KINCORA PROJECT FISCAL IMPACT ANALYSIS

Prepared for

Loudoun County

Prepared by

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March 1, 2007

Executive Summary

We have been retained by NA Dulles Real Estate Investor LLC (Owner) to conduct the fiscal impact analysis of the proposed mixed-use project in Loudoun County, Virginia, called Kincora. This report is intended for use by Loudoun County.

This analysis is based upon the Kincora project's description, intended land usage, values for improvements and activities to occur on the site and the phasing of development over time, relying on information as provided by the Owner. The following analysis takes into comprehensive account the relevant categories of revenues and outlays of the County, relying on data reported by the County on its recent fiscal results. The data sources and particular assumptions used in the analysis are discussed in the following sections, including the appendices.

Overall, at completion, Kincora will consist of a mixed-use development of offices, retail, hotels, apartments and condominiums. It is estimated that at full build out, Kincora will have 3.9 million square feet of office space, 490,000 square feet of retail space, 720 hotel rooms, 704 apartments, and 631 condominium units. These will be located on 260 acres, of which 19 acres will be devoted to a traffic interchange. At full build out, which is scheduled for about 2022 (with first product deliveries in 2009), there will be an estimated 9,129 employees on the property and 2,537 residents, including approximately 267 school children. Total taxable property values at build out will be $1.72 billion in 2006 dollars.

Using the methodology described in the appendices to this report, we estimate that the Kincora development will have a substantial positive net fiscal impact for the County. Examining the period of 2007 through 2022, we estimate in 2006 dollars that Kincora's operations will generate $235 million in County general fund revenues in comparison to $93 million in County increased operating expenditures, using applicable existing County tax rates

and operating cost data.[1] The difference represents a net fiscal benefit of approximately $142 million for the County during the period, again expressed in 2006 dollars. In addition to the net fiscal benefit from operations, the construction phases of the project will generate an estimated added fiscal benefit of $7 million dollars in net County revenues and $53 million in various capital contributions. Overall, the Kincora project, including capital contributions, will generate a $202 million net fiscal benefit for the County for the period 2007 through 2022.

In addition to the County general revenues, the Kincora project will generate a total of $22 million in taxes toward the Rt. 28 District. As part of its development plan, the Kincora project plans to use an improvement district to construct approximately $55 million in regional road improvements that will provide major benefits to County citizens.

By-Right Development Alternative

It is our understanding that the Owner is requesting a change in zoning to permit the above-discussed Kincora project. This makes relevant the question of the fiscal impact of the property were it to remain in the existing zoning land use. For purposes of comparison, we have prepared a fiscal impact estimate for development of the site as it is currently zoned.[2]

The current zoning for the "by right" development of the land is for office/light industrial land use. Based on the information supplied by the Owner and using our own estimates, we developed a scenario for the existing by-right development, which is assumed to occur over a 20-year period, commencing with first delivery of product in 2009. Since there are no specific alternative use plans in hand, it is assumed that the parcel would have a straight-line development pace of 20 years and thus not achieve full build-out until 2028. To make the two land uses

[1] This is based on the estimate that there will be 0.2 public school children per residential unit. The County has a presumptive standard of 0.2 school children. We believe that .011 is a more realistic school factor. In that case, the net benefit would be $10.4 million greater, since school costs are reduced by $10.4 million for the period. As is explained below, County general fund education costs are based on the annual transfer of County general funds to the school budget.

[2] We have relied on certain information from the Owner for estimates of the pace of development, but have used other sources for estimates of building value.

comparable, we examine the results for the period 2007 through 2022. Using the same revenue and cost bases and methodology as employed for the proposed Kincora development, we estimate that the existing permitted use would generate for that period (2007-2022) $39 million in County revenues and $16 million in expenses, for a *net* fiscal benefit to the County of $23 million in 2006 dollars. During the construction period the by-right alternative would add about $1.8 million in net fiscal benefits. In addition, the by-right development would generate about $6.6 million in Rt. 28 District revenues. Last, given its existing land use, we do not presume that any capital contributions are made in the case of the by-right alternative.

Overall, the Kincora mixed-use development provides a substantial increase in the net fiscal benefit to the County. For the period of the Kincora build out (2007 to 2022), the net fiscal advantage is estimated at $202 million as opposed to $25 million under existing development rights, expressed in 2006 dollars.[3] Existing land use would also require acquisition of land for an interchange for Route 28 by the Route 28 Tax District authority at an estimated cost of $10 million and, potentially, the cost of the Gloucester connection, which is estimated at $26 million, and ultimately would be a cost to the County.

