

**A Fiscal Impact Analysis of  
The Briar Chapel Development**

**Prepared for**

**Newland Communities**

**Prepared by**

**Harry W. Miley, Jr. Ph.D.  
Miley & Associates, Inc.  
Columbia, South Carolina**

**And**

**Lucy L. Gallo, CPA  
Thomas, Knight, Trent, King and Company  
Durham, North Carolina**

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# **A Fiscal Impact Analysis of The Briar Chapel Development**

## **1. Introduction**

This study evaluates the fiscal impacts of Newland Communities' proposed Briar Chapel development on the Chatham County government and the Chatham County Board of Education. This analysis is intended to provide the County and the School Board with detailed information that will help them evaluate the impacts that the development will have on the community. This information will also help the County and School Board plan for changes in the demand for services that will occur over the project's buildout.

In addition, this analysis is specifically designed to address Section 11 – Community Facilities (11.1 & 11.2 Impact Assessment & Mitigation) of Chatham County's Compact Community Ordinance.

## **2. Project Description**

Briar Chapel is a mixed use, compact community proposed for development by Newland Communities on 1,589 acres of land in northeastern Chatham County. The development is designed in conformance with the Chatham County Compact Communities Ordinance and is located within the area specifically designated for compact communities by the Ordinance and the Chatham County Land Development and Conservation Plan.

The community will include 2,389 homes, ranging from apartment/condominium units to townhomes and single-family homes of a variety of sizes and levels of affordability; commercial areas; church; recreational spaces; hiking and biking trails; County facilities (sites for two schools, an elevated water tank, an EMS base station, a fire station, a water reclamation plant site and a library); a community wastewater treatment facility; a stormwater quality and detention system; major off-site roadway improvements; and over 50% of the site in preserved and improved open spaces.

The development site plan on the following page shows the proposed project. Newland Communities is donating two separate parcels of land for school needs. One site is for a Chatham County Public School, and the other site is for a Charter School. In addition, Newland Communities is donating 120 home sites to the County to help the County meet its affordable housing objectives.



## MASTER PLAN

- OPEN SPACE
- STREAM BUFFER
- PARK
- RESIDENTIAL LOTS
- MULTI-FAMILY RESIDENTIAL
- CIVIC
- RETAIL
- OFFICE
- STORM POND
- WATER RECLAMATION



### SITE DATA

Area	1,589.36 Acres
Total Units	2,389
Gross Density	1.50 Units/Acre
Lot Area	359.90 Acres
Net Density	6.64 Units / Acre

### **3. Fiscal Impacts On the Chatham County General Fund**

The revenue and expenditure impacts from Briar Chapel are outlined in this section of the report. The methodology and assumptions underlying these estimates are provided in Appendix B. In general, the impacts are identified on an annual basis and then summarized at the time of the project's buildout. The estimates are based on constant, 2004 dollars and assume no inflation during the project's buildout. This assumption is based on the fact that over the buildout period, both net revenues and expenditures will rise proportionately and therefore inflation will have little, if any, affect on the net results of the analysis. This assumption applies to all estimates in this analysis, including: property values, incomes, sales, County revenues and expenditures and School operating and capital expenditures.

It is estimated that there will be approximately 300 dwelling units per year built in Briar Chapel and will take about eight years to build out. This absorption rate is based on market analyses undertaken in April 2002, by Robert Charles Lesser & Co., LLC (see Appendix C).

#### ***Revenue Impacts<sup>1</sup>***

The impacts of Briar Chapel on the revenues of Chatham County government are outlined in this section. The revenues that Briar Chapel will generate for the County can be grouped into three major categories; property taxes, sales taxes and impact fees and voluntary contributions.

The estimated revenues from all sources generated in the first eight years of the project's development are provided in Table 1. Annual County revenues grow from about \$760,000 in Year 1 to \$6.4 million a year in the eighth year. Table 2 provides a detailed analysis of all County revenues from Briar Chapel at the development's buildout. The primary revenue source from Briar Chapel will be ad valorem tax revenues generated from the residential and commercial improvements in the project. Total annual property taxes generated at buildout from Briar Chapel will be approximately \$5.5 million (86% of total revenues).

As seen in Table 2, the residential property values in Briar Chapel will increase by a total of over \$757 million at buildout. Annual residential property taxes will be almost \$4.8 million. Annual property taxes from commercial development in Briar Chapel at buildout will be almost \$370,000. Property taxes from vehicles owned by property owners in Briar Chapel are estimated to be \$346,000 per year.

In addition to property tax revenues, Briar Chapel will generate considerable economic activity that will result in increased sales tax collections for Chatham County government. It is estimated that sales taxes will increase by over \$900,000 a year at the time of the development's buildout. As seen in Table

2 and Table 2A, these sales taxes will be generated by Articles 39, 40, 42 and 44 collections. These sales taxes will represent approximately 14% of the total Chatham County tax revenues generated by Briar Chapel at the project's buildout.

In addition to property and sales taxes generated by Briar Chapel, the project will generate substantial revenues from impact fees – both required and voluntary. The County's existing school impact fee of \$1,500 per dwelling unit will generate \$3.6 million for school construction by the project's buildout. In addition, Newland Communities has committed to pay a voluntary school impact fee of an additional \$2,000 per dwelling unit. These voluntary fees will generate an additional \$4.5 million by the project's completion. This will result in a total of over \$8.1 million in impact fees for new school construction. Table 17 provides a complete description of all fees and costs for new school construction as a result of Briar Chapel.

Newland Communities is also voluntarily contributing land to the County for school sites and other facilities. These sites and improvements total over 135 acres and are valued at \$4.6 million (see Table 17A).

**Summary**  
**One Time Revenues and Donations to Chatham County**

School Impact Fees	\$ 3,583,500
Voluntary Impact Fees	4,538,000
Land/Improvements Donations	<u>4,575,400</u>
Total	\$12,696,900 =====

Table 1

**Briar Chapel Fiscal Impact Study  
Buildout Analysis**

	Total	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8
Annual Residential Sales	\$ 757,313,000	\$ 95,100,000	\$ 95,100,000	\$ 95,100,000	\$ 95,100,000	\$ 95,100,000	\$ 95,100,000	\$ 95,100,000	\$ 91,613,000
Annual Unit Sales	2,389	300	300	300	300	300	300	300	289
Cumulative Residential Sales	\$ 757,313,000	\$ 95,100,000	\$ 190,200,000	\$ 285,300,000	\$ 380,400,000	\$ 475,500,000	\$ 570,600,000	\$ 665,700,000	\$ 757,313,000
Cumulative # of Units	2,389	300	600	900	1,200	1,500	1,800	2,100	2,389
Revenues:									
Per Capita Revenues - Excluding Commercial	\$	1,028.07	\$ 1,028.07	\$ 1,028.07	\$ 1,028.07	\$ 1,028.07	\$ 1,028.07	\$ 1,028.07	\$ 1,028.07
Expenditures:									
Direct Expenditures Per Capita at Existing Service Levels, including Public School Operating Costs	\$	670.81	\$ 670.81	\$ 670.81	\$ 670.81	\$ 670.81	\$ 670.81	\$ 670.81	\$ 670.81
School Capital Debt Service - Per Capita		138.76	138.76	138.76	138.76	138.76	138.76	138.76	138.76
Expanded Service Levels Per Capita		127.36	127.36	127.36	127.36	127.36	127.36	127.36	127.36
Total Expenditures - Per Capita		936.93	936.93	936.93	936.93	936.93	936.93	936.93	936.93
Per Capita Surplus	\$	91.14	\$ 91.14	\$ 91.14	\$ 91.14	\$ 91.14	\$ 91.14	\$ 91.14	\$ 91.14
Buildout Analysis:									
Revenues:									
Revenues, Excluding Commercial	\$	761,799	\$ 1,523,597	\$ 2,285,396	\$ 3,047,194	\$ 3,808,993	\$ 4,570,792	\$ 5,332,590	\$ 6,066,456
Commercial Revenue		-	-	-	92,012	184,024	276,035	368,047	368,047
Total Revenues		761,799	1,523,597	2,285,396	3,139,206	3,993,017	4,846,827	5,700,637	6,434,503
Expenditures:									
Expenditures at Existing Service Levels	\$	497,068	\$ 994,135	\$ 1,491,203	\$ 1,988,270	\$ 2,485,338	\$ 2,982,405	\$ 3,479,473	\$ 3,958,315
School Capital Debt Service		102,819	205,637	308,456	411,275	514,093	616,912	719,731	818,779
Total Expenditures	\$	599,886	\$ 1,199,772	\$ 1,799,659	\$ 2,399,545	\$ 2,999,431	\$ 3,599,317	\$ 4,199,204	\$ 4,777,094
Net Surplus at Existing Service Levels	\$	161,912	\$ 323,825	\$ 485,737	\$ 739,661	\$ 993,585	\$ 1,247,510	\$ 1,501,434	\$ 1,657,409
Expenditures at Expanded Service Levels		94,377	188,754	283,130	377,507	471,884	566,261	660,638	751,554
Net Surplus with Expanded Service Levels	\$	67,536	\$ 135,071	\$ 202,607	\$ 362,154	\$ 521,701	\$ 681,249	\$ 840,796	\$ 905,855
Net Surplus at Net Present Value (NPV) Discount Rate = 6%	\$	2,638,520							
Expected New Residents	5,901	741	1,482	2,223	2,964	3,705	4,446	5,187	5,901
Public School Students	956	120	120	120	120	120	120	120	116
Cumulative Public School Students	956	120	240	360	480	600	720	840	956

**Table 2****Briar Chapel Fiscal Impact Study  
Tax Revenue Analysis****Residential Property Taxes:**

Residential tax base	\$ 757,313,000
Tax rate	0.6464%
Collection %	98.00%
Total estimated residential property taxes	<u>\$ 4,797,366</u>

**Commercial Property Taxes:**

Commercial tax base	\$ 58,100,000
Tax rate	0.6464%
Collection %	98.00%
Total estimated commercial property taxes	<u>\$ 368,047</u>

**Motor Vehicle Property Taxes:**

Average motor vehicle value per household, based on Federal Reserve Bulletin survey	\$ 26,350
# of Households	2,389
Motor vehicle tax base	62,950,150
Tax rate	0.6464%
Collection %	85.00%
Total estimated motor vehicle property taxes	<u>\$ 345,873</u>

**Article 39 Sales Tax:**

Residential tax base	\$ 757,313,000	
# of households	2,389	
Average value	317,000	
Earnings multiple	2.90	
Estimated household earnings	\$ 109,310	
Estimated % of earnings for Chatham County purchases	14.57%	Note: Qualifying sales tax purchases limited to food, gas and oil, household supplies and incidentals.
Estimated Briar Chapel/Chatham County purchases	\$ 38,038,255	
Article 39 Sales Tax Rate	1.00%	
Article 39 Sales Tax	<u>\$ 380,383</u>	

**Articles 40 and 42 Sales Taxes:**

Estimated Briar Chapel Population	5,901
FY04 Per Capita Rate - Table 2A	\$ 63.64
	<u>\$ 375,518</u>

**Article 44 Sales Tax:**

Estimated Briar Chapel Population	5,901
FY04 Per Capita Rate - Table 2A	\$ 28.35
	<u>\$ 167,316</u>

<b>Total Property Tax Revenues</b>	<b><u>\$ 5,511,286</u></b>
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<b>Total Sales Tax Revenues</b>	<b><u>\$ 923,217</u></b>
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Table 2A

**Briar Chapel Economic Impact Study  
Expanded Analysis of Sales Tax Allocations**

Source: NC Department of Revenue Local Government Distributions and Reimbursements:

Chatham County, Excluding Municipalities:	Article 40 1/2%	Article 42 1/2%	Article 39 1%	Article 44 1/2%	Total	Population
July 2003	\$ 141,567	\$ 140,422	\$ 151,141	\$ 87,659	\$ 520,789	50,954
August 2003	191,192	189,893	225,647	133,624	740,356	52,582
September 2003	199,843	198,694	210,014	131,881	740,432	52,582
October 2003	166,943	165,564	206,496	123,844	662,847	52,582
November 2003	156,932	155,732	221,471	118,358	652,493	52,582
December 2003	171,545	170,063	284,772	139,923	766,303	52,582
January 2004	207,449	206,313	277,099	155,240	846,101	52,582
February 2004	159,383	158,235	215,510	119,588	652,716	52,582
	<u>\$ 1,394,854</u>	<u>\$ 1,384,916</u>	<u>\$ 1,792,150</u>	<u>\$ 1,010,117</u>	<u>\$ 5,582,037</u>	
<b>Annualized</b>	<b>\$ 2,092,281</b>	<b>\$ 2,077,374</b>		<b>\$ 1,515,176</b>		
<b>Annualized Per Capita</b>	<b>\$ 39.79</b>	<b>\$ 39.51</b>		<b>\$ 28.82</b>		
<b>Total Articles 40 and 42 - Annualized</b>					<b>\$ 4,169,655</b>	
<b>Total Articles 40 and 42 Per Capita- Annualized</b>					<b>\$ 79.30</b>	

North Carolina:

						Population
<b>July 2003</b>						
Total Distributed Ad Valorem Basis	\$ 11,313,919	\$ 11,127,100	\$ 24,870,979	\$ 8,773,310	\$ 56,085,308	
Total Distributed Per Capita Basis	15,248,288	15,031,748	28,253,007	11,524,904	70,067,947	6,747,021
Total Distributed For Both	<u>\$ 26,562,207</u>	<u>\$ 26,158,848</u>	<u>\$ 53,123,986</u>	<u>\$ 20,298,214</u>	<u>\$ 126,143,255</u>	
<b>August 2003</b>						
Total Distributed Ad Valorem Basis	\$ 15,048,766	\$ 14,852,293	\$ 34,718,334	\$ 14,768,795	\$ 79,388,188	
Total Distributed Per Capita Basis	20,253,382	20,046,497	35,885,674	17,342,468	93,528,021	6,881,322
Total Distributed For Both	<u>\$ 35,302,148</u>	<u>\$ 34,898,790</u>	<u>\$ 70,604,008</u>	<u>\$ 32,111,263</u>	<u>\$ 172,916,209</u>	
<b>September 2003</b>						
Total Distributed Ad Valorem Basis	\$ 15,729,672	\$ 15,537,686	\$ 35,354,908	\$ 14,959,163	\$ 81,581,429	
Total Distributed Per Capita Basis	21,156,953	20,945,580	38,418,119	17,751,638	98,272,290	6,876,219
Total Distributed For Both	<u>\$ 36,886,625</u>	<u>\$ 36,483,266</u>	<u>\$ 73,773,027</u>	<u>\$ 32,710,801</u>	<u>\$ 179,853,719</u>	
<b>October 2003</b>						
Total Distributed Ad Valorem Basis	\$ 13,140,145	\$ 12,945,126	\$ 30,116,427	\$ 13,388,170	\$ 69,589,868	
Total Distributed Per Capita Basis	17,673,950	17,465,611	31,525,952	15,695,337	82,360,850	6,876,219
Total Distributed For Both	<u>\$ 30,814,095</u>	<u>\$ 30,410,737</u>	<u>\$ 61,642,379</u>	<u>\$ 29,083,507</u>	<u>\$ 151,950,718</u>	
<b>November 2003</b>						
Total Distributed Ad Valorem Basis	\$ 12,352,137	\$ 12,137,294	\$ 36,989,505	\$ 13,708,699	\$ 75,187,635	
Total Distributed Per Capita Basis	16,614,051	16,425,535	33,783,925	14,967,521	81,791,032	6,876,219
Total Distributed For Both	<u>\$ 28,966,188</u>	<u>\$ 28,562,829</u>	<u>\$ 70,773,430</u>	<u>\$ 28,676,220</u>	<u>\$ 156,978,667</u>	
<b>December 2003</b>						
Total Distributed Ad Valorem Basis	\$ 13,502,382	\$ 13,309,344	\$ 36,628,241	\$ 14,356,030	\$ 77,795,997	
Total Distributed Per Capita Basis	18,161,171	17,950,737	40,028,407	17,206,877	93,347,192	6,876,219
Total Distributed For Both	<u>\$ 31,663,553</u>	<u>\$ 31,260,081</u>	<u>\$ 76,656,648</u>	<u>\$ 31,562,907</u>	<u>\$ 171,143,189</u>	
<b>January 2004</b>						
Total Distributed Ad Valorem Basis	\$ 16,328,361	\$ 16,133,272	\$ 44,569,300	\$ 17,490,835	\$ 94,521,768	
Total Distributed Per Capita Basis	21,962,210	21,753,827	47,460,405	20,687,697	111,864,139	6,876,219
Total Distributed For Both	<u>\$ 38,290,571</u>	<u>\$ 37,887,099</u>	<u>\$ 92,029,705</u>	<u>\$ 38,178,532</u>	<u>\$ 206,385,907</u>	
<b>February 2004</b>						
Total Distributed Ad Valorem Basis	\$ 12,545,110	\$ 12,351,184	\$ 34,296,096	\$ 13,412,754	\$ 72,605,144	
Total Distributed Per Capita Basis	16,873,607	16,664,060	36,748,211	15,919,640	86,205,518	6,876,219
Total Distributed For Both	<u>\$ 29,418,717</u>	<u>\$ 29,015,244</u>	<u>\$ 71,044,307</u>	<u>\$ 29,332,394</u>	<u>\$ 158,810,662</u>	
<b>8 Months - Per Capita</b>	<b>\$ 147,943,612</b>	<b>\$ 146,283,595</b>		<b>\$ 131,096,082</b>		
<b>Annualized</b>	<b>\$ 221,915,418</b>	<b>\$ 219,425,393</b>		<b>\$ 196,644,123</b>		
<b>Per Capita</b>	<b>\$ 32.27</b>	<b>\$ 31.91</b>		<b>\$ 28.60</b>		
<b>Total Articles 40 and 42 Per Capita - Annualized</b>					<b>\$ 64.18</b>	

State of North Carolina Population

6,876,219

Briar Chapel Population

5,901

Chatham County Population Before Briar Chapel:

Chatham County	52,582	\$	1,696,973	\$	1,677,932	\$	1,503,725	\$	4,878,629
Cary	35								
Goldston	331								
Pittsboro	2,307								
Siler City	7,407								
<b>Total</b>	<u>62,662</u>								

Chatham County Population After Briar Chapel:

Chatham County	58,483	\$	1,885,791	\$	1,864,632	\$	1,671,041	\$	5,421,464
Cary	35								
Goldston	331								
Pittsboro	2,307								
Siler City	7,407								
<b>Total</b>	<u>68,563</u>								

Net Difference, Sales Tax Attributable to Briar Chapel

\$ 188,819   \$ 186,700   \$ 167,316   \$ 542,835

Sales Tax Per Capita - Briar Chapel Allocation

\$ 32.00   \$ 31.64   \$ 28.35

## *Expenditure Impact<sup>2</sup>*

Along with the substantial revenue impacts generated by Briar Chapel, there will be increased demands on the County and the School Board to meet the needs of the residents of the development. This section of the report describes Briar Chapel's impacts on the expenditures required of Chatham County government to meet those needs.

In general, the expenditure analysis assumes that the existing levels of service currently provided by Chatham County to all citizens in the County are provided to the residents of Briar Chapel. However, in discussions with County staff and officials, it was deemed appropriate to evaluate impacts on certain County expenditures and departments on a marginal cost basis, including capital as well as operating cost impacts. The following departments were evaluated using a marginal cost approach:

Recreation	Elections
Public Schools	Human Services
Inspections	Public Works Transfers
Environmental Health	Emergency Medical Services (EMS)
Emergency Telecommunications	Sheriff's Department – Deputies
Sheriff's Department – Jail	Northeast Library
Waste Management Fund	Utility Fund
North Chatham Fire District	Capital Improvements Program

The analysis estimates the additional costs of the services to the County by major department. Table 3 details the annual costs at existing service levels to the County by department at Briar Chapel's buildout. These estimates are based on a modified marginal cost approach including estimated per capita costs from the County's FY 2003-04 Budget. Additional detail of the impact on individual departments is provided in Tables 4–9A.

### *Existing Service Levels*

As seen in Table 3, at Briar Chapel's buildout it is estimated that the County's costs of providing services will increase by almost \$2.0 million per year. The department that will incur the largest cost increase is the Department of Public Safety – primarily the Sheriff's Office. At buildout, the Public Safety department is estimated to incur additional costs of almost \$750,000 a year. The Human Services department is estimated to see costs increase by \$516,000 a year while Administration Department costs are estimated to increase by \$300,000 a year. Other departments will experience increased costs as seen in Table 3.

### *Expanded Service Levels*

In an effort to provide additional information for the County, this analysis also estimates the costs to the County if the County were to increase the level of services to Chatham County residents above those supported in the 2003-04 Budget. The County may need or desire to increase the level of service of various departments. In an effort to anticipate some of the additional costs if the County were to choose to raise the level of service to all County residents, we have estimated the costs of increasing the level of service of the Public Safety Department (Sheriff and EMS) and implementing the County's CIP. See Appendix B for a description of these increased levels of service.

The costs of these expanded levels of service are shown in Table 10. The total annual costs of these expanded service levels are estimated to be \$752,000 more than those estimated at the existing level of service. These costs are primarily associated with the increase of Public Safety officers from the 2004 level of 1.3 officers per 1,000 population to a level of 2.3 officers per 1,000 population (a 77% increase in the level of service).

