



**COUNTY LINE PLAZA
CHATHAM COUNTY, NC
ECONOMIC IMPACT
ANALYSIS**

**PREPARED FOR:
LEE-MOORE
OIL COMPANY**

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INTRODUCTION

This report evaluates the economic impacts of County Line Plaza, Lee-Moore Oil Company's proposed commercial development, on Chatham County, North Carolina. This analysis is intended to provide the County with an estimate of the level of economic activity and jobs that will be generated in Chatham County during the construction period as well as the ongoing annual economic impacts of County Line Plaza after completion.

PROJECT DESCRIPTION

Lee-Moore Oil Company has several components planned for the 210,500 square foot complex on the 63.3-acre site located in northern Chatham County. These components include a 140,800 square foot home improvements center anchor, a 23,400 square foot secondary retail anchor, 26,000 square feet of small anchor stores, a 14,800 square foot drug store in outparcel #1, and a 5,500 square foot convenience store in outparcel #2. There are no residential units planned for County Line Plaza.

THE STUDY AREA

The economic impacts of County Line Plaza will primarily be felt in Chatham County but its impacts will also extend to surrounding areas. This analysis focuses solely on the Chatham County economic impacts.

The developer and the builders constructing the facilities in County Line Plaza will purchase many of the required materials and services in Chatham County. However, the greatest long-term impacts will come from jobs created and filled by Chatham County residents. In addition to the labor inputs, the builders and future County Line Plaza employees will purchase such raw materials as electricity, food and beverage supplies, various professional services (legal, accounting, medical and dental), maintenance, miscellaneous supplies and transportation services in Chatham County.

The County has experienced substantial growth during the last decade. While much of the County is rural in nature, the area has become attractive to people who work in the Research Triangle Park.

Chatham County is relatively large in terms of square miles, as it comprises about 683 square miles. According to the North Carolina Department of Commerce, the population in the County was approximately 56,000 in July 2005. Employment in the County exceeded 30,000 workers in April 2006.

The average income in Chatham County is well above the average for the state. Based on the latest data published by the North Carolina Department of Commerce, the 2003 per capita income in the County was 15% above the state average - \$32,236 in Chatham County compared to \$28,071 for the state.

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The development of County Line Plaza will have impacts on the Chatham County economy and the surrounding counties in two phases. The initial impacts will occur during the construction of the commercial properties. Once construction is completed, the employees working in the new facilities and the commercial activities occurring within these facilities will have additional impacts on the local economy on an ongoing basis. It is important to note that this analysis focuses only on Chatham County. The economic impacts on the region will be larger than those occurring within the boundaries of Chatham County. This is due to the fact that the smaller the study area, the more the leakages (purchases and sales) will occur outside the area. Smaller and fewer ripples will occur inside the area. Thus multipliers generally become larger as the geographic area increases in size.

This analysis utilizes impact models generated by the IMPLAN modeling system.¹ IMPLAN is a nationally recognized system of local economic models that are specifically designed to represent a local economy such as Chatham County. The IMPLAN models are modifications of the national input-output models developed by the Bureau of Economic Analysis, US Department of Commerce. The IMPLAN models incorporate the most recent data available. These are generally 2002 unless otherwise noted.²

The methodology and assumptions underlying these estimates and those in the following section are described later in this report. The estimates are based on constant dollars and assume no inflation during the project's buildout. This assumption applies to all estimates in the analysis including: property values, incomes, sales, construction materials, etc. The assumption of constant dollars provides a more accurate analysis of the impacts since both revenues and costs are assumed to increase at similar rates during the buildout period.

IMPACTS FROM THE CONSTRUCTION PHASE

The economic impacts from the construction phase of County Line Plaza are outlined in this section. These impacts will be relatively short-term since the construction of the project is assumed to take two years.

Based on estimates by the developer, the construction phase of the development will result in direct investment of approximately \$42 million at the time of the project's completion. Construction costs, including site development costs but excluding the cost of land, are estimated to be \$29.6 million. The market value of the project at buildout is outlined below:

¹ IMPLAN is the regional modeling system developed by MIG, Inc., Stillwater, MN.

² The latest data available for the IMPLAN modeling system are for 2003. However, the final dollar impacts estimated in this analysis reflect 2006 prices.

