

EXECUTIVE SUMMARY AND FINDINGS

This study represents a detailed economic and fiscal analysis associated with the planned development program for the River District, located in Mecklenburg County, North Carolina. This analysis explores the most important and fundamental transactional relationships involved in developing and operating a large-scale mixed-use development. The development program for the proposed project, as presented to us, has the potential to generate significant new positive economic and fiscal impacts for the City of Charlotte (“City”) and Mecklenburg County (“County”).

- Built as now planned, the approximately 1,400 acre River District promises substantive economic and fiscal benefits.
- Continuing, permanent activities stemming from the planned investment in office, retail, and hotel uses alone will generate **\$5.6 billion** in gross annual economic output in a typical year within the state and across the region and local economies.
- This output is associated with more than **51,000** and **\$2.9 billion** direct, indirect and induced permanent jobs and wages, respectively.
- The initial one-time impacts from the investment in the River District are also substantive, albeit only occurring through the construction periods. One-time investment in developing and constructing the River District and related infrastructure is expected to generate a total **\$1.4 billion** in gross economic output and more than **10,700** total temporary jobs providing **\$380 million** in wages and salaries.
- As well, there will be fiscal benefits each and every year flowing to the City and County and various local governments. Over a 30 year period, the City and County are expected to realize nearly **\$1 billion** in cumulative net positive fiscal surpluses.
- The positive fiscal benefits derived by the City and County are largely a result of the substantial creation of new tax base of more than **\$2.7 billion** (in constant 2016 dollars).

Tax Base Creation – 2016 dollars in thousands (Full Entitlements)

Land Use	Phase 1	Phase 2	Phase 3	Total
Phases (Years)	2019-24	2025-34	2035-49	
Residential	\$ 199,950	\$ 280,000	\$ 505,800	\$ 985,750
Office	200,000	600,000	800,000	1,600,000
Retail and Hotel	22,500	37,500	90,000	150,000
TOTAL	\$ 422,450	\$ 917,500	\$ 1,395,800	\$ 2,735,750

Note: Does not include growth in market values over time; based on per unit values from recently developed comparables.

- On balance, we believe all the estimates described here would generally be conservative.

INTRODUCTION

GAI Consultants, Inc. ("GAI") was retained to analyze the potential fiscal and economic benefits stemming from a large-scale development program ("Development" or "River District") proposed by Crescent Communities ("Crescent") and Lincoln Harris located in Charlotte, North Carolina. GAI completed the fiscal benefit analysis and economic impact analysis for the River District that reconcile to plans already shared in preliminary forms with the City and County. The proposed River District, also known as the River District is located in the western portion of the County between the corporate limits of the City and the Catawba River.

Our experts in the Community Solutions Group at GAI have been conducting economic and fiscal studies for more than 30 years so communities and clients have sufficient information to make informed financial decisions. The Community Solutions Group remains top ranked in its ability to conduct impact analyses that provide the information needed for insightful decisions on government agency matters and private undertakings. Our team of economists, planners, and design professionals partner with clients from small communities to multi-million-dollar corporations with successful results.

GAI has been involved in scores of fiscal and economic studies, most involving significant projects with substantive effects on policy decisions within local communities across the country. Our studies have been associated with major undertakings such as large planned communities, public infrastructure investments, expansion of high technology processes, rail and infrastructure improvements, utility systems, and developments for campus, military, or sports venues. Recent economic and fiscal studies have included the Kansas State University campus expansion, an electric system in Murfreesboro, Tennessee, the University of Central Florida downtown campus, and Florida state-wide commuter rail.

In the most general of terms, the proposed River District leverages several large tracts of land currently owned by Crescent and a number of smaller assembled developed and undeveloped parcels controlled by Lincoln Harris. In total, the proposed River District, as approved in rezoning case, comprises approximately 1,380 acres. Our analysis was defined among multiple phases beginning with Phase 1 comprising development components to be completed and operational by 2025. Phase 2 and Phase 3 development is expected to occur between 2025 and 2034 and 2035 and 2049, respectively. The proposed program reflects an approximate 30 year period through buildout. Each phase of the River District is also planned to be annexed into the City prior to development, which will provide new tax base growth.

