\$1,875	\$21,354
CREEK FIVE MILE	REDWING MEADOWS	106	153.09	\$28,576,300	\$7,144,075	\$0	\$0	\$31,005	\$0	\$0	\$35,561	\$5,000	(\$1,656)	\$0	\$5,256	\$4,200	\$7,500	\$79,367
CREEK FIVE MILE	SPRING VIEW ESTATES	29	40.82	\$5,888,100	\$1,472,025	\$0	\$0	\$6,389	\$0	\$0	\$9,942	\$1,350	\$0	\$0	\$1,472	\$1,176	\$2,100	\$20,328
CREEK FIVE MILE	SUMMER HILL	33	36.96	\$15,559,700	\$3,889,925	\$0	\$0	\$16,882	\$0	\$0	\$9,942	\$1,300	\$0	\$0	\$1,419	\$1,134	\$2,025	\$30,677
CREEK	WALNUT WINDS	33	38.17	\$14,671,900	\$3,667,975	\$0	\$0	\$15,919	\$0	\$0	\$11,089	\$1,550	\$0	\$0	\$1,629	\$1,302	\$2,325	\$31,489
FIVE MILE CREEK	WINDSOR PARK	38	47.17	\$14,424,200	\$3,606,050	\$0	\$0	\$15,650	\$0	\$0	\$13,128	\$1,850	(\$629)	\$0	\$1,945	\$1,554	\$2,775	\$33,498
FIVE MILE	CREEK	533	1,163.83	\$170,598,600	\$42,649,650	\$2,062,900	\$825,160	\$185,099	\$3,581	\$350	\$177,934	\$25,050	(\$4,670)	\$0	\$26,838	\$21,420	\$38,250	\$435,604
GOOSE CREEK	GREEN VALLEY	186	224.93	\$40,635,800	\$10,158,950	\$0	\$0	\$44,090	\$0	\$0	\$66,279	\$9,100	\$0	\$0	\$9,566	\$7,644	\$13,650	\$136,679
NOLEN CEMETARY	SOUTH CAROTHERS RD	19	227.97	\$4,355,000	\$1,088,750	\$0	\$0	\$4,725	\$0	\$0	\$6,118	\$900	\$0	\$0	\$946	\$756	\$1,350	\$13,445
	LOCKWOOD																	
LAKE	PROPERTY	6	58.24	\$2,326,900	\$581,725	\$0	\$0	\$2,525	\$0	\$0	\$2,422	\$250	\$0	\$0	\$263	\$210	\$375	\$5,669
DONELSON CREEK	COLUMBIA PIKE	17	388.21	\$1,873,800	\$468,450	\$140,800	\$56,320	\$2,033	\$244	\$25	\$4,206	\$650	(\$414)	(\$389)	\$736	\$588	\$1,050	\$7,680
DONELSON CREEK	REDWING FARMS	134	165.31	\$39,993,000	\$9,998,250	\$204,400	\$81,760	\$43,392	\$355	\$0	\$47,670	\$6,700	\$0	\$0	\$6,990	\$5,628	\$10,050	\$110,736
DONELSON CREEK	OAKWOOD SUBDIVISION	241	296.46	\$65,220,900	\$16,305,225	\$0	\$0	\$70,765	\$0	\$0	\$84,379	\$11,900	(\$2,948)	\$0	\$12,509	\$9,996	\$17,850	\$186,601
DONELSON CREEK	OAKLEAF SUBDIVISION	92	97.85	\$27,308,400	\$6,827,100	\$0	\$0	\$29,630	\$0	\$0	\$30,590	\$4,400	\$0	\$0	\$4,625	\$3,696	\$6,600	\$72,941
DONELSON CREEK	OAK VALLEY BAPTIST CHURCH AREA	6	39.29	\$1,566,400	\$337,800	\$0	\$0	\$1,466	\$0	\$0	\$1,402	\$200	\$0	\$0	\$315	\$252	\$450	\$3,635
DONELSON	I CREEK	490	987.12	\$135,962,500	\$33,936,825	\$345,200	\$138,080	\$147,287	\$599	\$25	\$168,247	\$23,850	(\$3,362)	(\$389)	\$25,176	\$20,160	\$36,000	\$381,593
TOTAL - SC	OUTHERN BASINS	1,234	2,662.09	\$353,878,800	\$88,415,900	\$2,408,100	\$963,240	\$383,726	\$4,180	\$375	\$421,000	\$59,150	(\$8,032)	(\$389)	\$62,789	\$50,190	\$89,625	\$972,990

