

North Corridor Commuter Rail Project Financing Strategy



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Metropolitan Transit Commission
By The
Charlotte Area Transit System

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North Corridor Commuter Rail Project
Financing Strategy

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North Corridor Commuter Rail Project Financing Strategy

I. Introduction

On November 15, 2006, the Metropolitan Transit Commission (MTC) approved the 2030 Transit Corridor System Plan, which prioritized the implementation of rapid transit and other transit improvements in the greater Charlotte region. As part of the 2030 plan, the MTC directed the Charlotte Area Transit System (CATS) to advance implementation of commuter rail service between Charlotte and Mount Mourne and to prepare for MTC consideration a North Corridor Commuter Rail Project Financing Strategy detailing how the project is to be funded.

This Financing Strategy describes the North Corridor Commuter Rail Project, its status and cost, and the underlying assumptions for funding its implementation. A funding approach is suggested that would include State and CATS funding, as well as proceeds from Federal loans and/or local bonds, the debt service for which would be generated by incremental tax revenues resulting from increased development activity at commuter rail stations, much of which would not occur in the absence of commuter rail. This financing approach – called Tax Increment Financing (TIF) – has been in use in the United States since the 1950s. It does not result in higher taxes, but is a way of allocating funds to build infrastructure for new development that generates greater tax revenues than otherwise would have been generated without that development.

If this conceptual approach is approved by the MTC and other impacted jurisdictions, it will take many months to complete the necessary work to approve agreements with municipalities and local developers regarding allocation and payment of incremental taxes. Thus, approval by the MTC of this Financing Strategy is only a first step in securing the funding commitments required to implement commuter rail service. CATS will seek future MTC approval of a final financial plan prior to initiating construction of the North Corridor rail line.

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II. Background, Status & Cost

Charlotte and the North Mecklenburg towns of Huntersville, Cornelius and Davidson face two fundamental challenges as they attempt to retain their quality of life and identity in the growing regional economy:

- Rapid population growth is generating low-density residential and automobile-dependent retail development, dispersing the population and marginalizing the historic downtown centers of the towns.
- Growing congestion is overwhelming the capacity of the region's only major north-south highway and forcing commuters onto local two-lane roads never intended to serve as major regional arterials.

Already, low-density and automobile-dependent land uses, accompanied by significant traffic congestion, have come to define large areas between NC-115 (Old Statesville Road) and I-77 that were rural in nature just a decade ago. The result has been to lengthen the commute to work, endanger regional air quality and drive the development of strip malls and low-density retail to support the growing population.



In contrast, large areas east of NC-115 bordering the historic town centers have remained largely undeveloped due to lack of water and sewer and the limited road network. These areas are adjacent to the NS "O" line. Recently, with work to expand sewer

and water lines east of the "O" line, these large green-fields are facing accelerating residential development pressure.

Unfortunately, there are no plans to create a new road network linking these new green field communities to Center City Charlotte, and plans for new localized connector roads lack any source of funding. Moreover, expansion of I-77 north of Huntersville will not be completed for at least 20 years and most sections of NC-115 cannot be widened. As a result, the region is facing the prospect of new large-scale residential development lacking a reasonable, high-capacity means for coordinated, commutation to Charlotte and between the Towns and other local activity centers.



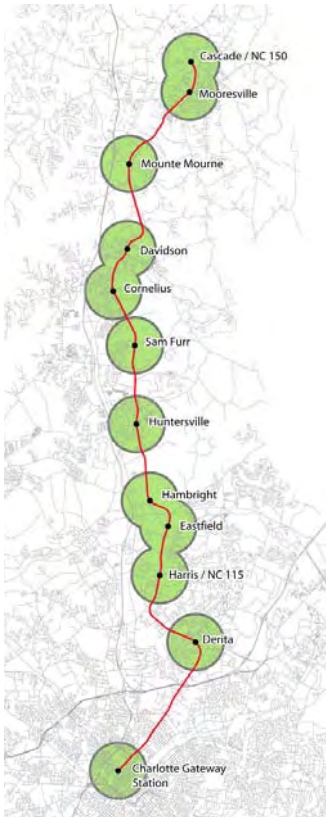
The following data confirm the challenges facing the North Corridor:

- Traffic on I-77 is projected to double by 2030 -- from 87,000 vehicles/day to 170,000 vehicles/day whether or not the highway is widened. The vast majority of trips are by single-occupancy vehicles.

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- Local trips within the North Corridor will nearly triple by 2030 – from 490,500 to 1,241,700.
- Population in Huntersville, Cornelius and Davidson is projected to more than triple by 2030.

To help meet these challenges, Charlotte and the Towns have led the effort within the region and at the MTC to implement commuter rail service in the North Corridor, concluding that provision of a convenient, reliable, safe and environmentally attractive public transportation alternative will positively shape future land use and stimulate strong mixed-use development around transit areas.



The North Corridor Commuter Rail Project would restore passenger rail service to the existing Norfolk Southern (NS) “O” line connecting downtown Charlotte with the downtowns of Huntersville, Cornelius, Davidson and Mount Mourne. This line saw its last passenger train in 1951. The project, which would be completed by the end of 2011, includes construction of ten stations and a vehicle maintenance facility, acquisition of train equipment, and safety enhancements to some 45 public at-grade crossings along the route. No new railroad right-of-way is required; no new structures currently are planned, and only minimal additional property for stations must be acquired. The service would consist initially of 22 daily trains. This would grow to 38 daily trains in a subsequent phase of the project, which would include additional train equipment and signalization of the rail line. Service would be focused on the peak morning and afternoon rush, with less frequent service during the remainder of the day. Trip time to Charlotte would be approximately 35 minutes from Davidson. Some 4,600 commuters are projected to ride the trains each day. The majority of these are new transit riders who currently travel by single-occupancy vehicle along I-77 and/or NC115/ US-21.

The southern terminus for the commuter rail line is the proposed Charlotte Gateway Station (CGS), located at Trade and Graham Streets in Charlotte’s downtown business center. Planning for CGS has been undertaken jointly by CATS and NCDOT, which owns the CGS site and some 20 adjacent acres of property along the NS tracks in downtown Charlotte. The facility is a key component of Charlotte’s regional transit program and North Carolina’s long-range intercity and high-speed rail service. In addition to North Corridor commuter trains, the new station would be served by Amtrak, with trains to Atlanta, Raleigh, and New York; Greyhound intercity buses; proposed Charlotte Center City Streetcars; and proposed rapid transit from the Southeast and the West corridors. The facility also would serve as a new CATS express and local off-street bus center, relieving congestion at the existing Charlotte Transportation Center. CGS will be within walking distance



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of much of the business district in downtown Charlotte, as well as the new Lynx Blue line, with light-rail service south to Pineville and eventually north to the UNC-Charlotte campus.

The location for the northern terminus remains unresolved. The cost to implement service north of Davidson, the last station in Mecklenburg County, must be funded by Iredell County and/or Mooresville. Neither has made a commitment to fund these costs; however, discussions continue and several options are under consideration, as detailed below. In the event funding is not available, trains will terminate at Davidson.

Project Status

The following work has been advanced to date:

- CATS has completed conceptual (15%) engineering for the rail upgrades, stations and Vehicle Maintenance Facility.
- CATS has completed preliminary (25%) engineering for all at-grade crossing improvements.
- The Environmental Assessment will be submitted to NCDOT for statewide review in July. The environmental impact review is expected to be completed by October.
- CATS has secured no-cost options for locomotives as part of a pending locomotive procurement by the Massachusetts Bay Transportation Authority (MBTA) and for passenger coaches as part of a pending Northstar Commuter Rail (Minnesota DOT) car procurement. The options may provide significant price reductions for equipment by combining the CATS' equipment within larger equipment orders. The options would not have to be exercised until at least March 2009.
- CATS and the Norfolk Southern Corporation have reached an agreement in principle providing CATS with a license to use the "O" line for commuter rail service for a term of 50 years.
- CATS and NCDOT are progressing planning for the Charlotte Gateway Station project. NCDOT intends to initiate a process this fall to secure a Master Developer to plan, design and build the public transportation facilities at Charlotte Gateway Station, as well as to develop air rights above the transportation facilities and other NCDOT property adjacent to the CGS. An Environmental Assessment was submitted to FTA in April. FTA review comments were received in May and formal submission of the Environmental Assessment is planned for this summer.



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If the MTC authorizes CATS to further advance the North Corridor Commuter Rail Project, CATS intends to:

- Initiate preliminary engineering for the rail upgrades, stations and Vehicle Maintenance Facility. Engineering for the project would be completed by the end of 2008.
- Formalize the NS license agreement and enter into a design/construction agreement with NS for the rail upgrades and the rail components of the at-grade crossing improvements.

Conceptual Project Cost

Based on conceptual engineering, the initial phase of the North Corridor Commuter Rail Project at the time of completion in 2011 is estimated to cost \$261 million for service to Mount Mourne and \$246 million for service to Davidson. Phase 2 of the project, planned to begin in 2015, includes additional train equipment, signalization and sidings to facilitate up to 38 daily trips. Phase 2 is projected to cost \$72 million in 2006 dollars.

Table 1
North Corridor Commuter Rail Project
Conceptual Cost Estimate
(\$ millions escalated to Fall 2011 Completion)

Project Element	Davidson Terminus	Mount Mourne Terminus
Track Upgrades	49	58
Stations & Parking	21	21
Facilities & Termini	32	32
Trains	55	55
Site-work & Crossings	22	24
Property	5	7
Rail Line Access	21	21
Design, Management & Contingency	41	43
Total	\$246 million	\$261 million

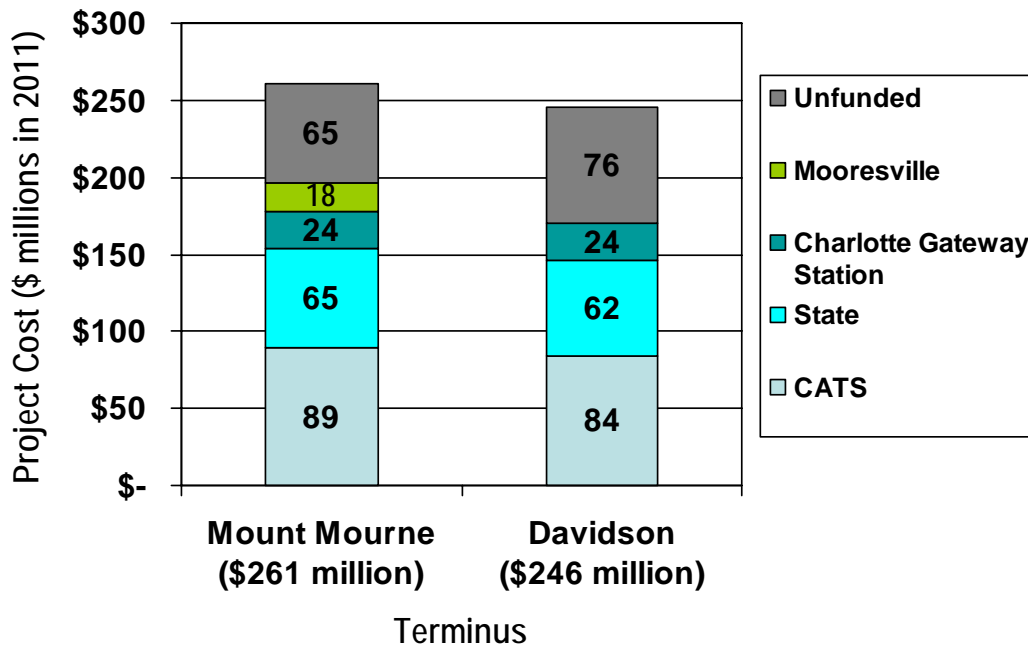
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III. Anticipated Funding Sources

In 2002, the MTC approved the 2025 Transit Corridor System Plan, which called for advancing multiple rapid transit corridors in the Charlotte region and enhancing local and regional bus services. An assumption underlying the 2025 plan was that Federal and state funding would be available for up to 50 percent and 25 percent respectively of the capital costs required to implement the 2025 program. The remaining 25 percent of costs would be made available from the proceeds of the ½-cent transit sales tax approved by voters in Mecklenburg County in 1998.