The following table illustrates the scale of new development activities proposed for the River District based on existing full entitlements consistent with rezoning case.

River District Proposed Development Program (Full Entitlements)

Land Use	Phase 1	Phase 2	Phase 3	Total
Phases (Years)	2019-24	2025-34	2035-49	
<i>Acres</i>				
Single family	88	94	102	284
Multi family	15	10	22	47
Office	57	81	61	200
Retail	5	8	20	33
Hotel	3	5	13	22
Open space	158	187	205	550
School and parks	70	-	-	70
Right-of-way and other	49	58	64	172
TOTAL	446	444	487	1,377
<i>Development program</i>				
Single family (units)	530	750	1,020	2,300
Multi family (units)	370	500	1,680	2,550
Office (sq ft)	1,000,000	3,000,000	4,000,000	8,000,000
Retail (sq ft)	75,000	125,000	300,000	500,000
Hotel (rooms)	150	250	600	1,000

Note: May not add due to rounding. Based on full entitlements consistent with rezoning case.

Appendix A provides more details on population, employment, development, and improved values by phase as used in this analysis.

As the River District is developed, the City and County will experience a stream of enhanced fiscal receipts while the region realizes a material change in the number of jobs, level of payroll, and overall level of economic activity. The purpose of the analysis is to summarize these various benefits which begin with construction of the major project elements and continue through their completion and operation.

DISTINCTION BETWEEN ECONOMIC AND FISCAL BENEFITS

Economic benefits are typically defined as the value of the new development’s output, expressed in terms of sales or production capacity, value added through refinement or improvement or other like economic or commercial activity, and total employment generated. The common measures, especially in today’s economic context, are jobs and wages. Fiscal benefits are the property taxes, sales taxes, other taxes, and similar revenues realized by the host jurisdictions as the result of local expenditures for various materials, services and wages. These items are, in essence, the classical inputs of production.

Both fiscal and economic benefits can be classified as direct, indirect, or induced:

- Direct benefits are those most substantively attributable to the undertaking and relate to revenues generated or expenditures made in the local economy during the years of construction and operation. For example, direct construction expenditures would relate only to the spending required to complete development of the proposed River District. After development is complete, retail sales or revenues generated by companies occupying retail and office space within the River District reflect permanent, ongoing economic benefits.
- Indirect and induced benefits are those stimulated by subsequent or secondary rounds of expenditures such as employees and/or other businesses that have some link to the operations or other partners, and any parties subsequently involved as users, tenants or owners. For example, the largest impact of these secondary effects includes employment and output that is created when employees of the primary activity spend annual wages as consumption expenditures.

This economic analysis (“Economic Impact”) considers all levels of direct, indirect, and induced activity. While similar calculations could be provided for the fiscal analysis (“Fiscal Impact”), it is purposefully confined to the direct effects only to avoid misrepresentations about benefits accruing to the discrete jurisdictions or agencies as the River District is implemented (e.g. property taxes paid by households of employees not located inside of the River District).

Direct economic benefits originate from the activities connected to the River District’s construction and operation. As suppliers or vendors working with components of the River District procure or provide material and labor to produce their own products for resale or use, further rounds of indirect and induced benefits are created. The later rounds, however, are less likely to result in significant impacts or benefits locally since expenditures ultimately are leaked to other economic systems and beneficiaries. By extension of this premise, the leakage will accrue to other settings and, depending on the nature of that setting, the related sums could be material.

From an economic perspective, it makes relatively little difference whether a newly hired employee is of local or non-local origin. In gross dollars, either will yield the same benefits to the host area because the wages paid to this work force are new to the region. If a job is filled as the result of a transfer, the dollars paid as the result of that hire represent exogenous [new or outside] income to the area.

From a fiscal perspective, however, the differences can be material because tax receipts have highly localized and distributed effects reflecting their political and legal boundaries. To the extent tax dollars might have instead been captured by other localities or regions, rather than flowing into specific jurisdictions, they represent an increase in fiscal activity inside the host jurisdiction.