**Table 3**

**Briar Chapel Economic Impact Study  
Annual Fiscal Impact - At Buildout  
At Existing Service Levels**

**Incremental Tax Revenues:**

**Property Taxes**

Residential	\$ 4,797,366	
Commercial	368,047	
Motor Vehicle	345,873	
Total Property Taxes		\$ 5,511,286

**Sales Taxes**

Article 39	\$ 380,383	
Articles 40 and 42	375,518	
Article 44	167,316	
Total Sales Tax Revenues		923,217

<b>Total Incremental Tax Revenues</b>	<b>\$ 6,434,503</b>
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**Incremental Expenditures at Existing Service Levels:**

**Chatham County Government**

Administration	\$ 304,045	
Education, Culture, and Recreation (excluding schools)	160,515	
General Government	115,211	
Human Services	516,231	
Natural Resource Management	68,811	
Public Safety	746,520	

Total Chatham County Government Incremental Expenditures	\$ 1,911,333
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<b>Chatham County Schools Operating Costs</b>	<b>2,046,982</b>
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<b>Total Incremental Expenditures at Existing Service Levels</b>	<b>3,958,315</b>
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**Incremental Capital Costs:**

<b>Chatham County Schools - Annual Debt Service</b>	<b>818,779</b>
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<b>Incremental Surplus at Existing Service Levels</b>	<b>\$ 1,657,409</b>
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**Table 4**

**Briar Chapel Fiscal Impact Study  
Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)  
Administration Summary**

	<b>Buildings &amp; Grounds</b>	<b>County Attorney</b>	<b>County Manager</b>	<b>Court Facilities</b>	<b>Finance Office</b>	<b>Fleet Management</b>	<b>General Services</b>	<b>Information Technology</b>	<b>Total</b>
<b>Expenditures:</b>									
Salaries	\$ 198,696	\$ -	\$ 343,308	\$ -	\$ 306,511	\$ 58,316	\$ (225,000)	\$ 261,198	\$ 943,029
Other personnel costs	100,283	-	94,263	-	92,363	23,465	-	74,962	385,336
Operating	489,052	37,250	56,870	40,853	103,113	24,239	51,551	193,932	996,860
Public assistance	-	-	-	-	-	-	20,000	-	20,000
Debt	252,177	-	-	-	-	-	-	-	252,177
Transfers	-	-	-	-	-	-	250,000	-	250,000
Capital outlay	-	-	-	3,000	-	-	-	30,000	33,000
<b>Total expenditures</b>	<b>\$ 1,040,208</b>	<b>\$ 37,250</b>	<b>\$ 494,441</b>	<b>\$ 43,853</b>	<b>\$ 501,987</b>	<b>\$ 106,020</b>	<b>\$ 96,551</b>	<b>\$ 560,092</b>	<b>\$ 2,880,402</b>
<b>Revenues:</b>									
Fees and permits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grants	-	-	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-	-	-
Intergovernmental	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	-	-
Other taxes	-	-	-	-	-	-	-	-	-
Sales & service	-	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-	-
Fund balance	-	-	-	-	-	-	-	-	-
<b>Total revenues</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Net cost - excluding sales and property taxes</b>	<b>\$ 1,040,208</b>	<b>\$ 37,250</b>	<b>\$ 494,441</b>	<b>\$ 43,853</b>	<b>\$ 501,987</b>	<b>\$ 106,020</b>	<b>\$ 96,551</b>	<b>\$ 560,092</b>	<b>\$ 2,880,402</b>
<b>FTE's</b>	<b>9.25</b>	<b>-</b>	<b>6.00</b>	<b>-</b>	<b>7.00</b>	<b>2.00</b>	<b>-</b>	<b>6.00</b>	<b>30.25</b>
<b>Chatham County Population</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>
<b>Chatham County Per Capita Net Cost</b>	<b>\$ 18.61</b>	<b>\$ 0.67</b>	<b>\$ 8.84</b>	<b>\$ 0.78</b>	<b>\$ 8.98</b>	<b>\$ 1.90</b>	<b>\$ 1.73</b>	<b>\$ 10.02</b>	<b>\$ 51.53</b>
<b>Estimated Marginal County Costs for Briar Chapel:</b>									
<b>Estimated Briar Chapel Population</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>
<b>Marginal Operating Costs</b>	<b>\$ 109,801</b>	<b>\$ 3,932</b>	<b>\$ 52,191</b>	<b>\$ 4,629</b>	<b>\$ 52,988</b>	<b>\$ 11,191</b>	<b>\$ 10,192</b>	<b>\$ 59,121</b>	<b>\$ 304,045</b>
<b>Additional FTE's Anticipated</b>	<b>0.98</b>	<b>-</b>	<b>0.63</b>	<b>-</b>	<b>0.74</b>	<b>0.21</b>	<b>-</b>	<b>0.63</b>	<b>3.19</b>
<b>Total Anticipated FTE's</b>	<b>10.23</b>	<b>-</b>	<b>6.63</b>	<b>-</b>	<b>7.74</b>	<b>2.21</b>	<b>-</b>	<b>6.63</b>	<b>33.44</b>

FTE = Full-time equivalent personnel

**Table 5**

**Briar Chapel Fiscal Impact Study  
Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)  
Education, Culture, and Recreation Summary**

	Central Carolina Comm. Coll.	Chatham County Schools	Cooperative Extension Service	Library	Recreation Department	Total	Total Excluding Schools
<b>Expenditures:</b>							
Salaries	\$ -	\$ -	\$ -	\$ 280,109	\$ 90,086	\$ 370,195	\$ 370,195
Other personnel costs	-	-	12,918	112,059	37,871	162,848	162,848
Operating	313,172	16,708,432	247,494	308,208	27,610	17,604,916	896,484
Public assistance	48,200	-	3,600	-	-	51,800	51,800
Debt	53,654	2,826,418	-	-	-	2,880,072	53,654
Transfers	-	-	-	-	-	-	-
Capital outlay	-	-	5,306	-	133,388	138,694	138,694
<b>Total expenditures</b>	<b>\$ 415,026</b>	<b>\$ 19,534,850</b>	<b>\$ 269,318</b>	<b>\$ 700,376</b>	<b>\$ 288,955</b>	<b>\$ 21,208,525</b>	<b>\$ 1,673,675</b>
<b>Revenues:</b>							
Fees and permits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grants	-	252,127	-	120,000	-	372,127	120,000
Interest	-	-	-	-	-	-	-
Intergovernmental	-	-	12,918	9,000	-	21,918	21,918
Miscellaneous	-	-	-	-	-	-	-
Other taxes	-	-	-	-	-	-	-
Sales & service	-	-	-	17,500	30,600	48,100	48,100
Transfers	-	140,000	-	-	-	140,000	-
Fund balance	-	-	-	-	-	-	-
<b>Total revenues</b>	<b>\$ -</b>	<b>\$ 392,127</b>	<b>\$ 12,918</b>	<b>\$ 146,500</b>	<b>\$ 30,600</b>	<b>\$ 582,145</b>	<b>\$ 190,018</b>
<b>Net cost - excluding sales and property taxes</b>	<b>\$ 415,026</b>	<b>\$ 19,142,723</b>	<b>\$ 256,400</b>	<b>\$ 553,876</b>	<b>\$ 258,355</b>	<b>\$ 20,626,380</b>	<b>\$ 1,483,657</b>
<b>FTE's</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9.00</b>	<b>2.50</b>	<b>11.50</b>	<b>11.50</b>
<b>Chatham County Population</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>
<b>Less Siler City, provides recreation services</b>					<b>(7,002)</b>		
<b>Adjusted Population</b>					<b>48,900</b>		
<b>Chatham County Per Capita Net Cost</b>	<b>\$ 7.42</b>	<b>\$ 342.43</b>	<b>\$ 4.59</b>	<b>\$ 9.91</b>	<b>\$ 5.28</b>	<b>\$ 369.64</b>	<b>\$ 27.20</b>
<b>Estimated Marginal County Costs for Briar Chapel:</b>							
<b>Estimated Briar Chapel Population</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>
<b>Marginal Operating Costs</b>	<b>\$ 43,809</b>	<b>\$ 2,020,639</b>	<b>\$ 27,065</b>	<b>\$ 58,465</b>	<b>\$ 31,176</b>	<b>\$ 2,181,154</b>	<b>\$ 160,515</b>
<b>Additional FTE's Anticipated</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>0.95</b>	<b>0.30</b>	<b>1.25</b>	<b>1.25</b>
<b>Total Anticipated FTE's</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9.95</b>	<b>2.80</b>	<b>12.75</b>	<b>12.75</b>

FTE = Full-time equivalent personnel

**Table 6**

**Briar Chapel Fiscal Impact Study  
Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)  
General Government Summary**

	Elections	Governing Board	Register of Deeds	Tax Administration	Tax - Land Records	Tax - Revaluation	Total
<b>Expenditures:</b>							
Salaries	\$ 69,945	\$ 137,222	\$ 191,594	\$ 283,475	\$ 64,180	\$ 129,471	\$ 875,887
Other personnel costs	52,494	73,855	86,710	95,932	22,347	61,694	393,032
Operating	72,621	61,812	135,108	201,880	7,393	50,725	529,539
Public assistance	-	-	-	-	-	-	-
Debt	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-
Capital outlay	-	1,000	-	-	-	-	1,000
<b>Total expenditures</b>	<b>\$ 195,060</b>	<b>\$ 273,889</b>	<b>\$ 413,412</b>	<b>\$ 581,287</b>	<b>\$ 93,920</b>	<b>\$ 241,890</b>	<b>\$ 1,799,458</b>
<b>Revenues:</b>							
Fees and permits	\$ -	\$ -	\$ 365,000	\$ -	\$ -	\$ -	\$ 365,000
Grants	-	-	-	-	-	-	-
Interest	-	-	-	-	-	-	-
Intergovernmental	-	-	-	-	-	-	-
Miscellaneous	-	-	-	(6,500)	-	-	(6,500)
Other taxes	-	-	331,000	-	-	-	331,000
Sales & service	-	-	-	18,500	-	-	18,500
Transfers	-	-	-	-	-	-	-
Fund balance	-	-	-	-	-	-	-
<b>Total revenues</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 696,000</b>	<b>\$ 12,000</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 708,000</b>
<b>Net cost - excluding sales and property taxes</b>	<b>\$ 195,060</b>	<b>\$ 273,889</b>	<b>\$ (282,588)</b>	<b>\$ 569,287</b>	<b>\$ 93,920</b>	<b>\$ 241,890</b>	<b>\$ 1,091,458</b>
<b>FTE's</b>	<b>2.00</b>	<b>1.50</b>	<b>6.00</b>	<b>9.00</b>	<b>3.00</b>	<b>3.00</b>	<b>24.50</b>
<b>Chatham County Population</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>
<b>Chatham County Per Capita Net Cost</b>	<b>\$ 3.49</b>	<b>\$ 4.90</b>	<b>\$ (5.06)</b>	<b>\$ 10.18</b>	<b>\$ 1.68</b>	<b>\$ 4.33</b>	<b>\$ 19.52</b>
<b>Estimated Marginal County Costs for Briar Chapel:</b>							
<b>Estimated Briar Chapel Population</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>
<b>Marginal Operating Costs</b>	<b>\$ 20,590</b>	<b>\$ 28,911</b>	<b>\$ (29,829)</b>	<b>\$ 60,092</b>	<b>\$ 9,914</b>	<b>\$ 25,533</b>	<b>\$ 115,211</b>
<b>Additional FTE's Anticipated</b>	<b>0.21</b>	<b>0.16</b>	<b>0.63</b>	<b>0.95</b>	<b>0.32</b>	<b>0.32</b>	<b>2.59</b>
<b>Total Anticipated FTE's</b>	<b>2.21</b>	<b>1.66</b>	<b>6.63</b>	<b>9.95</b>	<b>3.32</b>	<b>3.32</b>	<b>27.09</b>

FTE = Full-time equivalent personnel

Table 7

**Briar Chapel Fiscal Impact Study**  
**Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)**  
**Human Services Summary**

	Council on Aging	Health Administration	Health - Comm. Promotion and Advocacy	Family Outreach Services	Health Preventive Services	Human Service Programs	Pass Through Grants	OPC Mental Health Area Program	Social Services	Total
<b>Expenditures:</b>										
Salaries	\$ 89,470	\$ 177,638	\$ 363,640	\$ 448,340	\$ 1,137,574	\$ -	\$ -	\$ -	\$ 2,229,652	\$ 4,446,314
Other personnel costs	26,743	53,388	153,736	149,846	388,417	-	-	-	789,916	1,562,046
Operating	449,269	48,029	41,875	28,170	315,934	214,862	271,426	517,262	453,373	2,340,200
Public assistance	-	-	194,612	55,428	69,641	-	-	-	5,293,612	5,613,293
Debt	-	-	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	-	-	-	-
Capital outlay	-	-	-	-	-	-	-	-	-	-
<b>Total expenditures</b>	<b>\$ 565,482</b>	<b>\$ 279,055</b>	<b>\$ 753,863</b>	<b>\$ 681,784</b>	<b>\$ 1,911,566</b>	<b>\$ 214,862</b>	<b>\$ 271,426</b>	<b>\$ 517,262</b>	<b>\$ 8,766,553</b>	<b>\$ 13,961,853</b>
<b>Revenues:</b>										
Fees and permits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Grants	-	17,708	400,850	254,176	355,445	-	320,776	-	3,348,375	4,697,330
Interest	-	-	-	-	-	-	-	-	-	-
Intergovernmental	-	-	-	-	-	-	-	8,000	-	8,000
Miscellaneous	-	-	-	-	-	-	-	-	-	-
Other taxes	-	-	-	-	-	-	-	-	-	-
Sales & service	-	-	25,971	274,814	464,458	-	-	-	20,000	785,243
Transfers	-	-	-	-	-	-	-	-	-	-
Fund balance	-	-	-	-	-	-	-	-	-	-
<b>Total revenues</b>	<b>\$ -</b>	<b>\$ 17,708</b>	<b>\$ 426,821</b>	<b>\$ 528,990</b>	<b>\$ 819,903</b>	<b>\$ -</b>	<b>\$ 320,776</b>	<b>\$ 8,000</b>	<b>\$ 3,368,375</b>	<b>\$ 5,490,573</b>
<b>Net cost - excluding sales and property taxes</b>	<b>\$ 565,482</b>	<b>\$ 261,347</b>	<b>\$ 327,042</b>	<b>\$ 152,794</b>	<b>\$ 1,091,663</b>	<b>\$ 214,862</b>	<b>\$ (49,350)</b>	<b>\$ 509,262</b>	<b>\$ 5,398,178</b>	<b>\$ 8,471,280</b>
<b>FTE's</b>	<b>2.00</b>	<b>4.50</b>	<b>6.25</b>	<b>17.15</b>	<b>31.10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>65.00</b>	<b>126.00</b>
<b>Net Chatham County Non-Income Dependent Programs, per Chatham County officials</b>	<b>\$ 565,482</b>	<b>\$ 261,347</b>	<b>\$ 327,042</b>	<b>\$ 152,794</b>	<b>\$ 1,091,663</b>	<b>\$ 214,862</b>	<b>\$ (49,350)</b>	<b>\$ 509,262</b>	<b>\$ 1,817,467</b>	<b>\$ 4,890,569</b>
<b>Chatham County Population</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>
<b>Chatham County Per Capita Net Cost</b>	<b>\$ 10.12</b>	<b>\$ 4.68</b>	<b>\$ 5.85</b>	<b>\$ 2.73</b>	<b>\$ 19.53</b>	<b>\$ 3.84</b>	<b>\$ (0.88)</b>	<b>\$ 9.11</b>	<b>\$ 32.51</b>	<b>\$ 87.48</b>
<b>FTE's - Non-Income Dependent Programs</b>	<b>2.00</b>	<b>4.50</b>	<b>6.25</b>	<b>17.15</b>	<b>31.10</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>21.88</b>	<b>82.88</b>
<b>Estimated Marginal County Costs for Briar Chapel:</b>										
<b>Estimated Briar Chapel Population</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>
<b>Marginal Operating Costs</b>	<b>\$ 59,690</b>	<b>\$ 27,587</b>	<b>\$ 34,521</b>	<b>\$ 16,128</b>	<b>\$ 115,232</b>	<b>\$ 22,680</b>	<b>\$ (5,209)</b>	<b>\$ 53,756</b>	<b>\$ 191,845</b>	<b>\$ 516,231</b>
<b>Additional FTE's Anticipated</b>	<b>0.21</b>	<b>0.48</b>	<b>0.66</b>	<b>1.81</b>	<b>3.28</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.31</b>	<b>8.75</b>
<b>Total Anticipated FTE's</b>	<b>2.21</b>	<b>4.98</b>	<b>6.91</b>	<b>18.96</b>	<b>34.38</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>67.31</b>	<b>134.75</b>

FTE = Full-time equivalent personnel



Table 8

**Briar Chapel Fiscal Impact Study**  
**Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)**  
**Natural Resource Management Summary**

	Central Permitting	Economic Development Corporation	Environmental Health	Inspections	Planning Department	Pittsboro- Siler City CVB	Public Works Transfers	Soil & Water Conservation District	Total
<b>Expenditures:</b>									
Salaries	\$ 107,495	\$ -	\$ 462,207	\$ 379,084	\$ 136,883	\$ 44,890	\$ -	\$ 113,114	\$ 1,243,673
Other personnel costs	35,992	-	148,526	121,819	42,283	13,371	-	37,711	399,702
Operating	33,611	164,746	48,736	63,216	18,516	29,205	-	15,881	373,911
Public assistance	-	-	6,700	-	-	-	-	-	6,700
Debt	-	-	-	-	-	-	-	-	-
Transfers	-	-	-	-	-	-	500,000	-	500,000
** Transfers excluded per Chatham County, no marginal costs anticipated	-	-	-	-	-	-	(500,000)	-	(500,000)
Capital outlay	-	-	-	-	-	-	-	-	-
<b>Total expenditures</b>	<b>\$ 177,098</b>	<b>\$ 164,746</b>	<b>\$ 666,169</b>	<b>\$ 564,119</b>	<b>\$ 197,682</b>	<b>\$ 87,466</b>	<b>\$ -</b>	<b>\$ 166,706</b>	<b>\$ 2,023,986</b>
<b>Revenues:</b>									
Fees and permits	\$ -	\$ -	\$ -	\$ 700,000	\$ -	\$ -	\$ -	\$ -	\$ 700,000
Grants	-	-	12,950	-	-	-	-	19,280	32,230
Interest	-	-	-	-	-	-	-	-	-
Intergovernmental	-	-	-	-	-	-	-	-	-
Miscellaneous	-	-	-	-	-	-	-	1,200	1,200
Other taxes	-	-	-	-	-	87,418	-	-	87,418
Sales & service	-	-	234,000	-	65,000	-	-	500	299,500
Transfers	-	-	-	-	-	-	-	-	-
Fund balance	-	-	-	-	-	-	-	-	-
<b>Total revenues</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 246,950</b>	<b>\$ 700,000</b>	<b>\$ 65,000</b>	<b>\$ 87,418</b>	<b>\$ -</b>	<b>\$ 20,980</b>	<b>\$ 1,120,348</b>
<b>Net cost - excluding sales and property taxes</b>	<b>\$ 177,098</b>	<b>\$ 164,746</b>	<b>\$ 419,219</b>	<b>\$ (135,881)</b>	<b>\$ 132,682</b>	<b>\$ 48</b>	<b>\$ -</b>	<b>\$ 145,726</b>	<b>\$ 903,638</b>
<b>FTE's</b>	<b>2.50</b>	<b>-</b>	<b>10.50</b>	<b>9.00</b>	<b>3.50</b>	<b>1.00</b>	<b>-</b>	<b>3.00</b>	<b>29.50</b>
<b>Chatham County Population</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>
<b>Chatham County Per Capita Net Cost</b>	<b>\$ 3.17</b>	<b>\$ 2.95</b>	<b>\$ 7.50</b>	<b>\$ (2.43)</b>	<b>\$ 2.37</b>	<b>\$ 0.00</b>	<b>\$ -</b>	<b>\$ 2.61</b>	<b>\$ 16.16</b>
<b>Estimated Marginal County Costs for Briar Chapel:</b>									
<b>Estimated Briar Chapel Population</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>
<b>Marginal Operating Costs</b>	<b>\$ 18,694</b>	<b>\$ 17,390</b>	<b>\$ 44,251</b>	<b>\$ (14,343)</b>	<b>\$ 14,005</b>	<b>\$ 5</b>	<b>\$ -</b>	<b>\$ 15,382</b>	<b>\$ 95,385</b>
<b>Adjusted for Applicable Marginal Costs - Table 8A</b>	<b>-</b>	<b>-</b>	<b>\$ (26,573)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>\$ (26,573)</b>
<b>Adjusted Marginal Operating Costs</b>	<b>\$ 18,694</b>	<b>\$ 17,390</b>	<b>\$ 17,678</b>	<b>\$ (14,343)</b>	<b>\$ 14,005</b>	<b>\$ 5</b>	<b>\$ -</b>	<b>\$ 15,382</b>	<b>\$ 68,811</b>
<b>Additional FTE's Anticipated</b>	<b>0.26</b>	<b>-</b>	<b>0.28</b>	<b>0.95</b>	<b>0.37</b>	<b>0.11</b>	<b>-</b>	<b>0.32</b>	<b>2.28</b>
<b>Total Anticipated FTE's</b>	<b>2.76</b>	<b>-</b>	<b>10.78</b>	<b>9.95</b>	<b>3.87</b>	<b>1.11</b>	<b>-</b>	<b>3.32</b>	<b>31.78</b>

Note 1

FTE = Full-time equivalent personnel

Note 1 - Although the impact of the Inspections Department results in a net surplus due to offsetting fees generated, the FTE needs for this department will vary with the actual buildout rate.

**Table 8A**

**Briar Chapel Fiscal Impact Study  
Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)  
Environmental Health Analysis**

	<b>Environmental Health</b>
<b>Expenditures:</b>	
Salaries	\$ 462,207
Other personnel costs	148,526
Operating	48,736
Public assistance	6,700
Debt	-
Transfers	-
Capital outlay	-
	<hr/>
Total expenditures	\$ 666,169
	<hr/>
<b>Revenues:</b>	
Fees and permits	\$ -
Grants	12,950
Interest	-
Intergovernmental	-
Miscellaneous	-
Other taxes	-
Sales & service	234,000
Transfers	-
Fund balance	-
	<hr/>
Total revenues	\$ 246,950
	<hr/>
<b>Net cost - excluding sales and property taxes</b>	<b>\$ 419,219</b>
	<hr/>
<b>FTE's</b>	<b>10.50</b>
<b>Cost Per FTE</b>	<b>\$ 63,445</b>
<b># of FTEs for Applicable Inspections</b>	<b>2.75</b>
<b>Applicable Inspection Costs</b>	<b>\$ 174,473</b>
<b>Less Applicable Offsetting Revenue</b>	<b>(7,000)</b>
<b>Applicable Environment Health Costs</b>	<b>\$ 167,473</b>
<b>Chatham County Population</b>	<b>55,902</b>
<b>Chatham County Per Capita Net Cost</b>	<b>\$ 3.00</b>
<b>Estimated Marginal County Costs for Briar Chapel:</b>	
<b>Estimated Briar Chapel Population</b>	<b>5,901</b>
<b>Marginal Operating Costs</b>	<b>\$ 17,678</b>
<b>Additional FTE's Anticipated</b>	<b>0.28</b>
<b>Total Anticipated FTE's</b>	<b>10.78</b>

FTE = Full-time equivalent personnel

Table 9

**Briar Chapel Fiscal Impact Study**  
**Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)**  
**Public Safety Summary**

	Court- Related Programs	EMS	Emergency Operations	Emergency Telecom	Fire Marshal	Animal Control	Sheriff's Department	Sheriff - Jail	Total
<b>Expenditures:</b>									
Salaries	\$ 117,729	\$ -	\$ 115,953	\$ 352,308	\$ 129,311	\$ 171,272	\$ 1,909,212	\$ 396,716	\$ 3,192,501
Other personnel costs	38,145	-	37,791	218,850	46,889	81,898	783,720	174,945	1,382,238
Operating	199,342	1,415,814	197,980	102,809	19,192	52,709	463,467	194,433	2,645,746
Public assistance	-	-	264,814	-	-	-	38,594	-	303,408
Debt	-	-	-	-	-	-	-	-	-
Transfers	-	34,218	-	-	-	-	-	-	34,218
Capital outlay	-	-	15,357	4,623	-	-	104,114	-	124,094
<b>Total expenditures</b>	<b>\$ 355,216</b>	<b>\$ 1,450,032</b>	<b>\$ 631,895</b>	<b>\$ 678,590</b>	<b>\$ 195,392</b>	<b>\$ 305,879</b>	<b>\$ 3,299,107</b>	<b>\$ 766,094</b>	<b>\$ 7,682,205</b>
<b>Revenues:</b>									
Fees and permits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	2,700	\$ -	\$ 2,700
Grants	151,036	-	286,426	-	-	1,800	53,369	-	492,631
Interest	-	-	-	-	-	-	-	-	-
Intergovernmental	-	-	-	-	-	3,000	79,727	25,000	107,727
Miscellaneous	-	-	-	33,000	-	-	-	-	33,000
Other taxes	-	-	-	-	-	-	-	-	-
Sales & service	-	-	-	-	32,000	16,813	6,400	3,000	58,213
Transfers	-	-	-	-	-	-	5,572	-	5,572
Fund balance	-	-	-	-	-	-	-	-	-
<b>Total revenues</b>	<b>\$ 151,036</b>	<b>\$ -</b>	<b>\$ 286,426</b>	<b>\$ 33,000</b>	<b>\$ 32,000</b>	<b>\$ 21,613</b>	<b>\$ 147,768</b>	<b>\$ 28,000</b>	<b>\$ 699,843</b>
<b>Net cost - excluding sales and property taxes</b>	<b>\$ 204,180</b>	<b>\$ 1,450,032</b>	<b>\$ 345,469</b>	<b>\$ 645,590</b>	<b>\$ 163,392</b>	<b>\$ 284,266</b>	<b>\$ 3,151,339</b>	<b>\$ 738,094</b>	<b>\$ 6,982,362</b>
<b>FTE's</b>	<b>2.42</b>	<b>-</b>	<b>3.00</b>	<b>12.00</b>	<b>3.00</b>	<b>6.00</b>	<b>61.23</b>	<b>15.00</b>	<b>102.65</b>
<b>Chatham County Population</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>	<b>55,902</b>
<b>Chatham County Per Capita Net Cost</b>	<b>\$ 3.65</b>	<b>\$ 25.94</b>	<b>\$ 6.18</b>	<b>\$ 11.55</b>	<b>\$ 2.92</b>	<b>\$ 5.09</b>	<b>\$ 56.37</b>	<b>\$ 13.20</b>	<b>\$ 124.90</b>
<b>Estimated Marginal County Costs for Briar Chapel:</b>									
<b>Estimated Briar Chapel Population</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>	<b>5,901</b>
<b>Marginal Operating Costs</b>	<b>\$ 21,553</b>	<b>\$ 153,060</b>	<b>\$ 36,467</b>	<b>\$ 68,146</b>	<b>\$ 17,247</b>	<b>\$ 30,006</b>	<b>\$ 332,644</b>	<b>\$ 77,911</b>	<b>\$ 737,034</b>
<b>Allocation Adjustment - Additional Dispatcher Anticipated</b>				<b>\$ 47,597</b>					<b>\$ 47,597</b>
<b>Allocation Adjustment - No Add'l Jail Staff Anticipated</b>								<b>\$ (38,111)</b>	<b>\$ (38,111)</b>
<b>Adjusted Marginal Operating Costs</b>	<b>\$ 21,553</b>	<b>\$ 153,060</b>	<b>\$ 36,467</b>	<b>\$ 115,743</b>	<b>\$ 17,247</b>	<b>\$ 30,006</b>	<b>\$ 332,644</b>	<b>\$ 39,800</b>	<b>\$ 746,520</b>
<b>Additional FTE's Anticipated</b>	<b>0.26</b>	<b>-</b>	<b>0.32</b>	<b>1.27</b>	<b>0.32</b>	<b>0.63</b>	<b>6.46</b>	<b>1.58</b>	<b>10.84</b>
<b>Additional FTE's to Improve Level of Service</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1.00</b>	<b>-</b>	<b>-</b>	<b>7.11</b>	<b>(1.00)</b>	<b>7.11</b>
<b>Total Anticipated FTE's</b>	<b>2.68</b>	<b>-</b>	<b>3.32</b>	<b>14.27</b>	<b>3.32</b>	<b>6.63</b>	<b>74.80</b>	<b>15.58</b>	<b>120.59</b>
				<b>Note 1</b>				<b>Note 1</b>	

FTE = Full-time equivalent personnel

**Note 1 -** Existing level of service is based on the County standard of communications per 1,000 population (currently one communicator per 5,000 residents). For expanded level of services projections, the County anticipates an additional dispatcher will be needed to accommodate the increase in deputies in the Sheriff's Department. For this proposed development, the County does not anticipate the need for a full FTE for the Jail.