The 2030 Transit Corridor System Plan approved by the MTC in 2006 revised the projected funding assumptions for the North Corridor Commuter Rail Project. The anticipated funding sources are summarized in the following table and described below.

Table 2
North Corridor Commuter Rail Project
Funding Sources (\$ millions in 2011)



Direct Federal Grants: The 2025 plan assumed funding from the Federal Transit Administration’s (FTA) New Starts program, which provides grants for the design and construction of new transit systems and expansion of existing lines. However, as more and more cities compete for limited New Starts funding, FTA has stiffened the qualifications for participation in the program. It has established a rating system that limits the number of eligible projects to those it deems as the most critical in the country. This rating system is even tougher than it was when Charlotte’s South Corridor Light Rail Project was approved for Federal funding. A key component of the FTA rating system is the cost effectiveness of the proposed system, measured by comparing the amount of cumulative travel-time savings to the annualized capital and operating cost of the project. Based on FTA’s latest funding criteria, only those projects providing high-

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frequency service in highly congested, highly populated metropolitan areas are likely to meet the criteria for participation in New Starts.

Commuter rail projects in smaller cities such as Charlotte typically rate low under the New Starts criteria. This is due largely to the nature of commuter rail, which focuses primarily on rush hour service, with less frequent service during non-peak periods (the cost to expand the rail line to permit full-day high-frequency service would be excessive). In the case of the North Corridor, projected ridership of 4,600 daily trips compares strongly with other commuter rail systems in medium-sized cities. However, while North Corridor trains are projected to carry many work-based trips during the rush hour, off-peak service is planned to be less frequent. As a result, commuter rail service is unlikely to be an effective alternative for many off-peak local automobile trips by residents living near the train line. This reduces potential ridership and cumulative travel-times savings (compared to high-frequency light-rail and bus systems) below the FTA eligibility requirements. Accordingly, CATS does not intend to pursue FTA New Starts funding.

State Funding: North Carolina Department of Transportation (NCDOT) provided 25 percent of the funding required to design and to construct the South Corridor Light Rail Project. State funding was provided under a Full-Funding Grant Agreement and derived from the Highway Trust Fund.

Neither CATS nor this region's elected officials have yet sought a formal funding commitment for the North Corridor Commuter Rail Project from the North Carolina Legislature or NCDOT. State funding, however, is essential if the North Corridor project is to advance to construction and, pending approval by the MTC of this Financing Strategy, such a commitment will be sought over the next year.

CATS Funding: A portion of the ½-cent sales tax collected in Mecklenburg County for transit currently is allocated to implementation of the rapid transit corridors. At completion, CATS plans to contribute approximately \$157 million to the South Corridor Light Rail Project. This accounts for 34 percent of the light rail project cost.

The 2030 Transit Corridor System Plan assumes a similar 34 percent contribution from CATS to the cost of the North Corridor Commuter Rail Project. This amount of funding can be provided within the projected 2030 Transit Corridor System Plan budget, consistent with the financial standards and thresholds established by the MTC for expenditure of sale tax revenues.

Charlotte Gateway Station Funding: North Corridor commuter trains will terminate at the CGS. The cost for North Corridor property and storage tracks at CGS – totaling \$24 million – will be funded as part of the CGS program. In addition, the CGS budget absorbs other costs that benefit the North Corridor, including new bridges and other infrastructure that would be used by North Corridor trains.

CGS will house over \$120 million in public facilities and infrastructure required to accommodate relocation of Amtrak to downtown Charlotte, CATS North Corridor and bus facilities, the new Greyhound depot, parking and other public facilities. Funding for the project will come from FTA, NCDOT, CATS, Amtrak, Greyhound and private firms developing air rights at CGS and on adjacent NCDOT properties. The FTA has allocated \$21 million in funding to Charlotte for design and construction of CGS. In

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addition, the 2030 Transit Corridor System Plan includes \$43 million for the CGS project over the next five years.

NCDOT is in the process of seeking a Master Developer for CGS and its adjacent property. In addition to construction of the transportation facilities at CGS, the Master Developer will be expected to secure significant retail, office and residential development on the NCDOT property. The timeframe for construction of the public facilities at CGS matches with North Corridor Commuter Rail construction plans.

Iredell County / Mooresville Funding: Planning for the North Corridor has always included a station at Mount Mourne, which is the headquarters for Lowe's Corporation and the Lake Norman Regional Medical Center. Employment in southern Iredell County is expected to increase some 220 percent to nearly 60,000 workers by 2025, with Lowe's employment alone accounting for 12,000-15,000 workers. Some of those workers live in Mecklenburg County and could commute to work by train. Many Iredell County residents work in Mecklenburg County and would use the train if service were extended to Mount Mourne.



The incremental cost for extending service from the Davidson station to Mount Mourne is \$18 million. This includes the cost for track upgrades, track access, a Mount Mourne station, and at-grade crossing improvements.

Iredell County and Mooresville have shared in the costs to date for North Corridor planning, including environmental and engineering analysis of service to downtown Mooresville. While support for commuter rail remains strong in Mooresville, the Iredell County Board of Commissioners recently indicated that it was not interested in helping to fund service to Mount Mourne. CATS continues to discuss funding options with Mooresville officials. One such option is to fund the cost of extending service north of Davidson through TIF-backed bonds or loans.



This Financing Strategy assumes that the North Corridor will terminate at Davidson. While a Davidson terminus results in a less expensive total project cost, the project costs not funded by CATS or the state is actually higher, due to the reduced percentage "matching" of total project costs by the state and CATS. Thus, this Financing Strategy assumes the more conservative Davidson scenario.

Unfunded: The amount remaining after State, CATS, and other funding sources is the gap that CATS proposes to fund with loans or local bonds, the debt service for which would be paid with incremental property tax revenues generated in the station areas, as detailed below.

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There are several alternatives for the issuance of TIF debt instruments. Each option offers distinct advantages and disadvantages relating to which entity issues the debt, the type of security required to back the bonds or loans, duration and interest rates, impact on bonding capacity, and costs. Options include:

- Railroad Rehabilitation & Improvement Financing (RRIF) Loans
- North Carolina TIF (Amendment One) Bonds
- “Synthetic TIF,” using Certificates of Participation

The Federal RRIF loan program, administered by the Federal Railroad Administration (FRA), was created by Congress to assist railroads and municipalities with upgrading freight and passenger rail lines. Loans can be used to fund track, safety and facility upgrades as well as the acquisition of train equipment. The interest rate on the Federal loans is equal to the rate on the Treasury security of the same term as the loan – currently about 5.1%. Participation in the RRIF program eliminates many of the complexities and costs associated with the local issuance of bonds.



CATS has received positive feedback from the FRA regarding participation in the RRIF program. Further discussions are pending MTC approval of this Financing Strategy.

If RRIF loans are not available, local bonds also could be issued under the formal state TIF program or using Certificates of Participation to fund the rail-related costs. As discussed below, local bonds could also be used to fund other important local infrastructure projects, to be undertaken by the Towns and Charlotte in and around the station areas. Timely implementation of these projects will help ensure that needed infrastructure is in place to support rail and transit-oriented development.

If the MTC directs CATS not to rely on incremental tax revenues for the balance of project funds, other possible options include:

- Additional state funding
- Additional CATS funding
- Direct funding of project costs by each municipality
- Contribution by developers

These options are problematic and unlikely to succeed. For that reason, CATS proposes the TIF approach below and bases this Financing Strategy on that approach.

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IV. Tax Increment Financing

Huntersville, Cornelius and Davidson have been planning for the eventual implementation of commuter rail service since the mid-1990s. Each has adopted transit-oriented development (TOD) zoning overlays that provide for dense, mixed-use development around transit stations and require pedestrian-friendly, transit-supportive uses and site-planning. Charlotte has



adopted similar TOD zoning standards. The result is that seven major TOD development projects – *Griffith Lakes* at Harris; *Eastfield Station and Twin Lakes* at Eastfield; *Bryton* at Hambright; *Vermillion* at Huntersville; *Antiquity* at Cornelius; and *Legacy Village* at Mount Mourne – already are underway or are in the approval process at proposed North Corridor stations. Together, these seven TOD projects will add 8,653 residences, 4.3 million square feet of commercial space, and \$2.8 billion in increased assessed valuation. Each of these projects is defined by its proximity to a commuter rail station and their success and appeal will depend in part on the larger market

generated by access to public transportation.

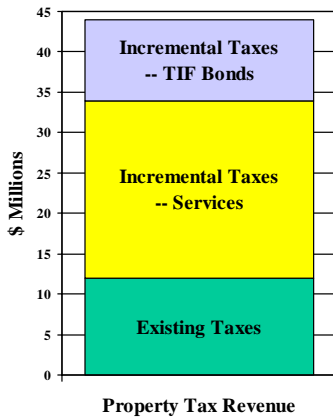
Clearly, some of the growth in station areas will advance whether or not commuter rail is implemented. However, key elements of these projects – particularly the most densely developed areas around the stations – are predicated on commuter rail. Indeed, current zoning will not permit the planned TOD densities in the absence of commuter rail. Thus, not only will these projects generate significant property and sales tax revenues to the County, Towns and Charlotte, but those tax revenues will be substantially increased with commuter rail.

Griffith Lakes is a prime example. The 450-acre development is planned along the rail line at Harris Boulevard and NC-115 in Charlotte at the proposed Harris commuter rail station. The developer of the project, E.C. Griffiths & Co., has generated two development scenarios – one with commuter rail and one without. The plan with commuter rail includes 2,800 new residential units and 918,000 sq. ft. of commercial development with a total projected assessed value of \$902 million. The plan without a commuter rail station includes just 1,050 resident units and 385,000 sq. ft. of commercial development, with a total projected assessed value of \$304 million, \$598 million less in assessed value. The property tax revenue impact is large: the plan with commuter rail generates \$7.6 million more in annual Charlotte and Mecklenburg County property tax revenue than the plan without commuter rail. That incremental tax revenue will not be generated in the absence of commuter rail.