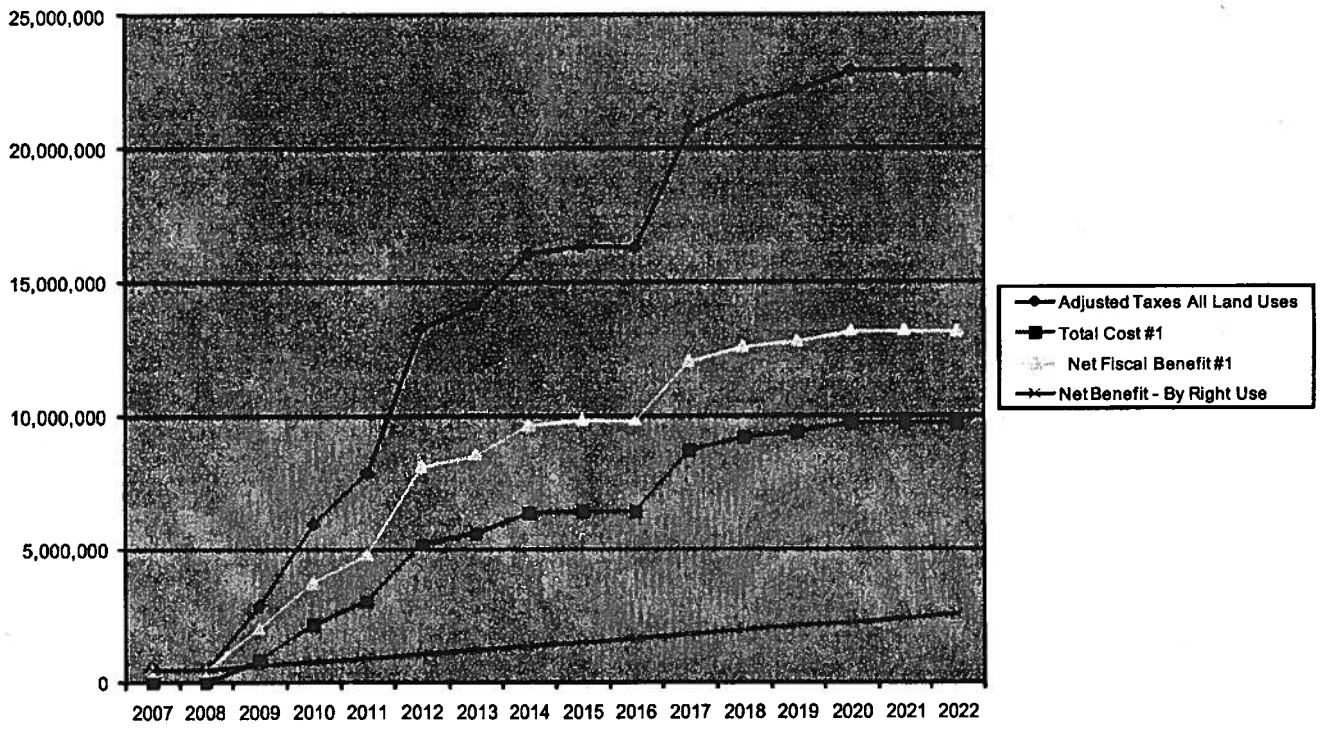
Summary of Major Results

The charts below provide a graphic representation of the results of the analysis. Chart 1 depicts the annual revenue flows to the County representing taxes and charges received from the Kincora development as it matures. It also depicts the estimated annual costs of County operating services and calculates a net fiscal benefit (revenues minus operating costs). Also shown for reference is the net benefit from the development of the property under the existing by-right alternative. As may be seen, given the development phasing and nature of improvements, Kincora maintains a substantial positive net benefit throughout the period, rising by 2022 to an annual level of around $21 million in net benefits per year under the existing regime of tax rates and estimated per worker and per

[3] This figure does not include the $22.1 million in Route 28 district tax revenues generated by Kincora for the period.

capita and per school child spending.[4] The by-right alternative, in contrast, shows a net annual fiscal benefit of about $2.5 million by 2022 under our assumed development pattern.

Chart 1: Kincora: Annual County Revenues, Operating Costs, and Net Fiscal Benefit (2006 Dollars annual flows)



[4] Case #1 assumes the County standard of 0.2 public school children per multi-family unit household. We believe that 0.11 is a better estimate of student generation for this development (Case #2). If Case #2 is correct, Kincora's net fiscal benefits would be about $10.4 million greater for the period 2007-2022.

Chart 2 provides a display of County annual revenues from the differing land uses at Kincora. As may be seen, there is a mix among the sources over the build-out period. By final buildout in 2022, office sector predominates at about $10 million in revenues, while retail, hotel and condominium sources will generate around $3 to $4 million and apartments, a bit over $2 million in annual County revenues. Receipts on undeveloped land diminish as the project is built-out. Tables 2 and 3, below, provide additional detail on County revenues from the Kincora project.

Chart 2: County Annual Revenues By Sector: Kincora 2007-2022 (2006 dollars)