Table 6 Estimated Annual Revenues Eastern Summary

BASIN	NAME	NUMBER OF PARCELS	ACRES	2006 RESIDENTIAL MARKET APPRAISAL	2006 RESIDENTIAL ASSESSMENT	2006 COMMERCIAL APPRAISAL	2006 COMMERCIAL ASSESSMENT	PROPERTY TAX REVENUE - RESIDENTIAL	PROPERTY TAX REVENUE - COMMERCIAL	TOTAL BUSINESS TAX REVENUE	STATE SHARED (Incl Hall Income)	FRANCHISE FEES	WATER REVENUE IMPACT (ANNUAL)	IMPACT	STORM WATER REVENUE (ANNUAL)	SOLID WASTE REVENUE (ANNUAL)	SOLID WASTE REVENUE (one time container)	TOTAL
MAYES CREEK	HOOPER PROPERTY	14	216.48	\$2,940,500	\$735,125	\$0	\$0	\$3,190	\$0	\$0	\$4,589	\$650	\$0	\$0	\$683	\$546	\$975	\$9,658
MAYES CREEK	WILSON PIKE EAST	13	58.34	\$3,707,800	\$926,950	\$0	\$0	\$4,023	\$0	\$0	\$3,951	\$600	\$0	\$0	\$631	\$504	\$900	\$9,709
MAYES CREEK	WILSON PIKE WEST	44	428.65	\$10,566,900	\$2,658,765	\$300,300	\$120,120	\$11,539	\$521	\$25	\$11,344	\$2,050	\$0	\$0	\$2,102	\$1,680	\$3,000	\$29,262
MAYES CREEK	BALDA/HUTHESON	9	90.93	\$2,081,600	\$520,400	\$0	\$0	\$2,259	\$0	\$0	\$2,932	\$300	\$0	\$0	\$315	\$252	\$450	\$6,057
MAYES CR	EEK	80	794.40	\$19,296,800	\$4,841,240	\$300,300	\$120,120	\$21,011	\$521	\$25	\$22,815	\$3,600	\$0	\$0	\$3,732	\$2,982	\$5,325	\$54,686
WATSON BRANCH	BRECKENRIDGE	79	85.80	\$18,746,700	\$4,686,675	\$0	\$0	\$20,340	\$0	\$0	\$28,169	\$3,950	\$0	\$0	\$4,152	\$3,318	\$5,925	\$59,929
WATSON BRANCH	CLOVERCROFT SOUTH	15	96.37	\$4,022,000	\$1,005,500	\$0	\$0	\$4,364	\$0	\$0	\$3,187	\$650	\$0	\$0	\$788	\$630	\$1,125	\$9,619
WATSON BRANCH	CLOVER MEADOWS SUBDIVISION	16	17.19	\$4,631,200	\$1,157,800	\$0	\$0	\$5,025	\$0	\$0	\$5,736	\$800	\$0	\$0	\$841	\$672	\$1,200	\$13,074
WATSON BRANCH	IVY GLEN SUBDIVISION	131	124.71	\$47,592,800	\$11,898,200	\$0	\$0	\$51,638	\$0	\$0	\$43,464	\$6,100	\$0	\$0	\$6,465	\$5,166	\$9,225	\$112,833
WATSON BRANCH	JOHN WILLIAMS ROAD	20	193.74	\$5,021,200	\$1,255,300	\$0	\$0	\$5,448	\$0	\$0	\$5,353	\$850	\$0	\$0	\$894	\$714	\$1,275	\$13,259
WATSON BRANCH	MURFREESBORO ROAD NORTH	21	57.14	\$4,698,500	\$1,174,625	\$186,200	\$74,480	\$5,098	\$323	\$0	\$5,991	\$950	\$0	\$0	\$1,104	\$882	\$1,575	\$14,347
WATSON I	BRANCH	282	574.95	\$84,712,400	\$21,178,100	\$186,200	\$74,480	\$91,913	\$323	\$0	\$91,899	\$13,300	\$0	\$0	\$14,244	\$11,382	\$20,325	\$223,061
TOTAL - E	ASTERN BASINS	362	1,369.35	\$104,009,200	\$26,019,340	\$486,500	\$194,600	\$112,924	\$845	\$25	\$114,714	\$16,900	\$0	\$0	\$17,976	\$14,364	\$25,650	\$277,747