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The incremental property tax revenues generated by the region's investment in commuter rail and by growth around the station areas can be similarly quantified for each station area based



on specific developer plans and the expertise of local planning staff and national experience. CATS proposes using this incremental property tax revenue to provide the remaining \$76 million in funding required to construct the North Corridor Commuter Rail Project, as well as to fund various local station area catalyst infrastructure improvements at each station, as discussed below. This would be accomplished by the issuance of bonds and/or securing a federal loan, the annual debt service for which would be funded from the incremental taxes collected within districts created around the station areas. The existing base of taxes is collected and fully retained by the municipality; incremental taxes (on top of the base) are used to pay for services and to service the debt used to fund the rail and local

infrastructure improvements. This type of financing is being used around the nation and has been used many times locally. It does not result in a tax increase, but merely allocates new incremental property tax revenue to service debt on bonds issued to support the new development.

Recently, Mecklenburg County approved the use of TIF to fund relocation of the “O” line and the upgrade of key road infrastructure in Huntersville to facilitate construction of the *Bryton* transit-oriented development. The Town of Mooresville is using TIF to fund the redevelopment of the Burlington Mill in downtown Mooresville, a possible future North Corridor station location.

Over the past six months, CATS has worked extensively with Charlotte, Huntersville, Cornelius, Davidson and Mecklenburg County to explore and analyze the use of TIF to provide additional project funding. As part of this effort, the municipalities have identified \$10-15 million in station area infrastructure projects at each proposed station site – sidewalks; roadway access; additional downtown parking – deemed important to managing the growth associated with commuter rail and TOD around the stations. These costs are not part of the North Corridor program. They would be



implemented by the Towns and Charlotte; indeed, many of these improvements already are planned for implementation and included in the local Capital Improvement Plan (CIP). However, implementation could be accelerated to ensure

that appropriate infrastructure is in place prior to or contemporaneous with anticipated growth resulting from commuter rail and transit-oriented development. Candidate projects have been identified by each of the Towns; Charlotte has not finalized a list and a pace-holder number has been used for purposes of this Financial Plan. Totalling \$97 million, these station area projects could similarly be funded through TIF.

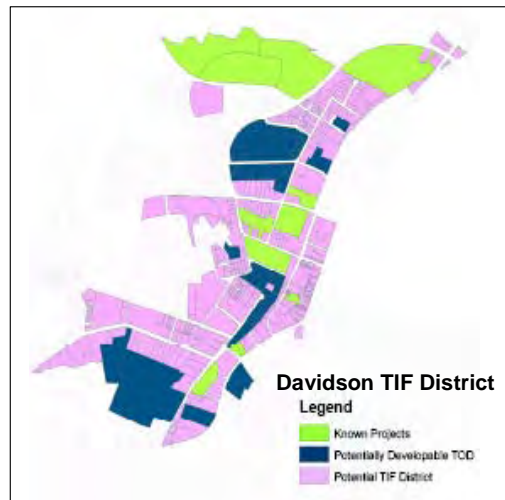
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CATS has analyzed the annual debt service required to support a RRIF loan and TIF bonds used to fund the rail-related costs and local station area infrastructure projects.¹ This analysis is based on issuance of 30-year bonds at a conservative rate of 5.75 percent, with two years of capitalized interest and interest-only payments for the first five years (when development at the stations is just starting up).² Under these assumptions, the annual debt service required to service TIF bonds/loans would total \$16.7 million as follows:

Rail-Related Improvements (\$76 million):	\$ 7.2 million/year
Local Infrastructure Projects (\$97 million):	\$ 9.5 million/year

The work with the County, Towns and City has generated key data on which to analyze the use of TIF, including:

- Proposed 200-450 acre TIF districts around proposed stations
- Determination of the current assessed value of property within the TIF districts
- Calculation of Future Growth with and without commuter based on:
 - Existing development plans
 - As-of-Right zoning
 - Local and adopted area plans
 - Conservative growth rates applied to developable sites
 - National TOD experience
- The amount of incremental taxes required to fund the debt service related to the rail and station area projects



The resulting station-by-station analysis is attached hereto as Appendix A and summarized in the graph and table below.

¹ CATS has been assisted in this effort by Cherokee Investment Partners, LLC, an investment and financing group headquartered in Raleigh with significant expertise in TIF and transit-oriented development financing and development. A description of Cherokee's expertise can be found at Cherokeefund.com.

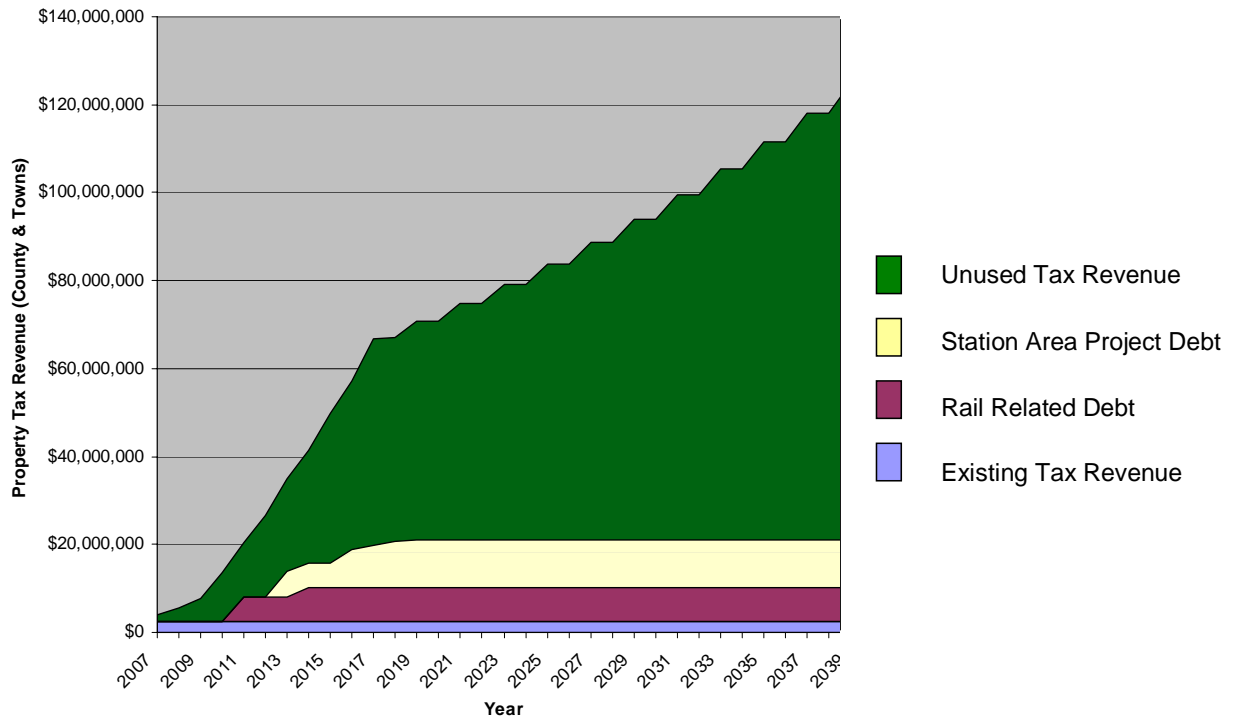
² For purposes of this analysis, it was assumed that a maximum of 90% of incremental County and 90% of incremental local (Towns and City) property tax revenue could be used to service the rail-related debt and that 25% of County and 90% of local incremental property taxes could be used to service the bonds for local station area projects. This represents the maximum rate at which incremental taxes can be used for debt service. However, as shown in Table 3 and Graph 1, total incremental property tax revenue generated in the station areas is significantly larger than required to service the loans and bonds. As a result, the percentage of County and local property tax actually required for debt service decreases considerably over time.

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Table 3 presents a snapshot of future growth and property tax revenue in the station areas at full build-out in 2019. Some \$5.2 billion in new development is projected in the station areas, generating \$61.9 million in combined County and local taxes. Debt service for the loans and bonds would total \$16.7 billion, leaving \$45.2 million in incremental property tax revenue available for funding County and local services.

Graph 1 shows the growth in property tax relative to the debt service over time for the term of the loan and/or bonds. Note that the debt service for the rail and station area projects remains constant (once issued) over the term. However, as property values increase with time, the property tax revenue also increases. The unused tax increment – the portion in green left over after all debt service – increases over the life of the bonds and loans, helping to ensure that the incremental taxes continue to be available to support local needs and services.

Graph 1
Incremental Property Tax Revenue Over A 30-year Term
(\$ million; debt service at 5.75%)



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Table 3
2019 Incremental Assessed Value & Tax Revenue
Generated By Investment in Rail & Station Area Projects At Full Build-Out
(\$ millions)

Station	Incremental Future Assessed Value in 2019	Total Annual Incremental Taxes			Annual Incremental Taxes Required To Fund Rail & Local Projects*			Annual Incremental Taxes Remaining After Debt Service On Rail & Local Projects			Percentage of Incremental Tax Revenue Required For Debt Service	
		County	Local	Total	County	Local	Total	County	Local	Total	County	Local
Davidson	754	6.1	2.6	8.7	1.4	.9	2.3	4.7	1.7	6.4		35%
Cornelius	890	7.3	2.4	9.7	1.3	.8	2.1	6.0	1.6	7.6		33%
Sam Furr	473	9.4	3.3	12.7	3.3	1.9	5.2	6.1	1.4	7.5		58%
Huntersville	504											
Hambright	176											
Eastfield	1,119	19.7	11.1	30.8	4.4	2.7	7.1	15.3	8.4	23.7		24%
Harris	1,263											
Derita	30											
Total	\$ 5.2 billion	\$42.5	\$19.4	\$61.9	\$10.4	\$6.3	\$16.7	\$32.1	\$13.1	\$45.2	24	33%

* Assumes 30-year bonds @ 5.75% with capitalized interest for two years. See Appendix A for market and TIF assumptions.

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Graph 1 illustrates that the share of incremental County and local property taxes required to service the loans and bonds will be higher in the initial years, when new development is just beginning and considerably lower in the later years as property values and property tax revenues continue to increase. Nationally, as much as 100% of incremental tax revenue is required to fund TIF debt. Here, however, property tax revenues will significantly exceed debt service costs. For the County, debt service over the life of the loan and bonds will average just 23 percent of available incremental property tax revenue, with a high of 43.5 percent in the initial years. For the Towns and Charlotte, debt service will average from 21 percent for Charlotte to 70 percent for Huntersville; the maximum in the initial years will range from 66 percent in Cornelius to 90 percent in Davidson and Huntersville. As shown on Table 3, at full build-out in 2019, just 24% of the incremental County taxes and 33% of the Town/City taxes (ranging from 24% for Charlotte to 58% for Huntersville) will be required to service the debt.

Two key conclusions are presented by the data:

- Incremental property tax revenue generated by station area development significantly exceeds the debt service required to fund the rail and station area projects.³
- A considerable and growing share of the incremental property tax will remain available for use by the County and the Towns and Charlotte for the provision of local services. Additional analysis is required to ensure that this amount is sufficient to cover the cost of County and local services. However, preliminary analysis, based on the financial data used to approve the *Bryton* TIF, indicates that the portion of incremental taxes not required for debt service will in fact exceed the cost of services for schools and other County needs.