**Table 9A**

**Briar Chapel Economic Impact Study  
Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)  
Expanded Analysis of EMS Service**

**Assumptions:**

Estimated cost of new EMS Base	\$ 275,000	Financing Terms:	
Annual Debt Service for EMS Base	\$ 62,275	Interest Rate	5.00%
Population Served	10,000		
<b>Debt Service Allocation to Briar Chapel</b>	<b>\$ 36,747</b>		
Annual operating cost of EMS Unit	\$ 192,000	Term - in years	5
# of Units Needed	2		
Total EMS Units Annual Operating Cost	\$ 384,000		
Population Served	10,000		
<b>Annual EMS Units Operating Cost Allocated to Briar Chapel</b>	<b>\$ 226,592</b>		

**EMS  
Operating**

**Expenditures:**

Salaries	
Other personnel costs	\$ -
Operating	-
Public assistance	1,415,814
Debt	-
Transfers	-
Capital outlay	34,218
	-
Total expenditures	
	<u>\$ 1,450,032</u>

**Revenues:**

Fees and permits	
Grants	\$ -
Interest	-
Intergovernmental	-
Miscellaneous	-
Other taxes	-
Sales & service	-
Transfers	-
Fund balance	-
	-
Total revenues	
	<u>\$ -</u>

**Net cost - excluding sales and property taxes**

\$ 1,450,032

**Estimated Costs Assuming Per Capita Approach:**

<b>Chatham County Population</b>	
	<b>55,902</b>
<b>Chatham County Per Capita Net Cost</b>	
	<b>\$ 25.94</b>
<b>Estimated Marginal County Costs for Briar Chapel:</b>	
<b>Estimated Briar Chapel Population</b>	
	<u><b>5,901</b></u>
<b>Marginal Operating Costs</b>	
	<u><u><b>\$ 153,060</b></u></u>

**Estimated Costs Assuming Increased Levels of Service:**

<b>Per Capita Allocation of Transfer to Capital Reserve</b>	<b>\$ 3,612</b>
<b>Annual debt service for new EMS base</b>	<b>36,747</b>
<b>Annual operating costs of new EMS units</b>	<u><b>226,592</b></u>
<b>Total Antipated Costs</b>	<u><u><b>\$ 266,951</b></u></u>
<b>Additional Annual Costs Related to Increased Levels of Service</b>	<u><u><b>\$ 113,891</b></u></u>

**Table 10**

**Briar Chapel Fiscal Impact Study  
Annual Financial Impact - At Buildout  
At Expanded Service Levels**

**Incremental Tax Revenues:****Property Taxes**

Residential	\$4,797,366	
Commercial	368,047	
Motor Vehicle	345,873	
Total Property Taxes		\$5,511,286

**Sales Taxes**

Article 39	\$ 380,383	
Articles 40 and 42	375,518	
Article 44	167,316	
Total Sales Tax Revenues		923,217

**Total Incremental Tax Revenues** **\$ 6,434,503**

**Incremental Expenditures at Existing Service Levels:****Chatham County Government**

Administration	\$ 304,045	
Education, Culture, and Recreation (excluding schools)	160,515	
General Government	115,211	
Human Services	516,231	
Natural Resource Management	68,811	
Public Safety	746,520	
Total Chatham County Government Incremental Expenditures		\$1,911,333

**Chatham County Schools Operating Costs** 2,046,982

**Total Incremental Expenditures at Existing Service Levels** **3,958,315**

**Incremental Capital Costs:**

**Chatham County Schools - Annual Debt Service** 818,779

**Incremental Surplus at Existing Service Levels** **\$ 1,657,409**

**Expanded Service Level Expenditures:**

## Public Safety:

Sheriff's Department	\$ 364,664	
Emergency Medical Services	113,891	\$ 478,554

## Contribution to Countywide CIP Program:

Debt Service - all projects, excluding Library	146,511	
Operating Costs - all projects, excluding Library	45,574	
Debt Service - Northeast Library	61,581	
Operating Costs - Northeast Library, net	19,334	
Total contribution to Countywide CIP Program		<u>273,000</u>

**Total Expanded Service Level Expenditures** 751,554

**Annual Incremental Surplus at Expanded Service Levels** \$ 905,855

Table 11 provides more detail of the estimated costs for providing this expanded level of service in the Sheriff's Department. To increase the level of service that the Sheriff desires would require an additional 7 deputies for a total of 14 new officers. To provide this expanded level of service, the County would need to allocate an additional \$348,000 (for a total of \$663,000) to the Sheriff's department to serve the residents of Briar Chapel. Table 11 also reflects the estimated costs of a satellite facility for the Sheriff's Department attributable to Briar Chapel.

*County's Capital Improvement Program (CIP)*

In addition to the potential impact of the County choosing to increase the level of services county-wide, as outlined in Table 10, the County is also considering a Capital Improvement Program (CIP) that includes approximately \$22 million in new projects. The proposed 2005-2009 CIP is provided in Table 12 and outlines the projects to be funded. The total County annual debt service on the entire CIP is estimated to be \$2.1 million. The portion of that debt service attributable to the residents of Briar Chapel is estimated to be \$146,511 a year. This is distributed on a per capita basis (other than debt service on new Library, see Appendix B for further detail). In addition to the debt service on the CIP, it is estimated that the additional operating costs attributable to Briar Chapel associated with these capital improvements will cost the County \$45,574 at the project's buildout (see Table 12).

Table 12 also includes an estimate of the debt service attributable to Briar Chapel for a proposed Northeast Library. It is estimated that Briar Chapel's portion of the debt service for this project would be \$62,000 a year. In addition to the debt service on the new Library, it is estimated that the additional operating costs attributable to Briar Chapel associated with the new Library would cost the County \$19,334 more than the existing service level at the project's buildout (see Tables 10 & 12).

**However, as seen in Table 10, even at these expanded levels of service, the net fiscal surplus to the County at Briar Chapel's buildout is still substantial. At buildout, the County would still receive a net surplus above costs of approximately \$906,000 per year.**

**Table 11**

**Briar Chapel Economic Impact Study  
Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)  
Expanded Analysis of Sheriff's Department**

**Annual Cost Per Chatham County Deputy**

Compensation, benefits and other direct costs		\$ 43,362
Equipment costs:		
Vehicle	\$ 26,500	
Radio/Walkie	650	
Gun	460	
Total	<u>27,610</u>	
Equipment cost depreciated over five years		<u>5,522</u>
<b>Annual Cost Per Chatham County Deputy</b>		<b><u>\$ 48,884</u></b>

**Marginal Public Safety Cost Estimates for Briar Chapel:**

	<b>Additional Deputies</b>	<b>Total Annual Cost</b>
Total deputies provided based on per capita marginal cost estimation	<b>6.46</b>	\$ 315,948
Total deputies needed to achieve the County targeted level of service	<b>13.57</b>	\$ 663,449
Additional cost to achieve County targeted level of service	<b>7.11</b>	\$ 347,501

**Estimated Satellite Facility and Operating Costs Associated With New Deputies:**

Current Operating Costs	\$ 463,467
Current FTEs	61.23
Operating Cost Per FTE	\$ 7,569
Additional FTEs needed to achieve targeted level of service	<u>7.11</u>
<b>Satellite Facility and Operating Cost Related to New Deputies</b>	<b>\$ 53,808</b>
<b>Population Served - Assumed to equal North Chatham Fire District</b>	<b>18,500</b>
<b>Satellite Facility and Operating Costs Allocated to Briar Chapel</b>	<b><u>\$ 17,163</u></b>
<b>Total Additional Costs for New Deputies and Satellite Facility</b>	<b><u>\$ 364,664</u></b>

**Note:**

The satellite facility cost estimates above adequately cover 2,000 square feet of office space with rentals of \$13.00 per square foot.

**Table 12**

**Briar Chapel Fiscal Impact Study  
Chatham County 2005 - 2009 Capital Improvements Program**

<b>Project:</b>	<b>Project Cost</b>	<b>Projected Debt</b>	<b>Annual Debt Service</b>	<b>Increased (Decreased) Costs</b>	<b>Increased (Decreased) Operating Costs</b>	<b>Annual Operating Impact</b>
Judicial Center	\$ 8,150,000	\$ 8,150,000	\$ 896,333	\$ (14,400)	\$ 108,160	\$ 93,760
American Tobacco Trail	1,200,000	-	-	-	-	-
Bells Landing Park	231,250	-	-	-	43,264	43,264
Community College Renovations **	551,903	-	-	-	6,000	6,000
Community Park - Southwest	575,566	-	-	-	46,800	46,800
Community Parks System - Countywide	1,040,000	-	-	-	60,000	60,000
Evidence Room	150,000	-	-	-	1,000	1,000
Imaging	500,000	-	-	42,000	100,000	142,000
Northeast Library - 23,000 sq ft facility	4,240,417	4,240,417	593,658	-	750,000	750,000
Social Services Building Renovation and Expansion	2,846,480	2,806,480	392,910	-	50,000	50,000
Telephone System Replacement	240,000	240,000	-	-	40,000	40,000
Voice-activated Software for Central Permitting	40,000	-	-	-	4,000	4,000
Voting Machines	525,000	525,000	110,250	(9,500)	-	(9,500)
West Chatham Senior Center	2,050,000	1,000,000	135,000	-	-	-
	<b>\$ 22,340,616</b>	<b>\$ 16,961,897</b>	<b>\$ 2,128,151</b>	<b>\$ 18,100</b>	<b>\$ 1,209,224</b>	<b>\$ 1,227,324</b>
CIP Totals Excluding Northeast Library	\$ 18,100,199	\$ 12,721,480	\$ 1,534,493	\$ 18,100	\$ 459,224	\$ 477,324
Chatham County Population, including Briar Chapel			61,803			61,803
<b>Per Capita Allocation</b>			<b>\$ 24.83</b>			<b>\$ 7.72</b>
<b>CIP Allocable to Briar Chapel</b>			<b>\$ 146,511</b>			<b>\$ 45,574</b>
<b>Allocation of Northeast Library to Estimated Population Served:</b>						
Northeast Library - adjusted for 10,000 sq ft onsite facility	\$ 1,843,660	\$ 1,843,660	\$ 258,112	\$ -	\$ 326,087	\$ 326,087
Estimated Northwood School District Population			27,154			27,154
Less Town of Pittsboro - expected to use existing library			(2,236)			(2,236)
Less Center Township - expected to use existing library			(3,701)			(3,701)
Less Cape Fear Township - expected to use existing library			(1,170)			(1,170)
Less Haw River Township - expected to use existing library			(1,215)			(1,215)
Plus Estimated Briar Chapel Population			5,901			5,901
Estimated Population to be served by Northeast Library			<u>24,733</u>			<u>24,733</u>
<b>Per Capita Allocation</b>			<b>\$ 10.44</b>			<b>\$ 13.18</b>
Library - Allocable to Briar Chapel			<b>\$ 61,581</b>			\$ 77,799
Less allocation of Library at Existing Service Levels						(58,465)
<b>Net Expanded Service Level Allocation</b>			<b>\$ 61,581</b>			<b>\$ 19,334</b>

**Debt Service Assumptions per Chatham County Management:**

Voting Machines - 5% interest, 5-year term, lease/lease purchase  
Social Service Building Expansion - 5% interest, 10-year term, installment purchase  
Senior Center and Northeast Library - 5% interest, 10-year term, GO Bond or installment purchase  
Judicial Center - 5% interest, 15 year term, installment purchase

FY 08-09 Operating Effect information was used to estimate annual impact

\*\* Cost reduced by projected \$420,000 grant



### ***FTE Analysis***

The fiscal impacts on the County budget for services outlined above can also be estimated by evaluating the level of new employees the County would need to have in order to provide desired services to the residents of Briar Chapel. The following analysis outlines the number of new full-time equivalent employees (FTE) that the County would need in order to provide the expanded levels of service to Briar Chapel residents – once the project is at buildout.

This analysis is based on the existing level of service of FTE per capita supported in the FY 2003-04 County Budget. Tables 4 - 9A identify the FTEs that would be required to provide the existing and expanded levels of services to the residents of Briar Chapel. For example, it is estimated that just over three new FTEs will be required to provide the existing level of service by the Chatham County Administration (See Table 4) to Briar Chapel residents.

As seen in Table 6, there would need to be an additional 0.21 FTEs required for Elections Department at existing levels. The entire General Government division of the County would be expected to add an additional 2.6 FTEs at the project's buildout (See Table 6). The Human Services Department would need to add an additional 8.8 FTEs while the Natural Resources Management Department would need to add 2.3 FTEs (See Tables 7 & 8).

The Department of Public Safety would need to add the most FTEs to maintain existing service levels. This department would need an additional 10.9 FTEs to provide the existing level of service to Briar Chapel. However, if the County chooses to expand the level of service, as outlined earlier in this report, the Department would have to add another 7.1 FTEs – or a total of almost 18 new FTEs to provide the expanded level of service to Briar Chapel residents.

Table 13 provides an overview of the FTEs that would be expected if the County were to provide expanded levels of service to Briar Chapel residents.

Table 13

**Briar Chapel Fiscal Impact Study**  
**Analysis of Chatham County Full-Time Equivalent (FTE) Personnel to Population Changes**

General Fund	Briar Chapel Assumed FTEs At Expanded Service Levels	Per Chatham County Budgets (Comparable Time Frame to Briar Chapel Build-Out)							
	FY04	FY03	FY02	FY01	FY00	FY99	FY98	FY97	
Administration:									
Buildings & Grounds	10.23	9.25	9.25	9.25	9.25	9.25	9.01	9.24	8.82
County Attorney	-	-	-	-	-	-	-	-	-
County Manager	6.63	6.00	6.00	6.00	6.00	4.50	5.50	5.50	5.50
Court Facilities	-	-	-	-	-	-	-	-	-
Finance Office	7.74	7.00	7.00	7.00	7.00	6.00	6.00	6.00	6.00
Fleet Management	2.21	2.00	2.00	2.00	2.00	2.00	2.00	2.00	-
General Services	-	-	-	-	-	-	-	-	-
Information Technology	6.63	6.00	5.00	5.00	5.00	4.00	3.00	2.00	1.00
Total Administration	33.44	30.25	29.25	29.25	29.25	25.75	25.51	24.74	21.32
Education, Culture and Recreation:									
Central Carolina Community College	-	-	-	-	-	-	-	-	-
Chatham County Schools	-	-	-	-	-	-	-	-	-
Cooperative Extension Service	-	-	-	-	-	-	-	-	-
Library	9.95	9.00	9.00	9.00	9.00	9.00	8.80	8.20	8.20
Recreation Department	2.80	2.50	2.50	2.50	2.50	2.50	2.75	1.50	1.50
Total Education, Culture and Recreation	12.75	11.50	11.50	11.50	11.50	11.50	11.55	9.70	9.70
General Government									
Elections	2.21	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Governing Board	1.66	1.50	1.50	1.50	1.50	1.50	-	-	-
Register of Deeds	6.63	6.00	6.00	6.00	6.00	6.00	5.00	5.00	5.00
Tax Administration	9.95	9.00	9.00	7.50	7.50	7.50	10.25	11.00	12.00
Tax - Land Records	3.32	3.00	3.00	3.00	3.00	4.00	3.00	3.00	-
Tax - Revaluation	3.32	3.00	3.00	5.50	5.50	5.50	1.75	-	-
Total General Government	27.09	24.50	24.50	25.50	25.50	26.50	22.00	21.00	19.00
Human Services									
Council on Aging	2.21	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Health Administration	4.98	4.50	4.50	4.50	4.50	4.50	5.00	4.00	4.00
Health - Promotion and Advocacy	6.91	6.25	6.75	6.75	6.75	6.00	6.60	4.50	2.00
Family Outreach	18.96	17.15	17.15	17.15	17.15	15.40	2.40	2.25	-
Health Preventive Services	34.38	31.10	33.85	33.50	33.50	31.76	41.99	39.50	-
Home Health	-	-	-	-	-	-	-	28.75	28.75
Human Service Programs	-	-	-	-	-	-	-	-	-
OPC Mental Health Area Program	-	-	-	-	-	-	-	-	-
Community Alternatives Division	-	-	-	-	-	-	-	-	3.00
General Health	-	-	-	-	-	-	-	-	36.00
Social Services	67.31	65.00	65.00	65.00	65.00	64.00	63.00	62.00	57.75
Excluding Home Health Program	-	-	-	-	-	-	-	(28.75)	(28.75)
Total Human Services	134.75	126.00	129.25	128.90	128.90	123.66	120.99	143.00	133.50
Natural Resource Management									
Central Permitting	2.76	2.50	3.50	3.50	3.50	2.50	2.00	1.00	-
Economic Development Corporation	-	-	-	-	-	-	2.00	2.00	2.00
Environmental Health	10.78	10.50	10.50	10.50	10.50	10.50	10.50	9.50	9.50
Inspections	9.95	9.00	9.00	9.00	9.00	9.00	9.00	8.00	11.00
Planning Department	3.87	3.50	3.50	3.50	3.50	3.50	4.00	4.00	3.00
Preferred Site Local Advisory Committee	-	-	-	-	-	1	1	1	1.49
Pittsboro-Siler City CVB	1.11	1.00	1.00	1.00	1.00	1.00	-	-	-
Public Works Transfers	-	-	-	-	-	-	-	-	-
Soil & Water Conservation District	3.32	3.00	3.00	3.00	3.00	3.00	3.00	3.00	2.00
Total Natural Resource Management	31.78	29.50	30.50	30.50	30.50	30.50	31.90	28.90	28.99

Table 13

**Briar Chapel Fiscal Impact Study**  
**Analysis of Chatham County Full-Time Equivalent (FTE) Personnel to Population Changes**

<b>Public Safety</b>									
Court-Related Programs	2.68	2.42	2.42	2.00	2.00	-	1.00	-	-
EMS	-	-	-	-	-	-	-	-	25.00
Emergency Operations	3.32	3.00	2.00	2.00	2.00	3.00	3.00	3.00	2.00
Emergency Telecommunications	14.27	12.00	13.00	13.00	13.00				-
Fire Marshal	3.32	3.00	3.00	3.00	3.00	3.00	3.00	3.00	-
Animal Control	6.63	6.00	6.00	6.00	6.00	6.00	6.00	6.00	5.00
Sheriff's Department	74.80	61.23	58.23	57.23	57.23	53.00	51.98	49.50	59.00
Sheriff - Jail	15.58	15.00	15.00	15.00	15.00	15.00	14.00	14.00	14.00
Excluding EMS**	-	-	-	-	-	-	-	-	(25.00)
<b>Total Public Safety</b>	<b>120.59</b>	<b>102.65</b>	<b>99.65</b>	<b>98.23</b>	<b>98.23</b>	<b>80.00</b>	<b>78.98</b>	<b>75.50</b>	<b>80.00</b>
<b>Total FTE's</b>	<b>360.41</b>	<b>324.40</b>	<b>324.65</b>	<b>323.88</b>	<b>323.88</b>	<b>297.91</b>	<b>290.93</b>	<b>302.84</b>	<b>292.51</b>
<b>New FTE's Per Year</b>		<b>(0.25)</b>	<b>0.77</b>	<b>-</b>	<b>25.97</b>	<b>6.98</b>	<b>(11.91)</b>	<b>10.33</b>	
<b>Cumulative FTE Growth</b>	<b>36.01</b>	<b>31.89</b>	<b>32.14</b>	<b>31.37</b>	<b>31.37</b>	<b>5.40</b>	<b>(1.58)</b>	<b>10.33</b>	
<b>Chatham County Population</b>	<b>60,628</b>	<b>54,727</b>	<b>53,965</b>	<b>52,582</b>	<b>50,954</b>	<b>49,588</b>	<b>47,264</b>	<b>45,938</b>	<b>45,130</b>
<b>New Residents Per Year</b>		<b>762</b>	<b>1,383</b>	<b>1,628</b>	<b>1,366</b>	<b>2,324</b>	<b>1,326</b>	<b>808</b>	
<b>Cumulative Population Growth</b>	<b>5,901</b>	<b>9,597</b>	<b>8,835</b>	<b>7,452</b>	<b>5,824</b>	<b>4,458</b>	<b>2,134</b>	<b>808</b>	
<b>Ratio of New FTE's to New Residents</b>	<b>0.61%</b>	<b>-0.03%</b>	<b>0.06%</b>	<b>0.00%</b>	<b>1.90%</b>	<b>0.30%</b>	<b>-0.90%</b>	<b>1.28%</b>	
<b>Cumulative Ratio of New FTE's to New Resident:</b>	<b>0.61%</b>	<b>0.33%</b>	<b>0.36%</b>	<b>0.42%</b>	<b>0.54%</b>	<b>0.12%</b>	<b>-0.07%</b>	<b>1.28%</b>	

\* In FY98, the Home Health program was sold to UNC Hospitals.

\*\* Beginning FY98, EMS services are provided through a contract arrangement.

#### **4. Impacts on The Chatham County Schools**

Estimates of the increased costs incurred by the Chatham County Board of Education from Briar Chapel for operations and capital needs are described in this section. These costs are based on the School District's FY 2003-04 budget and projections of capital costs used by the School Board. The costs to the District will primarily be driven by the number of students generated by the new residents in Briar Chapel.

In addition to the current cost per student for operations and the marginal capital costs of new students, a critical assumption in the analysis is the estimate of the Student Generation Rate (SGR). The issue of what is the appropriate SGR for Chatham County has been discussed in the community at considerable length. (See Appendix A for a separate analysis of the SGR for Chatham County).

Chatham County has approached the task of estimating the number of new school-aged children generated from new residential growth in a straightforward, deliberate manner. In 1996, the County contracted with Tischler & Associates, Inc. (TA) to provide an analysis of the impacts on schools in Chatham County.<sup>3</sup> TA's report estimates student generation rates (SGR) for various types of housing and provides the County with an estimate of the appropriate impact fees necessary to offset the costs of new residents to the school system.

The County should be commended for using a study such as TA's to help anticipate the costs and impacts of new growth and its impact on the school system. Unfortunately, many communities are not proactive in this area and ultimately are forced to deal with growth issues in an after-the-fact, reactive manner. As a result of the TA analysis, the County initiated an impact fee for new housing units of \$1,500 per dwelling unit. This impact fee has assisted in providing capital improvement funds to help the School Board keep pace with new growth while at the same time it has apparently had little affect on slowing growth in the County.

TA's 1996 report uses data from the 1990 Census. The study incorporates methodologies that are frequently used in the industry. It should be noted that as of the 2000 Census, the average student per housing unit in Chatham County has not changed substantially from that estimated by TA using 1990 data. According to the more recent 2000 Census data, the average SGR for Chatham County was equal to 0.37.<sup>4</sup> That is on average, there were 37 school-aged children attending public schools in Chatham County for every 100 dwelling units in the County. This is very similar to the SGRs estimated by Tischler in his 1996 report.

The following analysis assumes a SGR of .40. This means that for every 100 new dwelling units in Briar Chapel, there will be 40 more students generated in the School District. This is slightly above the rate indicated in the 2000 Census and very similar to the single-family dwelling unit rate estimated by Tischler & Associates in 1996. A SGR of .40 was also considered appropriate by the Chatham County School Superintendent. An analysis of SGRs for selected areas is shown in Table 14. As seen in Table 14, the assumption of a SGR of .40 for Briar Chapel is well within the range of that for these surrounding counties and communities.

Based on a SGR of .40, it is estimated that Briar Chapel will have 956 new students enrolled in Chatham County schools at the development's buildout. There will be an estimated 454 new elementary students, 215 new middle school students and 287 new high school students. The derivation of these new students by type of school is shown in Table 15.