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Table 1
County Line Plaza Estimated Market Value*

Retail Anchor #1 – home improvements center	140,800 sf	\$21,120,000
Retail Anchor #2	23,400 sf	4,840,000
Small Retail Shops #1	3,600 sf	1,240,000
Retail Anchor #3	8,400 sf	2,020,000
Retail Anchor #4	8,000 sf	1,920,000
Small Retail Shops #2	6,000 sf	2,070,000
Drug Store – Outparcel #1	14,800 sf	5,210,000
Convenience Store – Outparcel #2	<u>5,500 sf</u>	<u>3,530,000</u>
Total	<u>210,500 sf</u>	<u>\$41,950,000</u>

* The exact size, type and cost of the facilities may vary slightly due to market conditions.

As the construction dollars are spent and re-spent in Chatham County, additional income is created for those companies and individuals that supply goods and services to the construction of the commercial space. The recipients will spend this income on other goods and services. Each time, some of the purchases will be for goods and services inside Chatham County and some will be for goods and services from outside the area (referred to as “leakages”). The well known “multiplier effect” estimates the aggregate amount of local buying and selling that occurs.

The multipliers used in this analysis estimate three components of total change within the local area:

- *Direct effects* represent the initial change in the industry in question.
- *Indirect effects* account for changes in inter-industry transactions as supplying industries respond to increased demands from the directly affected industry.
- *Induced effects* reflect changes in local spending of income that results from changes in the directly and indirectly affected industry sectors.

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The cycle of spending continues until leakages from the region (spending on goods and services outside the area) end the cycle. Due to the ripple effects of the multiplier, the initial, direct investment results in indirect and induced impacts of many more dollars.

As seen in Table 2, the cumulative effects of the multiplier cause the initial direct investment of construction costs totaling \$29.6 million to result in an indirect impact of \$5.4 million and an induced impact of \$5.1 million within Chatham County. The total increase in output for Chatham County from the construction of County Line Plaza is \$40.1 million.

Table 2				
Construction Impacts on Chatham County Over The Two-Year Buildout				
	<u>Direct</u>	<u>Indirect</u>	<u>Induced</u>	<u>Total</u>
Output	\$29.6M	\$5.4M	\$5.1M	\$40.1M
Labor Income	\$12.7M	\$2.2M	\$1.5M	\$16.4M
New Jobs	409	61	60	530
*M = Million				

New jobs will also be created during the construction period. It is estimated that there will be 409 new jobs directly created in Chatham County from the construction activity at County Line Plaza. In addition to these direct jobs, another 61 jobs will be created as an indirect effect of the construction activity and another 60 new jobs from the induced impacts – for a total of 530 new jobs in Chatham County during the construction phase of County Line Plaza. This job creation will decline as the project nears completion and will end after completion.

During the construction of County Line Plaza, Chatham County will experience an increase in labor income. As seen in Table 2, the cumulative effects of the multiplier cause the initial direct construction investment of \$29.6 to result in a direct impact on labor income in Chatham County of \$12.7 million. These dollars circulate throughout the County and result in an indirect impact of an additional \$2.2 million in labor income and an induced labor income impact of \$1.5 million. The total increase of labor income in Chatham County is \$16.4 million.

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ONGOING IMPACTS FROM COUNTY LINE PLAZA

In addition to the impacts from the commercial construction activity, Chatham County will also experience economic activity generated by new employees in County Line Plaza facilities. The annual economic impacts of this employment are based on the projected total income of the 314 employees anticipated to work in County Line Plaza establishments.

Total personal income estimated for the employees is based on the projected square footage, type of business, and occupational earnings data for the businesses that are currently expected to locate in County Line Plaza.³

Table 3
County Line Plaza Direct Employment and Payrolls

	<u>Estimated Employment</u>	<u>Estimated Annual Payroll</u>
Retail Anchor #1	210	\$5,713,000
Retail Anchor #2	35	761,000
Small Retail Shops #1	5	116,000
Retail Anchor #3	13	271,000
Retail Anchor #4	12	258,000
Small Retail Shops #2	9	193,000
Drug Store – Outparcel #1	22	477,000
Convenience Store – Outparcel #2	<u>8</u>	<u>166,000</u>
Totals	<u>314</u>	<u>\$7,955,000</u>

Based on community shopping center statistics for the South contained in the *Dollars & Cents of Shopping Centers: 2004* published by the Urban Land Institute, the ongoing retail sales generated in County Line Plaza are estimated to be \$73 million a year.