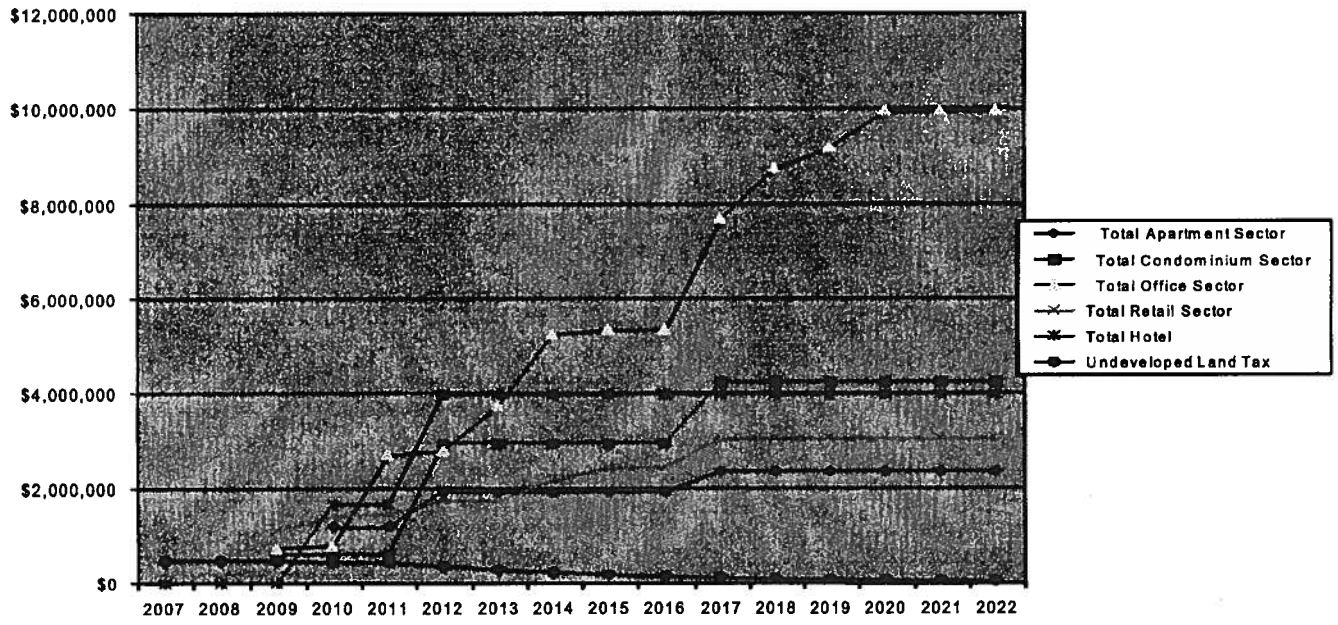
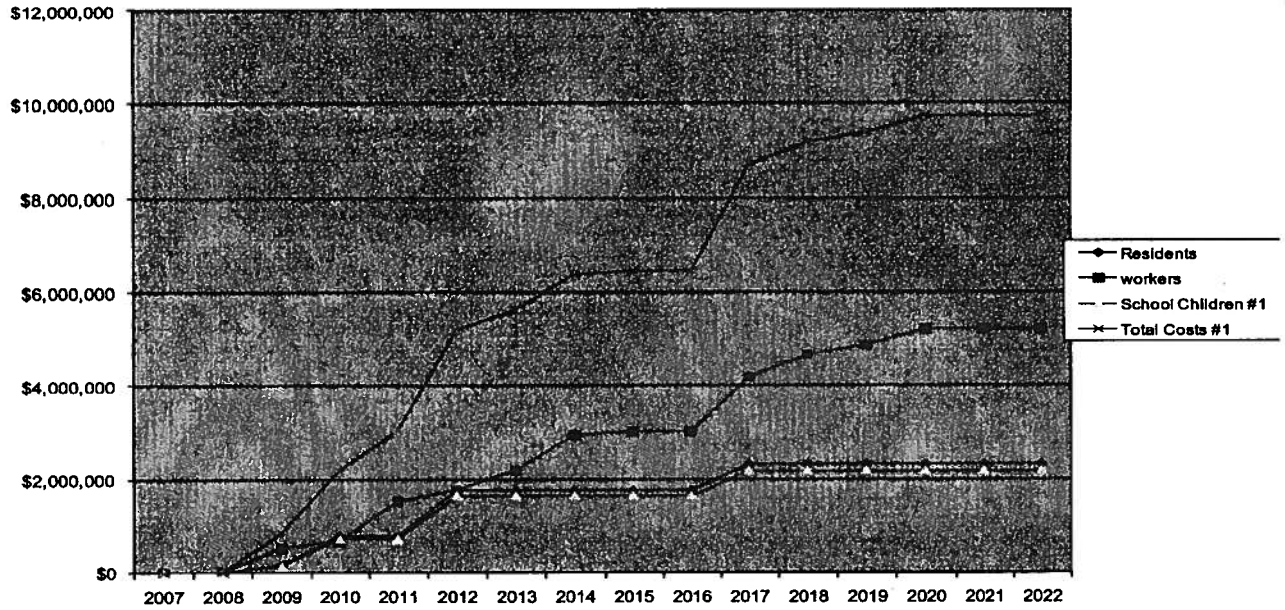


Chart 3 depicts the breakdown of annual County operating costs as apportioned among residents in Kincora, workers that are employed there, and public school children (assuming the county standard of 0.2 school children per residential unit). By project build out, workers employed there are estimated to constitute the largest demands for County services, with total school children and residents' operating costs being about equal. (As noted, by 2022, there are estimated to be around 9,100 employees, 2,500 residents and 267 school children, using the County's school generation assumption).

Chart 3: Kincora: County Annual Operating Costs by Residents and Workers: 2006 dollars (Assuming Case #1 of 0.2 children per household)



Cumulative Results for the Period: 2007-2022

Table 1 below provides a summary consolidated report on the total fiscal impacts for the period 2007 through 2022. It illustrates that the total accumulated net fiscal impact for Kincora is estimated at $202.1 million. This figure consolidates the project's construction and operations phases. The former is estimated to have $7.2 million in net benefits in County revenues in excess of its operating costs, plus $ 53.1 million in capital contributions. The operational phase, as the project's improvements enter into use, is the more significant. It is estimated that Kincora project's operations will generate $141.9 million in net fiscal benefits. These figures are in 2006 dollars.