It is important to emphasize the preliminary nature of this financial work. Not only will CATS and the staffs from the Towns, City and County continue to refine this work, but the bond underwriters and/or the FRA (under RRIF) will do an extensive, independent financial analysis of their own. This work would progress over the coming months.

³ Indeed, as shown in the table in Appendix B, the incremental tax revenue attributable just to implementation of commuter rail (i.e., excluding growth that would have occurred even in the absence of commuter rail) exceeds the projected debt service on the RRIF loan and TIF bonds. The County's share of incremental property tax revenue in 2019 at full build-out -- \$18.5 million -- exceeds total debt service for the rail and station area improvements. This \$18.5 million would not have been generated "but for" commuter rail.

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V. Advancing The North Corridor

CATS proposes the following strategy to advance the North Corridor Commuter Rail Project:

1. The \$76 million in rail-related costs can best be funded through a loan secured under the RRIF program. One entity – either the City of Charlotte or Mecklenburg County – would agree to be responsible for repayment of the loan. Interlocal agreements would be signed between the Towns, Charlotte and Mecklenburg County ensuring the payment of incremental property tax revenues required to provide annual debt payments. Agreements could be signed with developers guaranteeing the payment of a minimum amount of taxes required for annual debt payments.

2. The local station area infrastructure projects could be funded using TIF bonds or COPS issued by the County. However, the County's share of incremental tax revenue used for these bonds could be reduced to reflect the local nature of the projects – the analysis used in this Financing Strategy assumed a cap of 25 percent for the share of incremental County taxes used to service bonds for the station area infrastructure projects. The bonds could be issued in two series, one in 2009 and one around 2015, in order to ensure that local improvements are timed to support rail service and transit-oriented development in the station areas, and to ensure that incremental property tax revenues are sufficient to service the bonds. Here, too, interlocal agreements would be signed between the Towns, Charlotte and Mecklenburg County ensuring the payment of incremental property tax revenues required to provide annual debt service. Agreements could be signed with developers guaranteeing the payment of a minimum amount of annual taxes.

3. Charlotte, Mecklenburg County and the Towns should collectively continue to seek the commitment of Mooresville to fund extension of commuter rail service to Mount Mourne or downtown Mooresville. TIF remains an option for funding the cost of extending service north of Davidson. Bonds or a RRIF loan could be used for this purpose.

4. Charlotte, Mecklenburg County and the Towns should work collectively to secure a state commitment to financially participate in the North Corridor Commuter Rail Project.

North Corridor Commuter Rail Project Financing Strategy

VI. What's In It For The Towns, City & County?

Implementation of commuter rail on the North Corridor will positively shape land use in the region and provide the region with an energy-efficient, environmentally superior alternative to congestion on I-77 and local roads. This has been the fundamental premise behind the region's transportation and land use planning efforts for well over a decade and has been the rationale for adoption of local transit-oriented development zoning and area planning in the Towns and Charlotte. Use of TIF to advance implementation of commuter rail and to fund key local infrastructure projects around stations is consistent with these efforts and would provide the certainty required by municipalities and developers attempting to plan for the future.

What's in it for Charlotte, Huntersville, Cornelius, Davidson and the County?

- Better integration and self-sufficiency of development around the commuter rail stations
- Greater concentration of residential and commercial in the downtown core, specifically designed to be pedestrian-friendly and transit-supportive
- Activation of the historic town center
- Faster implementation of local Town and area master plans
- Increased station area employment from commuter rail and transit-oriented development
- Acceleration of key local station area infrastructure projects prior to development and growth
- Higher & faster growth in property and sales tax revenues
- A convenient, environmentally superior and safe public transportation alternative to growing highway and local congestion



North Corridor Commuter Rail Project Financing Strategy

VII. Next Steps

If the MTC approves this Financing Strategy, CATS proposes to undertake the work necessary to advance engineering of the rail line, which is essential to plan for construction and finalize project cost and schedule. At the same time, CATS will work to complete the process necessary to establish TIF Districts, execute agreements between the municipalities and seek possible minimum-tax assessment agreements with station area developers, and secure a state funding commitment. The timeframe for advancing this work is as follows:

<u>Action</u>	<u>Time Frame</u>
Refine TIF District Boundaries & Seek Local TIF Plan Approval	Fall 2007
Determine TIF Bond/Loan Program(s)	Fall 2007
Issue RFP For Preliminary Project Engineering	Fall 2007
Award Engineering Contract	December 2007
Create TIF Districts	December 2007
Execute TIF Agreements With Municipalities & Developers	Fall 2007 – Spring 2008
Execute Design Agreement With NS	Spring 2008
Secure State Funding Agreement	Spring/Summer 2008
Seek MTC Approval to Complete Design & Commence Construction	Fall 2008
Commence Construction	Spring 2009
Initiate Commuter Rail Service	Fall 2011

North Corridor Commuter Rail Project
Financing Strategy

Appendix A

Tax Increment Financing
Analysis

TIF Analysis Assumptions

The following assumptions were used in developing the market and TIF analysis:

- **Real Estate Development**
 - TIF Districts Created: 2007
 - Market appreciation: 2% per year
- **Property Tax**
 - Annual growth in Assessed Value: 3% (not compounded)
 - Debt For Rail Cost: up to 90% of County and 90% of local incremental taxes could be applied to debt service
 - Debt For Station Area Projects: up to 25% of County and 90% of local incremental taxes could be applied to debt service
- **Bonds**
 - Interest rate: 5.75%
 - TIF District term: 30 years
 - Coverage: 1.25
 - Bonds issued in 2009, 2011(all for rail-related debt) and 2015
 - Capitalized interest: 2 years for each series
 - Underwriter's discount: 2%
 - Interest only for first five years

Intentionally Blank

Summary of TOD Buildout Projections

Station	Proposed TIF District Acreage	Current AV	Projected Growth		Buildout Value (\$2007)	
			Res. Units	Office (sf) Retail (sf)		
Davidson	216 \$	51,612,000	1,746	211,828	227,143 \$	547,301,890
Cornelius	128 \$	32,586,800	1,991	248,353	356,706 \$	630,946,872
Huntersville - DT	224 \$	75,207,700	935	249,705	259,340 \$	353,139,900
Huntersville - Sam Furr	220 \$	9,407,635	900	488,750	122,750 \$	359,436,250
Bryton	\$	8,900,000	350	100,000	100,000 \$	131,500,000
Harris	450 \$	12,000,000	3,000	530,000	453,000 \$	966,260,000
Eastfield	391 \$	42,000,000	2,230	2,600,000	0 \$	1,129,500,000
Total	788 \$	231,714,135	5,572	1,198,637	965,940 \$	4,118,084,911

Incremental AV	\$	495,689,890
	\$	598,360,072
	\$	277,932,200
	\$	350,028,615
	\$	122,600,000
	\$	954,260,000
	\$	<u>1,087,500,000</u>
	\$	3,886,370,776

Summary of Required Municipal Contributions to Fund Transit

Station	Municipal Contribution of Available Tax Increment (1)		TIF Bond Proceeds						Total TIF Proceeds	Remaining TI to Municipalities (\$2007)		
	Average Total Contribution County	Town	County	Town	Series A		Series B				Series C	
					Amount	Year	Amount	Year			Amount	Year
Davidson	21%	48%	36%	98%	\$ 12,000,000	2009	\$ 10,000,000	2011	\$ 4,440,733	2016	\$ 26,440,733	\$ 230,743,782
Cornelius	16%	37%	26%	66%	\$ 12,000,000	2009	\$ 10,000,000	2011	\$ -	0	\$ 22,000,000	\$ 287,441,307
Huntersville - DT	29%	61%	53%	90%	\$ 4,000,000	2009	\$ 10,000,000	2011	\$ 6,500,000	2015	\$ 20,500,000	\$ 134,831,556
Huntersville - Sam Furr	32%	71%	58%	90%	\$ 3,750,000	2009	\$ 10,000,000	2011	\$ 7,250,000	2014	\$ 21,000,000	\$ 115,733,382
Bryton	40%	13%	85%	27%	\$ -		\$ 6,000,000	2011	\$ -	0	\$ 6,000,000	\$ 48,270,558
Harris	13%	23%	28%	87%	\$ 15,000,000	2009	\$ 10,000,000	2011	\$ -	0	\$ 25,000,000	\$ 465,045,965
Eastfield	11%	19%	23%	73%	\$ 15,000,000	2009	\$ 10,000,000	2011	\$ -	0	\$ 25,000,000	\$ 565,822,257
Total	--	--	--	--	\$ 61,750,000		\$ 66,000,000		\$ 18,190,733		\$ 145,940,733	\$ 1,847,888,806

(1) Assumes County shares 90% of Transit Project costs and 25% of Non-Transit Project costs.

Davidson Model:

Projected growth based primarily on the "Redevelopment Sites: Ownership & Acreage" figure and the Town's Station Area Vision Plan. Specific projects identified in those two documents were evaluated independently. Any remaining parcels within the proposed TIF District Boundary and deemed "available for development" by Town Planning staff were assigned a TOD Typology. Future land values were estimated based on current comps from recent development projects and an assumed appreciation rate.

TOD Typology Assumptions

TOD Types	TYPE #	Residential	Office	Retail
Urban Center	1	60	13,846	18,462
Suburban Center	2	45	9,643	9,643
Urban Neighborhood	3	23	4,219	4,219
Medium Density	4	16	1,694	3,388
Low Density	5	10	-	2,322

Town-wide Future Assessed Value Assumptions

Value (/unit/SF)	Density	AV/Acre	Low	High	Avg
\$ 250,000	10 units/ac	2,500,000	289000	320000	304500
\$ 220	0.35 FAR	3,354,120	140000	260000	46%
\$ 220	0.35 FAR	3,354,120	240000	260000	250000
\$ 220	0.35 FAR	3,354,120	0.15		

Residential Comps

S. Main infill (Corninthian)	277,250
Affordable	127,471
Davidson Bay	254,783
% affordable	
Mkt Price	\$
Aff Price	\$
W.Avg	\$

Known Near Term Projects

Acres	Absorption (Year)		Method	DU	Office	Retail	Comm'l	Future Value (\$2007)
	Start	Finish						
Davidson Bay	35.57		1	301	-	-	-	75,250,000
TOTAL	35.57	0	1	301	0	0	0	\$ 75,250,000

Other Known Project Areas ("Blue")

Acres	Base AV	Method (Select: 1=Station Plan; 2=Typology)				Future Value (\$2007)	Future Value Attributed to Transit (\$2007)
		DU	Office	Retail	Comm'l		
Town Hall	1	88	-	-	20,000	26,400,000	-
Metrolina	4.74	96	-	-	25,000	29,500,000	-
Sadler Square	3.71	83	15,652	15,652	-	27,755,438	-
Sadler Property	1.81	50	-	-	20,000	16,900,000	-
Wachovia Property	0.74	17	3,122	3,122	-	5,536,125	-
A.M.E. Zion	2.66	60	11,222	11,222	-	19,900,125	-
Parcel #14	2.3	18	-	-	-	4,500,000	-
Davidson Bay	0	-	-	-	-	-	-
N. Town Parcels	18.08	145	15,315	30,630	-	46,267,784	-
TOTAL	35.04	557	45,310	60,625	65,000	\$ 176,759,471	\$