The Chatham County Board of Education FY 2003-04 operating costs of these new students are shown in Table 16. These 956 new students will cost the District approximately \$2.0 million in annual operating costs. These operating costs are based on a per student operating cost of \$2,142. This per student operating cost is detailed in Table 16 and is based on the Chatham County Board of Education FY 2003-04 total net expenditure of \$16.3 million and a student enrollment of 7,617.

In addition to the operating costs to the District, there will be additional capital costs required for these new students. Based on the District's current estimates of capital costs and building capacities, it is estimated that the District will incur capital costs of slightly more than \$20 million to accommodate the 956 new students. The capital costs by type of school are shown in Table 17. However, these capital costs will be partially offset by land donations and related improvements as well as required and voluntary impact fees paid. Newland Communities is donating land and related improvements with an estimated value of \$713,000 (See Table 17) to Chatham County Schools. In addition, Briar Chapel residents will pay impact fees of \$1,500 per dwelling unit and Newland Communities has committed to pay a voluntary \$2,000 impact fee per dwelling unit (excluding 120 affordable housing units). The District will receive a total of \$8.1 million of these offsetting revenues (See Table 17). This results in a net capital cost of \$11.3 million. The annual debt service for \$11.3 million is estimated to be \$819,000.

**Table 14**

**Briar Chapel Fiscal Impact Study  
Area Public School Student Generation Rate Comparisons**

		<b>Source of Information:</b>
<b>Briar Chapel</b>		
# of Households	2,389	Newland Communities
Public School Students	956	
Student Generation Rate	0.40	Harry W. Miley, Jr. Ph.D. and David J. Cowen, Ph.D.
<b>Chatham County - 2004</b>		
# of Households	22,255	Extrapolated from NC Treasurer Reports
Public School Students	7,617	Chatham County Schools
Student Generation Rate	0.34	
<b>Chatham County - 2000</b>		
# of Households	19,741	2000 US Census
Public School Students - Fall 2001	7,362	Chatham County Schools
Student Generation Rate	0.37	
<b>Durham County - 2000</b>		
# of Households	89,015	2000 US Census
Public School Students - Fall 2001	30,312	Durham County Public Schools
Student Generation Rate	0.34	
<b>Wake County - 2000</b>		
# of Households	242,042	2000 US Census
Public School Students - Fall 2001	101,448	Wake County Public Schools
Student Generation Rate	0.42	
<b>Orange County - 2000</b>		
# of Households	45,863	2000 US Census
Public School Students - Fall 2001	16,207	Orange County Public Schools
Student Generation Rate	0.35	
<b>Southern Village - March 2004</b>		
# of Households	1,242	D. R. Bryan, Developer of Southern Village
Public School Students	540	Chapel Hill-Carrboro Public Schools
Student Generation Rate	0.43	
<b>Meadowmont - April 2004</b>		
# of Households	268	Meadowmont Homeowners Association
Public School Students	70	Chapel Hill-Carrboro Public Schools
Student Generation Rate	0.26	
<b>Chatham Development - April 2004</b>		
# of Households	140	Chatham County GIS
Public School Students	41	Chatham County Schools
Student Generation Rate	0.29	
<b>Polk's Landing - April 2004</b>		
# of Households	146	Chatham County GIS
Public School Students	31	Chatham County Schools
Student Generation Rate	0.21	
<b>Forest Creek - April 2004</b>		
# of Households	111	Chatham County GIS
Public School Students	52	Chatham County Schools
Student Generation Rate	0.47	
<b>Persimmon Hill - April 2004</b>		
# of Households	26	Chatham County GIS
Public School Students	3	Chatham County Schools
Student Generation Rate	0.12	
<b>Hidden Oaks - April 2004</b>		
# of Households	26	Chatham County GIS
Public School Students	4	Chatham County Schools
Student Generation Rate	0.15	
<b>Governors Club - April 2004</b>		
# of Households	778	Chatham County GIS
Public School Students	87	Chatham County Schools
Student Generation Rate	0.11	

**Table 14A**

**Briar Chapel Fiscal Impact Study  
Chatham County Population and Household Estimates**

**Chatham County Population as Reported to N. C. State Treasurer:**

<b>As of July 1</b>	<b>Reported Population</b>	<b>Annual Change</b>	<b>%</b>	<b>Cumulative Change</b>	<b>%</b>	<b># of Units</b>	
1997	45,130						
1998	45,938	808	1.79%	808	1.79%		
1999	47,264	1,326	2.89%	2,134	4.73%		
2000	49,588	2,324	4.92%	4,458	9.88%	19,741	<b>U. S. Census</b>
2001	50,954	1,366	2.75%	5,824	12.90%	20,285	<b>Estimated</b>
2002	52,582	1,628	3.20%	7,452	16.51%	20,933	<b>Estimated</b>
Average growth during period		1,490	3.11%				

**Projected Population Based on Growth Trend Over the Last Five Years:**

				<b># of Units</b>	
2003	54,217	1,635	3.11%	21,584	<b>Estimated</b>
2004	55,902	1,685	3.11%	22,255	<b>Estimated</b>

**U. S. Census Bureau:**

Population 2000	49,329
2001 Estimate	51,645
Percentage Change	4.70%

**Northwood School District**

Per 1999 Master Plan Study:		23,300
Estimated	2000	24,024
Using	2001	24,771
Percentage	2002	25,541
Calculated	2003	26,335
Above	2004	27,154

**Table 15**

**Briar Chapel Fiscal Impact Study  
Chatham County Schools - Student Generation Rate**

Source: 1996 Chatham County Public School Impact Fee Report - Tischler and Associates, Inc.

***Adjusted Public School Students Per Household***

	<b>Elementary</b>	<b>Middle</b>	<b>High</b>	<b>Total</b>
Single Family	0.19	0.09	0.12	0.40
Multifamily	0.08	0.02	0.04	0.15
Mobile Homes & Other	0.19	0.09	0.09	0.37
ALL TYPES	0.17	0.08	0.09	0.33

**Estimated Briar Chapel Public School Students**

	<b>Elementary</b>	<b>Middle</b>	<b>High</b>	<b>Total</b>
Single Family	454	215	287	956
Total	454	215	287	956

**Public School Student Generation Rate (SGR)                      0.40**



**Table 16**

**Briar Chapel Fiscal Impact Study**  
**Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)**  
**Chatham County Schools Operating Costs**

<b>Expenditures:</b>		
Salaries	\$	-
Other personnel costs		-
Operating		16,708,432
Public assistance		-
Debt		2,826,418
Transfers		-
Capital outlay		-
Less Debt - New School Debt Service Evaluated Separately		(2,826,418)
Total expenditures	\$	16,708,432
<b>Revenues:</b>		
Fees and permits	\$	-
Grants		252,127
Interest		-
Intergovernmental		-
Miscellaneous		-
Other taxes		-
Sales & service		-
Transfers		140,000
Fund balance		-
Total revenues	\$	392,127
<b>Net cost - excluding sales and property taxes</b>	<b>\$</b>	<b>16,316,305</b>
<b>Chatham County Public School Enrollment</b>		<b>7,617</b>
<b>Chatham County Per Student Net Cost</b>	<b>\$</b>	<b>2,142.09</b>
<b>Estimated Marginal County Costs for Briar Chapel:</b>		
<b>Estimated Briar Chapel Public School Students</b>		<b>956</b>
<b>Marginal Operating Costs</b>	<b>\$</b>	<b>2,046,982</b>

FTE = Full-time equivalent personnel

**Table 17**

**Briar Chapel Fiscal Impact Study  
Chatham County Schools - Capital Costs**

<b>Based on Current Estimates</b>	<b>Elementary</b>	<b>Middle</b>	<b>High School</b>	
Land	\$ 780,000	\$ 900,000	\$ 1,183,000	
Building & Equipment	12,400,000	22,000,000	31,000,000	
Total Cost	<u>13,180,000</u>	<u>22,900,000</u>	<u>32,183,000</u>	
Student Capacity	800	1,000	1,200	
Capital Cost per Student	\$ 16,475	\$ 22,900	\$ 26,819	
<b>Briar Chapel Students</b>	<b>454</b>	<b>215</b>	<b>287</b>	<b>Total 956</b>
Capital Costs Allocable to Briar Chapel	\$ 7,478,167	\$ 4,923,729	\$ 7,688,519	\$ 20,090,415
Less:				
Donated Land and Related Improvements	712,771	-	-	712,771
Impact Fees	1,702,163	806,288	1,075,050	3,583,500
Voluntary Impact Fees	2,155,550	1,021,050	1,361,400	4,538,000
	<u>4,570,483</u>	<u>1,827,338</u>	<u>2,436,450</u>	<u>8,834,271</u>
Net Chatham Count School Capital Cost Attributable to Briar Chapel	\$ 2,907,684	\$ 3,096,392	\$ 5,252,069	\$ 11,256,144
<b>Annual Debt Service</b>	<b><u>\$ 211,507</u></b>	<b><u>\$ 225,234</u></b>	<b><u>\$ 382,039</u></b>	<b><u>\$ 818,779</u></b>

**Capital Costs Estimates Above Compared to 1996 Public School Impact Fee Report by Tischler and Associates, Inc.**

<b>Level of Service</b>	<b>K - 8</b>	<b>High School</b>	<b>Total</b>
Building Sq. Ft. Per Student	113	163	
Net Local Capital Cost Per Sq. Ft.	<u>\$ 102.19</u>	<u>\$ 107.19</u>	
Capital Cost Per Student	\$ 11,547	\$ 17,472	
Estimated Briar Chapel Students	<u>669</u>	<u>287</u>	956
<b>Estimated Capital Costs</b>	<b><u>\$ 7,724,334</u></b>	<b><u>\$ 5,008,864</u></b>	<b><u>\$ 12,733,198</u></b>

**Conclusion:** To more realistically project capital costs for Chatham County Schools, the approach above, which utilizes more current construction cost information, will be used in lieu of the capital cost estimates included in the 1996 Tischler report.

**Table 17A**

**Briar Chapel Fiscal Impact Study  
Schedule of Developer Donated and Dedicated Public Use Property**

	<b>Total Value</b>	<b>Acres</b>
<b>School Sites</b>		
Unimproved Land Value	\$ 820,000	40.10
WWTP Prorata share for sewer	117,000	
Additional land for spray fields	224,000	11.00
Spray irrigation system and controls	78,400	11.00
50% of roadway cost - built to serve school along frontage of site. Includes grading, clearing, storm drainage, water lines, curbs, paving, stone base, erosion control, etc.)		
Full cost - \$150/LF	<u>90,000</u>	<b>\$ 1,329,400</b>
<b>Allocation to Chatham County and Charter Schools:</b>		
Chatham County School Site	\$ 712,771	
Charter School Site	616,629	
<b>Total School Sites</b>	<u><u>\$ 1,329,400</u></u>	
<b>County Park</b>		
Unimproved Land Value	\$ 1,380,000	66.20
Constructed ballfields: two soccer fields, three baseball fields, and one football field. Also includes gravel drives, gravel parking areas, clearing, grading, water service lines, etc.	500,000	
Paved trailway	<u>105,000</u>	<b>1,985,000</b>
<b>Library Site</b>		
Unimproved Land Value	20,000	0.58
Clearing, grading pad for building, water and sewer services	20,000	
Constructed parking areas, base, paving and curbs	32,000	
Sewer system allocation for plant, spray fields, spray irrigation	8,000	
Prorata share of roadway fronting site	<u>-</u>	<b>80,000</b>
<b>Other - Unimproved Land Value Only</b>		
EMS Base		0.53
Fire Station		1.45
Total	<u>40,000</u>	<b>40,000</b>
<b>Water Reclamation Plant</b>		<b>100,000</b>
<b>New Water Tower</b>	<u>1,041,000</u>	
<b>Total Developer Donated Property</b>	<u><u>\$ 4,575,400</u></u>	<u><u>135.86</u></u>

**Note:** In addition, Newland Communities will provide traffic improvements to existing roads situated outside of Briar Chapel. These improvements, estimated at \$1.5 million to \$2.0 million, are not reflected in the schedule above.

## **5. Impacts on Chatham County Special Revenue and Enterprise Funds**

Chatham County's Compact Community Ordinance requires an assessment of the impact of a proposed development on the Utility and Waste Management Funds (Enterprise Funds) as well as the applicable Volunteer Fire District Fund (Special Revenue). As described in Appendix B, enterprise funds are supported by user fees, and the special revenue fund is supported by a special tax levy. In comparison, the general fund is supported primarily by ad valorem and sales tax revenues. Enterprise and special revenue funds are typically self-supporting.

### ***North Chatham Fire District Fund***

Table 18 reflects the impacts Briar Chapel will have on the County's Volunteer Fire Department. Based on the current tax rate of .06% and a collection rate of 98%, annual revenues of \$479,000 will result from the proposed Briar Chapel development. Fire Department officials indicated a new fire station manned by three full-time personnel would be needed to serve Briar Chapel. New vehicles costing an estimated \$829,000 are also expected. Annual operating costs attributable to Briar Chapel, as provided by Fire Department officials, total \$326,000 and produce a net annual surplus of \$154,000.

### ***Utility Fund***

The impacts on the County's Utility Fund are presented in Table 19. Appendix B details the corresponding assumptions. Utility Department officials provided estimated availability fee and operating revenues, per household expenditures, and anticipated capital needs. The analysis presented in Table 19 indicates that Briar Chapel will have a self-supporting impact on the Utility Fund.

### ***Waste Management Fund***

The incremental revenues and expenditures of the Waste Management Fund are detailed in Table 20. Newland Communities has assumed that private contractors will provide curbside trash and recycling services. As a result, the annual \$81 availability fee will produce revenues of \$194,000 at Briar Chapel's buildout. Based on per household cost estimates of \$31.55, as provided by Waste Management officials, annual expenditures for Briar Chapel will be \$76,000. Therefore, a net annual surplus of \$118,000 is expected.

**Table 18**

**Briar Chapel Economic Impact Study  
Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)  
North Chatham Fire District - Special Revenue Fund**

**Incremental Revenue:**

Property Tax Base:

Residential	\$ 757,313,000
Commercial	58,100,000
	<u>\$ 815,413,000</u>

North Chatham Fire Tax Rate	0.0600%
Collection %	<u>98.00%</u>

**Incremental Fire Department Revenue** **\$ 479,463**

**Incremental Expenditures:**

**Estimated Operating Costs:**

Annual operating budget of a station with three full-time personnel per Deputy Fire Chief \$ 360,000

**Estimated Capital Costs:**

	<b>Cost</b>
New station	\$ 325,000
New fire engine	329,000
New aerial truck with 75' ladder	500,000
Total Capital Costs	<u><u>\$ 1,154,000</u></u>

Annual debt service - 5% for five years 261,329

Total Annual Cost \$ 621,329

Estimated population served - per Deputy Fire Chief 11,250

Estimated Briar Chapel Population 5,901

Estimated Annual Cost Allocated to Briar Chapel \$ 325,898

**Incremental Fire Department Expenditures** 325,898

**Annual Net Surplus** \$ 153,565

**Table 19**

**Briar Chapel Fiscal Impact Study  
Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)  
Utility Fund - Enterprise Fund**

**Summary of Operating Activity:**

**Incremental Revenue:**

Average North Chatham Water Bill	\$	47.76	
Annual North Chatham Water Bill	\$	573.12	
# of Briar Chapel Households		2,389	
<b>Annual Utility Fund Revenue</b>			<b>\$ 1,369,184</b>

**Incremental Expenditures:**

Annual Budget:			
Salaries (See Note 1)	\$	563,876	
Other Personnel		267,138	
Operating		1,608,049	
Debt Service		711,486	
Transfers		114,893	
Capital Outlay		36,859	
Interest		(12,000)	
	\$	3,290,301	
# of Chatham County Households		4,802	
Average Cost Per Household	\$	685	
# of Briar Chapel Households		2,389	
<b>Annual Utility Fund Expenditures</b>			<b>1,636,928</b>

**Plus Allocated Debt Service on Loan Maturing June 2004,  
Financing of New Capital Investment Reflected Below  
and Southwest Chatham Water Line  
(See Note 2):**

FY04 Water Plant Debt Service	\$	497,167	
FY04 Southwest Chatham Water Line Debt Service		25,491	
<b>Total Allocated Debt Service</b>	\$	522,658	
# of Chatham County Households		4,802	
Average Cost Per Household	\$	109	
# of Briar Chapel Households		2,389	
<b>Plus Allocated Debt Service Adjustment</b>			<b>260,023</b>

<b>Net - Fully offset for 111+ years by Capital Surplus Calculated Below</b>	<b>\$</b>	<b>(7,722)</b>
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**Summary of Capital Activity:**

**Revenues:**

Per Unit Availability Fee	\$	2,040	
# of Briar Chapel Units		2,389	
<b>Total Unit Fees</b>			<b>\$ 4,873,560</b>

**Construction Cost of Water Tower -  
Paid By Newland Communities**

		<b>1,041,000</b>	
<b>Total Revenues</b>			<b>\$ 5,914,560</b>

**Expenditures:**

Tap Setting	\$	425	
# of Briar Chapel Units		2,389	
<b>Total Tap Setting</b>			<b>1,015,325</b>

Total Cost of Required Plant Expansion	\$	6,000,000	
<b>Allocation to Briar Chapel - 50%</b>			<b>3,000,000</b>
<b>Cost of Water Tower</b>			<b>1,041,000</b>
<b>Total Expenditures</b>			<b>5,056,325</b>

<b>Net Surplus</b>	<b>\$</b>	<b>858,235</b>
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**Note 1 -** The Director of the Utility Division anticipates the need for 3 water distribution construction staff and equipment for repairs and customer services issues and one meter reader and equipment. The costs associated with these needs total \$365,976 and are appropriately included in the per capita estimation reflected above.

**Note 2 -** The operating portion of the Utility Fund impact has been adjusted to reflect the June 2004 maturity of outstanding water plant debt and the related debt service. Capital needs associated with the Briar Chapel project are included above in the Summary of Capital Activity along with the source of funding. Debt service for water lines in Southwest Chatham County are also reflected as an adjustment since Briar Chapel will not affect these loans.

**Table 20**

**Briar Chapel Fiscal Impact Study  
Analysis of Chatham County FY04 Budget (As Amended January 15, 2004)  
Waste Management - Enterprise Fund**

**Incremental Availability Fee Revenue:**

Annual Availability Fee	\$	81.00	
# of Briar Chapel Households		<u>2,389</u>	
<b>Annual Availability Fee Revenue</b>			<b>\$ 193,509</b>

**Incremental Expenditures:**

**Per Household Cost Estimates Provided by Chatham County Staff**

Garbage	\$	10.97	
Recyclables		7.25	
White goods		2.10	
Scrap tires		0.84	
Administration		7.50	
HHW		<u>2.89</u>	
<b>Costs Per Household</b>	<b>\$</b>	<b>31.55</b>	
# of Briar Chapel Households		<u>2,389</u>	
<b>Annual Expenditures</b>			<b><u>75,373</u></b>
 <b>Annual Net Surplus</b>			 <b><u><u>\$ 118,136</u></u></b>

## **6. Sensitivity Analysis**

This fiscal impact analysis of the Briar Chapel development incorporates several critical assumptions. These assumptions include (1) the number of persons per household (2) the number of public school-aged children per household and (3) the average housing unit value. Extensive analysis was applied to each of these assumptions to determine their appropriateness as well as to formulate the need for potential upper and/or lower limit evaluation.

The estimate of the number of persons per household of 2.47 is based on 2000 Census data for Chatham County. This rate compares favorably with the rate of 2.49 (2000 Census) for the entire state of North Carolina and is consistent with surrounding areas. Therefore, this value was considered the most appropriate for this analysis, and further sensitivity analysis was not deemed necessary.

In order to generate the most accurate estimate of the student generation rate used in forecasting the number of public school-aged children per household resulting from Briar Chapel, Harry. W. Miley, Jr., Ph.D. and David J. Cowen, Ph.D. conducted a Student Generation Rate (SGR) Analysis specifically designed to study the impact of Briar Chapel on Chatham County School enrollment. The results of their work are included Appendix A. The estimated student generation rate of .40 is consistent with the 1996 study prepared by Tischler & Associates, Inc. and is considered a reasonable estimate by the Chatham County School Superintendent. This rate is also comparable to existing student generation rates of the surrounding area, as presented in Table 14.

Robert Charles Lesser & Co., LLC, a national real estate consulting firm, performed an in-depth market analysis for Newland Communities to determine the optimal development program for Briar Chapel. The results of their study are included in the executive summary at Appendix C, and Table A-2, Summary of Housing Types Price Ranges and Housing Values. Another conservative aspect of the Lesser analysis is the that the market analysis is based on housing prices in 2002 and that there has been no adjustment upward to reflect 2004 prices. In addition, there is no appreciation in real estate values during the 8-year buildout period. Residential real estate has typically increased at rates well above the inflation rate in the area, but for this analysis, it is assumed that there will be no real appreciation in residential real estate values. Based on these conservative assumptions, as described in their report, used in developing both the absorption rates and housing unit values, further sensitivity analysis was not considered necessary.



## 7. Summary and Conclusions

As outlined in the analysis above, it is clear that Briar Chapel will have a positive net fiscal impact on Chatham County government and the Chatham County School Board. This analysis demonstrates that Briar Chapel meets and exceeds the requirements as outlined in Section 11 – Community Facilities (11.1 & 11.2 Impact Assessment & Mitigation) of Chatham County’s Compact Community Ordinance. *As seen in Table 1, the net present value of the stream of annual surpluses at expanded service levels during the buildout period is \$2.6 million, assuming a discount rate of 6.0%.*

The following summary of revenues and expenditures at the time of the Briar Chapel’s buildout also clearly shows the positive fiscal impacts of the proposed development on Chatham County and the Chatham County Board of Education.

**Summary Table 21**  
**Annual General Fund Fiscal Impacts**  
**Of Briar Chapel at Buildout**

Incremental Revenues

Property Taxes	\$5,511,286
Sales Taxes	<u>923,217</u>

Total Incremental Revenues	\$6,434,503
----------------------------	-------------

Incremental Expenditures

County	\$ 1,911,333
School	
Operating	2,046,982
Debt Service	<u>818,779</u>

Total Incremental Expenditures	<u>\$4,777,094</u>
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**Annual Incremental Benefit at Existing Service Levels \$1,657,409**

Incremental County Expenditures with Expanded Services	<u>751,554</u>
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**Annual Incremental Benefit, Expanded Service Levels \$ 905,855**  
**=====**

## Endnotes:

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<sup>1</sup> The methodology and underlying assumptions underlying these estimates are detailed in Appendix A.

<sup>2</sup> The methodology and underlying assumptions underlying these estimates are detailed in Appendix A.

<sup>3</sup> US Census Bureau, Summary File 3 (SF 3).

<sup>4</sup> US Census Bureau, Summary File 3 (SF 3).

# Appendix A

## Student Generation Rate Analysis

## **Appendix A**

### **Student Generation Rate (SGR) Analysis**

*Harry W. Miley, Jr., Ph. D.*

*David J. Cowen, Ph. D.\**

Chatham County, like every growing community, faces the challenge of estimating the number of new school-aged children in order to plan for the facilities and public services that will be needed to serve new residents. This is particularly so in Chatham County. According to the US Census Bureau, Chatham County's population increased by 4.7% from 2001 to 2002. This was the second fastest growth rate experienced of any county in North Carolina.

Forecasting population growth and the growth of new school-aged children can be difficult. This section of the report outlines an alternative approach that County officials can use to forecast the number of public school-aged children that could be expected from new residential development. The following methodology is based on an approach similar to the comparable value approach used in real estate property appraisals.

The focus of this analysis is to estimate the SGR for the proposed Briar Chapel development. However, the methodology incorporated in this analysis would be appropriate for any proposed residential or mixed-use development. The analysis in this report relies on the latest US Census Department data from the 2000 Census that is available at the Block Group level of geographic delineation.

### **Previous Studies**

#### **1996 Tischler Report**

Chatham County has approached the task of estimating the number of new school-aged children generated from new residential growth in a straightforward, deliberate manner. In 1996, the County contracted with Tischler & Associates, Inc. (TA) to provide an analysis of the impacts on schools in Chatham County.<sup>1</sup> TA's report estimates student generation rates (SGR) for various types of housing and provided the County with an estimate of the appropriate impact fees necessary to offset the costs of new residents to the school system.

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\* Harry W. Miley, Jr. is President of Miley & Associates, Inc. and David J. Cowen is Professor and Chairman of the Department of Geography, University of South Carolina, Columbia, South Carolina.