Table 1: Summary of County Revenues, Costs, Fiscal Benefits: Kincora Project and By-Right Development Operations and Construction Phases: 2007-2022 (2006 dollars)

	Construction:		*Operations:*		*Period Totals:*	
Item	*Kincora*	*By-Right*	*Kincora*	*By Right*	*Kincora*	*By Right*
Total County Revenues	14,090,906	3,566,695	234,755,278	39,174,624	248,846,184	42,741,319
(Minus) County Operating Cost	6,884,108	1,762,041	92,851,932	15,774,454	99,736,040	17,536,495
Net Fiscal Impact	7,206,798	1,804,653	141,903,347	23,400,170	149,110,144	25,204,823
(Add) Capital Contributions	53,001,100	0			53,001,100	0
Total Net Impact with Contributions					**202,111,244**	**25,204,823**

For comparison, also displayed in Table 1 are the results for the by-right development. Consolidating the fiscal impacts through construction and operations, the by right development alternative generates $25.2 million in net fiscal benefits, with $1.8 million during the construction phase and $23.4 million during operations. For the period, Kincora would additionally pay $22.1 million in Route 28 District taxes, while the by-right development would generate as estimated $6.6 million in taxes.[5]

[5] As is discussed in Appendix A-4, the 2006 dollar figures can be converted into future "current" dollars, assuming future rates of price inflation.

Tables 2 and 3 provide a breakdown of cumulative County tax and fee revenues for the operating phase for both Kincora and the By Right Development. Breakdowns for the construction period are found in Appendix A-4.

Table 2: Summary of Taxes By Type and Sector : Kincora Operation
Cumulative Values: 2007-2022 (2006 dollars)

Tax/Charges	*Apartment*	*Condominium*	*Office*	*Retail*	*Hotel*	*Undev. Land*	*Total*
Real Property	17,548,048	33,806,002	64,876,658	10,587,602	19,936,800	3,976,824	150,731,935
Personal Property	3,494,436	2,661,784	3,441,905	477,449	203,202		10,278,776
Sales	2,141,642	3,202,555	1,688,482	20,258,510	5,017,771		32,308,959
Consumer Utility	900,601	723,699	649,416	90,085	38,340		2,402,141
Other taxes/charges	2,065,210	1,635,710	5,714,861	792,745	337,392		10,545,918
BPOL	70,192	33,806	5,844,744	810,762	345,060		7,104,564
Lodging tax					21,382,985		21,382,985
Total General Revenue	**26,220,130**	**42,063,557**	**82,216,066**	**33,017,153**	**47,261,549**	**3,976,824**	**234,755,278**

Note: Rt. 28 District Revenues 22,083,924

Table 3: Summary of Taxes By Type: By-Right Development Operation
Cumulative Values: 2007-2022 (2006 dollars)

Tax/Charge	
Property Tax Improved Land	24,642,701
Consumer Utility	275,296
BPOL	2,477,663
Personal Property	2,918,136
Machinery & Tools	497,955
Other Taxes and Charges	2,422,604
Employee Retail Sales	715,769
Property Tax Undeveloped Land	5,224,500
Total General Revenues	**39,174,624**

Note: Rt. 28 Revenues 6,637,156

The future economic activity at Kincora is projected in this report to serve as a basis for examining the fiscal impacts for the County. Nonetheless, the results in terms of employment opportunities and the creation of asset values in the County are of interest as indices of the economic development taking place. Table 4 depicts the job generation by the Kincora project in comparison to the by-right alternative. By 2022, Kincora will generate a wide band of jobs in the multi-use project. There will be 7,800 jobs in the office sector, 833 in the retail sector, 324 in the hotel sector, and about 108 in the residential sector. In contrast, the by-right development, under the assumed path of development, would lead to a total of 3,671 jobs in the office/light industry classifications by 2022. We note that in the construction phases, Kincora will generate an estimated 12,000 person years of jobs, in comparison to around 3,000 person years of such employment in the by-right alternative.

Table 4: Jobs By Sector: Kincora and By-right Development : F.T.E. Jobs at year 2022

Sector	*Kincora*	*By-right*
Office	7,864	2,841
Light Industry	0	830
Retail	833	0
Hotel	324	0
Apartments	70	0
Condos	38	0
Total Employees	**9,129**	**3,671**
Construction (Person Yrs.) for the period 2207- 2022	12,014	3,075

In terms of the overall economic development of the site, it should be noted that Kincora development by 2022 is projected to have a total of $1.72 billion in taxable real property values, as opposed to $365 million under the

by-right development, as is shown in Table 5 below.[6] (These figures are in 2006 values.) Kincora, as a mixed-use development, provides much greater employment and higher real estate values using the same acreage space.