³ The exact employment, occupation and salaries may vary due to market conditions.

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However, these retail sales require two adjustments to properly estimate the economic impacts on Chatham County using the IMPLAN methodology.

The first adjustment is the conversion of retail sales into the appropriate producer values. Input-output models such as IMPLAN are concerned with the effects on industries and corresponding values are in producer prices. The application of margin assumptions, whereby margin represents the difference between the producer and purchaser/retail prices, effectively assigns direct expenditures to the correct input-output sector. In essence, margining allocates the purchase price into the appropriate producer price, the transportation costs and the wholesale and retail margins added, with each value impacting specific industries.

The second adjustment involves the application of Regional Purchasing Coefficients (“RPC”). An RPC represents the portion of the total local demand that is met by local production and attempts to account for the regional importation and exportation of commodities from each sector. Using RPC assumptions to modify the local expenditure proportion is particularly important for margined items, where a purchase may be made through a local retailer, but the item itself is manufactured outside the area and is imported.

As seen in Table 4, County Line Plaza annual retail sales of \$73 million generate \$17.9 million of direct output activity. The cumulative effects of the multiplier cause the initial direct activity of \$17.9 million generated annually by customers shopping at this project to result in an indirect impact of \$1.4 million and an induced impact of \$3.0 million of additional spending within Chatham County. This results in a total increase in output for Chatham County of \$22.3 million from the ongoing commercial activities of County Line Plaza.

**Table 4
Summary of Permanent Annual Impacts on Chatham County**

	<u>Direct</u>	<u>Indirect</u>	<u>Induced</u>	<u>Total</u>
Output	\$17.9M	\$1.4M	\$3.0M	\$22.3M
Labor Income	\$8.0M	\$420,000	\$798,000	\$9.2M
New Jobs	314	14	32	360

*M = Million

It is estimated that the 314 employees will earn approximately \$8.0 million in total personal income after the development’s buildout. As seen in Table 4, the activity generated by indirect spending will produce an indirect earnings impact of \$420,000 and

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an induced earnings impact of an additional \$798,000. The total labor income generated is \$9.2 million for Chatham County workers.

Based on the anticipated mix and size of commercial activities planned for County Line Plaza, we estimate an additional 46 jobs created in Chatham County from the direct spending of the customers shopping at County Line Plaza. Therefore, County Line Plaza is expected to create a total of 360 permanent new jobs in Chatham County ($314 + 14 + 32 = 360$).

These annual impacts will begin when the retailers expected in County Line Plaza begin their commercial operations.

LOCAL TAXES GENERATED BY COUNTY LINE PLAZA

County Line Plaza will generate substantial local property taxes for the Chatham County government. The commercial tax base in Chatham County will increase by approximately \$42 million upon the completion of the project. Based on the current ad valorem tax rate, County Line Plaza will produce approximately \$250,000 per year at buildout. These annual tax revenues are based on the assumptions in Table 1 and assume the property tax rate in effect during 2006 is constant at 0.5970% over the buildout period.⁴

County Line Plaza will also generate Article 39 sales tax collections that will accrue to Chatham County and its municipalities. Article 39 sales taxes are assessed at 1% of non-exempt sales resulting in annual estimated sales tax collections of \$729,000. Article 39 sales tax collected in Chatham County is distributed to the County and its respective municipalities on a per capita basis. Presently, 83.93% is distributed directly to Chatham County, 3.63% is distributed to the Town of Pittsboro and 12.44% is distributed to the remaining municipalities.

Together, the additional property and sales tax collections should result in a net fiscal benefit to Chatham County. The cost of providing additional County services to County Line Plaza should be relatively modest. The primary reason for this low impact on County services is that new Chatham County public school students will not be directly generated from the project. In addition, since the project is located in a well-established area of the County, most of the infrastructure – such as water and sewer capacity and connecting traffic arteries – already exists to serve the area.

SUMMARY

As outlined in the accompanying analysis, it is clear that the development of County Line Plaza will have a positive impact on Chatham County. These benefits will be generated

⁴ It is beyond the scope of this analysis to estimate the costs to the County from the project, but it is reasonable to assume they will be relatively modest since no residential units are planned.

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from both the construction phase and the permanent commercial activities of County Line Plaza.