## Appendix A

The County should be commended for using a study such as TA's to help anticipate the costs and impacts of new growth and its impact on the school system. Unfortunately, many communities are not proactive in this area and ultimately are forced to deal with growth issues in an after-the-fact, reactive manner. As a result of the TA analysis, the County initiated an impact fee for new housing units. This impact fee has assisted in providing capital improvement funds to help the School Board keep pace with new growth while at the same time it has apparently had little affect on slowing growth in the County.

TA's 1996 report uses data from the 1990 Census. The study incorporates standard methodologies that are frequently used in the industry. It should be noted that as of the 2000 Census, the average student per housing unit in Chatham County has not changed much from that estimated by TA using 1990 data. According to the latest Census data, the average SGR for Chatham County was equal to 0.37.<sup>2</sup> That is on average, there were 0.37 school-aged children attending public schools in Chatham County for every dwelling unit in the County. This is very similar to the SGRs estimated by Tischler in his 1996 report.

However, there are several concerns with using the SGRs estimated in the Tischler study to estimate the number of public school children for the Briar Chapel project. One major concern is that the study relies on 1990 data. Chatham County has changed dramatically in the last 14 years. The pattern of growth in Chatham County as well as the value and type of residential development that has occurred over the last decade has changed the demographic profile in the County from that that existed in 1989 (1990 Census reports are based on surveys taken in April of 1989).

In addition, the data used in the TA report are from the Public Use Microdata Sample (PUMS) 5% sample. As stated in the TA report on page A9, *"Because this information is only available for areas with at least 100,000 residents, Chatham County was grouped with Orange County as a single geographic area".*<sup>3</sup> Although Chatham and Orange counties are contiguous, there are many differences in the two counties, and caution should be used when relying on SGRs generated from these combined counties to estimate impacts for specific counties.

And finally, the TA study delineates between housing type, but not housing value. That is, the TA study calculates SGRs for single family housing, but it is an average for all housing values. Housing value is an important factor in determining household size and number of children.

## Appendix A

### Malizia Study

A second study that has been recently circulated in the community also deserves mentioning here. While the TA study estimates the SGRs on Chatham and Orange Counties, a study conducted by Dr. Emil Malizia, Professor in the Department of City and Regional Planning at the University of North Carolina, does not incorporate any specific data for Chatham County. The Malizia study is a good example of an academic effort to demonstrate that by 1996 the characteristics of households had changed from those reported in the 1990 Census. It was specifically designed to demonstrate that SGRs can vary over time and did so in the study area selected for the study. The study focused on the changes in SGRs over this period in five metropolitan areas in North Carolina.<sup>4</sup> This review is not intended to be critical of Dr. Malizia's study; however, it is critical of using the SGRs generated by the study for specific areas, especially Chatham County.

The findings of the Malizia study are important in that they demonstrate how the characteristics of a community can change over a relatively short time period. However, there are several reasons why it would be inappropriate to use the specific SGR estimates generated in the Malizia study to estimate the impacts on Chatham County schools (or any other specific county). In fact, Malizia specifically cautions the reader that "these results are not strong enough to recommend changing the school generation rates used for planning purposes".<sup>5</sup>

In addition to the author's own warning, another reason is that the study area for the Malizia study is the five metropolitan areas of Asheville, Charlotte, the Piedmont Triad, the Research Triangle and Wilmington. Using SGRs to estimate new students in mostly rural, Chatham County based on this large, predominately metropolitan study area could lead to incorrect projections. The more representative the study area is of the particular impact area, the more accurate the projected SGR will most likely be.

A third reason is that the Malizia study is not based on Census data but is based on a relatively small telephone survey sample that is heavily weighted by apartment units. Of the 455 units included in the telephone sample, 216 of the units were apartments. This is over 46% of the sample. Again, this does not appear to be very representative of the Chatham County area. For example, in 2000, only 31% of all housing units in Chatham County were attached units.<sup>6</sup> Of those attached, some are owner-occupied town homes and townhouses, not apartments. (Approximately 8% of the units in the proposed Briar Chapel development are planned to be attached units.)

## **Appendix A**

The fact that Malizia's study was sponsored by the Apartment Association of North Carolina may have had something to do with the large number of apartments included in the sample and the study area being primarily urban in nature. The SGR estimates for single family units are based on a sample of only 239 persons in the five metropolitan areas. This appears to be a relatively small sample size to justify using these estimates for Chatham County.

### **Methodology**

Given these concerns Chatham County is still faced with determining the most appropriate estimates of SGRs to use for estimating the impacts of Briar Chapel. This section of the report describes the methodology utilized to generate appropriate SGR estimates.

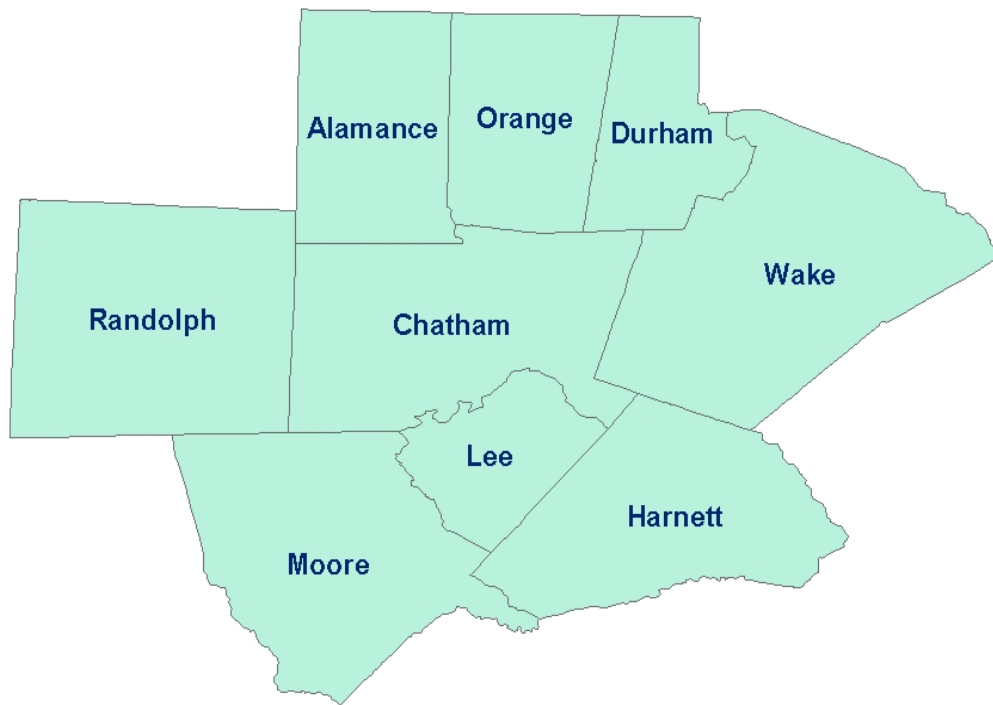
As shown in Figure 1, the study area for the analysis includes Chatham County and the eight counties that are contiguous to Chatham County; Alamance, Randolph, Orange, Lee, Durham, Moore, Wake and Harnett. Census data were obtained from the US Department of Commerce, Census Bureau.

The data were obtained from the US Department of Census, Summary File 3 (SF 3) for all nine counties.<sup>7</sup> These data are available at the Block Group level of geographic delineation. The Summary File 3 (SF 3) contains the sample data, which is the information compiled from the questions asked of a sample of all people and housing units. Population items include basic population totals; urban and rural; households and families; marital status; grandparents as caregivers; language and ability to speak English; ancestry; place of birth, citizenship status, and year of entry; migration; place of work; journey to work (commuting); school enrollment and educational attainment; veteran status; disability; employment status; industry, occupation, and class of worker; income; and poverty status. Housing items include basic housing totals; urban and rural; number of rooms; number of bedrooms; year moved into unit; household size and occupants per room; units in structure; year structure built; heating fuel; telephone service; plumbing and kitchen facilities; vehicles available; value of home; monthly rent; and shelter costs. Summary File 3 contains a total of 813 unique tables — 484 population tables and 329 housing tables.

# Figure 1

## Study Area

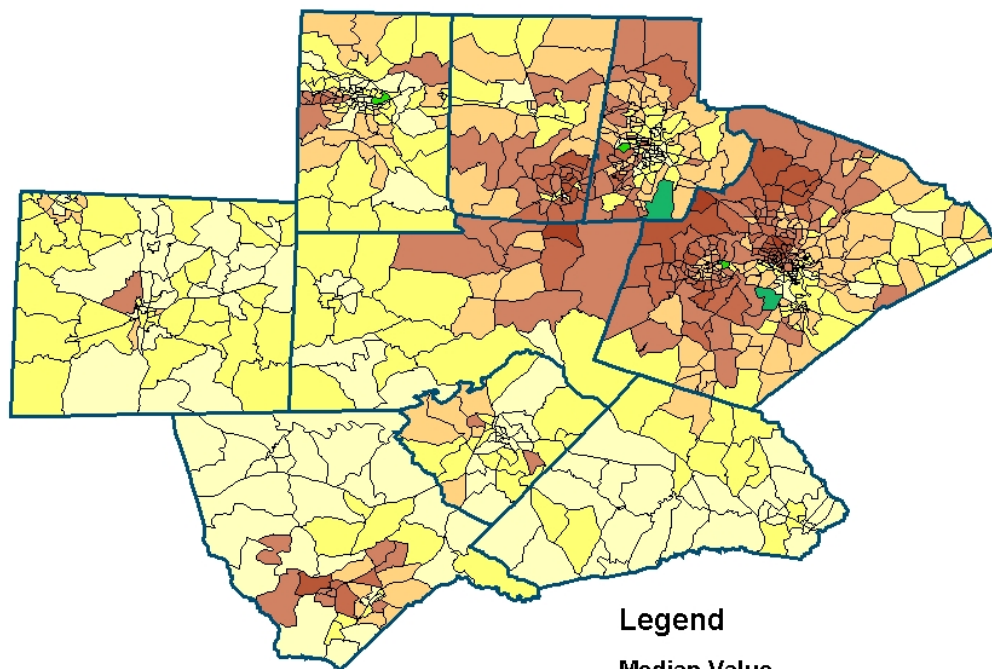
2000 Census Counties





# Figure 2

## Median Value - Owner Occupied Houses



### Legend

#### Median Value

	0.00000 - 36400.00000
	36400.00001 - 82200.00000
	82200.00001 - 110500.00000
	110500.00001 - 147600.00000
	147600.00001 - 195300.00000
	195300.00001 - 271700.00000
	271700.00001 - 450000.00000
	450000.00001 - 770800.00000

0 15 30 60 Miles

## Appendix A

There are 775 Block Groups in the nine county study area. The data for the most appropriate variables for these 775 block groups were selected from the SF Summary File. The following variables were selected:

Block Group Number  
County Number  
Total Housing Units (#)  
Median Value of Housing Units (\$)  
Number of school-aged children attending public schools (#)  
Number of school-aged children attending all schools (#)

From these variables, the following variables were calculated:

Percent of School-aged children attending public schools (%)  
Average number of School-aged children attending public  
Schools per housing unit (SGR)

The profile of these block groups is shown in Table 1 below:

**Table 1**

**Profile of the  
Nine County Study Area  
2000 Census**

<b><u>Variable</u></b>	<b><u>Nine County Total</u></b>
Total Housing Units	627,202
Median Value Range	\$27,300 - \$770,800
Children attending public schools	236,850
% attending public schools	91%
Student Generation Rate (SGR)	.38

## **Appendix A**

The profile of the nine county area indicates that the SGR estimated by Tischler in the 1996 study is still fairly accurate. This nine-county area average provides a broad-based, long-term estimate of the SGR. That is, the average SGR calculated above is based on housing units that have been built in the last 50 years or more. It includes block groups in which the median housing value ranges from a minimum of \$27,300 to a maximum of \$770,800.

### **Appropriate SGR for Briar Chapel**

Although the profile of the 775 Block Groups is helpful in understanding the characteristics of the nine county area, to accurately forecast the number of students that could be generated as a result of the proposed Briar Chapel development, the nine county study area must be further analyzed by housing value.

In order to get a more precise estimate of what might occur in the Briar Chapel development, only those Block Groups that are comparable in terms of median value should be considered. The Briar Chapel development is proposed to have an average value of \$317,000 per housing unit.

Of the 775 Block Groups, only those that were the most comparable to the proposed development should be used to generate estimates for Briar Chapel. The first selection step for the 775 block groups was to identify those Block Groups that had median housing values comparable to the Briar Chapel. A range of approximately 15% above and below the average value in Briar Chapel resulted in a range of median housing values in comparable Block Groups of between \$270,000 and \$365,000. However, since these values are April 2002 housing values and the Census data are from April 1999, this range was adjusted by 8.1% (the percentage change in the All-Item CPI from April 1999 to April 2002.)<sup>8</sup> This resulted in a range of Block Group housing values from the 2000 Census between \$250,000 and \$340,000.

The data were filtered given these selection criteria. Of the 775 Block Groups in the nine county area, there were 27 Block Groups that met these criteria. The profile of these 27 Block Groups is provided in Table 2 below.

## Appendix A

**Table 2**

**Profile of the  
27 Comparable Block Groups  
Median Value \$250,000 - \$340,000**

<b><u>Variable</u></b>	<b><u>27 Block Group Total</u></b>
Total Housing Units	27,226
Children attending public schools	10,934
% attending public schools	85%
Student Generation Rate (SGR)	.40

While this subset of Block Groups is more comparable to the Briar Chapel development in terms of housing values, this set is still too diverse in terms of housing values to be completely representative of the proposed Briar Chapel project. For example, Briar Chapel will include many housing units priced below \$250,000 and above \$340,000.

Tables 3-6 further delineate the comparable Block Groups by median housing value. As can be seen from these data, the SGRs vary somewhat, but all are similar to the .40 assumed in the Briar Chapel analysis.

**Table 3**

**Profile of the  
44 Block Groups  
Median Value \$200,000 - \$249,999**

<b><u>Variable</u></b>	<b><u>44 Block Group Total</u></b>
Total Housing Units	53,327
Children attending public schools	19,356
% attending public schools	86%
Student Generation Rate (SGR)	.36

## Appendix A

Table 4

**Profile of the  
19 Block Groups  
Median Value \$250,000 - \$299,999**

<b><u>Variable</u></b>	<b><u>9 Block Group Total</u></b>
Total Housing Units	20,306
Children attending public schools	8,870
% attending public schools	85%
Student Generation Rate (SGR)	.44

Table 5

**Profile of the  
12 Block Groups  
Median Value \$300,000 - \$350,000**

<b><u>Variable</u></b>	<b><u>12 Block Group Total</u></b>
Total Housing Units	9,599
Children attending public schools	3,227
% attending public schools	85%
Student Generation Rate (SGR)	.34

Table 6

**Profile of the  
11 Block Groups  
Median Value \$350,000 - \$770,800**

<b><u>Variable</u></b>	<b><u>11 Block Group Total</u></b>
Total Housing Units	6,169
Children attending public schools	2,150
% attending public schools	68%
Student Generation Rate (SGR)	.35

## **Appendix A**

### **School Administrators Survey**

In an effort to obtain input from school officials of the reasonableness of this methodology of estimating the SGR for school districts, the analysis above was distributed to all members of the American Association of School Administrators (AASA) and the North Carolina Association of School Administrators (NCASA). There were 169 school superintendents included in the survey. The survey was conducted during July and August, 2003. A copy of the survey is attached below.

The response to the survey was very encouraging. The response rate was strong based on a single mail out. As seen in the following tabulation, the overwhelming response was that the “comparable” approach outlined above was reasonable to use in estimating SGRs for local school districts. It is interesting to note how important this analysis is to school officials. Of those responding, 62% indicating that this type of analysis is “Highly Critical” in their planning process.

### **Conclusions and Recommendations**

Based on the analysis of 2000 Census data for comparably valued housing in the nine county area immediately surrounding Chatham County, the Briar Chapel development could be expected to generate between .34 and .44 public school students per new housing unit.

## Appendix A

### SURVEY RESPONSES

American Association of School Administrators (AASA)  
North Carolina Association of School Administrators (NCASA)

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1. Does the methodology appear reasonable?

☐ Yes

**100%**

☐ No

**0%**

2. To what degree is estimating student enrollment from new development critical to the planning process?

☐ Not at all critical

**7%**

☐ Somewhat critical

**31%**

☐ Highly Critical

**62%**

3. Do you currently use models for calculating specific development impact?

☐ Yes

**15%**

☐ No

**85%**

4. If yes, what type of models are you using?

**(1) In-house development along with local planning/zoning staff. (2) Census changes.**

5. If yes, how effective have the models been in estimating new student enrollment from new developments? If existing models exhibit deficiencies or have been subject to challenge, please share your concerns.

**(1) We have been quite close. (2) Very accurate**

6. Additional comments:

**(1) Accurately predicting student growth is an important part of creating and implementing a cost effective building program**

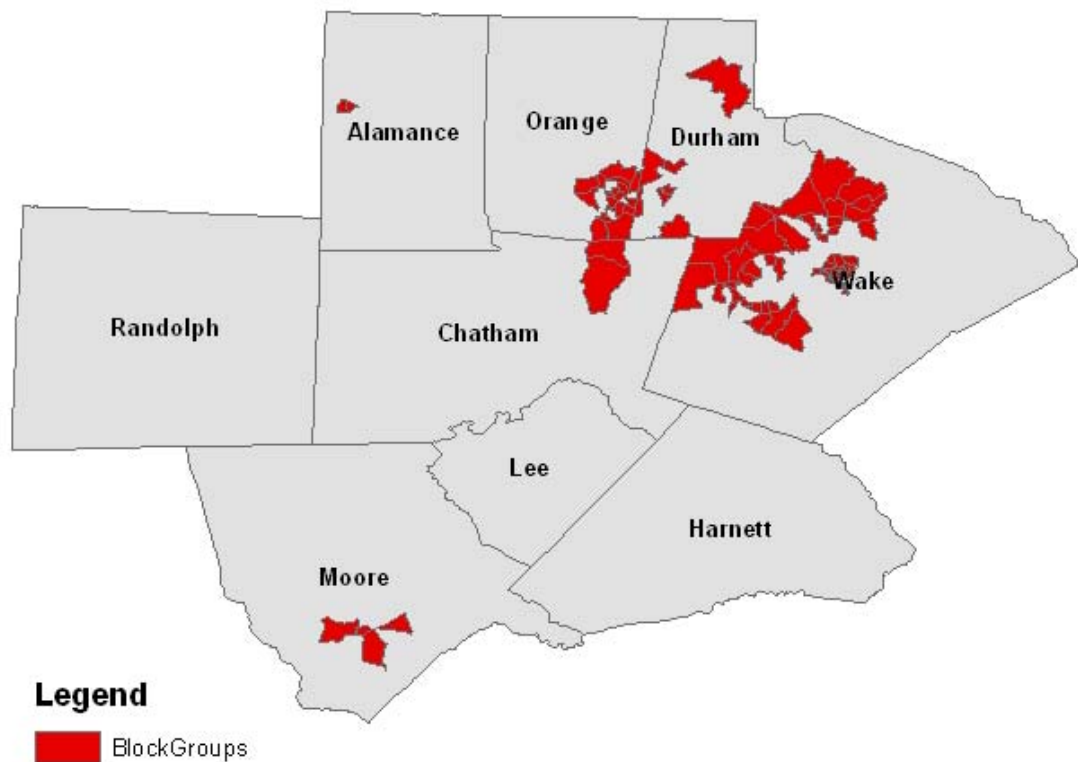
**(2) I don't feel that I am qualified to be much help but this is a worthy project, and I wish you the best.**

**(3) School districts in CT use the "percent of persistence" formula for computing school enrollment.**

**(4) Thanks for letting me know that you are developing models to estimate SGR. It is important work but far from my area of expertise. I trust you.**

**(5) Our estimates are usually well under 5% + or -.**

Figure 3. Blockgroups With Median Housing Value Greater Than \$200,000



Source: 2000 Census Data

0 10 20 40 Miles



## Appendix A

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### Endnotes:

- <sup>1</sup> US Census Bureau, Summary File 3 (SF 3).
- <sup>2</sup> US Census Bureau, Summary File 3 (SF 3).
- <sup>3</sup> Tischler & Associates, Inc. Public School Impact Fee Report, Chatham County, NC. September 30, 1996, Tischler & Associates, Inc. Bethesda, Maryland, page A9.
- <sup>4</sup> Emil E. Malizia, "Estimating the Size of Households and Number of School-Aged Children in New Development: Applications for Forecasting and Impact Analysis," Carolina Planning, Vol. 22, Spring 1997, 14-19.
- <sup>5</sup> Malizia, page 17.
- <sup>6</sup> US Census Bureau, Summary File 3 (SF 3).
- <sup>7</sup> US Census Bureau, Summary File 3 (SF 3).
- <sup>8</sup> US Department of Labor, Bureau of Labor Statistics, All-Item Consumer Price Index, April 2004.

# Appendix B

Methodology and Assumptions

## Appendix B

### Methodology and Assumptions

The assumptions and methodologies used in the attached fiscal analysis titled “**A Fiscal Impact Analysis of the Briar Chapel Development**” conducted by Miley & Associates, Inc. and Thomas, Knight, Trent, King and Company are detailed in this appendix. Table A-1 lists all input assumptions and data sources utilized in the report.

The objective of fiscal impact analysis is to estimate the financial impacts of a development or land use change on the revenues and expenditures of the government units affected by the development. The analysis evaluates the fiscal characteristics of the proposed development and is designed to help local governments measure the estimated difference between anticipated revenues and the related costs of new development.

There are several acceptable methods for conducting fiscal impact analyses. The simplest and most often used is the pure per capita technique. Options range to the more costly case-study oriented approach that relies exclusively on interviews with local government officials and staff. Furthermore, there are two basic approaches used to project the costs of local governmental services related to new development – average costing and marginal costing. Average costing is more straightforward, less expensive and tends to be the more common approach for smaller government units. When applying average costing, local government costs attributable to new development are allocated according to the average cost per unit of service in the current population times the number of units related to the proposed development. This approach does not take into account existing excess or deficient capacity. Furthermore, it assumes stable costs of future municipal services. In comparison, marginal costing requires an in-depth analysis of capacities present in services currently provided by the local government. In many cases, analysts use a combination of the various approaches in order to more accurately evaluate the impacts on local government.

A modified per-capita, case-study type approach was used to estimate the costs and revenues associated with the proposed Briar Chapel development. This approach was considered to be the most fiscally conservative method since it assumes that (1) 100% of governmental costs vary according to population changes and (2) all governmental services are currently provided at full-capacity. As a result, the projected governmental expenditures included in this report are most likely overstated because fixed cost relationships are inherent, to a degree, in every budget. Furthermore, based on information obtained in personal interviews with Chatham County officials, certain departmental budgets will be more modestly affected by the Briar Chapel development than projected in this report.

## **Appendix B**

Once local government costs were assigned using the per-capita approach, a comprehensive analysis, including interviews with key department heads and County officials, was performed to determine the extent of new and increased levels of service that may be required by Briar Chapel residents. To assist County staff in this evaluation, a departmental full-time employee (FTE) analysis report was prepared as a tool to more closely review anticipated personnel needs. Each of the following departments was subject to an extensive evaluation based on an assessment by County staff that indicated these budgets and related services had increased sensitivity to the proposed development. Marginal costs associated with the demand identified for new and/or increased levels of service were estimated and are reflected in the accompanying report.

1. Recreation
2. Elections
3. Public Schools – Operating and Capital Costs
4. Human Services
5. Inspections
6. Public Works - General Fund Transfer
7. Environmental Health
8. Emergency Medical Services (EMS)
9. Emergency Telecommunications
10. Sheriff's Department – Deputies
11. Sheriff's Department – Jail
12. Countywide Capital Improvements Program
13. Northeast Library
14. Waste Management – Enterprise Fund
15. Utility Fund (Water Department) – Enterprise Fund
16. North Chatham Fire District – Special Revenue Fund

In general, the impacts are identified on an annual basis and then summarized at the time of the project's buildout. All revenues and expenditures are based on constant, 2004 dollars and the analysis includes no inflation during the project's buildout. This procedure is based on the assumption that over the buildout period, both net revenues and expenditures will rise proportionately, and therefore, inflation will have little if any affect on the net results of the analysis. A constant dollar approach is commonly used in fiscal impact analysis since many local governments do not have the resources necessary to adequately perform the sophisticated financial modeling required to produce credible alternative assumptions. The constant dollar assumption applies to all estimates in this analysis, including: property values, incomes, sales, County revenues and expenditures and school operating and capital expenditures.