Table 7 Estimated Annual Revenues Western Summary

B AAS IN (C od e) BASIN	NAME	NUMBER OF PARCELS	ACRES	2006 RESIDENTIAL MARKET APPRAISAL	2006 RESIDENTIAL ASSESSMENT	2006 COMMERCIAL APPRAISAL	2006 COMMERCIAL ASSESSMENT	PROPERTY TAX REVENUE - RESIDENTIAL	PROPERTY TAX REVENUE - COMMERCIAL	TOTAL BUSINESS TAX REVENUE	STATE SHARED (Incl Hall Income)	FRANCHISE	WATER REVENUE IMPACT (ANNUAL)	SEWER REVENUE IMPACT (ANNUAL)	SOLID WASTE REVENUE (ANNUAL)	STORM WATER REVENUE (ANNUAL)	SOLID WASTE REVENUE (one time container)	TOTAL
HATCHER SPRING	ROGERS PROPERTIES	3	627.90	\$607,100	\$151,775	\$0	\$0	\$659	\$0	\$0	\$382	\$50	(\$17)	\$0	\$53	\$42	\$75	\$1,169
HATCHER SPRING	WHITEHALL FARMS	71	89.73	\$31,739,400	\$7,934,850	\$0	\$0	\$34,437	\$0	\$0	\$26,002	\$3,450	(\$1,143)	\$0	\$3,627	\$2,898	\$5,175	\$69,271
HATCHER SPRING	CARTERS CREEK EAST	4	100.05	\$547,200	\$136,800	\$0	\$0	\$594	\$0	\$0	\$1,020	\$150	\$0	\$0	\$158	\$126	\$225	\$2,048
HATCHER SPRING	OLD CARTERS CREEK EAST	48	178.84	\$5,160,400	\$1,290,100	\$971,700	\$388,680	\$5,599	\$1,687	\$125	\$21,923	\$2,150	(\$83)	\$0	\$2,523	\$2,016	\$3,600	\$35,940
HATCHER SPRING	GENTRY PROPERTIES EAST	5	88.11	\$1,233,700	\$308,425	\$0	\$0	\$1,339	\$0	\$0	\$1,020	\$150	\$0	\$0	\$105	\$84	\$150	\$2,697
HATCHER	SPRING	131	1,084.63	\$39,287,800	\$9,821,950	\$971,700	\$388,680	\$42,628	\$1,687	\$125	\$50,347	\$5,950	(\$1,242)	\$0	\$6,465	\$5,166	\$9,225	\$111,126
WEST HARPETH	GENTRY PROPERTIES-W	5	387.72	\$1,436,900	\$359,225	\$0	\$0	\$1,559	\$0	\$0	\$1,147	\$150	\$0	\$0	\$158	\$126	\$225	\$3,140
POLK CREEK	CARTERS CREEK WEST	21	331.95	\$2,221,400	\$555,350	\$0	\$0	\$2,410	\$0	\$0	\$3,314	\$1,050	\$0	\$0	\$1,051	\$840	\$1,500	\$8,665
POLK CREEK	OLD CARTERS CREEK WEST	19	145.71	\$2,161,700	\$540,425	\$0	\$0	\$2,345	\$0	\$0	\$7,265	\$950	\$0	\$0	\$999	\$798	\$1,425	\$12,357
POLK CREE	EK	40	477.66	\$4,383,100	\$1,095,775	\$0	\$0	\$4,756	\$0	\$0	\$10,579	\$2,000	\$0	\$0	\$2,050	\$1,638	\$2,925	\$21,023
TOTAL - W	ESTERN BASINS	176	1,950.01	\$45,107,800	\$11,276,950	\$971,700	\$388,680	\$48,942	\$1,687	\$125	\$62,073	\$8,100	(\$1,242)	\$0	\$8,673	\$6,930	\$12,375	\$135,288