Table 5: Developed Property Values in 2022: Kincora and By-right Use (2006 dollars)

Sector	*Kincora*	*By-right*
Office	$872,948,400	
Light Industry Flex		$365,077,057
Retail	$108,757,800	
Hotels	$187,200,000	
Apartments	$176,000,000	
Condos	$378,600,000	
Total Property Value	**$1,723,506,200**	**$365,077,057**

We also note that a substantial portion of the economic development will be derived from the performance of the hotel sector at Kincora. For the period 2007- 2022, the hotel sector in Kincora is anticipated to generate a total of over $47.3 million in County revenues of which some $21.4 million in revenues will represent proceeds in the County lodging tax (See Table 2 above). At present, 60 per cent of the lodging tax is dedicated to fostering County tourism and travel and related economic development activities.

[6] In 2022, the by-right development (since the site would not be fully built out) also would have approximately $16.2 million remaining in taxable undeveloped land, based on 2006 prices. There would be no undeveloped land in Kincora by that date.

Methodology and Appendices

The methodology used in the fiscal impact analysis may briefly be described as follows. There are two overlapping phases to the project: first, the construction phase, during which the project is built, and second, the continuing operation of the project as it is inhabited by residents and businesses that put the land to various designated uses. Over the long run, the operational phase of the development will be the most important. These operating activities will involve both assets and income bases that, when subject to the County's tax and fee regime, will generate County revenues. Those ongoing values and activities will also require County services and related County expenditures. The overall aim of the fiscal impact analysis is to compare the County's estimated revenues derived from the project with the estimated expenditures it will incur in supplying County services to the developed area. In the case of Kincora, the analysis of fiscal impact involves residential use, offices, retail, and hotel activities, as well as undeveloped land in the process of being developed. The operation phase assumptions and fiscal impacts of Kincora are discussed in Appendix A-1. Appendix A-2 discuses the key assumptions used in examining the by-right development alternative.

The development process itself will have fiscal impacts for the County. In this report, the construction and associated spending have been estimated separately. As is discussed in Appendix A-3, spending will be done in the County and will be related to County revenue generation. Such spending comprises construction payroll and the buying of various materials and services that are procured in the County. The construction-related spending at Kincora or at the by-right development will continue over several years. But, that activity and the workers it attracts will also mean costs for the County. For purposes of estimation, we assumed that there will be a standard two-year building cycle for the separate elements in the parcel. Thus, we assume that construction begins in 2007, with first-stage projects being ready for sale and use by the beginning of 2009.[7] Appendix A-4 discusses the impact of price inflation assumptions on the results.

[7] The fiscal impacts for the construction period are estimated separately, following much the same analytical method. Certain County taxes and charges pertain to construction and development activities.

Appendix A-1: Calculation of County Revenues and Costs from Development Operations

The calculation of County revenues was done by using a variety of parameters that are produced by running the underlying *pro forma* model for development. The process is meant to give a full accounting of the direct fiscal results of the development on an annual basis until it reaches full build out. Since the development will extend through several phases, it is necessary to view the fiscal impacts of both (a) land that is developed to its final use and placed in operation and (b) the construction period. The following discussion relates first to estimating the fiscal impacts of the Kincora site in its operating phases. A later appendix (A-3) refines the analysis by adding in the fiscal impacts of construction phases. It is important to note that the construction and operations phases will be going on concurrently over the 17-year build-out period, as project phases are completed and begin to operate, while other phases move into construction.

The County revenue impacts are examined by the nature of the land use. There are six types of land use in the development (not counting various shared spaces and public improvements):

Commercial Office Buildings
Retail Establishments
Hotels
Residential – Apartments
Residential - Condominiums
Undeveloped Land at the site

Revenue calculations have been done as follows. In the case of some taxes, the tax base can be estimated directly from the project's phasing plans and the predicted price-points on a per square foot basis or per other relevant unit. However, many tax revenues will depend on the volume of future taxable activities and thus require assumptions

about the future residents of the project and their income, the number of workers and their salaries, and various spending characteristics. Thus, to be exhaustive in accounting for all revenues and to be as precise as possible, the respective categories of County revenues were broken down into those revenues that could be directly calculated from the projected future values and those that needed to be estimated using various indices, based on per worker, per resident and per household unit bases.

First, the County's actual revenues for fiscal year 2005 were examined for each category of revenue from the standpoint of ascribing the collections as having been generated by non-residential versus residential uses. While the appropriate allocation is evident in some cases, in many other cases, the contributions from these respective sources need to be estimated. The rationale is that once there is distribution between the commercial/business and residential sectors, there can be then be allocations on both a per-worker and per capita basis (and on per household unit given household size) for those taxes that will need to be estimated on assumed features of the project. Table A-1 provides an allocation of those taxes based on 2005 values. The residential component is divided by 2005 population to provide per capita figures. The commercial/business component is divided by total employment in the County. In order to achieve a 2006 baseline value, the 2006 per capita and per worker estimates were then inflated by 2.5 per cent. (See Table A-2 for the 2006 adjusted own-sources revenues.)

Several of the tax and revenue categories have not been placed on the per capita/ per worker basis. That is because they are either not relevant as possible revenues stemming from the project's operation or because the tax base values will be taken directly from the values embedded in the project phasing model.[8] For example, certain fees and taxes are closely related to the development and construction process and will be accounted for separately as part of the construction period impact.

[8] The underlying model provides values for square feet developed and assumptions regarding price points of facilities to be rented or sold. From these values we are able to estimate taxable values. In the case of retail and hotel usages, for example, we are able to develop estimates of taxable sales. However, in several other cases, we need to have presumptive measures based on per capita (or per unit) or per worker bases. Thus, we estimate the number of residents and employees at the site to develop several of the revenue estimates.