## Appendix B

### 1. Chatham County Revenue Projections -- Report Tables 1 & 2

#### Property Tax Revenues

The estimates for Chatham County General Fund revenues are based on property taxes generated by the improvements on property and the motor vehicles owned by the residents living in the Newland Communities development. The County-wide tax rate is assumed to be constant throughout the buildout period and is equal to the existing rate of 0.6464%. It is assumed that the property tax collection rate is constant throughout the period and is equal to the current rate of 98%.

The average dwelling unit included in the analysis is \$317,000 and is based on the weighted average of the all 2,389 units. There are 120 affordable housing units and 68 rental apartment units in Briar Chapel. It is assumed that there are 2.47 persons per household (2000 Census for Chatham County) resulting in an estimated population in Briar Chapel at buildout of 5,901 persons. This rate compares favorably with the North Carolina persons per household rate of 2.49, according to the 2000 Census. Using highly conservative absorption rates based on the market analyses, it is assumed that there will be approximately 300 dwelling units per year built in Briar Chapel, and it will take the development 7.96 years to build out. These prices and absorption rates are based on market analyses undertaken in April 2002, by Robert Charles Lesser & Co., LLC (see Appendix C). Another conservative aspect of this analysis is the assumption that there will be no appreciation in real estate values during this 8-year period. Residential real estate has typically increased at rates well above the inflation rate in the area, but for this analysis, it is assumed that there will be no real appreciation in residential real estate values.

Commercial property tax revenues are assumed to be taxed at the existing rate of 0.6464% for the entire buildout period. It is assumed that the property tax collection rate is constant throughout the period and is equal to the current rate of 98%. Briar Chapel plans call for 270,000 square feet of commercial office space valued at \$130 per square foot. The project also includes 230,000 square feet of commercial retail space valued at \$100 per square feet.

Each new household in Briar Chapel is assumed to own motor vehicles valued at \$26,350. This assumption is based on the average value (households with annual incomes of more than \$70,000) of motor vehicles owned as published by the *Federal Reserve Bulletin*, Survey of Consumer Finances. Therefore, the 2,389 households will own \$63 million in motor vehicles which will pay property tax at the same existing rate of 0.6464% for the entire buildout period. It is assumed that the collection rate is constant throughout the period and is equal to the current rate of 85%.

## Appendix B

### Sales Tax Revenues

Sales tax revenues generated for Chatham County are assumed to come from four separate North Carolina sales tax laws; Article 39, Article 40, Article 42 and Article 44. The Article 39 sales tax rate is 1.0% and is held constant throughout the period. Since Article 39 Sales Tax is distributed based on Point of Sale, assumptions were necessary to estimate anticipated purchases in Chatham County by Briar Chapel residents. The first step was to calculate the estimated household earnings. The estimate of \$109,310 results when an earnings/housing value multiple of 2.9 (North Carolina Department of Commerce) is applied to the average housing value of \$317,000. [ $\$317,000/2.9 = \$109,310$ ]. The next step calculates the type of purchases that are likely to be made by Briar Chapel residents in Chatham County. These purchases were limited to food, gas and oil, household supplies and incidentals. According to the *Federal Reserve Bulletin* Consumer Expenditure Survey, approximately 14.57% of household incomes are spent on these items. Article 39 Sales Tax proceeds for Chatham County from these purchases are estimated to be \$380,000 at buildout. Articles 40 and 42 Sales Taxes are disbursed by the State of North Carolina based on per capita distribution. Article 44 Sales Tax is distributed on a combined point of sale and per capita basis. To properly estimate revenue from Articles 40, 42 and 44 Sales Taxes, it was necessary to compute per capita distributions for the fiscal year to date (July 1, 2003 to February 29, 2004) for both Chatham County and the State of North Carolina. The State's annualized Articles 40 and 42 per capita rates of \$63.64 were used to estimate the corresponding sales tax revenue for Briar Chapel (as opposed to the County's annualized rate of \$79.30). Likewise, the State's annualized Article 44 per capita rate of \$28.35 was used to estimate the corresponding sales tax revenue for Briar Chapel (compared to the annualized County rate of \$28.82). Based on discussions between Chatham County officials and Mr. Jack Vogt at the University Of North Carolina School Of Government, this method represents a reasonable approach. Table 2A details this analysis and also reflects the relatively inconsequential impact on the State per capita calculation when the Briar Chapel population is considered.

### Impact Fees

All dwelling units are assumed to pay the required school impact fee of \$1,500 and Newland Communities has committed to the County that they will pay a voluntary impact fee of \$2,000 per dwelling unit for all units except the affordable housing units. These fees are all paid at the time of construction.

## **Appendix B**

### **2. Chatham County Expenditure Projections**

#### **Existing Service Levels -- Report Tables 3 - 9**

It is assumed that all Chatham County services will be provided in the future at their existing levels of service. All County operating expenditures are estimated on a net cost basis, consistent with the official County Budget Report. The budget data are from the current FY 2003-04 County Budget. The County's current population is estimated at 55,902 as extrapolated by analyzing the County's reported population and associated growth trends since 1997. Total department budgets are calculated on a per capita basis based on the County's existing residents. This per capita cost is then multiplied by the number of anticipated residents in Briar Chapel to estimate the total cost of providing that particular service to Briar Chapel.

For example, the estimated net cost for Administrative services by Chatham County government in FY 2003-04 is \$2,880,402. Based on Chatham County's population of 55,902, this results in a per capita cost for Administration of \$51.53. [ $\$2,880,402/55,902=\$51.53$ ]. The total cost to provide Administration services to Briar Chapel at the project's buildout are thus estimated to be \$304,045 [ $\$51.53 \times 5,901 = \$304,045$ ]. This same methodology is applied to all departments and estimated at Briar Chapel's buildout as shown in Tables 4-9 in the report. Table 3 provides a summary of these departmental impacts.

#### **Expanded Service Levels & Capital Improvements -- Report Tables 10 - 12**

The expenditure estimates are based on the assumption that the County will maintain the existing level of service to the residents of Briar Chapel as currently provided to all residents of Chatham County. This assumption is relaxed in the Report to determine the costs to the County if certain County services are increased in the future relative to what they are today. As identified above, 16 departments were specifically evaluated for new and/or expanded level of service demands. Table 10 provides a summary of these departmental impacts and the resulting positive net surplus to the County's general fund of over \$900,000 per year at the project's buildout. Methodologies and assumptions supporting the expanded service level analyses are as follows.

Public Safety - Public Safety, primarily Emergency Services and the Sheriff's Department, required the most extensive analysis. Currently the County provides 1.3 deputies per 1,000 population. Based on the density of the Briar Chapel development, the Chatham County Sheriff's Office anticipates the need to increase that service level to

## Appendix B

2.3 deputies per 1,000 population. This ratio is more consistent with areas such as Cary, Apex, Durham, Carrboro, Graham, Burlington, Asheboro, etc. The cost of providing this expanded level of service is detailed in Table 11. Furthermore, based on the significant growth occurring in the northern portion of the County, the Sheriff's Office foresees the near-term need for a satellite office facility. Briar Chapel's portion of the cost of this facility is also reflected in Table 11.

As shown in Table 9, applying the per capita approach resulted in 1.27 additional FTE's for Emergency Telecommunications. However due to the increased number of expected deputies, both County staff and the Sheriff's office estimated an additional dispatcher would be required resulting in a total of 2.27 FTE's needed for the Emergency Telecommunications department. Corresponding costs are outlined in Table 9. Although the per capita approach produced 1.58 FTE's for the Jail, County staff and the Sheriff's Office concluded that .58 FTE's would likely be necessary. Table 9 also reflects this adjustment.

Adequacy of cost projections for Emergency Medical Services (EMS) using the per capita approach was closely scrutinized as well. Table 9A projects the additional costs necessary to accommodate the annual debt service for a new EMS base as well as to operate two new EMS units. The worksheet also allocates these costs proportionately to the Briar Chapel residents.

Northeast Library and County CIP - Expanded Library services are included in the analysis at Table 12. Newland Communities has committed to donate land for an onsite branch library. The County's CIP includes a new 23,000 square foot Northeast Library to be constructed at a cost of \$4.2 million (Chatham County CIP). Based on acreage associated with the anticipated donated land, a new 10,000 square foot Northeast Library is considered in the expanded service analysis. Approximately \$1.8 million, or 43.5%, of the facility cost is subject to allocation to Briar Chapel ( $43.5\% = 10,000/23,000$ ). The same portion of the County's estimated operating costs [ $43.5\% \times \$750,000 = \$326,000$  per year at buildout] of the new library are also subject to allocation (see Table 12) on a per capita served basis. As seen in Table 12, a total of 24,733 residents are expected to be served by the new library (The Town of Pittsboro's population of 2,236, along with the populations of Center Township, Cape Fear Township and Haw River Township were deducted since it is reasonable to assume these residents would use existing County facilities). The per capita operating costs of the new library are estimated to be \$13.18 and therefore, the total cost allocated to the Briar Chapel project is \$77,799 [ $\$13.18 \times 5,901 = \$77,799$ ]. The per capita method at existing service levels produced estimated additional costs of \$58,465. Debt service of \$61,581 along with operating costs of \$77,799 reflects the annual expenditures of a 10,000 square foot Northeast Library attributable to Briar Chapel.



## Appendix B

Other components of the County's proposed CIP are outlined in Table 12. The per capita debt service is calculated based on the current population of the County plus that of Briar Chapel at buildout (5,901). The debt service on this CIP is calculated assuming the following terms specified by County staff:

- \* Voting Machines - 5% interest, 5-year term, lease/lease purchase
- \* Social Service Building Expansion - 5% interest, 10-year term, installment purchase
- \* Senior Center and Northeast Library - 5% interest, 10-year term, GO Bond or installment purchase
- \* Judicial Center - 5% interest, 15 year term, installment purchase

The FY 08-09 Operating Effect information was used to estimate the annual operating impacts of these capital improvements (see Table 12).

Recreation Department - Table 5 reflects the fiscal impact on the Recreation Department. Newland Communities has committed to donate three ball fields, two soccer fields, one football field and a number of publicly accessible park areas but understands the constraints on the County's budget to properly maintain these properties. Newland Communities, via the Briar Chapel Homeowner's Association, plans to enter into cooperative agreements with the County such that all future maintenance costs related to these facilities will be the responsibility of the Briar Chapel Homeowner's Association. Therefore, projected maintenance costs associated with these properties are excluded. The recreation department analysis is also based on the assumption that the County will approve that the donation of recreational facilities to the County (valued at \$2.0 million) plus the assumption by Briar Chapel of the associated future ongoing maintenance costs will be accepted in lieu of payment of the recreation fees. The estimated fees, as calculated by the Planning Director, are approximately \$857 per unit, for a total of \$2.0 million.

Based on recommendations by County staff, the population of Siler City (7,002) was subtracted from the Countywide population used to compute the existing Recreation Department per capita cost since that municipality provides its own recreation service. Table 5 depicts this adjustment.

Human Services - Table 7 reflects a per capita allocation of Human Services costs. County staff provided net costs associated with non-income dependent programs of the Department of Social Services. The Council on Aging and the Health Department reflect all net costs.

Environmental Health - Table 8A provides a further analysis of the Environmental Health Department. A full per capita approach was not appropriate for this department since Briar Chapel will have water and sewer systems regulated by the State of North Carolina. County staff provided estimation techniques to address the

## Appendix B

anticipated impacts of businesses and institutions by the Food, Lodging and Institution Staff. Table 8A reflects estimates based on these estimation techniques.

*Enterprise and Special Revenue Funds* - Many fiscal impact analyses are limited to a review of the General Fund since Enterprise and Special Revenue funds function more like commercial entities and are designed to be self-supporting. However, the fiscal impact analysis for Briar Chapel includes a detailed review of the North Chatham Fire District (Table 18), the Utility Fund (Table 19), and the Waste Management Fund (Table 20) as required by the recently adopted Compact Communities Ordinance.

*North Chatham Fire District* – Fire Department officials provided estimated operating (\$360,000 annually) and debt service costs (\$261,000 annually) associated with a new fire station manned by three full-time personnel and serviced by two new fire vehicles. According to Fire Department officials, a fire station will provide a five-mile rated insurance district. The existing station in that area is now serving a population of 11,250 according to GIS information and 2000 U.S. Census figures. Determining the population served is subject to many factors, and there is no rule of thumb guideline (unlike EMS). Stations and personnel must be added as demand increases, and the number of commercial and other occupancies will dictate that demand. Special revenue taxes resulting from Briar Chapel households, assuming an average value of \$317,000, will produce an estimated annual surplus of \$154,000 for this department as shown in Table 18.

*Utility Fund* – Table 19 details the fiscal impact on the Utility Fund related to the Briar Chapel development. Revenues for this fund are generated from monthly water bills and availability fees. Availability fees total \$2,040 per unit with associated tap setting expenditures estimated by Utility Division officials to be \$425 per unit. Furthermore, officials of the Utility Division anticipate County growth will ultimately require a \$6 million water plant expansion with 50% of the cost attributable to the Briar Chapel development. Table 19 illustrates the Briar Chapel availability fees of \$4.9 million will produce a surplus to the Utility Fund of \$858,000 after tap fee and plant expansion costs.

Average household water bills were used to estimate other operating revenue. Existing per capita expenditures were used to calculate annual operating costs. Based on discussions with Chatham County and Utility Division officials, the annual operating costs were reduced by the existing water plant debt service maturing in June 2004 since Briar Chapel capital needs and the associated funding are analyzed separately.

In addition, Chatham County is requiring Newland Communities to provide a site and to fund the cost of a new water tower that will be needed to maintain system pressure and water capacity needs. Utility Division officials estimate the cost of the new tower will be \$1,041,000.

## **Appendix B**

Waste Management – It is assumed that curbside trash and recycling services for Briar Chapel residents will be provided by private contractors. Table 20 reflects that the \$81 per household availability fee will produce annual revenue of \$194,000. Waste Management Division officials estimated the related cost per household to be \$31.55, resulting in annual expenditures of \$75,000. Based on these assumptions, the impact of Briar Chapel on the Waste Management fund will produce a net annual surplus of \$118,000.

### **FTE Analysis -- Report Table 13**

This section of the analysis is based on the FTE's required to provide the existing level of services as supported in the FY 2003-04 County Budget. Tables 4 - 9 quantify the additional FTE's that would be required to provide the necessary services to the residents of Briar Chapel. For each department, the existing number of full-time equivalent employees currently employed by the County to provide the existing level of service is divided by the County's population. The resulting ratio of FTE to population is applied to the anticipated Briar Chapel population.

For example, the Administration Summary (Table 4) reflects 30.25 FTEs in FY 04. This equates to 0.0005411 FTEs per capita. This per capita FTE is then multiplied by the number of residents in Briar Chapel to estimate the amount of Administrative FTEs that will be needed to provide the existing level of services to Briar Chapel.  $[0.0005411 \times 5,901 = 3.19]$ . The result indicates the County will need to add approximately three additional FTEs in the Administration Department at the project's buildout. This methodology is applied to each of the County's departments (see Tables 4-9), and the summation of these departmental impacts is presented in Table 13.

Table 13 compares the additional FTEs required to serve Briar Chapel at the expanded levels of service to the actual County FTE growth rate over the preceding 8-year period (anticipated build-out term for Briar Chapel). Interestingly, this analysis reveals the County has responded well to meeting increased service needs during a period of significant growth without a proportionate expansion in personnel. In fact, the ratio of new FTE's to new residents was 1.28% in 1998 and declined to (.03%) in 2004. The cumulative ratio for this 8-year period was .33%. Projected County FTE's associated with Briar Chapel are estimated at a much higher ratio (i.e. more fiscally conservative) of .61%.

### **2. Impacts on The Chatham County Schools – Report Tables 14 - 17**

The revenues used to fund the Chatham County School operations are provided through property and sales tax collections, as previously described. Likewise school impact fees, voluntary developer impact fees and developer land contributions are included in the County Revenue section. Therefore, the following assumptions and methodologies are limited to Chatham County School expenditures.

## Appendix B

School expenditures are estimated for operating and capital costs. The operating costs are based on the FY 2003-04 budget for the Chatham County Board of Education. The impacts on the school operating costs are based on a per pupil cost of \$2,142 as detailed in Table 16. Net budgeted expenditures of \$16.3 million are divided by the current student enrollment of 7,617 [ $\$16.3 \text{ million} / 7,617 = \$2,142$ ] to determine the net per pupil operating cost. The district's \$2.8 million debt service line item is deducted from the School operating budget since debt service related to capital costs is separately addressed.

The number of new students estimated for Briar Chapel is determined by applying the Student Generation Rate (SGR) times the number of new dwelling units proposed for the development. As detailed in Appendix A, the blended SGR is assumed to be 0.40. Table 14 provides an overview of the SGR for various areas and communities in and around Chatham County. Data sources are also provided in this table.

The SGR of 0.40 is distributed across types of schools (elementary, middle and high schools) based on the same distribution method estimated in the County's Public School Impact Fee report prepared in 1996 by Tischler & Associates, Inc. The SGRs, delineated by school type, are provided in Table 15 and are used to distribute the number of students generated by the application of the SGR of 0.40 assumed in this report.

The net annual Chatham County School operating cost attributable to Briar Chapel at build out is estimated by multiplying the per student operating cost times the number of new students generated by the development [ $\$2,142 \times 956 \text{ students} = \$2.04 \text{ million}$ ].

Capital costs for new schools are based on standard enrollment capacities as outlined by the Chatham County Schools. In addition land, building and equipment costs by type of school were obtained from the Chatham County Board of Education and are included in this analysis. These facility cost estimates and capacities are provided in Table 17. Capital costs per student are estimated based on these projected costs and enrollment capacities.

For example, the capital cost for a new elementary school is estimated to be \$13.2 million, and the capacity is 800 students resulting in a capital cost per student of \$16,475. The number of elementary students to be generated by Briar Chapel (454) is multiplied by this per student cost to estimate the elementary school capital cost allocated to Briar Chapel. Then the impact fees, voluntary impact fees and land donations are deducted from these capital costs to determine the net impact on the Chatham County School Board.

## **Appendix B**

As shown in Table 17, these costs are then amortized at 5.25% for 25 years (terms provided by County staff) to determine the annual debt service required to provide these students with the necessary facilities. This approach is applied to all 956 Briar Chapel students resulting in total allocated capital cost of \$20 million with corresponding annual debt service of \$819,000.

Table A-1

**Briar Chapel Fiscal Impact Study  
Source Data**

Input		
Calculated in Table A-1		
Calculated in Another Table		

Briar Chapel	Information Source
Project Name	Briar Chapel
Total Units	2,389
Affordable Housing Units	120
Rental Apartments	68
Traditional Neighborhood Development (TND)	1,074
Family/Park Units	1,127
Total Units - Excluding Affordable Housing	2,269
Average unit sales value	\$ 317,000
Residential tax base	\$ 757,313,000
Commercial office sq footage	270,000
Commercial office tax value per sq ft	\$ 130
Commercial office tax base	\$ 35,100,000
Commercial office/retail sq footage	230,000
Commercial office/retail tax value per sq ft	\$ 100
Commercial office/retail tax base	\$ 23,000,000
Commercial Buildout - Year 4	25%
Commercial Buildout - Year 5	50%
Commercial Buildout - Year 6	75%
Commercial Buildout - Year 7	100%
Persons per household - Chatham County	2.47
Persons per household - North Carolina	2.49
Projected Briar Chapel population	5,901
Voluntary impact fee per unit - excluding affordable housing	\$ 2,000
Value of land donated for Chatham County School Site	\$ 712,771
Donated unimproved land acreage to Chatham County Schools	21.5
Donated unimproved land acreage to Woods Charter School	18.6
Absorption rate - residential units per year	300
Build-out period - in years	7.96
Estimated Onsite Library Square Footage	10,000
Discount Rate	6.00%

Chatham County		
Fiscal Year (FYxx)	FY04	
County	Chatham	
Current County Population under Study	55,902	Extrapolated from NC Treasurer Reports
Northwood School District Estimated Population	27,154	Extrapolated from Chatham County Reports
Siler City Population	7,002	Chatham Co. NC website
Pittsboro Population	2,236	Chatham Co. NC website
Goldston Population	319	2000 U.S. Census
Center Township - excluding Pittsboro	3,701	2000 U.S. Census
Haw River Township	1,215	2000 U.S. Census
Cape Fear Township	1,170	2000 U.S. Census
Population served by existing North Chatham Fire Station	11,250	Deputy Chief - North Chatham Fire Department
Population served by North Chatham Fire District	18,500	Deputy Chief - North Chatham Fire Department
Current ratio of deputies per 1,000 population	1.30	Chatham County Sheriff
Norm area county ratio of deputies per 1,000 population	1.80	Chatham County Sheriff
Target ratio of deputies per 1,000 population	2.30	Chatham County Sheriff
Population factor	1,000	Chatham County Sheriff

<b>Ad Valorem Tax Rates:</b>		
Commercial	0.6464%	Chatham County FY 04 Budget
Commercial collection %	98.00%	Chatham County FY 04 Budget
Residential	0.6464%	Chatham County FY 04 Budget
Residential collection %	98.00%	Chatham County FY 04 Budget
Motor vehicle	0.6464%	Chatham County FY 04 Budget
Motor vehicle collection %	85.00%	Chatham County FY 04 Budget
North Chatham Fire Tax %	0.06%	Chatham County FY 04 Budget

Article 39 Sales Tax Rate	1.0%	Chatham County FY 04 Budget
Article 44 Point of Sale	0.25%	Chatham County Officials

<b>Assumptions for Sales Tax Calculations:</b>		
Earnings multiple	2.90	North Carolina Department of Commerce, Weighted Average
Estimated household earnings	\$ 109,310	Chatham, Orange, Wake and Durham Counties 1st Qtr 2004 Trends
Survey Category - Median Value of Motor Vehicle Holdings	\$ 26,350	Calculated Based on Earnings Multiple
		Federal Reserve Bulletin - 2001 Survey of Consumer Finances

FY04 Articles 40 and 42 Sales Taxes	\$ 4,360,725	Chatham County FY 04 Budget
FY04 Article 44 Sales Tax	\$ 1,582,131	Chatham County FY 04 Budget
FY04 Article 40 and 42 Sales Tax Per Capita (Annualized) - Chatham Co.	\$ 63.64	NC Department of Revenue - Sales and Use Tax Distributions
FY04 Article 44 Sales Tax Per Capita (Annualized) - Chatham Co.	\$ 28.35	NC Department of Revenue - Sales and Use Tax Distributions
FY04 Article 40 and 42 Sales Tax Per Capita (Annualized) - NC	\$ 64.18	NC Department of Revenue - Sales and Use Tax Distributions
FY04 Article 44 Sales Tax Per Capita (Annualized) - NC	\$ 28.60	NC Department of Revenue - Sales and Use Tax Distributions

<b>FRB Survey of Average Household Expenditures:</b>		
Total Applicable Household Expenditures	15,922	Federal Reserve Bulletin - 2002 Consumer Expenditure Report
% of earnings for purchases in Chatham County	14.57%	

**Table A-1**

**Briar Chapel Fiscal Impact Study  
Source Data**

Estimated Square Footage Northeast Library	23,000	Chatham County 2005 - 2009 Capital Improvements Program
Occupied Housing Units - Chatham County	19,741	2000 U.S. Census
Total Housing Units - Chatham County	21,358	2000 U.S. Census
Total Household Water Customers	4,802	Chatham County Officials
Average Monthly Household Water Bill for North Chatham Customers	\$ 47.76	Chatham Journal Weekly, March 29, 2004
Waste Management Annual Household Availability Fee	\$ 81.00	Chatham County Officials
% of Waste Management Budget Allocated to Non-Disposal Costs	69.00%	Chatham County FY04 Budget
<b>Chatham County Schools</b>		
<b>Chatham County Public School Enrollment:</b>		
Chatham County Public Schools - March 2004	7,254	Chatham County Schools
Chatham Charter School	242	Chatham Charter School
Woods Charter School	121	Chatham County Students - Woods Charter School
<b>Total Chatham County Public School Enrollment</b>	<b>7,617</b>	
<b>Public School Student Generation Rate</b>	<b>0.40</b>	<b>Tischler and Associates, Inc.</b>
<b>Briar Chapel Public School Students</b>	<b>956</b>	Table 15
<b>School Impact Fee</b>	<b>\$ 1,500</b>	Chatham County Officials
<b>Capital Financing</b>		
School Bond Interest Rate	5.25%	Estimated
School Bond Term - in years	25	Estimated
<b>Elementary School Capital Costs:</b>		
Land	\$ 780,000	Chatham County Schools Public School Facility Needs Report
Building, sitework, furniture, fixtures and equipment	12,400,000	Chatham County Schools
Total Elementary School Capital Costs	\$ 13,180,000	
Capacity	800	Chatham County Schools
Capital Cost per Public Elementary School Student	\$ 16,475	
<b>Middle School Capital Costs:</b>		
Land	\$ 900,000	Estimated
Building, sitework, furniture, fixtures and equipment	\$ 22,000,000	Estimated
Total Middle School Capital Costs	\$ 22,900,000	
Capacity	1,000	Estimated
Capital Cost per Public Middle School School Student	\$ 22,900	
<b>High School Capital Costs:</b>		
Land	\$ 1,183,000	Chatham County Schools Public School Facility Needs Report
Building, sitework, furniture, fixtures and equipment	31,000,000	Chatham County Schools
Total High School Capital Costs	\$ 32,183,000	
Capacity	1,200	Chatham County Schools
Capital Cost per Public High School Student	\$ 26,819	

**Table A-2**

**Briar Chapel Fiscal Impact Study**  
**Summary of Housing Types, Price Ranges and Housing Values**  
**Based on the Master Land Plan and the Robert Charles Lesser & Co. Executive Summary of June 2004**

Lot Type	House Size	Robert Charles Lesser's House Price Range		Average House Price or Value	# Units	Total Value All Houses	
Affordable Housing Units (AFU's) (Lots donated to Affordable Housing Agency):							
Condos (12), Towns (72), SFD (24)		\$ 85,000	\$ 125,000	\$ 105,000	108	\$	11,340,000
Apartments (12)		\$ 75,000	\$ 75,000	\$ 75,000	12	\$	900,000
Commercial Area:							
Apartments		\$ 85,000	\$ 85,000	\$ 85,000	68	\$	5,780,000
Family/Park Area (combined):							
Garden Lot & Small Lot	1200 - 1700	\$ 140,000	- \$ 230,000	\$ 185,000	189	\$	34,965,000
Medium Lot 1	1700 - 2000	\$ 210,000	- \$ 270,000	\$ 240,000	185	\$	44,400,000
Medium Lot 2	2000 - 2800	\$ 250,000	- \$ 370,000	\$ 310,000	304	\$	94,240,000
Large Lot 1	2700 - 3800	\$ 350,000	- \$ 520,000	\$ 435,000	241	\$	104,835,000
Large Lot 2 *	3500 - 8500	\$ 500,000	- \$ 1,550,000	\$ 650,000	208	\$	135,200,000
TND Areas (Both)							
Condos	900 - 1300	\$ 120,000	- \$ 165,000	\$ 142,500	48	\$	6,840,000
Towns 1	1200 - 1500	\$ 150,000	- \$ 175,000	\$ 162,500	114	\$	18,525,000
Towns 2	1300 - 1900	\$ 175,000	- \$ 250,000	\$ 212,500	186	\$	39,525,000
Garden 1	1500 - 2000	\$ 185,000	- \$ 260,000	\$ 222,500	36	\$	8,010,000
Garden 2	1500 - 1900	\$ 210,000	- \$ 250,000	\$ 230,000	187	\$	43,010,000
Small Lot 1 & 2	1900 - 2800	\$ 250,000	- \$ 360,000	\$ 305,000	221	\$	67,405,000
Medium Lot 1	2800 - 3500	\$ 350,000	- \$ 500,000	\$ 425,000	186	\$	79,050,000
Medium Lot 2 *	3200 - 7500	\$ 500,000	- \$ 1,500,000	\$ 650,000	96	\$	62,400,000
Total Units and House Value					2,389	\$	756,425,000
Average House Price						\$	317,000

\* The average house price for these categories is about \$1,000,000, but to be conservative \$650,000 was used here.