As applied to the proposed River District, these various concepts suggest potential to generate appreciable economic and fiscal gain. The project’s additional jobs, created by capital investment and the source of other spending, will spur substantial sums of incremental tax receipts.

GENERAL METHODOLOGY

The economic benefits derived in this report have been prepared using commercially available software, Impact Analysis for Planning ("IMPLAN"). IMPLAN, is a common input-output model often used to track the impacts of major capital spending and business operating activities. These kinds of generalized models incorporate multipliers adapted from extensive archives of national economic accounts specific to a state, region, or county. Consequently, the output is explained in terms of both direct and total economic impact of these activities to the region based.

The fiscal analysis, is very particular to this property, the River District, and area's local governments or agencies. Rather than a generalized model, the fiscal analysis is a project specific outlook, and it reflects the tax structure of both the County and the City for purposes of calculating revenues.

Among the key considerations in fiscal calculations:

- The determination of certain revenues (excluding ad valorem, sales taxes, and occupancy taxes) and costs expected to be created by the River District are derived using a calculation of full-time equivalent (FTE) population. This calculation takes into account the base of household population, the number of household population working outside of their county or place of residence, the number of establishment employment within the county or place, and an estimate of the number of annual visitors. Together, these values are converted to represent the equivalency of a person impacting the creation of certain revenues and costs for the City and County 24 hours-a-day 365 days-a-year, or on a full-time basis.
- Valuations used for the purposes of projecting real and personal property taxes are based on the values of comparable properties already on the tax rolls in the County. This method would normally impart the most conservative valuation since the regional marketplace, not construction cost or uncertain revenues, establishes the base of comparison. Applicable millage rates for the City and County are held constant through the projection period.

The following table summarizes the taxable values applied in the analysis.

2017 Estimated Taxable Property Values (Land and Improvements)

Land Use	2017 Value	Basis
Vacant land	\$ 14,250	Acre
Single family	290,000	Unit
Multi family	125,000	Unit
Office	200	Sq ft
Retail	150	Sq ft
Hotel	75,000	Room

Note: Per unit market values based on recently developed comparables within the Charlotte market. Based on information from Mecklenburg County Property Appraiser.

- Market growth in real property values are based on an assessment of historical trends observed in the County. Since 1987, the County has conducted 4 revaluations ranging from every 5 to 8 years. The fiscal analysis assumes the County would maintain a revaluation cycle every 7 years on average. In addition, the fiscal analysis tested alternatives to the timing of revaluation cycles because of the significant impact to the real estate market of the last recession. For the purpose of this analysis, an annualized growth rate of 2.4% was used to reflect a more reasonable growth rate over the projection period.

The following table summarizes observed and calculated market growth rates used in the analysis.

Real Property Compound Annual Growth Rates

	Assessed	Market	Alternative Assessment
1987 to 2014	1.9%	2.0%	2.4%
1987 to 2009	2.2%	3.0%	2.9%

Appendix B provides the detail behind the calculation of annualized growth rates.

- Sales taxes are based exclusively on those likely to be realized within the respective facilities on site and are based on the actual sales of like retailers or businesses located elsewhere throughout the region but adjusted for the current situation.
- Tourist taxes are very specific to the class of anticipated hotel operations on site. Because there are likely to be spillover or secondary impacts as these rooms are occupied, these figures should be deemed conservative.
- Both the City and County have experienced positive economies of scale from the addition of population, employment, and visitors over time. As a result, the highly efficient

management of City and County service delivery has generated relatively significant decreases in marginal cost impacts from the additional of incremental population, employment, and visitors. Based on our analysis, marginal costs have decreased at a compound annual rate of 3% and 1.7% for the County and City, respectively. The benefits of economies of scale have been incorporated into the fiscal analysis.

The following table summarizes observed and calculated gross cost and net cost for the County between 2005 and 2015.