Market appreciation (real) 2.0%

Davidson -- TAX INCREMENT CASH FLOW P

	2016	2017	2018	2019	2020	2021	2022	2023	2024
	9	10	11	12	13	14	15	16	17
Tax Increment Calculations									
Base Assessed Value	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900
Known Project Areas	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400
Growth Area (outside known projects)	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700
Non-Growth Area	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000
Total Base AV									
New AV on Tax Rolls									
Known Near-Term Projects	-	-	-	-	-	-	-	-	-
Other Known Project Areas	26,405,491	26,933,601	-	-	-	-	-	-	-
Growth Area (outside known projects)	44,112,722	44,994,976	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
County Readjustment (2009-2013; 2yrs thereal)	-	35,430,419	46,263,141	46,263,141	-	49,080,567	-	52,069,573	-
Total New AV	70,518,213	107,388,997	46,263,141	46,263,141	-	49,080,567	-	52,069,573	-
Cumulative Projected AV									
Incremental Assessed Value	652,298,498	759,657,495	805,920,636	805,920,636	805,920,636	855,001,203	855,001,203	907,070,776	907,070,776
Max Tax Increment - County	600,686,498	708,045,495	754,308,636	754,308,636	754,308,636	803,389,203	803,389,203	855,458,776	855,458,776
Max Tax Increment - Town	4,919,022	5,798,185	6,177,033	6,177,033	6,177,033	6,578,954	6,578,954	7,005,352	7,005,352
Max Tax Increment - Total	2,072,368	2,442,757	2,602,365	2,602,365	2,602,365	2,771,693	2,771,693	2,951,333	2,951,333
Total	6,991,390	8,240,942	8,779,398	8,779,398	8,779,398	9,350,647	9,350,647	9,956,685	9,956,685

Davidson -- TAX INCREMENT CASH FLOW P

	2025	2026	2027	2028	2029	2030	2031	2032	2033
	18	19	20	21	22	23	24	25	26
Tax Increment Calculations									
Base Assessed Value									
Known Project Areas	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900
Growth Area (outside known projects)	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400
Non-Growth Area	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700
Total Base AV	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000
New AV on Tax Rolls									
Known Near-Term Projects	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
County Readjustment (2009, 2013, 2yrs thereafter)	55,240,610	55,240,610	58,604,763	62,173,794	62,173,794	62,173,794	65,960,178	65,960,178	69,977,152
Total New AV	55,240,610	55,240,610	58,604,763	62,173,794	62,173,794	62,173,794	65,960,178	65,960,178	69,977,152
Cumulative Projected AV									
Incremental Assessed Value	962,311,387	962,311,387	1,020,916,150	1,020,916,150	1,083,089,944	1,083,089,944	1,149,050,121	1,149,050,121	1,219,027,273
Max Tax Increment - County	910,699,387	910,699,387	969,304,150	969,304,150	1,031,477,944	1,031,477,944	1,097,438,121	1,097,438,121	1,167,415,273
Max Tax Increment - Town	7,457,717	7,457,717	7,937,632	7,937,632	8,446,773	8,446,773	8,986,921	8,986,921	9,559,964
Max Tax Increment - Total	3,141,913	3,141,913	3,344,099	3,344,099	3,558,599	3,558,599	3,786,162	3,786,162	4,027,583
	10,599,630	10,599,630	11,281,731	11,281,731	12,005,372	12,005,372	12,773,082	12,773,082	13,587,546

Davidson -- TAX INCREMENT CASH FLOW P

	2034	2035	2036	2037	2038	2039
	27	28	29	30	31	32
Tax Increment Calculations						
Base Assessed Value						
Known Project Areas	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900	10,625,900
Growth Area (outside known projects)	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400	11,072,400
Non-Growth Area	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700	29,913,700
Total Base AV	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000	51,612,000
New AV on Tax Rolls						
Known Near-Term Projects	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-
County Readjustment (2009), 2013, 2yrs thereaf	-	74,238,761	-	78,759,901	-	83,556,379
Total New AV	-	74,238,761	-	78,759,901	-	83,556,379
Cumulative Projected AV						
Incremental Assessed Value	1,219,027,273	1,293,266,034	1,293,266,034	1,372,025,936	1,372,025,936	1,455,582,315
Max Tax Increment - County	1,167,415,273	1,241,654,034	1,241,654,034	1,320,413,936	1,320,413,936	1,403,970,315
Max Tax Increment - Town	9,559,964	10,167,905	10,167,905	10,812,870	10,812,870	11,497,113
Max Tax Increment - Total	4,027,583	4,283,706	4,283,706	4,555,428	4,555,428	4,843,698
Max Tax Increment - Total	13,587,546	14,451,611	14,451,611	15,368,298	15,368,298	16,340,811

Cornelius Model:

Projected growth based on "2006 Planning Retreat" output ("Post TOD Development Density") and Antiquity Plan
 No specific projects outside Antiquity were known or specifically estimated
 Any remaining parcels within the proposed TIF District Boundary and deemed "available for development" by Town Planning staff were assigned a TOD Typology
 Future land values were estimated based on current comps from recent development projects and an assumed appreciation rate.

TOD Typology Assumptions

TOD Types	TYPE #	Residential	Program Mix Office	Retail
Urban Center	1	60	13,846	18,462
Suburban Center	2	45	9,643	9,643
Urban Neighborhood	3	23	4,219	4,219
Medium Density	4	16	1,694	3,388
Low Density	5	10	-	2,322

Town-wide Future Assessed Value Assumptions

Value (unit/\$F)	Density	AV/Acre
\$ 250,000	10 units/ac	2,500,000
\$ 220	0.35 FAR	3,354,120
\$ 220	0.35 FAR	3,354,120
\$ 220	0.35 FAR	3,354,120

Residential Comps

Low	High	Avg
289000	320000	304500
Affordable	140000	46%
Davidson Bay	240000	250000
% affordable	0.15	
Mkt Price	\$ 277,250	
Aff Price	\$ 127,471	
W.Avg	\$ 254,783	

Known Near Term Projects

Acres	Absorption (Year)	Method	DU	Office	Retail	Comm'l	Future Value (\$2007)
99	Start	1	968	-	-	-	242,000,000
30	Finish	1	-	140,000	140,000	-	61,600,000
129	0	2	968	140,000	140,000	0	\$ 303,600,000
		3					

Other Known Project Areas

Acres	Method (Select: 1=Station Plan; 2=Typology)	Retail	Comm'l	Future Value (\$2007)
None known	1	-	-	-
	2,225,900	-	-	-

Market appreciation (real) 2.0%

TIF & Development Timing

Year
0
3
10
8

GIS PROJECTIONS

"Proposed Densities After TOD"	Acres	Base AV	Projected Growth	Future Value (\$2007)
Town Descriptor			Office	
50% Developable	63.96	15,180,450	108,353	\$ 327,346,872
			216,706	
			1,023	
			1,023	
Total	64	15,180,450	108,353	\$ 327,346,872

Cornelius -- TAX INCREMENT CASH FLOW PRO FORMA

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	0	1	2	3	4	5	6	7	8	9	10
Tax Increment Calculations											
Base Assessed Value											
Known Project Areas	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900
Growth Area (outside known projects)	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450
Non-Growth Area	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450
Total Base AV	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800
New AV on Tax Rolls											
Known Near-Term Projects	103,224,000	103,224,000	105,288,480	-	-	-	-	-	-	-	-
Other Known Project Areas	2,225,900	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	15,180,450	-	-	43,422,890	44,291,348	45,177,175	46,080,718	47,002,332	47,942,379	48,901,227	49,879,251
Non-Growth Area	15,180,450	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009, 2013, 2yrs thereafter)	-	-	26,354,398	-	-	-	46,523,314	-	36,306,943	-	44,300,169
Total New AV	135,810,800	103,224,000	131,642,878	43,422,890	44,291,348	45,177,175	92,604,032	47,002,332	84,249,322	48,901,227	94,179,420
Cumulative Projected AV											
Incremental Assessed Value	103,224,000	239,034,800	370,677,678	414,100,568	458,391,915	503,569,090	596,173,122	643,175,455	727,424,777	776,326,004	870,505,424
Max Tax Increment - County	845,301	1,690,603	2,768,626	3,124,216	3,486,918	3,856,874	4,615,208	5,000,110	5,690,028	6,090,480	6,861,716
Max Tax Increment - Town	283,866	567,732	929,750	1,049,163	1,170,964	1,295,201	1,545,862	1,679,119	1,910,804	2,045,283	2,304,276
Max Tax Increment - Total	1,129,167	2,258,335	3,698,376	4,173,379	4,657,882	5,152,075	6,165,071	6,679,229	7,600,833	8,135,763	9,165,992

Cornelius -- TAX INCREMENT CASH FLOW P

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	11	12	13	14	15	16	17	18	19	20	21	22	23
Tax Increment Calculations													
Base Assessed Value	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900
Known Project Areas	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450
Growth Area (outside known projects)	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450
Non-Growth Area	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800
Total Base AV	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900
New AV on Tax Rolls	-	-	-	-	-	-	-	-	-	-	-	-	-
Known Near-Term Projects	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009, 2013, 2yrs thereat)	-	53,013,780	-	56,242,320	-	59,667,477	-	63,301,226	-	67,156,271	-	71,246,088	-
Total New AV	-	53,013,780	-	56,242,320	-	59,667,477	-	63,301,226	-	67,156,271	-	71,246,088	-
Cumulative Projected AV	870,505,424	923,519,204	923,519,204	979,761,524	1,039,429,000	1,039,429,000	1,039,429,000	1,102,730,226	1,102,730,226	1,169,886,497	1,169,886,497	1,241,132,585	1,241,132,585
Incremental Assessed Value	837,918,624	890,932,404	890,932,404	947,174,724	1,006,842,200	1,006,842,200	1,006,842,200	1,070,143,426	1,070,143,426	1,137,299,697	1,137,299,697	1,208,545,785	1,208,545,785
Max Tax Increment - County	6,861,716	7,295,845	7,295,845	7,756,414	8,245,031	8,245,031	8,245,031	8,763,405	8,763,405	9,313,347	9,313,347	9,896,781	9,896,781
Max Tax Increment - Town	2,304,276	2,450,064	2,450,064	2,604,730	2,768,816	2,768,816	2,768,816	2,942,894	2,942,894	3,127,574	3,127,574	3,323,501	3,323,501
Max Tax Increment - Total	9,165,992	9,745,910	9,745,910	10,361,144	11,013,847	11,013,847	11,013,847	11,706,299	11,706,299	12,440,921	12,440,921	13,220,282	13,220,282

Cornelius -- TAX INCREMENT CASH FLOW P

	2031	2032	2033	2034	2035	2036	2037	2038	2039
	24	25	26	27	28	29	30	31	32
Tax Increment Calculations									
Base Assessed Value									
Known Project Areas	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900	2,225,900
Growth Area (outside known projects)	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450
Non-Growth Area	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450	15,180,450
Total Base AV	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800	32,586,800
New AV on Tax Rolls									
Known Near-Term Projects	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
County Readjustment (2009, 2013, 2 yrs thereat)	75,584,974	80,188,099	80,188,099	85,071,555	85,071,555	90,252,412	90,252,412	95,748,784	95,748,784
Total New AV	75,584,974	80,188,099	80,188,099	85,071,555	85,071,555	90,252,412	90,252,412	95,748,784	95,748,784
Cumulative Projected AV									
Incremental Assessed Value	1,316,717,559	1,316,717,559	1,396,905,659	1,481,977,213	1,481,977,213	1,481,977,213	1,572,229,626	1,572,229,626	1,667,978,410
Max Tax Increment - County	1,284,130,759	1,284,130,759	1,364,318,859	1,449,390,413	1,449,390,413	1,449,390,413	1,539,642,826	1,539,642,826	1,635,391,610
Max Tax Increment - Town	10,515,747	10,515,747	11,172,407	11,172,407	11,869,058	11,869,058	12,608,135	12,608,135	13,392,222
Max Tax Increment - Total	3,531,360	3,531,360	3,751,877	3,751,877	3,985,824	3,985,824	4,234,018	4,234,018	4,497,327
	14,047,106	14,047,106	14,924,284	14,924,284	15,854,882	15,854,882	16,842,153	16,842,153	17,889,549

Huntersville Sam Furr Model

Projected growth based on reconciliation of Sam Furr Station Area Concept Plan and Caldwell Station Plan
 Any remaining parcels within the proposed TIF District Boundary and deemed "available for development" by Town Planning staff were assigned a TOD Typology
 Future land values were estimated based on current comps from recent development projects and an assumed appreciation rate.