Table A-1, based primarily on the Virginia State Auditor's Report for 2005 for Loudoun County, indicates $695.8 million in County own-source revenues. As noted, we have not allocated some of the revenue categories, such as permits and fees and the recordation tax, as will be explained below.

Table A-1 Loudoun County Own Revenues

Loudoun County Own Revenues (2005)	2005 Auditor Report	Allocation Factors Res.	Allocation Factors Bus.	Dollar Allocations Res.	Dollar Allocations Bus.	per resident	per worker
Real Property Tax	422,518,209						
PSC Property	10,092,632						
Personal Property tax	62,198,326	0.800	0.200	49758660.8	12439665	$205.64	$103.67
Machinery and Tools	1,155,636	0.000	1.000		1155636	$0.00	$9.63
Penalty	2,147,417						
Interest	1,378,905						
Property Taxes	***499,491,125***						
Sales Tax	40,440,519	0.923	0.077	37319501	3121018	$154.23	$26.01
Consumer Utility	12,591,497	0.850	0.150	10702772.5	1888724.6	$44.23	$7.81
BPOL	21,230,787		1.000	0	21230787	$0.00	$87.74
Franchise License	1,143,290		1.000	0	1143290	$0.00	$4.72
Motor Veh Lisc	4,626,043	0.850	0.150	3932136.55	693906	$16.25	$2.87
Lodging	4,865,837		1.000	0			
Recordation Tax	15,758,857						
Emergency Phone	3,368,634	0.850	0.150	2863338.9	505295	$11.83	$2.09
Other Taxes	6,049,073		1.000		6049073	$0.00	$25.00
Total Other Taxes	***110,074,537***					$0.00	$0.00
Permits.Fees	23,102,301					$0.00	$0.00
Fines	2,032,360	0.668	0.332	1357616.48	674744	$5.61	$2.79
Charges	29,894,475	0.668	0.332	19969509.3	9924966	$82.53	$41.02
Interest	6,174,356	0.668	0.332	4124469.81	2049886	$17.05	$8.47
Rental	1,289,947	0.668	0.332	861684.596	428262	$3.56	$1.77
Misc	23,694,250	0.668	0.332	15827759	7866491	$65.41	$32.51
Total Fines/Misc	*86,187,689*	0.668	0.332	57573376.3	28614313	$237.94	$118.26
Total	695,753,351						

TABLE A-2: Loudoun County Own-source Revenues Adjustments to 2006 Base-line Revenue Figures:

		Adjusted 2006 annual values per resident	per worker	Per 2-person HH Unit
Real Property Tax	nc			
PSC Property	nc			
Personal Property tax		$210.78	$106.26	$421.57
Machinery and Tools		$0.00	$9.87	
Penalty	nc			
Interest	nc			
Property Taxes	nc			
Sales Tax		*$158.09*	*$26.66*	*$316.18*
Consumer Utility		$45.34	$8.00	$90.68
BPOL		$0.00	$89.94	
Franchise License */		$0.00	$4.84	
Motor Vehicle Lisc*/		$16.66	$2.94	$33.31
Lodging	nc			
Recordation Tax	nc			
Emergency Phone		$12.13	$2.14	$24.26
Other Bus, Taxes */		$0.00	$25.62	
Total Other Taxes */		**$16.66**	**$33.40**	**$33.31**
Permits.Fees	nc			
Fines **/		$5.75	$2.86	
Charges **/		$84.59	$42.04	
Interest **/		$17.47	$8.68	
Rental **/		$3.65	$1.81	
Total Charges and other rev. **/		**$111.47**	**$55.40**	**$222.94**
Misc. Revenue	nc			

Note: Inflation rate of 2.5 per cent on per capita/worker/unit figures

Note that the residential unit figure assumes a two-person household and simply is a multiple of the per capita figures. Application of the above figures infers that the existing applicable rates will be maintained in the future.

Illustration of Calculations and Discussion:

The methodology for application of the estimated tax and charge revenues is best illustrated by an example: Below in Table A-3 are shown, using the baseline 2006 values, the array of taxes and charges to be generated by each residential unit in both the apartment and condominium categories.

TABLE A-3: Application of Tax Estimates (2006 values) Kincora Residential Properties

Residential - Apartment		Prop Tax	Pers PT	Sales	Utility	BPOL	Misc.	Charges	
HH size	2	0.009	0.042	0.01	$115/yr	0.0016	33/yr	223/yr	Totals
Average rent	1575								
Annual rent	18900								
Annual Mkt. value	250,000	2250							$2,250
Annual HH Income	80,000								
Personal Property Tax	422		422						$422
Taxable Sales Factor	0.34								
Annual Taxable Sales	27200			272					$272
Utility Tax	$115				115				$115
BPOL on rentals	0.0016					30.24			$30
Misc. Taxes.	33						33		$33
Misc. Charges	223							223	$223
Total →									**$3,345**
Employee Impacts:									(See Below)
Residential - Condo									
HH size	2								
Annual Mkt. Value	600,000	5,400							$5,400
Annual HH Income	150,000								
Personal P. Tax	422/unit		422						$422
Taxable Sales Factor	0.34								
Annual Taxable Sales	51,000			510					$510
Utility tax	115				115				$115
BPOL	nc								
Misc. Taxes	33/unit						33		$33
Misc. Charges	223							223	$223
Total →									**$6,703**

Note that the key inputs are the assumed per unit values (in 2006 prices), the household size, and the average household income (at 2006 levels). The average household income level for apartment dwellers is assumed to be $80,000 per year. For condominium owners, the average income is assumed to be $150,000.[9] The household sizes are assumed to be the same (2 persons) in the case of both condominiums and apartments. It is assumed that in the case of apartments, the rent levels will reflect embedded taxes that are collected.