Table 8 Estimated Annual Revenues Northern Summary

BASIN	NAME	NUMBER OF PARCELS	ACRES	2006 RESIDENTIAL MARKET APPRAISAL	2006 RESIDENTIAL ASSESSMENT	2006 COMMERCIAL APPRAISAL	2006 COMMERCIAL ASSESSMENT	PROPERTY TAX REVENUE - RESIDENTIAL	PROPERTY TAX REVENUE - COMMERCIAL	TOTAL BUSINESS TAX REVENUE	STATE SHARED (Incl Hall Income)	FRANCHISE FEES	WATER REVENUE IMPACT (ANNUAL)	SEWER REVENUE IMPACT (ANNUAL)	STORM WATER REVENUE (ANNUAL)	SOLID WASTE REVENUE (ANNUAL)		TOTAL
MONTICELLO WEST	BONE ROBERT CARVER	6	26.03	\$1,318,800	\$329,700	\$0	\$0	\$1,431	\$0	\$0	\$382	\$50	(\$17)	(\$15)	\$53	\$42	\$75	\$1,927
MONTICELLO WEST	MONTICELLO	152	113.05	\$41,792,300	\$10,448,075	\$0	\$0	\$45,345	\$0	\$0	\$53,788	\$7,600	(\$2,517)	(\$628)	\$7,989	\$6,384	\$11,400	\$117,961
MONTICELLO	WEST	158	139.08	\$43,111,100	\$10,777,775	\$0	\$0	\$46,776	\$0	\$0	\$54,171	\$7,650	(\$2,534)	(\$642)	\$8,042	\$6,426	\$11,475	\$119,888
GREEN HILL	DEERFIELD	48	346.08	\$23,971,100	\$5,992,775	\$0	\$0	\$26,009	\$0	\$0	\$13,893	\$2,250	(\$17)	(\$15)	\$2,208	\$1,764	\$3,150	\$46,092
GREEN HILL	SPENCER CR PLACE	9	43.10	\$5,130,000	\$1,282,500	\$0	\$0	\$5,566	\$0	\$0	\$2,804	\$400	\$0	\$0	\$473	\$378	\$675	\$9,621
GREEN HILL		57	389.18	\$29,101,100	\$7,275,275	\$0	\$0	\$31,575	\$0	\$0	\$16,697	\$2,650	(\$17)	(\$15)	\$2,681	\$2,142	\$3,825	\$55,713
SPENCER CREEK	MEADOWS PROPERTY	2	105.17	\$761,500	\$190,375	\$0	\$0	\$826	\$0	\$0	\$765	\$50	\$0	\$0	\$105	\$84	\$150	\$1,830
SPENCER CREEK	FRANKLIN RD WEST	19	89.41	\$4,800,600	\$1,200,150	\$0	\$0	\$5,209	\$0	\$0	\$5,991	\$950	\$0	\$0	\$999	\$798	\$1,425	\$13,947
SPENCER CREEK	WALNUT HILLS	15	60.03	\$2,958,900	\$739,725	\$0	\$0	\$3,210	\$318	\$0	\$5,098	\$750	\$0	\$0	\$788	\$630	\$1,125	\$10,795
SPENCER CR	REEK	36	254.61	\$8,521,000	\$2,130,250	\$0	\$0	\$9,246	\$318	\$0	\$11,854	\$1,750	\$0	\$0	\$1,893	\$1,512	\$2,700	\$26,573
TOTAL - NO	RTHERN BASINS	251	782.87	\$80,733,200	\$20,183,300	\$0	\$0	\$87,596	\$318	\$0	\$82,722	\$12,050	(\$2,550)	(\$657)	\$12,615	\$10,080	\$18,000	\$202,173

Revenue Basis and Methodology

<u>Scope</u> - The 2006 Annexation Study scope was to determine the revenue implications for the areas identified by Planning and Administration. All values reflect 2006 dollars and show the annual impact, except for one-time container fees. Future annexations would have different revenue impacts.

<u>Building the file</u> - Coordination with GIS resulted in an excel file for the study area of the specific parcels (map/parcel, address, property owner, acres, appraisal and assessment value). Separate files were established for the four basins (Southern, Eastern, Western and Northern) and worksheets for each study area. These were linked so that changes in one property would roll up.

<u>Commercial vs. Residential</u> - A calculation was made to determine the percent of assessed value to appraised value and allowed me to separate residential and commercial properties (25% for residential and 40% for commercial). This allowed separation and identification of the properties for subsequent calculations (e.g. potential business impacts). There were very few commercial properties and the impact on revenue was considered negligible for purposes of the study.

<u>Property Tax</u> – Revenue was assigned by property based on the assessed values using the 2006 rate (\$0.434/100 assessed value). Properties >10 acres were identified as potential for development. No effort was made to assign development value as revenue consideration should be determined at the point of development potential. This resulted in revenue in 2006 dollars with existing land use. It must be noted that revenue does not accrue in the year of annexation, but the year following (e.g. a property must be annexed as of December 31, 2006 to be on the tax rolls for bills issued October 1, 2007). The rate for 2007/later could be different from 2006 and affect revenue implications.

<u>Business Tax(es)</u> – Consideration was given for revenue from businesses but there were very few commercial properties. Therefore, there would be minimal revenue impact given the current use (e.g. the Henpeck Market also has a beer license and there are some commercial businesses located on Lewisburg just south of Henpeck Lane so an assigned value was made to reflect that some revenue would accrue). No attempt was made to coordinate with the County to determine business taxes paid by the businesses. A value of \$25 was assigned to each commercial property and \$250 for a beer license. Changes would occur as development occurred.

<u>State Shared Tax</u> – This revenue is a function of the amount paid by the State of Tennessee and the number of residents. The estimate was prepared using the current per capita value of \$127.46 experienced in the City and includes: sales tax, beer, petroleum, TVA, fuels, excise, mixed drink and Hall Income. This is consistent with budget planning efforts. The population values were developed by Planning for each study area.

<u>Franchise Fees</u> – This revenue stream from Comcast & Atmos is determined by revenue from providing these services to customers in Franklin and is a function of the rate the City applies and the revenue the provider receives from Franklin customers. The estimate was based on: the existing rates, similar market penetration for the affected area and percentage growth of properties (assumes this to be a function of households and thus growth would correlate). The

City currently has ~19,000 parcels and received \$1.3 million from these fees in FY 06. This equates to \$68/parcel, but was rounded down to \$50 due to multi-resident properties in the current number of properties (i.e. there are no apartment complexes being annexed).