**Note:** "These housing prices are in 2002 dollars and do not reflect any pricing appreciation in the market since that time."



# Appendix C

Market Analysis of Briar Chapel

# NEWLAND COMMUNITIES

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## EXECUTIVE SUMMARY

In April 2002, Robert Charles Lesser & Co., LLC, (RCLCo)<sup>1</sup>, a national real estate consulting firm, completed research and analysis for Newland Communities (Newland) to determine the optimal development program for Briar Chapel, a 1,300-acre property (now +/- 1,600 acres) eight miles south of Chapel Hill, North Carolina, in northeastern Chatham County. Specifically, RCLCo conducted market and consumer research, including in-depth interviews with real estate professionals in the regional market to identify future customers for Briar Chapel and guidance in developing a community with housing products, amenities, and lifestyle that appeal to these homebuyers. The results of the synthesis of this data were then tested in financial modeling to advise Newland on the optimal development program that would result in positive returns both for Newland and for Chatham County and its residents. This report summarizes the overall price positioning and sales potential identified for Briar Chapel under these efforts. No additional research has been conducted for this executive summary.

RCLCo concluded that there was a strong market opportunity for a multi-product residential community development at the subject property. This conclusion was based on several factors:

1. There is more for-sale housing demand relative to existing or planned housing supply to support economic growth in the Raleigh-Durham-Chapel Hill metropolitan area.
2. The subject property is located in the direction of growth south from Chapel Hill, in a location to take advantage of this demand.
3. The housing demand is very strong for mid to upper end priced housing for multi-generational community development.
4. Homebuyers in the metropolitan area indicated a strong desire to live in an amenity-oriented master-planned community like the subject property, and at its location (more than 1,500 were initially interviewed via an internet survey).
5. These homebuyers are willing to pay a premium to live in an amenity-oriented, conservation ("green") themed community.
6. The subject property is well located with good access to jobs and commercial services to take advantage of the market opportunities.
7. The subject property is of the size to support recreational amenities and quality development.
8. The subject property is very attractive, given its tree coverage, rolling terrain and natural features.
9. The developers, Newland Communities, are among the most experienced and reputable community developers in the nation, creating high quality communities to provide places to live for homebuyers and that enhance the quality of life for towns and counties in which they develop.
10. The sustainable development practices (protecting the environment, pedestrian orientation, clustering development, town center at core) that Newland plans for this community have

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<sup>1</sup> Qualifications for Robert Charles Lesser & Co. are summarized at the end of this memorandum.

# NEWLAND COMMUNITIES

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proven to result in greater contribution to the environment and economic growth than rural development practices that create sprawl.

Based on these conclusions, RCLCo recommended that Newland take advantage of the market opportunities and create a high quality, amenitized and themed residential community at the subject property. From the consumer research, RCLCo concluded that the community should be developed with an emphasis on a "green" community concept to preserve the natural landscape. The concept would include a village or town center, hamlets with various product types, parks and open space, preserve areas to protect the fauna and flora, and passive and active recreational amenities. The community would be designed with superior execution, which Newland is experienced with, and therefore create a strong sense of place, a destination and real community versus a subdivision of houses. This concept will likely create value for not only the community itself but also for the surrounding area.

To understand market depth, RCLCo conducted an in-depth analysis of demand and supply, overlaid with an extensive consumer research study with existing and prospective homebuyers. From this, RCLCo created a statistical demand analysis that incorporated the projected demand and supply data. This analysis was used to assess the level of new housing potential within the Raleigh-Durham-Chapel Hill metropolitan statistical area (MSA) annually during the period of 2001 to 2006. Based on this analysis, a total of 11,300 new for-sale housing units (attached and detached) per year were projected for the MSA, on average, over the five-year period. In 2000, the MSA experienced 10,000 new home sales and was anticipated to have over 12,000 sales in 2001, which was consistent with our demand analysis. The results of the statistical demand analysis are shown in Figure 1 below.

# NEWLAND COMMUNITIES

**New For-Sale Housing Demand  
Figure 1**

***Raleigh-Durham-Chapel Hill MSA, 2001-2006***

Annual Income Range	Base Affordable Home Price	% of Hhlds	Existing Hhlds	% Own a Home	Total Existing Home-owner HH	Annual Turnover	Owner HH in Turn-over	Owner HHs Becoming Renters	Net Owner HHs	Total New Hhlds	# New Hhlds Buy Homes	Demand Pot. From Owner HHs
\$0 - \$40,000	\$0 - \$100,000	38%	180,424	40%	72,170	8.6%	6,207	621	5,586	3,826	1,530	7,116
\$40,000 - \$70,000	\$100,000 - \$175,000	28%	132,784	65%	86,309	8.6%	7,423	742	6,680	2,816	1,830	8,511
\$70,000 - \$100,000	\$175,000 - \$250,000	17%	80,817	75%	60,613	8.6%	5,213	521	4,691	1,714	1,285	5,977
\$100,000 - \$135,000	\$250,000 - \$350,000	9%	44,890	90%	40,401	8.6%	3,474	347	3,127	952	857	3,984
\$135,000 - \$185,000	\$350,000 - \$500,000	3%	14,594	95%	13,865	8.6%	1,192	119	1,073	309	294	1,367
\$185,000 - +	\$500,000 - +	5%	24,806	98%	24,310	8.6%	2,091	209	1,882	526	516	2,397
<b>Total or Weighted Average:</b>		<b>100%</b>	<b>478,315</b>	<b>62%</b>	<b>297,667</b>	<b>8.6%</b>	<b>25,599</b>	<b>2,560</b>	<b>23,039</b>	<b>10,143</b>	<b>6,312</b>	<b>29,352</b>

Base Affordable Home Price	Existing Renter HHs	Annual Turnover Rate	Qualified Renters in turnover	% of renters who buy	Renters Buying	Sale Demand Pot.	% Buy New	New For-Sale Demand	Distrib.	Buy up	Buy Down	Adjusted Demand	Distrib.
\$0 - \$100,000	108,254	35%	37,889	0.5%	189	7,306	19%	1,377	12%	50%	0%	688	6%
\$100,000 - \$175,000	46,474	45%	20,913	10%	2,091	10,602	38%	4,029	36%	25%	0%	5,037	45%
\$175,000 - \$250,000	20,204	50%	10,102	10%	1,010	6,987	38%	2,655	23%	30%	50%	2,215	20%
\$250,000 - \$350,000	4,489	55%	2,469	10%	247	4,231	40%	1,692	15%	20%	40%	1,701	15%
\$350,000 - \$500,000	730	50%	365	15%	55	1,422	40%	569	5%	10%	40%	1,308	12%
\$500,000 - +	496	50%	248	20%	50	2,447	40%	979	9%	0%	70%	350	3%
<b>Total:</b>	<b>180,648</b>	<b>40%</b>	<b>71,986</b>	<b>5%</b>	<b>3,642</b>	<b>32,994</b>	<b>34%</b>	<b>11,300</b>	<b>100%</b>			<b>11,300</b>	<b>100%</b>

For this analysis, RCLCo assumed that demand for new for-sale housing will emanate from three primary sources:

- New households moving or forming in the Raleigh-Durham-Chapel Hill MSA;
- Owner households moving up, down or over within the regional market; and
- Renter households upgrading to homeownership

The MSA contained almost 500,000 households (478,315) as of year-end 2001, and of these, 62% were homeowners, mirroring the US in homeownership rates at that time. (Since then, homeownership rates have increased to 70%. Since our analysis did not include this increase, it should be considered conservative.) According to the US Census, about 8.6% of these would move within the market (not including those who may move out of the market) during the course of a year. (Again, these rates have been higher as of late, influenced by low mortgage rates and more flexible underwriting standards.) These owner households in turnover were then qualified by income and home affordability at various housing price ranges. (For home affordability, RCLCo again used conservative qualifiers, which are much lower than actual qualifiers in the market.)

Renter households move more often, with average annual turnover rates of 40%. This turnover rate has actually been much higher since our study given the greater conversion of renters to homeowners. At the time of this study, we very conservatively assumed that only 5% would convert to homeownership, in part due to the amount of university students. Again, statistics have proven out that these assumptions were very conservative. (This does not necessarily include all new households to the area who may rent temporarily.)

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As noted above, the MSA is adding approximately 10,000 new households annually, on average, and the incomes and homeownership rates are assumed to be similar to existing households.

Approximately 34% of homes purchased are projected to be new construction versus the purchase of existing homes. This varies by home price with fewer new housing units being constructed and sold under \$100,000. The new for-sale housing demand was adjusted based on home prices consumers have actually purchased relative to their income.

With an annual new housing potential of 11,300 in the MSA, we are confident that Briar Chapel could capture a significant portion of sales in the region given the experience of Newland as a successful community developer nationally and the strong consumer interest in the community concept and location. Developments that are created as regional destinations as described earlier in this summary typically surpass the performance level achieved in the local market, in terms of pricing, sales pace and value creation.

The key elements of these successful developments are shown below, which we believe could be emulated at Briar Chapel. While the local market offers relatively diverse housing products (such as attached and detached), there are few examples of competitive communities in the MSA that feature many of these characteristics, which represent a strong opportunity for Newland at this property.

- Strong market segmentation (i.e., targeting more than one price range)
- Diverse niche products (i.e., attached and detached housing types)
- More preservation areas and parks
- Multiple villages or hamlets
- Multiple amenities
- Soft programming (activity directors, events, etc.)
- Technology strategy (wired communities)
- Effective and efficient lot delivery systems

As mentioned above, consumer research was undertaken to further define the untapped potential. These surveys indicated that 43% of potential homebuyers would choose to live within a multi-product and amenitized community versus a subdivision if given the option, which was significantly higher than the demonstrated 17% of sales within these community types that was experienced in the market. This was a clear indication that actively selling communities in the market were not offering the lifestyle options, price ranges and housing products these buyers were seeking, and as a result home purchasers were settling for an alternative.

In addition, we learned that not only were buyers seeking to live in a community versus a subdivision, but that they also had strong preferences for different community types. As such, we categorized and defined the communities, and the villages that comprise them, into eight distinct typologies. The typologies are defined by the differences among them in primary target market segments, buyer purchase motivations, key amenities and the primary housing products that are offered. One typology may define an entire community, or a larger community may be made up of smaller villages each defined by one or different typologies. The eight types include:

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- Family
- Golf
- Active Adult (AAC)
- Traditional Neighborhood Design (TND)
- Park
- Green
- Resort or Second-Home
- Urban Mixed-Use

Of the eight typologies, the following six are represented in the MSA and are most relevant to the development of Briar Chapel.

## Family

A Family community is one that predominately attracts single and two-parent families with children. It is very family oriented with a focus on amenities for children. Buyers are motivated to purchase new homes in these communities based on the quality of the schools and the availability of family recreational opportunities. Key amenities that provide this active, recreational lifestyle include pools, children's playgrounds and tot lots, sports fields and on-site schools and daycare facilities. The primary and preferred housing products in a Family community or village are single-family detached homes.

## Golf

Golf communities are defined by the availability of an on-site golf course and the associated golf club amenities including a clubhouse with dining, pools, tennis courts and a fitness center. Typical buyers are primarily families and mature couples including retirees that are influenced by the prestige and high-quality landscaping and overall appearance of golf communities, as well as, the investment and appreciation potential of the property. Housing types within Golf communities will include custom single-family homes, cluster (smaller lot) homes and attached villa homes.

## Active Adult

An Active Adult Community (AAC) is one that is restricted by age to buyers - generally to those aged 55 years or older. Subsequently, buyers are predominately mature couples and retirees. Often these buyers are motivated to purchase within an AAC because they are seeking a sense of belonging and an active lifestyle that is offered by the community programs and amenities. These programs and amenities include clubs and organized activities, a program director to coordinate the activities, pools, tennis courts and fitness centers. Golf courses and the associated club amenities are also very popular within Active Adult communities and villages. Homes within an AAC are typically low-maintenance detached homes and attached villa homes.

## Traditional Neighborhood Design (TND)

Traditional Neighborhood Design (TND) or Neo-Traditional communities offer a more progressive, interactive lifestyle that is attractive to both singles and couples across a broad age spectrum. TND communities and villages are characterized by featuring housing that is concentrated within a five-minute walk from gathering places like a town center, or village green where residents can socialize and interact with one another. Housing products include attached housing near and around the activity centers, as well as, single-family detached homes, both of which are accessed with rear garages via an alley or lane. Homes are generally located closer to a sidewalk that fronts along both sides of the street, feature front-porches and rear access garages from alleys and can be

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found in a range of architectural styles, most of which are reminiscent of older neighborhoods and more traditional architecture.

## Park

Park communities are characterized by having a significant portion of land being devoted to both active and passive park areas. These parks can range from large conservation areas and linear greenbelts to smaller “pocket” parks and green areas with playgrounds and recreational fields. Key amenities will relate to the availability of parkland like trails for walking, hiking and biking. Both families and couples without children are attracted to park communities or villages due to the availability of outdoor activities, and the high-level of landscaping and overall “green” appearance of the community. Homes are primarily single-family detached homes and are located on or within walking distance of the parks.

## Green

Attractive to buyers who are seeking a community with a significant level of open space and a low-density, low impact feeling without curb and gutter, Green communities and villages are defined by the presence of large areas of undisturbed conservation and preserve land. A Green community will have integrated trails for walking, hiking and biking and will actively promote recycling, energy efficiency and the use of natural materials and sustainable designs. A nature center and educational programs may also be available for residents to learn about the ecology of the area. Both families and couples without children represent target markets for Green communities. Typical housing products are low-density single-family detached homes.

The consumer research results indicated that of the 43% of potential buyers who would choose to pay a premium to live within a community versus a subdivision, 34% indicated a preference and willingness to pay more to live within a TND Community, 23% within a Family Community, 19% within a Park Community, 15% within a Green Community, and only 5% and 3% to live within a Golf Community, and an Active Adult Community (AAC), respectively. Based on this feedback, the demand potential for new housing in the region by typology is shown below in Figure 2.

**Figure 2** *Demand Potential by Community Type*

RCLCO ADJUSTED MPC POTENTIAL				RCLCO ADJUSTED MPC TYPE PREFERENCES BASED ON CONSUMER RESEARCH											
PRICE RANGE	TOTAL DEMAND POT.	% MPC PREF.	MPC DEMAND POT.	FAMILY		GOLF		AAC		TND		PARKS		GREEN	
				% FAMILY PREF.	FAMILY DEMAND POT.	% GOLF PREF.	GOLF DEMAND POT.	% AAC PREF.	AAC DEMAND POT.	% TND PREF.	TND DEMAND POT.	% PARKS PREF.	PARKS DEMAND POT.	% GREEN PREF.	GREEN DEMAND POT.
\$0 - \$100,000	688	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
\$100,000 - \$175,000	5,037	20%	999	21%	235	17%	42	33%	55	18%	298	19%	178	26%	191
\$175,000 - \$250,000	2,215	79%	1,758	32%	358	22%	55	33%	55	41%	679	34%	319	40%	293
\$250,000 - \$350,000	1,701	65%	1,100	28%	313	22%	55	12%	20	19%	315	26%	244	21%	154
\$350,000 - \$500,000	1,308	51%	663	11%	123	30%	74	12%	20	16%	265	13%	122	8%	59
\$500,000 - +	350	93%	326	7%	78	9%	22	10%	17	6%	99	7%	66	6%	44
<b>TOTAL</b>	<b>11,300</b>	<b>43%</b>	<b>4,859</b>	<b>23%</b>	<b>1,118</b>	<b>5%</b>	<b>248</b>	<b>3%</b>	<b>165</b>	<b>34%</b>	<b>1,657</b>	<b>19%</b>	<b>938</b>	<b>15%</b>	<b>734</b>

Since most of the competitive developments in the Raleigh market offer only one community typology, we concluded that there was an opportunity to significantly increase absorption and capture potential for Briar Chapel by offering multiple community types. In other words, Briar Chapel could achieve the combined sales potential of several local developments, assuming each

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community type at the subject property offered a distinct lifestyle, with multiple housing products at different price ranges selling concurrently.

Given the land constraints of the subject property, offering all, or even several, typologies was not likely (particularly golf); however, we recommended that several typologies be combined in order to attract the widest array of buyers types given the diverse preferences expressed in the consumer research. As such, the strategic program recommendations to maximize absorption potential at Briar Chapel consisted of two main villages: 1) Family/Park and 2) TND, with some products targeting active adults. Given, the treed environment of the property we concluded that while the property was not large enough to accommodate a third village, we recommended that Newland take advantage of the green community concept as a theme to tie the family/park and TND villages or hamlets together.

Within this community concept, Newland would have an opportunity to offer multiple types of housing products and various builders so that the community takes on the appearance of a more customized housing community versus a cookie-cutter type subdivision. An advantage of Newland is that they work with multiple builders and this gives homebuyers housing choices within the community.

The recommended development program consists of single-family detached homes on various lot sizes, with production housing priced from \$140,000 to over \$500,000, and custom homes ranging from \$500,000 to well over \$1,500,000 (for the largest homes on the nicest lots). (These housing prices are in 2002 dollars and do not reflect any pricing appreciation in the market since that time.) The TND village is recommended to offer condominiums and single-family attached housing with base prices starting at \$120,000.

The recommended prices positions Briar Chapel as a value to Meadowmont, a competitive community that is advantageously located near I-40, just east of Chapel Hill. With most home prices starting above \$250,000, Meadowmont represented the best performing residential community in the Raleigh-Durham market, achieving a sales pace of 205 homes per year, offering five different product types and six points of sale under one (versus two) community typology. We are confident that with more affordable pricing (approximately 25% less than Meadowmont for a similar sized product) and given the addition of another village other than TND, Briar Chapel could achieve a higher velocity of home sales per year. The recommended program for the Family/Park village (i.e., the more conventional housing) is shown in Figure 3 below.



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**Figure 3**

**Family/Park Village**

COMMUNITY TYPE PRODUCT TYPE	UNIT SIZE RANGE (S.F.)	BASE HOME PRICE RANGE	PRICE PER S.F.	BASE LOT/HOME RATIO	BASE LOT PRICE	PREMIUM LOT PRICE	POINTS OF SALE	ANN. ABS. POTENTIAL			
								BASE	YRS. 1-2	3-5	6+
<b>FAMILY/PARK</b>							<b>11+</b>	<b>425</b>	<b>353</b>	<b>436</b>	<b>422</b>
<b>Family-Oriented</b>											
F-1 Garden Lot	1,200 - 1,500	\$140,000 - \$165,000	\$110 - \$117	18%	\$27,000	n/a	1	47	47	56	38
F-2 Small Lot	1,500 - 1,700	\$175,000 - \$210,000	\$117 - \$124	18%	\$35,000	n/a	1	48	48	58	38
F-3 Medium Lot 1	1,700 - 2,000	\$210,000 - \$250,000	\$124 - \$125	18%	\$41,000	n/a	1	24	24	29	19
F-4 Medium Lot 2	2,000 - 2,800	\$250,000 - \$350,000	\$125 - \$125	18%	\$54,000	n/a	2	63	47	57	76
F-5 Large Lot 1	2,700 - 3,800	\$350,000 - \$500,000	\$130 - \$132	18%	\$77,000	n/a	1	25	13	19	30
F-6 Large Lot 2	3,500 - 8,500	\$500,000 - \$1,500,000	\$143 - \$176	18%	\$90,000	n/a	Multiple	12	6	9	14
<b>Park-Oriented</b>											
P-1 Garden Lot	1,200 - 1,500	\$160,000 - \$185,000	\$123 - \$133	20%	\$35,000	\$42,000	1	42	42	50	34
P-2 Small Lot	1,500 - 1,700	\$195,000 - \$230,000	\$130 - \$135	20%	\$43,000	\$52,000	2	60	60	72	48
P-3 Medium Lot 1	1,700 - 2,000	\$230,000 - \$270,000	\$135 - \$135	20%	\$50,000	\$60,000	1	34	26	31	41
P-4 Medium Lot 2	2,000 - 2,800	\$270,000 - \$370,000	\$132 - \$135	20%	\$64,000	\$77,000	1	24	18	22	29
P-5 Large Lot 1	2,700 - 3,800	\$375,000 - \$520,000	\$137 - \$139	20%	\$90,000	n/a	1	30	15	23	36
P-6 Large Lot 2	3,500 - 8,500	\$540,000 - \$1,550,000	\$154 - \$182	20%	\$110,000	n/a	Multiple	16	8	12	19

As shown in Figure 3, the Family/Park Village combines distinct park and non-park neighborhoods. Consumer research indicated buyers would be willing to pay a premium to be in a park setting, which accounts for the higher home prices for the park-oriented products.

In general, this village targets families with children; however, families with children will not be the only homebuyer. On the contrary, these communities are highly attractive to empty nesters and young couples without children. Neighborhoods should be designed and situated among the various amenities depending on their respective target market. For example, neighborhoods intended for families with children will be located closer to the active parks, tot lots, children's playgrounds, schools, walking trails, daycare and family recreation centers. Alternatively, the neighborhoods targeting non-children families could be located near the passive parks, hiking and nature trails. A pool is also recommended at the village level. A mix of national builders is recommended for this village with several local builders for more specialized products near the parks.