Mecklenburg County Governmental Services (in thousands)

County Per FTE	Gross Costs	Direct Revenue	Net Cost	General Revenue	Net-Net Cost
FY 2005	\$(1,176)	\$359	\$(817)	\$842	\$26
Marginal cost impact	304	-	304	-	304
Price deflator	(294)	(40)	(334)	58	(276)
<i>Subtotal - change</i>	10	(40)	(30)	58	28
FY 2015	\$(1,165)	\$319	\$(846)	\$900	\$54
<i>Rate cause of change:</i>					
Cost of service (prices)	2.3%				
Marginal (benefit)/cost	-3.0%				

The following table summarizes observed and calculated gross cost and net cost for the City between 2005 and 2015.

City of Charlotte Governmental Services (in thousands)

City Per FTE	Gross Costs	Direct Revenue	Net Cost	General Revenue	Net-Net Cost
FY 2005	\$(658)	\$536	\$(122)	\$555	\$433
Marginal cost impact	102	-	102	-	102
Price deflator	(191)	(357)	(548)	81	(468)
<i>Subtotal - change</i>	(89)	(357)	(447)	81	(366)
FY 2015	\$(747)	\$178	\$(569)	\$636	\$67
<i>Rate cause of change:</i>					
Cost of service (prices)	2.6%				
Marginal (benefit)/cost	-1.7%				

Our assessment of this analysis supports the concept of declining future marginal costs for the City and County as development is absorbed by existing service and infrastructure capacity. A reduction of future marginal costs would be consistent with positive economies

of scale. **Appendix C** provides the detail behind the calculation of causes of change for the City and County between 2005 and 2015.

ECONOMIC BENEFITS

The economic benefits derived in this report have been prepared using IMPLAN for both on-going (recurring) operational impacts and one-time construction impacts.

- Operational impacts.** The proposed River District, at build out, is expected to produce more than 51,000 total permanent jobs within the region by the ongoing operations with 31,590 of these directly associated with the River District itself. The other 19,425 jobs result from indirect and induced effects. Independent of these additional indirect jobs, the River District's own direct job counts are significant. These kinds of recurring economic impacts are essential to achieving the fiscal impacts which we calculated. The total job count is associated with \$2.9 billion in total earnings with \$1.8 billion in earnings connected to the project's directly created jobs. The following table presents the estimated recurring economic impact within the region.

Economic Impact Summary (Current dollars) – Ongoing Impacts			
	Direct	Indirect/ Induced	Total Impact
Phase 1			
Employment	4,040	2,450	6,490
Earnings (000's)	\$ 232,030	\$ 129,870	\$ 361,900
Output (000's)	378,540	329,380	707,920
Phase 2			
Employment	11,760	7,260	19,020
Earnings (000's)	\$ 685,140	\$ 385,150	\$1,070,290
Output (000's)	1,113,920	976,420	2,090,340
Phase 3			
Employment	15,790	9,710	25,500
Earnings (000's)	\$ 917,170	\$ 515,020	\$1,432,190
Output (000's)	1,492,460	1,305,790	2,798,260

- Construction impacts.** An estimated 7,090 total construction jobs over three development phases are expected to be produced within the region with 4,510 of these directly associated with construction of the River District itself. Again, there are indirect and induced effects as well. Another 2,580 jobs result from those indirect and induced effects. In this case, the total job count is associated with more than \$250 million in total earnings with more than \$170 million in earnings connected to the project's directly created jobs.

The following table illustrates the estimated nonrecurring economic impact captured within the region from the proposed construction activities for each phase.

Economic Impact Summary (Current dollars) – Construction Impacts			
	Direct	Indirect/ Induced	Total Impact
Phase 1			
Employment	840	480	1,320
Earnings	\$ 31,500	\$ 14,520	\$ 46,020
Output	126,680	48,100	179,900
Phase 2			
Employment	910	520	1,430
Earnings	\$ 34,200	\$ 15,770	\$ 49,970
Output	137,700	52,240	189,930
Phase 3			
Employment	2,760	1,580	4,350
Earnings	\$ 104,100	\$ 48,000	\$ 152,040
Output	418,940	158,950	577,890

Appendix D provides the detail behind the calculation of economic impacts.

FISCAL IMPACT

The following summarizes the results of the fiscal impact assessment for the City and County. While we recognize the proposed development activities could create a significant multiplier effect on downstream fiscal impact for each local taxing jurisdictions, this effect is neither considered nor presented in this analysis. In the end, the total impact and returns are substantial and are probably conservative.