TOD Typology Assumptions

TOD Types	TYPE #	Residential	Office	Retail
Urban Center	1	60	13,846	18,462
Suburban Center	2	45	9,643	9,643
Urban Neighborhood	3	23	4,219	4,219
Medium Density	4	16	1,694	3,388
Low Density	5	10	-	2,322

Town-wide Future Assessed Value Assumptions

	Value /Unit(SE)	Density	AV/Acre	Low	High	Avg
Residential	\$ 250,000	10 units/ac	2,500,000	289,000	320,000	304,500
Office	\$ 220	0.35 FAR	3,354,120	140,000	140,000	46%
Retail	\$ 220	0.35 FAR	3,354,120	240,000	260,000	250,000
General Comm'l	\$ 220	0.35 FAR	3,354,120	0.15		

Residential Comps
 S. Main infill (Corninthian) Affordable
 Davidson Bay
 % affordable
 Mkt Price \$ 277,250
 Aff Price \$ 127,471
 W.Avg \$ 254,783

Known Near Term Projects

Acres	Absorption (Year)		Method	DU	Office	Retail	Comm'l	Future Value (\$2007)
	Start	Finish						
0			1					
0	0	2	1					
		3	Duration					
TOTAL	0	0	0	0	0	0	0	0

Other Known Project Areas

DT Master Plan Designation	Acres	Base AV	Method (Select: 1=Station Plan; 2=Typology)	Office	Retail	Future Value (\$2007)
Sam Furr 1		91	1	194	22,000	53,225,417
Sam Furr 2			1	-	59,250	115,720,000
Sam Furr 3			1	466,750	15,000	6,600,000
Sam Furr 4			1	-	26,500	48,850,833
Sam Furr 5			1	7,000	-	1,540,000
Caldwell Station 6			1	534	-	133,500,000
		91		488,750	122,750	\$ 359,436,250

Market appreciation (real) 2.0%

TIF & Development Timing

	Year
TIF District Formation	0
First TOD Phase hits tax rolls	3
Last TOD Phase hits tax rolls	10
Development period	8

Sam Furr -- TAX INCREMENT CASH FLOW P

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	11	12	13	14	15	16	17	18	19	20	21	22	23
Tax Increment Calculations													
Base Assessed Value	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535
Known Project Areas	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100
Growth Area (outside known projects)	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635
Non-Growth Area													
Total Base AV	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100
New AV on Tax Rolls													
Known Near-Term Projects													
Other Known Project Areas													
Growth Area (outside known projects)													
Non-Growth Area													
County Readjustment (2009; 2013; 2 yrs thereafter)	27,677,572	27,677,572		29,363,137		31,151,352		33,048,469		35,061,121		37,196,343	
Total New AV	27,677,572	27,677,572		29,363,137		31,151,352		33,048,469		35,061,121		37,196,343	
Cumulative Projected AV	454,475,738	482,153,310	482,153,310	511,516,447	511,516,447	542,667,799	542,667,799	575,716,267	575,716,267	610,777,388	610,777,388	647,973,731	647,973,731
Incremental Assessed Value	445,068,103	472,745,675	472,745,675	502,108,812	502,108,812	533,260,164	533,260,164	566,308,632	566,308,632	601,369,753	601,369,753	638,566,096	638,566,096
Max Tax Increment - County	3,644,663	3,871,314	3,871,314	4,111,769	4,111,769	4,366,867	4,366,867	4,637,501	4,637,501	4,924,617	4,924,617	5,229,218	5,229,218
Max Tax Increment - Town	1,290,697	1,370,962	1,370,962	1,456,116	1,456,116	1,546,454	1,546,454	1,642,295	1,642,295	1,743,972	1,743,972	1,851,842	1,851,842
Max Tax Increment - Total	4,935,360	5,242,277	5,242,277	5,567,885	5,567,885	5,913,322	5,913,322	6,279,796	6,279,796	6,668,589	6,668,589	7,081,059	7,081,059

Sam Furr -- TAX INCREMENT CASH FLOW P

	2031	2032	2033	2034	2035	2036	2037	2038	2039
	24	25	26	27	28	29	30	31	32
Tax Increment Calculations									
Base Assessed Value									
Known Project Areas	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535	2,056,535
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100	7,351,100
Total Base AV	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635	9,407,635
New AV on Tax Rolls									
Known Near-Term Projects	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
County Readjustment (2009, 2013, 2yrs thereaf)	39,461,600	41,864,812	44,414,379	47,119,214	49,988,775	49,988,775	49,988,775	49,988,775	49,988,775
Total New AV	39,461,600	41,864,812	44,414,379	47,119,214	49,988,775	49,988,775	49,988,775	49,988,775	49,988,775
Cumulative Projected AV	687,435,331	729,300,143	773,714,522	820,833,736	870,822,511	921,811,046	973,800,281	1,026,789,016	1,083,777,791
Incremental Assessed Value	678,027,696	719,892,508	764,306,887	811,426,101	861,414,876	913,403,651	967,392,426	1,023,381,201	1,081,370,976
Max Tax Increment - County	5,552,369	5,895,200	6,258,909	6,644,768	7,054,126	7,511,000	7,997,904	8,511,000	9,023,000
Max Tax Increment - Town	1,966,280	2,087,688	2,216,490	2,353,136	2,498,103	2,653,136	2,818,103	2,993,136	3,178,103
Max Tax Increment - Total	7,518,649	7,982,888	8,475,399	8,997,904	9,552,230	10,134,136	10,816,007	11,504,136	12,201,103

Huntersville Downtown Model

Projected growth based on reconciliation of DT Master Plan and East Huntersville Plan (Anchor Mill, Magla Mill, Vermilion)
 Civic projects were excluded as they are assumed to be tax exempt
 Any remaining parcels within the proposed TIF District Boundary and deemed "available for development" by Town Planning staff were assigned a TOD Typology
 Future land values were estimated based on current comps from recent development projects and an assumed appreciation rate.

TOD Typology Assumptions

TOD Types	TYPE #	Residential	Office	Retail
Urban Center	1	60	13,846	18,462
Suburban Center	2	45	9,643	9,643
Urban Neighborhood	3	23	4,219	4,219
Medium Density	4	16	1,694	3,388
Low Density	5	10	-	2,322

Town-wide Future Assessed Value Assumptions

Value (unit/\$F)	Density	AV/acre	Residential Comps	High	Avg	Low
Townhome \$ 250,000	10 units/ac	2,500,000	S. Main Infill (Cominthian)	289,000	320,000	304,500
Single Family \$ 350,000	7 units/ac	2,450,000	Affordable	140,000		46%
Duplex \$ 140,000	14 units/ac	1,960,000				
Multifamily \$ 250,000	18 units/ac	4,500,000				
Office \$ 220	0.35 FAR	3,354,120	Davidson Bay	240,000	260,000	250,000
Retail \$ 220	0.35 FAR	3,354,120	% affordable	0.15		
General Comm'l \$ 220	0.35 FAR	3,354,120	Mkt Price	\$ 277,250		

Other Known Project Areas

DT Master Plan Designation	Acres	Base AV	Method (Select: 1=Station Plan; 2=Typology)	Office	Retail	Future Value (\$2007)
A			1	53,080	16,740	43,760,400
B			1	7,500	7,500	5,550,000
C			1	96,800	48,400	31,944,000
D			1	32,200	21,000	13,954,000
E			1	36	-	9,000,000
F			1	21,125	-	4,927,500
G			1	12	10,000	5,200,000
H			1	6	-	2,100,000
I			1	283	18,000	76,510,000
J			1	309	28,500	83,520,000
K			1	47	72,000	30,090,000
L			1	15	-	3,070,000
M			1	51	-	14,750,000
N			1	36	37,200	22,464,000
O			1	12	-	3,000,000
P			1	15,000	-	3,300,000
		224 \$ 75,207,700		935	249,705	259,340 \$ 353,139,900

Market appreciation (real) 2.0%

TIF & Development Timing

TIF District Formation	Year
First TOD Phase hits tax rolls	0
Last TOD phase hits tax rolls	3
Development period	10
	8

Huntersville -- TAX INCREMENT CASH FLOW PRO FORMA

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	0	1	2	3	4	5	6	7	8	9	10
Tax Increment Calculations											
Base Assessed Value	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700
Known Project Areas	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700
Total Base AV	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700
New AV on Tax Rolls											
Known Near-Term Projects	-	-	-	-	-	-	-	-	-	-	-
Other Known Project Areas	75,207,700	-	-	46,844,361	47,781,248	48,736,873	49,711,611	50,705,843	51,719,960	52,754,359	53,809,446
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009 - 2013, 2yrs thereafter)	-	-	14,594,227	-	-	-	11,270,933	-	17,913,549	-	25,242,216
Total New AV	75,207,700	75,207,700	14,594,227	46,844,361	47,781,248	48,736,873	60,982,543	50,705,843	69,633,509	52,754,359	79,051,662
Cumulative Projected AV	75,207,700	75,207,700	89,801,927	136,646,288	184,427,536	233,164,409	294,146,952	344,852,795	414,486,304	467,240,663	546,292,325
Incremental Assessed Value	-	-	14,594,227	61,438,588	109,219,836	157,956,709	218,939,252	269,645,095	339,278,604	392,032,963	471,084,625
Max Tax Increment - County	-	-	119,512	503,121	894,401	1,293,507	1,792,894	2,208,124	2,778,352	3,210,358	3,857,712
Max Tax Increment - Town	-	-	42,323	178,172	316,738	458,074	634,924	781,971	983,908	1,136,896	1,366,145
Max Tax Increment - Total	-	-	161,835	681,292	1,211,139	1,751,582	2,427,817	2,990,094	3,762,260	4,347,254	5,223,857