Total absorption potential for this village is 425 units annually assuming all product types and prices range are selling concurrently, representing over 11 different points of sales, plus a custom lot program. Please note that this is potential only. In all likelihood, the number of product types of various orientations that would be selling concurrently would probably be more in the range of six to eight, representing a more realistic average absorption pace of 300 sales per year. While this rate is greater than the pace achieved by any of the competitive developments in the market (in 2001)<sup>2</sup>; we believe this is very achievable given the recommended product segmentation, price positioning, and master-planned community setting. We also anticipate a ramp up period in the initial years of sales as the subject property establishes a sense of place, and eventually sales momentum.

In addition to the Family/Park village, we have recommended an array of housing types for the TND village. The focal point for the TND village would be a town or village center that could

<sup>2</sup> The better competitive communities in the local market were averaging sales paces ranging from 120 to 205 annually, with fewer number of product types and points of sale offered than what is recommended at the subject property. Please see Exhibit 1 at the end of this report for a summary of competitive communities.

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include community facilities as well as some commercial space. The recommended program for the TND village is shown in Figure 4 below.

**Figure 4**

**TND Village**

COMMUNITY TYPE PRODUCT TYPE	UNIT SIZE RANGE (S.F.)	BASE HOME PRICE RANGE	PRICE PER S.F.	BASE LOT/HOME RATIO	BASE LOT PRICE	PREMIUM LOT PRICE	POINTS OF SALE	ANN. ABS. POTENTIAL			
								BASE	YRS. 1-2	3-5	6+
<b>TND</b>							9+	345	274	346	343
<b>Attached</b>											
T-1 Condominium	900 - 1,300	\$120,000 - \$165,000	\$127 - \$133	10%	\$14,000	n/a	1	69	35	52	83
T-2 Townhome 1	1,200 - 1,500	\$150,000 - \$175,000	\$117 - \$125	15%	\$24,000	\$29,000	1	18	18	22	14
T-3 Townhome 2	1,300 - 1,900	\$175,000 - \$250,000	\$132 - \$135	15%	\$32,000	\$38,000	1	29	29	35	23
<b>Detached</b>											
T-5 Garden 1	1,500 - 2,000	\$185,000 - \$260,000	\$123 - \$130	20%	\$45,000	\$54,000	1	15	15	18	12
T-6 Garden Lot 2	1,500 - 1,900	\$210,000 - \$250,000	\$132 - \$140	20%	\$46,000	\$55,000	2	116	116	139	93
T-7 Small Lot 1	1,900 - 2,700	\$250,000 - \$350,000	\$130 - \$132	20%	\$60,000	\$72,000	1	38	29	34	46
T-8 Small Lot 2	2,000 - 2,800	\$260,000 - \$360,000	\$129 - \$130	20%	\$62,000	\$74,000	1	10	8	9	12
T-9 Medium Lot 1	2,600 - 3,500	\$350,000 - \$500,000	\$135 - \$143	20%	\$85,000	\$102,000	1	32	16	24	38
T-10 Medium Lot 2	3,200 - 7,500	\$500,000 - \$1,500,000	\$156 - \$200	20%	\$100,000	\$120,000	Multiple	18	9	14	22

As shown above, the TND village includes an array of product types that would target young families, empty nesters, singles and young couples. We also suggested offering products targeting active adults, as well as introducing attached products that we believe will be accepted given the unique orientation of this community type. Strong design is a key component of this recommended village and drives its success. Important village amenities include a town center, village green and pools and parks. National builders are recommended for some of the AAC products, but for the most part, regional and local builders should be engaged for the balance of homes in this village. With multiple product types selling concurrently, the annual absorption potential for the TND village is 345, representing nine points of sale, plus a custom home program. Similar to the family/park village, this is potential only, and it is more likely that only four to five product types would be selling simultaneously, representing an average sales pace closer to 275 to 300 units per year. Again, this absorption would be achieved once the community has been established, allowing for a ramp up period to create a strong sense of place.

In addition to the village-level amenities, there should also be amenities at the community level to achieve the sales paces suggested herein. These include a town center, amphitheater, open space and parks, and trails linking the various villages and community-level amenities.

Based on market conditions in April 2002, we concluded that Briar Chapel represents a strong opportunity for development of an amenity-oriented community offering several village typologies and multiple product types and points of sale. Assuming strong community execution as a regional destination with multiple community types, the subject property could achieve relatively strong price positioning, and sales paces eclipsing absorption levels previously experienced in the market by any one development.

Moreover, our demand analysis demonstrated that there is ample new housing potential, and the consumer research indicated that potential buyers in the market have strong preferences for community types that are not currently offered. Briar Chapel has the chance to capitalize on these opportunities that actively selling developments are currently missing.

# NEWLAND COMMUNITIES

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## QUALIFICATIONS

RCLCo is the nation's leading independent real estate advisory firm, providing market and financial analysis and strategic planning for a broad spectrum of clients. We are recognized in the industry as having the ability to address specific project situations as well as our clients' overall long-term strategic needs. Our services are customized to address our clients' particular needs, supported by both quantitative analysis and creative problem solving.

We are committed to helping clients gain a competitive advantage in the marketplace. Our services include market and financial analyses, product programming, strategic planning, consumer research, appraisals, optimization analysis, disposition strategy and investment advisory. We are often called upon to help conceive a strategy plan that maximizes land values, by considering local market trends, regional growth, competition, and financial criteria. Our goal in all such engagements, regardless of the macro or micro issues at hand, is to translate market knowledge and our experience into winning strategic advice for our clients.

We work with master-planned communities (MPCs), resort properties, and mixed-use developments throughout North America and internationally. In February 2004, RCLCo released the results of our annual survey identifying the top-selling MPCs nationwide based on total new homes sold in 2003. Of the 20 leading MPCs, RCLCo provided consulting services for the developers of 15 of them. We are known in the industry for our ability to interpret information and help our clients take advantage of market opportunities. Our goal in all such engagements, regardless of the macro or micro issues at hand, is to translate market knowledge and our experience into winning strategic advice.

# NEWLAND COMMUNITIES

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## GENERAL LIMITING CONDITIONS

Every reasonable effort has been made to insure that the data contained in this study reflect the most accurate and timely information possible and it is believed to be reliable. This study is based on estimates, assumptions and other information developed by RCLCo from its independent research effort, general knowledge of the industry and consultations with the Client and its representatives. No responsibility is assumed for inaccuracies in reporting by the Client, its agent and representatives or any other data source used in preparing or presenting this study. This report is based on information that was current as of the April 2002, and RCLCo has not undertaken any update of its research effort since such date.

Our report may contain prospective financial information, estimates or opinions that represent our view of reasonable expectations at a particular point in time, but such information, estimates or opinions are not offered as predictions or as assurances that a particular level of income or profit will be achieved, that events will occur or that a particular price will be offered or accepted. Actual results achieved during the period covered by our prospective financial analysis may vary from those described in our report and the variations may be material. Therefore, RCLCo makes no warranty or representation that any of the projected values or results contained in this study will actually be achieved.

Possession of this study does not carry with it the right of publication thereof or to use the name of "Robert Charles Lesser & Co., LLC" or "RCLCo" in any manner without first obtaining the prior written consent of RCLCo. No abstracting, excerpting or summarization of this study may be made without first obtaining the prior written consent of RCLCo. This report is not to be used in conjunction with any public or private offering of securities or other similar purpose where it may be relied upon to any degree by any person other than the Client without first obtaining the prior written consent of RCLCo. This study may not be used for any purpose other than that for which it is prepared or for which prior written consent has first been obtained from RCLCo.

# NEWLAND COMMUNITIES

## Exhibit 1

### SUMMARY OF COMPETITIVE COMMUNITIES RALEIGH-DURHAM-CHAPEL HILL MSA NOVEMBER 2001

Community Neighborhood	Orientation	Product Type	Developer Builders	Date Opened	Total Units Planned	Total Units Sold	Current Avg Absorp	Product Price Range	Product Size Range	Price per SF or acre
<b>Meadowmont</b>	<b>TND</b>		<b>East West Partners</b>	<b>Apr-01</b>	<b>642</b>	<b>225</b>	<b>205</b>	<b>\$100,000 - \$1,000,000</b>	<b>800 - 4,500</b>	<b>\$108 - \$222</b>
Condominiums	TND	Condo	White Oak Properties					\$100,000 - \$108,000	800 - 1,000	\$125 - \$108
Row House	TND	Townhome	White Oak Properties					\$530,000 - \$1,000,000	2,700 - 4,500	\$196 - \$222
Cottage Home	TND	SFD small	Parker Lancaster					\$240,000 - \$350,000	1,200 - 2,000	\$200 - \$175
Fairway Park	TND	SFD small	Poythress and Timberline					\$475,000 - \$600,000	3,000 - 3,500	\$158 - \$171
Traditional House	TND	SFD medium	John Wieland Homes					\$475,000 - \$700,000	3,000 - 4,000	\$158 - \$175
<b>Wakefield Plantation</b>	<b>Golf</b>		<b>Wakefield Plantation Inc.</b>	<b>Jul-98</b>	<b>3,500</b>	<b>912</b>	<b>158</b>	<b>\$130,000 - \$3,500,000</b>	<b>1,286 - 9,400</b>	<b>\$83 - \$389</b>
Club Villas	Golf & Lake	4-Plex	Comstock					\$350,000 - \$450,000	2,500 - 4,800	\$140 - \$94
Calloway on the Green	Golf	Townhome	Centex					\$190,000 - \$250,000	1,700 - 2,200	\$112 - \$114
Ridgely Townes	Village	Multi-plex	Sunstar					\$130,000 - \$190,000	1,286 - 1,859	\$101 - \$102
Weatherby Villas	Village	Duplex	Sunstar					\$142,000 - \$150,000	1,200 - 1,435	\$118 - \$105
Dunleith	Golf	SFD medium	Custom					\$485,000 - \$2,000,000	4,000 - 8,500	\$121 - \$235
Fairview	Golf & Lake	SFD medium	Custom					\$600,000 - \$2,000,000	3,800 - 9,400	\$158 - \$213
Savannah	Golf	SFD medium	Amerimann					\$400,000 - \$750,000	2,450 - 3,600	\$163 - \$208
Savannah Village	Golf	SFD medium	Amerimann					\$400,000 - \$750,000	2,450 - 3,600	\$163 - \$208
Stratford Hall	Interior	SFD medium	Centex					\$270,000 - \$450,000	2,600 - 3,600	\$104 - \$125
St. James Place	Golf	SFD medium	Beazer and Centex					\$250,000 - \$600,000	1,850 - 4,000	\$135 - \$150
Deauville	Interior	SFD medium	Heritage Custom					\$380,000 - \$600,000	3,000 - 4,000	\$127 - \$150
Estates	Interior	SFD large	Custom					\$600,000 - \$2,000,000	4,000 - 8,500	\$150 - \$235
Rosemont	Golf	SFD large	Custom					\$1,000,000 - \$3,500,000	4,500 - 9,000	\$222 - \$389
Middleton	Interior	SFD large	John Wieland Homes					\$340,000 - \$650,000	2,450 - 3,600	\$139 - \$181
Glenstone	Village	SFD large	Sunstar					\$350,000 - \$450,000	2,900 - 4,200	\$121 - \$107
Parkside	Village	SFD small	Sunstar					\$160,000 - \$190,000	1,400 - 2,300	\$114 - \$83
Berkshire	Village	SFD small	Sunstar					\$220,000 - \$250,000	1,766 - 2,780	\$125 - \$90
<b>Scotts Mill</b>	<b>TND</b>		<b>York Properties</b>	<b>Jun-97</b>	<b>1,000</b>	<b>527</b>	<b>157</b>	<b>\$130,000 - \$450,000</b>	<b>1,300 - 2,500</b>	<b>\$100 - \$180</b>
Townhomes	TND	Townhome	Preservation and Stonewall					\$130,000 - \$200,000	1,300 - 1,900	\$100 - \$105
Single Family	TND	SFD garden	Biltmore					\$160,000 - \$170,000	1,500 - 1,500	\$107 - \$113
Single Family	TND	SFD small	Cattano, Preservation, Vintage					\$300,000 - \$450,000	2,500 - 2,500	\$120 - \$180
<b>Riverside</b>	<b>Family</b>		<b>Rhein Interests</b>	<b>Jan-00</b>	<b>730</b>	<b>365</b>	<b>138</b>	<b>\$103,000 - \$273,000</b>	<b>1,021 - 3,742</b>	<b>\$73 - \$122</b>
The Glens	Family	Townhome	Torrey					\$103,000 - \$132,000	1,021 - 1,589	\$101 - \$83
Willow Bend	Family	SFD garden	Torrey, Centex					\$140,000 - \$180,000	1,464 - 2,189	\$96 - \$82
White Oak Run	Family	SFD small	St. Lawrence Homes, Centex					\$195,000 - \$250,000	1,600 - 2,593	\$122 - \$96
Hickory Hill	Family	SFD medium	Fortis, St. Lawrence Homes					\$200,000 - \$273,000	2,567 - 3,742	\$78 - \$73

# NEWLAND COMMUNITIES

## Exhibit 1

### SUMMARY OF COMPETITIVE COMMUNITIES RALEIGH-DURHAM-CHAPEL HILL MSA NOVEMBER 2001

Community Neighborhood	Orientation	Product Type	Developer Builders	Date Opened	Total Units Planned	Total Units Sold	Current Avg Absorp	Product Price Range	Product Size Range	Price per SF or acre
<b>Southern Village</b>	<b>TND</b>		<b>Bryan Properties</b>	<b>1995</b>	<b>925</b>	<b>500</b>	<b>125</b>	<b>\$102,000 - \$700,000</b>	<b>600 - 4,000</b>	<b>\$139 - \$208</b>
Market Lofts	TND	Condo	Montgomery Dev Co		225			\$102,000 - \$220,000	700 - 1,300	\$146 - \$169
500 Market Street	TND	Condo	The Boulevard Company					\$125,000 - \$190,000	600 - 1,300	\$208 - \$146
Merritt Park	TND	Condo	White Oak Properties		150			\$178,000 - \$195,000	1,280 - 1,280	\$139 - \$152
Highgrove	TND	Townhome	Cambridge, Dixon/Kirby, McNeill Burbank					Sold Out	Sold Out	Sold Out
Highgrove	TND	SFD small	Future Homes, Jerry Smith		550			\$250,000 - \$700,000	1,700 - 4,000	\$147 - \$175
Glenhaven	TND	SFD small	Builders, Kemp-Harris, Keystone,					\$250,000 - \$700,000	1,700 - 4,000	\$147 - \$175
Arlen Park	TND	SFD small	Melville Builders, Poythress,					\$250,000 - \$700,000	1,700 - 4,000	\$147 - \$175
Graylyn	TND	SFD small	Synergy, Timberline, Upright					\$250,000 - \$700,000	1,700 - 4,000	\$147 - \$175
<b>Governors Club</b>	<b>Golf</b>		<b>Governors Club</b>	<b>1989</b>	<b>1250</b>	<b>1220</b>	<b>110</b>	<b>\$300,000 - \$1,500,000</b>	<b>2,800 - 8,000</b>	<b>\$88 - \$234</b>
Single Family	Golf	SFD small	BRW, Brightleaf, Chase Building Co., Crist-Chapman Builders, Diversified Shelters Corp., J. Daniel Fritz, Ken Huff, K Alan Co., Ray King Builders, Byron Mitchell Builder, Inc., Mrozek Design & Construction, Pomarico, T.L. Stewart Builders, Van Slyke Builders					\$300,000 - \$1,500,000	2,800 - 3,200	\$107 - \$469
Single Family	Golf	SFD medium	same as SFD small					\$400,000 - \$700,000	3,600 - 8,000	\$111 - \$88
Homesite	Golf	Homesite	n/a					\$60,000 - \$150,000	0.25 - 0.50	\$240,000 - \$300,000
<b>Sunset Ridge</b>	<b>Golf</b>		<b>Bryan Properties</b>	<b>1991</b>	<b>1,500</b>	<b>950</b>	<b>100</b>	<b>\$84,000 - \$400,000</b>	<b>700 - 3,080</b>	<b>\$102 - \$130</b>
Condos	Golf	Condo	White Oak Properties					\$84,000 - \$120,000	700 - 990	\$120 - \$121
Townhomes	Park	Townhome	Barnes, Dixon/Kirby, McNeill Burbank					\$130,000 - \$250,000	1,280 - 2,200	\$102 - \$114
Single Family	Golf	SFD small	Future Homes Jerry Smith					\$230,000 - \$230,000	2,230 - 2,230	\$103 - \$103
Single Family	Golf	SFD large	Builders, Poythress, Timberline, Upright Builders, Woodard Builders, Tailored Homes, Helton Homes, McNeill Burbank, Robuck, Jeff Fike, Dixon/Kirby, Samuel B. Carrico, Barrington, Barnes					\$400,000 - \$400,000	3,080 - 3,080	\$130 - \$130

# NEWLAND COMMUNITIES

## Exhibit 1

### SUMMARY OF COMPETITIVE COMMUNITIES RALEIGH-DURHAM-CHAPEL HILL MSA NOVEMBER 2001

Community Neighborhood	Orientation	Product Type	Developer Builders	Date Opened	Total Units Planned	Total Units Sold	Current Avg Absorp	Product Price Range	Product Size Range	Price per SF or acre
<b>Brier Creek</b>	<b>Golf</b>		<b>Toll Brothers</b>	<b>Dec-99</b>	<b>1,500</b>	<b>225</b>	<b>81</b>	<b>\$202,975 - \$576,975</b>	<b>2,474 - 4,780</b>	<b>\$81 - \$132</b>
Tournament Homes		4-plex	Toll Brothers					\$202,975 - \$216,975	2,520 - 2,510	\$81 - \$86
Carriage Townhome		Townhome	Toll Brothers					\$284,975 - \$297,975	2,474 - 2,594	\$115 - \$115
Carolina Collection		SFD small	Toll Brothers					\$279,975 - \$292,975	2,514 - 2,795	\$111 - \$105
Golf Villa Collection		SFD medium	Toll Brothers					\$295,975 - \$325,975	2,611 - 2,936	\$113 - \$111
Executive Collection		SFD medium	Toll Brothers					\$349,975 - \$382,975	3,135 - 3,211	\$112 - \$119
The Estates		SFD medium	Toll Brothers					\$449,975 - \$576,975	3,400 - 4,780	\$132 - \$121
<b>Heritage Pines</b>	<b>AAC</b>		<b>US Home</b>	<b>Jan-00</b>	<b>302</b>	<b>160</b>	<b>80</b>	<b>\$150,000 - \$230,000</b>	<b>1,380 2,215</b>	<b>\$100 - \$127</b>
Villa Home	AAC	Duplex	Westminster					\$150,000 - \$188,000	1,380 1,880	\$109 - \$100
Garden Home	AAC	SFD garden	Westminster					\$195,000 - \$230,000	1,540 2,215	\$127 - \$104
<b>Carpenter Village</b>	<b>TND</b>		<b>W &amp; W Partners</b>	<b>1996</b>	<b>575</b>	<b>255</b>	<b>63</b>	<b>\$160,000 - \$1,000,000</b>	<b>1,600 - 4,800</b>	<b>\$100 - \$208</b>
Townhomes		Townhome	Impact Design/Build, Inc., Amward Homes					\$160,000 - \$240,000	1,600 2,400	\$100 - \$100
Charleston Homes		SFD garden	Wardson Construction, Inc., Southbrook Builders, Blankenship & Mussler, Olde Raleigh Homes					\$260,000 - \$350,000	2,300 3,200	\$113 - \$109
Neighborhood Homes		SFD small	Douglas Ward & Associates, Poythress Construction Co., Samuel B. Carrico, Inc., Upright Builders, Inc., Wardson Construction, Amward Homes, South Pointe Builders, Calibre Homes and Beamon Building					\$299,000 - \$499,000	2,300 3,000	\$130 - \$166
Estate Homes		SFD medium						\$500,000 - \$1,000,000	3,200 4,800	\$156 - \$208
<b>Cary Park</b>	<b>TND</b>		<b>East West</b>	<b>Feb-00</b>	<b>2,400</b>	<b>80</b>	<b>44</b>	<b>\$285,000 - \$700,000</b>	<b>2,834 - 4,300</b>	<b>\$101 - \$163</b>
Single Family	TND	SFD small	David Weekley					\$285,000 - \$320,000	2,834 - 3,094	\$101 - \$103
Single Family	TND	SFD small	John Wieland Homes					\$470,000 - \$470,000	3,250 - 3,700	\$145 - \$127
Single Family	TND	SFD medium	Brentwood Homes, Teris Construction Group, Carolinian Homes, Impact Design-Build, Ange Construction, DG Baron & Co., Sampson Construction, Barrington Homes, Van Slyke Builders, Sam Young Builders, Woodard Builders, Lawrence Construction,					\$490,000 - \$700,000	3,500 - 4,300	\$140 - \$163
Homesites	TND	Homesite	n/a					\$65,000 - \$100,000	0.25 - 0.75	\$260,000 - \$133,333

# NEWLAND COMMUNITIES

## Exhibit 1

### SUMMARY OF COMPETITIVE COMMUNITIES RALEIGH-DURHAM-CHAPEL HILL MSA NOVEMBER 2001

Community Neighborhood	Orientation	Product Type	Developer Builders	Date Opened	Total Units Planned	Total Units Sold	Current Avg Absorp	Product Price Range	Product Size Range	Price per SF or acre
<b>Governors Village</b>	<b>TND</b>		<b>Governors Club</b>		<b>244</b>	<b>95</b>	<b>44</b>	<b>\$225,000 - \$320,000</b>		
Homes	TND	SFD small	M/I					\$320,000 - \$320,000	3,200 - 3,200	\$100 - \$100
Homesites	TND	Custom Homesite						\$45,000 - \$55,000	-	-
<b>Faerrington Village</b>	<b>AAC</b>		<b>Fitch</b>	<b>1974</b>	<b>1,500</b>	<b>980</b>	<b>25</b>	<b>\$240,000 - \$600,000</b>	<b>1,600 - 4,000</b>	<b>\$130 - \$167</b>
Patio Homes	AAC	SFD garden	Fitch					\$240,000 - \$390,000	1,600 - 3,000	\$150 - \$130
Courtyard Homes	AAC	SFD medium	Fitch					\$275,000 - \$500,000	1,700 - 3,000	\$162 - \$167
SFD	AAC	SFD large	Fitch					\$275,000 - \$600,000	1,800 - 4,000	\$153 - \$150
<b>Churton Grove</b>	<b>Family</b>		<b>Churton Grove Dev LLC</b>	<b>1999</b>	<b>410</b>	<b>50</b>	<b>25</b>	<b>\$220,000 - \$360,000</b>	<b>1,500 - 3,600</b>	<b>\$100 - \$147</b>
Single-Family	Family	SFD Large	Drees, Beazer and Biltmore					\$220,000 - \$360,000	1,500 - 3,600	\$147 - \$100
<b>Falls River</b>	<b>Parks</b>		<b>East West Partners</b>	<b>Feb-96</b>	<b>981</b>	<b>833</b>	<b>8</b>	<b>\$80,000 - \$420,000</b>	<b>780 - 3,100</b>	<b>\$88 - \$135</b>
Condominiums		Condo	White Oak Properties		96			\$80,000 - \$120,000	780 - 980	\$103 - \$122
Townhomes		Townhome	Dobson		89			\$160,000 - \$180,000	1,560 - 2,050	\$103 - \$88
Cottage		SFD Small	McNeill Burbank Homes		99			\$140,000 - \$190,000	1,300 - 1,800	\$108 - \$106
Cluster		SFD Medium	Robuck		44			\$230,000 - \$260,000	1,700 - 2,200	\$135 - \$118
Patio		SFD Garden	Terry-Peterson		53			\$166,000 - \$175,000	1,650 - 1,680	\$101 - \$104
Single Family	Parks	SFD Large	Robuck, Rice, Tingen, Cityscape, Summerton and Parker Lancaster		600			\$250,000 - \$420,000	2,000 - 3,100	\$125 - \$135
<b>The Preserve at Jordan Lake</b>	<b>Resort/2nd</b>		<b>Bluegreen</b>	<b>2001</b>	<b>516</b>	<b>260</b>	<b>n/a</b>	<b>\$250,000 \$750,000</b>	<b>14,375 - 43,560</b>	<b>\$17 - \$17</b>
Wooded Homesite	Golf	Custom Homesite	Local Custom Builders					\$50,000 \$60,000	14,375 - 43,560	\$3 - \$1
Golf Homesite	Golf	Custom Homesite	Local Custom Builders					\$100,000 \$150,000	14,375 - 43,560	\$7 - \$3