The analysis calculates potential incremental fiscal revenues across a variety of revenue streams. Those which are major, direct, highly likely, and measurable include:

- Ad valorem (real & personal property)
- State sales taxes
- Occupancy tax
- Development fees and tap fees

The following table summarize the fiscal revenues generated for the County. In effect, the ultimate buildout adds an additional \$600,800,000 in incremental net revenue to the County over the full 30 year analysis period.

Mecklenburg County – Summary of Fiscal Impact (in thousands)

Land Use	Phase 1	Phase 2	Phase 3	Total
<i>--- 30 Year Cumulative Impact ---</i>				
Phases (Years)	2019-24	2025-34	2035-49	
REVENUE:				
Ad Valorem	\$ 161,600	\$ 283,800	\$ 216,500	\$ 661,900
Sales taxes	20,600	31,900	46,300	98,800
Other	13,200	18,600	22,600	54,400
TOTAL	\$ 195,400	\$ 334,300	\$ 285,400	\$ 815,100
EXPENSES:				
Operating	\$ 56,800	\$ 69,800	\$ 63,300	\$ 189,900
Capital	6,000	8,500	9,900	24,400
TOTAL	\$ 62,800	\$ 78,300	\$ 73,200	\$ 214,300
NET FISCAL IMPACT	\$ 132,600	\$ 256,000	\$ 212,200	\$ 600,800

The following table summarize the fiscal revenues generated for the City. In effect, the ultimate buildout adds an additional \$302,300,000 in incremental net revenue to the City over the full 30 year analysis period.

City of Charlotte – Summary of Fiscal Impact (in thousands)

Land Use	Phase 1	Phase 2	Phase 3	Total
<i>--- 30 Year Cumulative Impact ---</i>				
Phases (Years)	2019-24	2025-34	2035-49	
REVENUE:				
Ad Valorem	\$ 94,800	\$ 166,200	\$ 125,500	\$ 386,500
Sales taxes	8,500	13,200	19,100	40,800
Other	20,800	28,500	31,000	80,300
TOTAL	\$ 124,100	\$ 207,900	\$ 175,600	\$ 507,600
EXPENSES:				
Operating	\$ 51,400	\$ 66,400	\$ 42,500	\$ 160,300
Capital	11,000	15,700	18,300	45,000
TOTAL	\$ 62,400	\$ 82,100	\$ 60,800	\$ 205,300
NET FISCAL IMPACT	\$ 61,700	\$ 125,800	\$ 114,500	\$ 302,300

Appendix E provides the detail behind the calculation of net fiscal impact for the City and County between 2005 and 2015.

SUMMARY AND CONCLUSIONS

This study represents a detailed economic and fiscal analysis associated with a large-scale planned development program. This analysis explores the most important and fundamental transactional relationships involved in developing and operating a large-scale mixed use development. The development program for the proposed project, as presented to us, has the potential to generate significant positive economic and fiscal impacts for the City and County.

- Built as now planned, the River District promises substantive economic and fiscal benefits. Continuing activities stemming from the planned investment in office, retail, and hotel uses alone will generate **\$5.6 billion** in gross economic output in a typical year within the state and across the region and local economies of Charlotte.
- This output is associated with more than **51,000** and **\$2.9 billion** direct, indirect and induced jobs and wages, respectively.
- The initial one-time impacts from the investment in the River District are also substantive, albeit occur only through the construction periods. One-time investment in developing and constructing the River District and related infrastructure is expected to generate a total **\$1.4 billion** in gross economic output and more than **10,700** total jobs providing **\$380 million** in wages and salaries.
- As well, there will be gross fiscal benefits each and every year flowing to the City and County and various local governments. Over a 30 year period, the City and County are expected to realize nearly **\$1 billion** in cumulative net positive fiscal surplus.
- The positive fiscal benefits derived by the City and County are largely a result of the substantial creation of new tax base of more than **\$2.7 billion** (in constant 2016 dollars).
- On balance, we believe all the estimates described here would generally be conservative.