Huntersville -- TAX INCREMENT CASH FLOW

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	11	12	13	14	15	16	17	18	19	20	21	22	23
Tax Increment Calculations													
Base Assessed Value	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700
Known Project Areas	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Base AV	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700
New AV on Tax Rolls													
Known Near-Term Projects	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009 - 2013 - 2 yrs thereafter)	33,269,203	33,269,203	33,269,203	35,295,297	35,295,297	37,444,781	37,444,781	39,725,168	39,725,168	42,144,430	42,144,430	44,711,026	44,711,026
Total New AV	33,269,203	33,269,203	33,269,203	35,295,297	35,295,297	37,444,781	37,444,781	39,725,168	39,725,168	42,144,430	42,144,430	44,711,026	44,711,026
Cumulative Projected AV	546,292,325	579,561,527	579,561,527	614,856,824	614,856,824	652,301,605	652,301,605	692,026,773	692,026,773	734,171,203	734,171,203	778,882,229	778,882,229
Incremental Assessed Value	471,084,625	504,353,827	504,353,827	539,649,124	539,649,124	577,093,905	577,093,905	616,819,073	616,819,073	658,963,503	658,963,503	703,674,529	703,674,529
Max Tax Increment - County	3,857,712	4,130,153	4,130,153	4,419,187	4,419,187	4,725,822	4,725,822	5,051,131	5,051,131	5,396,252	5,396,252	5,762,391	5,762,391
Max Tax Increment - Town	1,366,145	1,462,626	1,462,626	1,564,982	1,564,982	1,673,572	1,673,572	1,788,775	1,788,775	1,910,994	1,910,994	2,040,656	2,040,656
Max Tax Increment - Total	5,223,857	5,592,780	5,592,780	5,984,169	5,984,169	6,399,394	6,399,394	6,839,907	6,839,907	7,307,246	7,307,246	7,803,047	7,803,047

Huntersville -- TAX INCREMENT CASH FLOW

	2031	2032	2033	2034	2035	2036	2037	2038	2039
	24	25	26	27	28	29	30	31	32
Tax Increment Calculations									
Base Assessed Value									
Known Project Areas	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
Total Base AV	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700	75,207,700
New AV on Tax Rolls									
Known Near-Term Projects	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
County Readjustment (2009; 2013; 2yrs thereafter)	47,433,928	-	50,322,654	-	53,387,304	-	56,638,590	-	60,087,881
Total New AV	47,433,928	-	50,322,654	-	53,387,304	-	56,638,590	-	60,087,881
Cumulative Projected AV	826,316,157	826,316,157	876,638,811	876,638,811	930,026,115	930,026,115	986,664,705	986,664,705	1,046,752,586
Incremental Assessed Value	751,108,457	751,108,457	801,431,111	801,431,111	854,818,415	854,818,415	911,457,005	911,457,005	971,544,886
Max Tax Increment - County	6,150,827	6,150,827	6,562,919	6,562,919	7,000,108	7,000,108	7,463,921	7,463,921	7,955,981
Max Tax Increment - Town	2,178,215	2,178,215	2,324,150	2,324,150	2,478,973	2,478,973	2,643,225	2,643,225	2,817,480
Max Tax Increment - Total	8,329,042	8,329,042	8,887,070	8,887,070	9,479,081	9,479,081	10,107,147	10,107,147	10,773,461

Bryton Model

Based on modest intensification of development around immediate station area

Town-wide Future Assessed Value Assumptions

	Value /unit/SF)	Density	AV/Acre	Residential Comps	High	Avg
Residential				S. Main infill (Corninthian)	289000	320000
Townhome	\$ 250,000	10 units/ac	2,500,000			
Single Family	\$ 350,000	7 units/ac	2,450,000	Affordable	140000	46%
Duplex	\$ 140,000	14 units/ac	1,960,000			
Multifamily	\$ 250,000	18 units/ac	4,500,000			
Office	\$ 220	0.35 FAR	3,354,120	Davidson Bay	240000	250000
Retail	\$ 220	0.35 FAR	3,354,120	% affordable	0.15	
General Comm'l	\$ 220	0.35 FAR	3,354,120	Mkt Price	\$ 277,250	
				Aff Price	\$ 127,471	
				W.Avg	\$ 254,783	

Other Known Project Areas

DT Master Plan Designation	Acres	Method (Select: 1=Station Plan; 2=Typology)	Future Value (\$2007)
None known			
		Office	100,000
		Retail	100,000
		DU	350
		1	100,000
		350	131,500,000
		350	131,500,000

Market appreciation (real) 2.0%

TIF & Development Timing

	Year
TIF District Formation	0
First TOD Phase hits tax rolls	3
Last TOD phase hits tax rolls	10
Development period	8

Bryton -- TAX INCREMENT CASH FLOW PRO FORMA

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	0	1	2	3	4	5	6	7	8	9	10
Tax Increment Calculations											
Base Assessed Value	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000
Known Project Areas	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000
Total Base AV	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000
New AV on Tax Rolls											
Known Near-Term Projects	-	-	-	-	-	-	-	-	-	-	-
Other Known Project Areas	8,900,000	-	17,443,607	18,148,328	17,792,479	18,148,328	18,511,295	18,881,521	19,259,151	19,644,334	20,037,221
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009-2013, 2yrs thereafter)	-	-	1,727,065	-	-	-	1,333,790	-	5,106,865	-	7,740,640
Total New AV	8,900,000	-	1,727,065	17,443,607	17,792,479	18,148,328	19,845,085	18,881,521	24,366,016	19,644,334	27,777,860
Cumulative Projected AV	8,900,000	8,900,000	10,627,065	28,070,672	45,863,151	64,011,479	83,856,564	102,738,085	127,104,100	146,748,434	174,526,295
Incremental Assessed Value	-	-	1,727,065	19,170,672	36,963,151	55,111,479	74,956,564	93,838,085	118,204,100	137,848,434	165,626,295
Max Tax Increment - County	-	-	14,143	156,989	302,691	451,308	613,819	768,440	967,973	1,128,841	1,356,314
Max Tax Increment - Town	-	-	5,008	55,595	107,193	159,823	217,374	272,130	342,792	399,760	480,316
Max Tax Increment - Total	-	-	19,151	212,584	409,884	611,131	831,193	1,040,571	1,310,765	1,528,601	1,836,630

Bryton -- TAX INCREMENT CASH FLOW PRC

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	11	12	13	14	15	16	17	18	19	20	21	22	23
Tax Increment Calculations													
Base Assessed Value	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000
Known Project Areas	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Base AV	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000
New AV on Tax Rolls													
Known Near-Term Projects	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009, 2013, 2yrs thereafter)	-	10,628,651	-	11,275,936	-	11,932,641	-	12,691,166	-	13,464,058	-	14,284,019	-
Total New AV	-	10,628,651	-	11,275,936	-	11,932,641	-	12,691,166	-	13,464,058	-	14,284,019	-
Cumulative Projected AV	174,526,295	185,154,946	185,154,946	196,430,883	196,430,883	208,393,523	208,393,523	221,084,689	221,084,689	234,546,746	234,546,746	248,832,765	248,832,765
Incremental Assessed Value	165,626,295	176,254,946	176,254,946	187,530,883	187,530,883	199,493,523	199,493,523	212,184,689	212,184,689	225,648,746	225,648,746	239,932,765	239,932,765
Max Tax Increment - County	1,356,314	1,443,352	1,443,352	1,535,690	1,535,690	1,633,652	1,633,652	1,737,580	1,737,580	1,847,838	1,847,838	1,964,809	1,964,809
Max Tax Increment - Town	480,316	511,139	511,139	543,840	543,840	578,531	578,531	615,336	615,336	654,381	654,381	695,805	695,805
Max Tax Increment - Total	1,836,630	1,954,491	1,954,491	2,079,530	2,079,530	2,212,184	2,212,184	2,352,916	2,352,916	2,502,219	2,502,219	2,660,614	2,660,614

Bryton -- TAX INCREMENT CASH FLOW PRC

	2031	2032	2033	2034	2035	2036	2037	2038	2039
	24	25	26	27	28	29	30	31	32
Tax Increment Calculations									
Base Assessed Value									
Known Project Areas	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
Total Base AV	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000	8,900,000
New AV on Tax Rolls									
Known Near-Term Projects	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
County Readjustment (2009, 2013, 2013.2 vrs lthreal)	15,153,915	-	16,076,789	-	17,055,865	-	18,094,567	-	19,196,527
Total New AV	15,153,915	-	16,076,789	-	17,055,865	-	18,094,567	-	19,196,527
Cumulative Projected AV	263,986,680	263,986,680	280,063,469	280,063,469	297,119,335	297,119,335	315,213,902	315,213,902	334,410,429
Incremental Assessed Value	295,086,680	295,086,680	271,163,469	271,163,469	286,219,335	286,219,335	306,313,902	306,313,902	325,510,429
Max Tax Increment - County	2,088,905	2,088,905	2,220,558	2,220,558	2,360,228	2,360,228	2,508,405	2,508,405	2,665,605
Max Tax Increment - Town	739,751	739,751	786,374	786,374	835,836	835,836	888,310	888,310	943,980
Max Tax Increment - Total	2,828,656	2,828,656	3,006,932	3,006,932	3,196,064	3,196,064	3,396,715	3,396,715	3,609,585

Eastfield Model
Based On Eastfield Area Plan

Town-wide Future Assessed Value Assumptions

	Value (/unit/SF)	Density	AV/Acre
Residential			
Dwelling	\$ 200,000	10 units/ac	2,000,000
Office	\$ 220	0.35 FAR	3,354,120
Retail	\$ 220	0.35 FAR	3,354,120
General Comm'l	\$ 220	0.35 FAR	3,354,120

Known Near Term Projects	Absorption (Year)		Method	DU	Office	Retail	Comm'l
	Start	Finish					
No known projects	0		1	-	-	-	-
TOTAL	0	0	1	0	0	0	0

Other Known Project Areas

DT Master Plan Designation	Acres	Method (Select: 1=Station Plan; 2=Typology)	Future Value (\$2007)
None known		DU	Retail
		2,230	2,600,000
		2,230	2,600,000

Market appreciation (real) 2.0%

TIF & Development Timing

	Year
TIF District Formation	0
First TOD Phase hits tax rolls	3
Last TOD phase hits tax rolls	10
Development period	8