Table 5 presents a summary of the economic impacts during the construction phase as well as the ongoing operations of County Line Plaza on Chatham County. As seen below, the project will create almost \$22.3 million of annual economic activity on an ongoing basis and over 360 new jobs for Chatham County.

Table 5
County Line Plaza Impacts on Chatham County

	<u>Construction Phase Impacts Over The Two-Year Buildout</u>	<u>Permanent Annual Impacts</u>
Output	\$40.1M	\$22.3M
Labor Income	\$16.4M	\$9.2M
Employment	530	360
Tax Base – Real Estate	\$29.6M	\$42.0M
Annual Property Taxes	\$177,000	\$250,000
Annual Article 39 Sales Tax		\$729,000

*M = Million

METHODOLOGY

This study estimates the economic impacts of the proposed County Line Plaza on the Chatham County economy. The methodology used in this study is the IMPLAN regional input-output modeling system developed by MIG, Inc. of Stillwater, Minnesota.

IMPLAN was developed by MIG, Inc. as a cost-effective means to develop regional input-output models. The IMPLAN accounts closely follow the accounting conventions used in the “Input-Output Study of the US Economy” by the Bureau of Economic Analysis (1980) and the rectangular format recommended by the United Nations.

The IMPLAN Input-Output Model mathematically describes commodity flows from producers to intermediate and final consumers. Purchases for final use (final demand) drive the model. Industries producing goods and services for final demand also purchase

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goods and services from other producers. These other producers, in turn, purchase goods and services. This buying of goods and services (indirect purchases) continues. Leakages from the region eventually stop the cycle.

The IMPLAN input-output model mathematically derives the indirect and induced effects. The resulting multipliers describe the change in output for every regional industry caused by a one-dollar change in final demand for any given industry. The notion of a multiplier rests upon the difference between the initial effect of a change in final demand and the total effects of that change. Total effects are the direct effects plus indirect effects, plus induced effects. Direct effects are the production changes associated with initial final demand changes. Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly effected industries. Induced effects result from the household expenditures from the directly or indirectly generated labor income.

In essence, the multipliers estimated by this methodology represent the consecutive rounds of buying and selling that ripple through an economy. To produce one dollar of new product, employees must be hired and paid. The wages paid to these workers will then be spent on goods and services, such as food, gasoline, clothes, housing, etc. within the region and outside the region. As these cents are spent, they become income to the recipient, and the spending continues over and over again. The induced effect is the cumulative amount of spending.

The economic activity of the project also requires intermediate inputs to be purchased such as electricity, raw materials, transportation services, labor etc. These expenditures become income to the recipient and pay for the purchases of raw materials, labor, etc. They, in turn, are then spent over and over again in the economy. Purchases made from outside the region are considered “leakages” from the economy. The consecutive rounds of selling goods and services continues until these leakages from the region end the cycle. The indirect effect is the cumulative amount of such spending.

The IMPLAN databases consist of two major parts: national-level matrices and tables and economic and physical data at the county and/or state level. The national matrices are used with regional data to create a regional model.

The following national-level matrices are included with each IMPLAN database.

1. The *National Absorption Table* is a coefficient form of the National Use Table derived by dividing each element of the Use Table by the respective industry’s total dollar output. The resulting Absorption Table shows how an industry spends each dollar of outlay on goods and services to produce a dollar of output. Each column is an industry’s production function reflecting the proportions of commodities used to produce one dollar of output.

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2. The *National Byproducts Table* is a coefficient form of the National Make Table derived by dividing each element by the Make Table row (industry) totals. Each industry can produce more than one commodity. The Byproducts Tables shows what percentage of an industry's total output each commodity represents.
3. Deflators are used to adjust values from one time period to another.
4. Margins split a purchaser price into the appropriate producer values.

The local economic data in an IMPLAN database include Industry Output, Employment, Value Added and Final Demands. The value-added components are employee compensation, proprietors' income, other property type income, and indirect business taxes. The final demands components in the initial Final Demands Table are personal consumption expenditures, state and local education and non-education purchases, federal military and non-military purchases, inventory purchases and capital formation. Regional data is applied to the national matrices to create a set of regional accounts.

EMPLOYEES PER SQUARE FOOT

Estimates of employment per square foot are based on those published by Arthur C. Nelson, Planner's Estimating Guide: *Projecting Land-Use and Facility Needs*. American Planning Association, 2004. For community shopping centers, the gross square footage of retail trade per employee is 671.05.