<u>Local Permits</u> – This is to accommodate development and additions to existing properties. Numerically, most of the properties are already developed (however large tracts are being studied and development revenue for each tract should be reflected in that individual evaluation). Based on the value of permits issued for changes to existing residential properties annually, permit fees may only be a few thousand dollars/year. This data column was hidden in the worksheets.

<u>Impact Fees</u> – Consideration was given, but no attempt to add a value. Any future developments would be expected to stand on their own value. This data column was hidden in the worksheets.

<u>Water/sewer service</u> - An evaluation was made (checking individual records in some cases) to identify properties served by the City of Franklin as revenue reductions would occur due to rate reductions for in-the-city service. The impact was calculated using the current July 2006 rate differential for in/out of the city and assumed the average residential consumption (7,200 gallons/month/household). There were no commercial properties affected.

<u>Stormwater</u> – The estimate for stormwater revenue assumed that each improved parcel had some impervious area and thus impacted. For purposes of the study, the rate was assumed to be the large residential rate of \$4.38/month for an annual revenue stream per property of \$52.56. This results in potentially misstating revenue as there would be some properties that were open pasture and some with small homes, but this would be offset by commercial properties. However, this is expected to well within the estimate scope and the margin of error would be small and have minimal revenue impact.

<u>Solid Waste</u> – This estimate consisted of both annual (weekly service) and one time (container) components. It was assumed that each property with a residence/business would have service. The weekly service estimate used the current residential rate of \$3.50/month for an annual estimate of \$42. There was no special consideration given for commercial due to the small number of properties. The one-time residential container drop fee of \$75 was applied to each improved property.