Eastfield -- TAX INCREMENT CASH FLOW PRO FORMA

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	0	1	2	3	4	5	6	7	8	9	10
Tax Increment Calculations											
Base Assessed Value	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000
Known Project Areas	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000
Total Base AV	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000
New AV on Tax Rolls											
Known Near-Term Projects	-	-	-	-	-	-	-	-	-	-	-
Other Known Project Areas	42,000,000	-	-	149,829,305	152,825,891	155,882,408	159,000,057	162,180,058	165,423,659	168,732,132	172,106,775
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009 - 2013, 2yrs thereafter)	-	-	8,150,196	-	-	-	6,294,291	-	41,045,513	-	63,496,251
Total New AV	42,000,000	42,000,000	8,150,196	149,829,305	152,825,891	155,882,408	165,294,348	162,180,058	206,469,172	168,732,132	235,603,026
Cumulative Projected AV	42,000,000	42,000,000	50,150,196	199,979,501	352,805,392	508,687,800	673,982,148	836,162,206	1,042,631,377	1,211,363,509	1,446,966,535
Incremental Assessed Value	-	-	8,150,196	157,979,501	310,805,392	466,687,800	631,982,148	794,162,206	1,000,631,377	1,169,363,509	1,404,966,535
Max Tax Increment - County	-	-	66,742	1,293,694	2,545,185	3,821,706	5,175,302	6,503,394	8,194,170	9,575,918	11,505,271
Max Tax Increment - Town	-	-	37,377	724,484	1,425,354	2,140,230	2,898,270	3,642,028	4,588,895	5,362,701	6,443,177
Max Tax Increment - Total	-	-	104,119	2,018,188	3,970,539	5,961,937	8,073,572	10,145,422	12,783,066	14,938,619	17,948,447

Eastfield -- TAX INCREMENT CASH FLOW Pf

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	11	12	13	14	15	16	17	18	19	20	21	22	23
Tax Increment Calculations													
Base Assessed Value	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000
Known Project Areas	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Base AV	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000
New AV on Tax Rolls													
Known Near-Term Projects	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009 - 2013 - 2yrs thereal	88,120,262	88,120,262	-	93,486,786	-	99,180,131	-	105,220,201	-	111,628,111	-	118,426,263	-
Total New AV	88,120,262	88,120,262	-	93,486,786	-	99,180,131	-	105,220,201	-	111,628,111	-	118,426,263	-
Cumulative Projected AV	1,446,966,535	1,535,086,797	1,535,086,797	1,628,573,583	1,628,573,583	1,727,753,714	1,727,753,714	1,832,973,915	1,832,973,915	1,944,602,027	1,944,602,027	2,063,028,290	2,063,028,290
Incremental Assessed Value	1,404,966,535	1,493,086,797	1,493,086,797	1,586,573,583	1,586,573,583	1,685,753,714	1,685,753,714	1,790,973,915	1,790,973,915	1,902,602,027	1,902,602,027	2,021,028,290	2,021,028,290
Max Tax Increment - County	11,505,271	12,226,888	12,226,888	12,992,451	12,992,451	13,804,637	13,804,637	14,666,285	14,666,285	15,580,408	15,580,408	16,550,201	16,550,201
Max Tax Increment - Town	6,443,177	6,847,296	6,847,296	7,276,026	7,276,026	7,730,867	7,730,867	8,213,406	8,213,406	8,725,333	8,725,333	9,268,436	9,268,436
Max Tax Increment - Total	17,948,447	19,074,184	19,074,184	20,268,478	20,268,478	21,535,504	21,535,504	22,879,692	22,879,692	24,305,741	24,305,741	25,818,636	25,818,636

Eastfield -- TAX INCREMENT CASH FLOW PT

	2031	2032	2033	2034	2035	2036	2037	2038	2039
	24	25	26	27	28	29	30	31	32
Tax Increment Calculations									
Base Assessed Value	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000
Known Project Areas	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000
Total Base AV	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000	42,000,000
New AV on Tax Rolls									
Known Near-Term Projects	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
County Readjustment (2009 - 2013, 2yrs thereaf)	125,638,423	133,289,803	141,407,152	141,407,152	141,407,152	141,407,152	150,018,847	150,018,847	159,154,995
Total New AV	125,638,423	133,289,803	141,407,152	141,407,152	141,407,152	141,407,152	150,018,847	150,018,847	159,154,995
Cumulative Projected AV									
Incremental Assessed Value	2,188,666,713	2,188,666,713	2,321,956,516	2,321,956,516	2,463,363,668	2,463,363,668	2,613,382,515	2,613,382,515	2,772,537,510
Max Tax Increment - County	17,579,054	17,579,054	18,670,564	18,670,564	19,828,547	19,828,547	21,057,051	21,057,051	22,360,372
Max Tax Increment - Town	9,844,614	9,844,614	10,455,861	10,455,861	11,104,374	11,104,374	11,792,360	11,792,360	12,522,245
Max Tax Increment - Total	27,423,667	27,423,667	29,126,444	29,126,444	30,932,921	30,932,921	32,849,412	32,849,412	34,882,617

Harris Model

Based on Griffiths Lake Plan

Griffiths Lake Future Assessed Value Assumptions

	Value / (unit/SF)	Density	AV/Acre
Residential	250,000	units/ac	-
Office	220	0.35 FAR	3,354,120
Retail	220	0.35 FAR	3,354,120
General Comm'l	220	0.35 FAR	3,354,120

Other Known Project Areas

DT Master Plan Designation	Acres	Base AV	Method (Select: 1=Station Plan; 2=Typology)	Office	Retail	Future Value (\$2007)
Griffith Lakes	450	12,000,000	1	2,800	390,000	901,960,000
				2,800	390,000	\$ 901,960,000

Market appreciation (real) 2.0%

TIF & Development Timing

	Year
TIF District Formation	0
First TOD Phase hits tax rolls	3
Last TOD phase hits tax rolls	10
Development period	8

Harris -- TAX INCREMENT CASH FLOW PRO FORMA

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
	0	1	2	3	4	5	6	7	8	9	10
Tax Increment Calculations											
Base Assessed Value	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000
Known Project Areas	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-
Total Base AV	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000
New AV on Tax Rolls											
Known Near-Term Projects	-	-	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	128,175,355	130,738,862	133,353,640	136,020,712	138,741,127	141,515,949	144,346,268	147,233,194
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009; 2013; 2yrs thereafter)	-	-	2,328,628	-	-	-	-	-	-	-	-
Total New AV	12,000,000	-	2,328,628	128,175,355	130,738,862	133,353,640	137,819,081	138,741,127	174,670,857	144,346,268	152,241,698
Cumulative Projected AV	12,000,000	12,000,000	14,328,628	142,503,983	273,242,845	406,596,485	544,415,566	683,156,693	857,827,550	1,002,173,818	1,201,648,710
Incremental Assessed Value	-	-	2,328,628	130,503,983	261,242,845	394,596,485	532,415,566	671,156,693	845,627,550	990,173,818	1,169,648,710
Max Tax Increment - County	-	-	19,069	1,068,697	2,139,318	3,231,351	4,359,951	5,496,102	6,926,482	8,108,533	9,742,033
Max Tax Increment - Town	-	-	10,679	598,491	1,198,060	1,809,619	2,441,658	3,077,925	3,878,965	4,540,937	5,455,729
Max Tax Increment - Total	-	-	29,748	1,667,188	3,337,377	5,040,970	6,801,609	8,574,027	10,805,447	12,649,471	15,197,762

Harris -- TAX INCREMENT CASH FLOW PRO

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
	11	12	13	14	15	16	17	18	19	20	21	22	23
Tax Increment Calculations													
Base Assessed Value	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000
Known Project Areas	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Base AV	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000
New AV on Tax Rolls													
Known Near-Term Projects	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-	-	-	-	-
County Readjustment (2009, 2013, 2yrs thereaf	-	73,180,406	-	77,637,093	-	82,365,192	-	87,381,232	-	92,702,749	-	98,348,347	-
Total New AV	-	73,180,406	-	77,637,093	-	82,365,192	-	87,381,232	-	92,702,749	-	98,348,347	-
Cumulative Projected AV													
Incremental Assessed Value	1,201,648,710	1,274,829,116	1,274,829,116	1,352,466,209	1,352,466,209	1,434,831,401	1,434,831,401	1,522,212,634	1,522,212,634	1,614,915,383	1,614,915,383	1,713,263,730	1,713,263,730
Max Tax Increment - County	9,742,033	10,341,308	10,341,308	10,877,078	10,877,078	11,651,566	11,651,566	12,367,131	12,367,131	13,126,274	13,126,274	13,931,649	13,931,649
Max Tax Increment - Town	5,455,729	5,791,334	5,791,334	6,147,378	6,147,378	6,525,105	6,525,105	6,925,835	6,925,835	7,350,970	7,350,970	7,801,995	7,801,995
Max Tax Increment - Total	15,197,762	16,132,642	16,132,642	17,124,456	17,124,456	18,176,671	18,176,671	19,292,966	19,292,966	20,477,244	20,477,244	21,733,644	21,733,644

Harris -- TAX INCREMENT CASH FLOW PRO

	2031	2032	2033	2034	2035	2036	2037	2038	2039
	24	25	26	27	28	29	30	31	32
Tax Increment Calculations									
Base Assessed Value	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000
Known Project Areas	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
Total Base AV	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000
New AV on Tax Rolls									
Known Near-Term Projects	-	-	-	-	-	-	-	-	-
Other Known Project Areas	-	-	-	-	-	-	-	-	-
Growth Area (outside known projects)	-	-	-	-	-	-	-	-	-
Non-Growth Area	-	-	-	-	-	-	-	-	-
County Readjustment (2009; 2013; 2yrs. thereaf)	104,337,761	110,691,931	110,691,931	117,433,069	117,433,069	124,584,743	124,584,743	132,171,954	132,171,954
Total New AV	104,337,761	110,691,931	110,691,931	117,433,069	117,433,069	124,584,743	124,584,743	132,171,954	132,171,954
Cumulative Projected AV									
Incremental Assessed Value	1,817,601,491	1,817,601,491	1,928,293,422	1,928,293,422	2,045,726,491	2,045,726,491	2,170,311,234	2,170,311,234	2,302,483,189
Max Tax Increment - County	14,786,071	14,786,071	15,692,527	15,692,527	16,654,186	16,654,186	17,674,411	17,674,411	18,756,767
Max Tax Increment - Town	8,280,488	8,280,488	8,788,122	8,788,122	9,326,670	9,326,670	9,898,015	9,898,015	10,504,156
Max Tax Increment - Total	23,066,559	23,066,559	24,480,648	24,480,648	25,980,856	25,980,856	27,572,426	27,572,426	29,260,923

North Corridor Commuter Rail Project
Financing Strategy

Appendix B

Commuter Rail Generated Growth & Tax Revenue

Some station area growth and resulting property tax revenue would not take place “but for” the implementation of commuter rail service. The transit village within the *Griffith Lakes* development is an example. Commuter rail generated growth and property tax revenue is identified in the table below, which makes clear that incremental property tax revenue directly attributable to implementation of commuter rail service exceeds the debt service required to fund the rail improvements and local station area projects. Without commuter rail, this tax revenue would not have been generated in the first place.

Incremental Growth & Property Tax Revenues
Directly Attributable to Commuter Rail in 2019
(\$ millions)

Station	Total Incremental Future Assessed Value in 2019	Incremental Future Assessed Value Attributable to Commuter Rail in 2019	Incremental Taxes Attributable To Commuter Rail		Annual Debt Service	
			County	Local	Rail Projects	Station Area Projects
Davidson	754	106	.9	.4		
Cornelius	890	88	.7	.2		
Sam Furr	473	398	7.3	2.6		
Huntersville	504	299				
Hambright	176	176				
Eastfield	1,119	349	9.6	5.4		
Harris	1,263	807				
Derita	30	24				
Total	5.2 billion	\$2.2 billion	\$18.5	\$8.6		
			\$27.1 million		\$16.7 million	