As may be seen in Table A-3, the apartment projects are estimated to generate $3,350 in annual revenues per apartment unit, while the condominium units are estimated at over $6,700 per unit. Two factors are especially important in the tax differential: the higher per unit value of the condominium units and the higher per unit annual income. In addition to these revenue impacts are those that are accountable to the employment of persons on site to administer and service the apartment complex and the condominium.

The logic of the revenue estimates is to multiply the number of units that are occupied (operating) by the above factors. In the case of the property tax, it is assumed that it will be paid, no matter what the vacancy rate at a given time. Otherwise, the vacancy rate is assumed to be 5% for both apartment and condominium units.

As indicated in Table A-3, in addition to the County revenues accountable to the residents themselves are those revenues that are associated with the operation of the apartment complex and the condominium facilities. While of a much smaller scale, they need to be considered (as will be the costs to the County of workers employed to carry out these functions).

[9] In the case of apartments, the estimate of income is based on the assumption that the annual rental will on average be 27 per cent of personal income. In the case of the condominium, it is assumed that annual cost of 20-year 7% mortgage for $400,000 and property taxes will equal 29 per cent of personal income.

Comments on County Tax and Various Sector Assumptions

The sales tax revenues to the County are assumed to be at 1% of all taxable sales. The elements driving this tax source (aside from the 1% rate as set by state code) are the incomes and associated consumption expenditures by residents and the degree to which such consumption expenditures are captured by Loudoun County merchants. This report estimates that residents in the Kincora development will spend approximately 34 percent of their annual income on taxable sales within the County. The primary basis for this consumption pattern and recapture rate is the recent study of the Route 7 Retail Area conducted for the County.[10] The results indicated that "captured" taxable retail consumption in this area of the County was approximately 34 per cent of personal incomes of residents.[11] This represented a County capture rate of around 90 per cent of the potential. We believe that this capture rate for Loudoun-based retail purchases is conservative and will be reinforced by the fact that there is significant retail activity on the Kincora site. [12]

The Route 7 Retail study also provides relatively up-to-date information on sales per square foot. An overall calculation indicates that all stores in the study area had per square foot sales of $331 per square foot, presumably based on 2005 figures.[13] Reportedly, some major retailers in the Leesburg discount area were enjoying sales close to $400 per square foot. Overall, given the likely mix of retail establishments, we assume taxable retail sales in the retail sector to $340 per gross square foot in 2006 prices.

Personal property taxes are based on the allocation of personal property taxes on a per capita and per worker basis. The amount for residents will be heavily influenced by car ownership. Since the per capita estimates are

[10] *Route 7 Retail Market Analysis.* AKRF Inc. (October 13, 2006) pp. 13-16

[11] By way of comparison, total taxable sales as reported by Virginia Department of Taxation was $3.58 billion in Loudoun County compared to estimated personal income of $10.20 billion in 2004 (the last year for which taxable sales figures are available) or approximately 35%..

[12] We did not adjust for a possible "double-count" for retail sales made by establishments at Kincora to residents and workers. An "outside" measure is that all sales tax revenues associated with Kincora residents and workers amounts to $7.3 million out of a total of $31.2 million in sales taxes for the entire period.

[13] Based on $3.134 billion in sales divided by 9.627 million square feet. See p 12 (store square footage) and p 16 (sales volumes) in *Route 7 Retail Market Analysis*. Omitted are mail order sales, gasoline stations, and motor vehicle sales.

influenced by the inclusion of children, the estimate is conservative in housing types where there will be proportionately fewer children. Also, we have made no attempt to vary the amount collected by personal income classes. Utility taxes are based on a standard residential utility bill tax of $115 per year including the emergency telephone tax of $24 per year per unit. Miscellaneous taxes, based on the calculations provided in Table A-2, are calculated at $33 (motor vehicle license) and $223 for miscellaneous charges, fines, rentals and interest income that are allocated to the residential sector.

As noted, both the apartments and condominiums will generate employment and themselves carry on business activities. (For example, the apartments will generate BPOL taxes on the rental of units.) Based on analysis of recent economic models, it is estimated that in the Washington DC region, apartments generate an average employment of one employee per 10-units in multi-family units of five-or-more units. This residential unit related employment includes rental agents, managers, cleaning services and maintenance personnel.[14] Two aspects of employment in the area are important. First, employees spend money in the area of their employment. A recent estimate is that employees in an area spend on average $2,600 a year at retail places at or near where they work.[15] While obviously this amount will vary with income level, we take that as an average amount that is reasonable for employee on-site spending. Where there are extensive retail opportunities integrated into the development plan, as is the case with Kincora, we believe that estimate to be conservative. Secondly, employment is a reasonable proxy for the BPOL and other business-related taxes. In a nutshell, businesses with large number of employees will tend to pay higher gross income taxes, higher consumer utility taxes, and higher miscellaneous charges. Thus, we will use projected employment as proxies for the relevant business tax bases. Accordingly, we have estimated $90 per worker as the proxy for BPOL taxes, $10 per worker as the consumer utility taxes, $33 for other taxes, and $55 dollars for charges, fines and fees (in 2006 values). See Table A-4 below.