Table 9 Estimated Annual Expenditures

	ESTIMATED	POLICE	FIRE	REFUSE	STREET		
AREA	POPULATION	PROTECTION	PROTECTION	COLLECTION/ DISPOSAL	MAINTENANCE	PARKS	TOTAL
SOUTHERN AREA							
FIVE MILE CREEK BASIN DOUGLAS GLEN SUBDIVISION	112	\$15,680	\$16,800	\$6,720	\$4,480	\$2,240	\$45,920
ELLINGTON PARK SUBDIVISION	335	\$46,900	\$50,250	\$20,100	\$13,400	\$6,700	\$137,350
GOOSE CREEK ESTATES SUBDIVISION	190	\$26,600	\$28,500	\$11,400	\$7,600	\$3,800	\$77,900
HENPECK LANE AREA EAST	64	\$8,960	\$9,600	\$3,840	\$2,560	\$1,280	\$26,240
LEELAND SUBDIVISION	70	\$9,800	\$10,500	\$4,200	\$2,800	\$1,400	\$28,700
REDWING MEADOWS SUBDIVISION	279	\$39,060	\$41,850	\$16,740	\$11,160	\$5,580	\$114,390
SPRING VIEW ESTATES SUBDIVISION	78	\$10,920	\$11,700	\$4,680	\$3,120	\$1,560	\$31,980
SUMMER HILL SUBDIVISION	78	\$10,920	\$11,700	\$4,680	\$3,120	\$1,560	\$31,980
WALNUT WINDS SUBDIVISION	87	\$12,180	\$13,050	\$5,220	\$3,480	\$1,740	\$35,670
WINDSOR PARK SUBDIVISION	103	\$14,420	\$15,450	\$6,180	\$4,120	\$2,060	\$42,230
TOTAL FIVE MILE CREEK BASIN	1,396	\$195,440	\$209,400	\$83,760	\$55,840	\$27,920	\$572,360
GOOSE CREEK BASIN GREEN VALLEY SUBDIVISION	520	\$72,800	\$78,000	\$31,200	\$20,800	\$10,400	\$213,200
TOTAL GOOSE CREEK BASIN	520	\$72,800	\$78,000	\$31,200	\$20,800	\$10,400	\$213,200
NOLEN CEMETERY BASIN	020	ψ <i>1</i> 2 /000	<i>\$10,000</i>	ψ01/200	Ψ20/000	\$10/100	4210)200
SOUTHERN CAROTHERS RD AREA	48	\$6,720	\$7,200	\$2,880	\$1,920	\$960	\$19,680
TOTAL NOLEN CEMETERY BASIN	48	\$6,720	\$7,200	\$2,880	\$1,920	\$960	\$19,680
ROBINSON LAKE BASIN							
LOCKWOOD PROPERTY AREA	19	\$2,660	\$2,850	\$1,140	\$760	\$380	\$7,790
TOTAL ROBINSON LAKE BASIN	19	\$2,660	\$2,850	\$1,140	\$760	\$380	\$7,790
DONELSON CREEK BASIN					2000		
COLUMBIA PIKE AREA	33	\$4,620	\$4,950	\$1,980	\$1,320	\$660	\$13,530
OAK VALLEY BAPTIST CHURCH AREA	11	\$1,540	\$1,650	\$660	\$440	\$220	\$4,510
REDWING FARMS	374	\$52,360	\$56,100	\$22,440	\$14,960	\$7,480	\$153,340
OAKWOOD ESTATES SUBDIVISION	662	\$92,680	\$99,300	\$39,720	\$26,480	\$13,240	\$271,420
OAKLEAF ESTATES SUBDIVISION TOTAL DONELS ON CREEK PASIN	240 1,320	\$33,600 \$184,800	\$36,000 \$198,000	\$14,400 \$79,200	\$9,600 \$52,800	\$4,800 \$26,400	\$98,400 \$541,200
TOTAL DONELSON CREEK BASIN TOTAL SOUTHERN AREA	3,303				-		
EASTERN AREA	0,505	\$462,420	\$495,450	\$198,180	\$132,120	\$66,060	\$1,354,230
MAYES CREEK BASIN							
BALDA/HUTCHESON PROPERTIES AREA	23	\$3,220	\$3,450	\$1,380	\$920	\$460	\$9,430
HOOPER PROPERTY AREA	36	\$5,040	\$5,400	\$2,160	\$1,440	\$720	\$14,760
WILSON PIKE EAST AREA	31	\$4,340	\$4,650	\$1,860	\$1,240	\$620	\$12,710
WILSON PIKE WEST AREA	89	\$12,460	\$13,350	\$5,340	\$3,560	\$1,780	\$36,490
TOTAL MAYES CREEK BASIN	179	\$25,060	\$26,850	\$10,740	\$7,160	\$3,580	\$73,390
WATSON BRANCH BASIN							
BRECKENRIDGE SUBDIVISION	221	\$30,940	\$33,150	\$13,260	\$8,840	\$4,420	\$90,610
CLOVER MEADOWS SUBDIVISION	45	\$6,300	\$6,750	\$2,700	\$1,800	\$900	\$18,450
CLOVERCROFT ROAD SOUTH AREA	25	\$3,500	\$3,750	\$1,500	\$1,000	\$500	\$10,250
IVY GLEN SUBDIVISION	341	\$47,740	\$51,150	\$20,460	\$13,640	\$6,820	\$139,810
JOHN WILLIAMS ROAD AREA	42	\$5,880	\$6,300	\$2,520	\$1,680	\$840	\$17,220
MURFREESBORO RD NORTH PROPERTIES TOTAL WATSON BRANCH BASIN	47 721	\$6,580 \$100,940	\$7,050 \$108,150	\$2,820 \$43,260	\$1,880 \$28,840	\$940 \$14,420	\$19,270 \$295,610
TOTAL EASTERN AREA	900	\$100,940	\$135,000	\$54,000	\$36,000	\$18,000	\$369,000
WESTERN AREA		Ψ120,000	Ψ155,000	ψ.54,000	ψ50,000	Ψ10,000	φ307,000
HATCHER SPRING BASIN							
CARTERS CREEK EAST	8	\$1,120	\$1,200	\$480	\$320	\$160	\$3,280
GENTRY PROPERTIES EAST AREA	8	\$1,120	\$1,200	\$480	\$320	\$160	\$3,280
OLD CARTERS CREEK EAST	172	\$24,080	\$25,800	\$10,320	\$6,880	\$3,440	\$70,520
ROGERS PROPERTIES	3	\$420	\$450	\$180	\$120	\$60	\$1,230
WHITEHALL SUBDIVISION	204	\$28,560	\$30,600	\$12,240	\$8,160	\$4,080	\$83,640
TOTAL HATCHER SPRING BASIN	395	\$55,300	\$59,250	\$23,700	\$15,800	\$7,900	\$161,950
POLK CREEK BASIN	2.5	40	40.777	da =	da o co	45	440
CARTERS CREEK WEST	26 57	\$3,640	\$3,900	\$1,560 \$3,420	\$1,040	\$520 \$1.140	\$10,660 \$22,270
OLD CARTERS CREEK WEST	83	\$7,980 \$11,620	\$8,550 \$12,450	\$3,420 \$4,980	\$2,280 \$3,320	\$1,140 \$1,660	\$23,370 \$34,030
WEST HARPETH BASIN	83	\$11,020	\$12, 4 5U	\$ 4 ,700	\$3,320	\$1,000	φ34,030
GENTRY PROPERTIES WEST AREA	9	\$1,260	\$1,350	\$540	\$360	\$180	\$3,690
TOTAL WEST HARPETH BASIN	9	\$1,260	\$1,350 \$1,350	\$540	\$360	\$180	\$3,690
TOTAL WESTERN AREA	487	\$68,180	\$73,050	\$29,220	\$19,480	\$9,740	\$199,670
NORTHERN AREA							
GREEN HILL BASIN							
DEERFIELD ESTATES SUBDIVISION	109	\$15,260	\$16,350	\$6,540	\$4,360	\$2,180	\$44,690
SPENCER CREEK PLACE SUBDIVISION	22	\$3,080	\$3,300	\$1,320	\$880	\$440	\$9,020
TOTAL GREEN HILL BASIN	131	\$18,340	\$19,650	\$7,860	\$5,240	\$2,620	\$53,710
MONTICELLO WEST BASIN					***		
BONE ROBERT CARVER SUBDIVISION	3	\$420	\$450	\$180	\$120	\$60	\$1,230
MONTICELLO SUBDIVISION AREA	422	\$59,080	\$63,300	\$25,320	\$16,880	\$8,440	\$173,020
TOTAL MONTICELLO WEST BASIN	425	\$59,500	\$63,750	\$25,500	\$17,000	\$8,500	\$174,250
SPENCER CREEK BASIN FRANKLIN ROAD WEST PROPERTIES	47	\$6,580	\$7,050	\$2,820	\$1,880	\$940	\$19,270
MEADOWS PROPERTY	6	\$6,580 \$840	\$7,050 \$900	\$2,820 \$360	\$1,880 \$240	\$940 \$120	\$19,270 \$2,460
WALNUT HILLS SUBDIVISION	40	\$840 \$5,600	\$900 \$6,000	\$360 \$2,400	\$240 \$1,600	\$120 \$800	\$2,460 \$16,400
TOTAL SPENCER CREEK BASIN	93	\$13,020	\$13,950	\$2,400 \$159,960	\$3,720	\$1,860	\$38,130
TOTAL NORTHERN AREA	649	\$90,860	\$97,350	\$193,320	\$25,960	\$12,980	\$266,090
		470,000	977,000	ψ1 <i>30</i> 3020	Q20,500	ψ1 2 η700	Ψ±00,090
TOTAL ALL AREAS	5,339	\$747,460	\$800,850	\$474,720	\$213,560	\$106,780	\$2,188,990
	,	. ,	, ,	. 4	. ,,		. , ,

NOTE: ANNUAL SERVICE COSTS ESTIMATED FROM DEPARTMENT BUDGETS FOR FISCAL YEAR 2007 PROVIDING SERVICES TO APPROXIMATE POPULATION OF 50,000. SEE TABLE 10 FOR METHODOLOGY.

Table 10 Expenditure Basis and Methodology

SERVICE	2007 BUDGET (EXCLUDING CAPITAL)	LESS: ESTIMATED FIXED COSTS	ESTD VARIABLE COST	DIVIDE BY APPROXIMATE 50,000 POPULATION	ESTD VARIABLE COST PER CITIZEN (ROUNDED)
POLICE	11,511,484	(\$4,604,594)	\$6,906,890	50,000	\$140
FIRE	9,382,740	(\$2,064,203)	\$7,318,537	50,000	\$150
REFUSE COLLECTION/DISPOSAL	4,986,625	(\$1,845,051)	\$3,141,574	50,000	\$60
STREET	2,701,264	(\$540,253)	\$2,161,011	50,000	\$40
PARKS	1,488,854	(\$521,099)	\$967,755	50,000	\$20
TOTAL	30,070,967	(9,575,199)	20,495,768	50,000	\$410

Estimated annual service costs uses as its basis the 2007 departmental operating budgets as the costs needed to provide service to approximately 50,000 current residents. Assuming a factor for fixed costs within the operating budgets that would not increase with additional population, the estimated variable portion of each department's personnel and operations budget was divided by 50,000 to estimate a cost per resident for each service. This cost per resident for each service was multiplied by the estimated populations in the study areas and used as the estimated annual service costs to the City for providing additional residents these services.

The revenues have been conservatively forecasted and the expenditures have been biased towards overestimation to provide a cautious snapshot of the financial impacts of annexation. In developing the snapshot, a number of assumptions were made for both revenues and expenditures.

Revenue assumptions:

- 1. All future development will be residential. (Residential is taxed at about half the rate of commercial properties.)
- 2. No sales tax was included.
- 3. Impact fees and facilities tax were not included because they generally cover capital costs.
- 4. The state shared revenues were based on FY05 receipts while FY07 expenses were used for forecasting.
- 5. The Hall income tax revenues included in the state shared forecast excluded the portion retained by the State in FY 03 to be returned to cities in FY07.
- 6. Population growth was estimated at 3% and has annually been 3-5%.

Expenditure assumptions:

- 1. Total annexation of all study areas upon passage rather than a phased, incremental annexation of study areas, which would spread the cost across more time.
- 2. There is no timing delay for expenditures even though there would be a delay in hiring new police, fire and solid waste personnel, and the extension of parks and street services.
- 3. The expenditures do not include capital expenses that are generally recovered by facilities tax and impact fees.

General assumptions:

- 1. Rate of inflation = 2% for both revenues and expenditures.
- 2. Rate of infill = 3%.
- 3. Rate of population growth = 3% until year 25. Afterwards, growth = 1%
- 4. Infill (the rate of increasing population density without raising incremental services) drops in year 16 from 3% to 2%, and from 2% to 1% in year 20, and from 1% to 0% in year 25.

Table 11 Estimated Annual Revenues and Operating Expenditures Summary

BASIN	NUMBER OF PARCELS	ACRES	ESTIMATED POPULATION	TOTAL REVENUES	TOTAL EXPENDITURES	REVENUES MINUS EXPENDITURES
FIVE MILE CREEK	533	1,163.83	1,396	\$435,604	\$572,360	(\$136,756)
COOCE CREEV	106	224.02	F20	¢126 670	£212 200	(PTC F01)
GOOSE CREEK	186	224.93	520	\$136,679	\$213,200	(\$76,521)
NOLEN CEMETARY	19	227.97	48	\$13,445	\$19,680	(\$6,235)
ROBINSON LAKE	6	58.24	19	\$5,669	\$7,790	(\$2,121)
DONELSON CREEK	490	987.12	1,320	\$381,593	\$541,200	(\$159,607)
TOTAL - SOUTHERN BASINS	1,234	2,662.09	3,303	\$972,990	\$1,354,230	(\$381,240)
MAYES CREEK	80	794.40	179	\$54,686	\$73,390	(\$18,704)
WATSON BRANCH	282	574.95	721	\$223,061	\$295,610	(\$72,549)
TOTAL - EASTERN BASINS	362	1,369.35	900	\$277,747	\$369,000	(\$91,253)
HATCHER SPRING	131	1,084.63	395	\$111,126	\$161,950	(\$50,824)
WEST HARPETH	5	387.72	9	\$3,140	\$3,690	(\$550)
POLK CREEK	40	477.66	83	\$21,023	\$34,030	(\$13,007)
TOTAL - WESTERN BASINS	176	1,950.01	487	\$135,289	\$199,670	(\$64,381)
MONTICELLO WEST	158	139.08	425	\$119,888	\$174,250	(\$54,362)
GREEN HILL	57	389.18	131	\$55,713	\$53,710	\$2,003
SPENCER CREEK	36	254.61	93	\$26,573	\$38,130	(\$11,557)
TOTAL - NORTHERN BASINS	251	782.87	649	\$202,174	\$266,090	(\$63,916)
GRAND TOTAL	2,023	6,764.32	5,339	\$1,588,200	\$2,188,990	(\$600,790)

Data compiled from Tables 4 and 9 in this report.

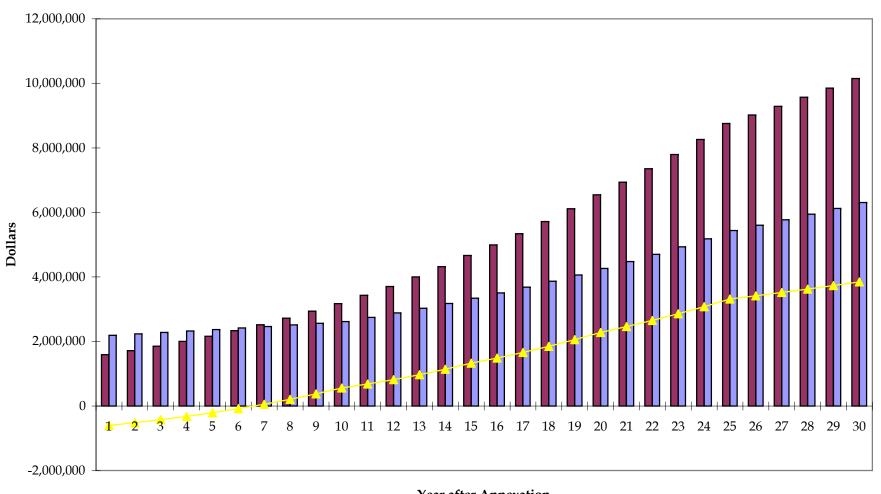
For vacant parcels when development occurs, such development would pay road impact fees and adequate facilities taxes as appropriate.

This table is based on the second year after annexation because the \$75 trash can fee is not included.

Annexation typically takes 7 to 10 years to recover the costs associated with annexation. It is then followed by a net gain to the City because the same marginal cost per person applies, but the fixed costs are spread over more people over more time.

See Table 10 for Assumptions.

Table 12 Estimated Revenues vs. Expenditures Over Time



Year after Annexation

See Table 10 for assumptions.

Revenue Expense — Net