[14] See Evans Carol & Associates, *The Economic Impacts and Job Creation of Various Types of Construction Projects* in the Washington DC Area (July 2005). pp. 12-19. It was estimated that 344-unit apartment complex created 35 jobs. We round this to 1 job per 10 units. In the case of condominiums, we assume half as many jobs would be created per unit (1 per 10), because of fewer sales agents and building services personnel.

[15] Route 7 Retail Study (2006) p. 5. This is based on the average office worker. We assume that it is comparable for all types of employed persons. The 2005 figure was inflated by 2.5 percent to put it in 2006 terms.

In the case of the BPOL tax, we attribute the tax during the calendar year in which it is earned. The County will actually receive these funds with a lag of a few months in its following fiscal year and we have made no adjustment for this.

Hotels generate several sources of County revenues, including the retail sales and lodging taxes, BPOL and sundry other taxes and charges. Based on assumed nightly room charges, the hotel vacancy rate and estimated related retail sales, we are able to generate an annual value of tax bases for these taxes. In addition, hotels will incur other business charges and taxes, which we assume are represented by the average miscellaneous taxes and charges per employee. Hotels also generate employment. Recent studies indicate approximately 0.45 employees per room in a standard full-service hotel configuration.[16] Retail sales at hotels are estimated to equal 15% of hotel room revenues (allowing for vacancies) and all sales are assumed subject to the sales tax. In the case of the hotel accommodation tax, we use the full tax rate at 5%. At present, 2% of this rate goes to the County general fund, while 3% is dedicated to a fund promoting tourism and travel. For our purposes, we treat the entire amount collected as going into County operating funds. We have assumed an average $191 hotel nightly room charge.

The real property tax will be collected on Kincora land prior to its development into the ultimate planned use. There are 17 years estimated in the build out (with the first phase commencing construction in 2007 and becoming operational in 2009). The land in inventory and undergoing development will be subject to the real property tax and while it is under construction the project will produce certain revenues associated with that process. (See construction phase below.) Last, we have used a real property tax rate of 90 cents per hundred dollars. Property tax rates can fluctuate greatly and the "effective rate" on true market value is often only 80 to 90 per cent of the nominal rate. While this is not a forecast, the 90 cent effective rate estimate is consistent with an average nominal tax rate of around $1 per hundred dollars of assessed value.

[16] See Evans Carol & Associates, *op. cit.* (2005).

Summary of Revenue Assumptions by Sector: Use of Proxy Estimators

As indicated in the above discussion, a number of proxies, based on 2006 values, will be used to project revenues from the project. These proxies rely on per capita, per employee, and household values. The assumption is that County's effective tax *rates* will remain the same through the future; that is, the projected bases have been subjected to the tax rates and charges in effect as of 2006. The numbers are rounded to the nearest dollar.

Table A-4 Projected Loudoun County Revenues (2006 values)
Based on allocation of revenues and the use of per resident and per worker bases

Revenue Item	*Per Resident*	*Per Worker*	*2-person Hse Hold***/*
Real Property Tax	calculated at rate and values		
Personal Property Tax	$211	$53	$422
Sales Tax	calculated at rate and values		
Lodging Tax	calculated at rate and values		
Consumer Utility + Emergency Phone	$57	$10	$115
BPOL	$0	$90	$0
Other Taxes*/	$17	$33	$33
Charges and Other Revenues**/	$111	$55	$223
Summary Total of Proxy Revenues	**$396**	**$242**	**$793**

Notes (Based on State Auditor definitions)
*/ includes franchise, motor vehicle, and other business tax
**/includes fines, charges, interest, rental incomes
***/ Per Resident times 2 for average household size
Omitted are permit fees and recordation tax, and misc. revenues which are primarily related to construction phases.

County Operating Costs Resulting from Operation of the Development

Offsetting the County revenues from Kincora will be the costs associated with the development's operation. The estimates of costs are based on the nature of the development and what has been the County's most recent spending experience. As in the case of revenues, the costs associated with development are linked to the nature of the development. Using established procedures for estimating costs used both by us and other analysts, we have allocated the County's operating costs between the residential and non-residential sectors.[17] Where underlying information was present or the beneficiaries are clear, this allocation was done on a derivation of the source of costs. Otherwise, it has been allocated on the basis of the ratio of population and employment, respectively, to the combined total.[18] The results, estimated in 2006 terms, are that County non-education operating costs are $573 per worker and $920 per resident. The non-education spending figures contain certain amounts of state and federal aid, which have not been netted out. The education figures are calculated separately on a per pupil basis, focusing on the County general fund contribution to the school system. In 2005, this transfer was approximately $352 million, or an amount equal to about $7,955 per pupil. Adjusted to 2006 values, this represents annual education operating costs financed by County general revenues of $8,195 per public school pupil.

General (non-local education) aid to the County presents a problem in calculating the non-education spending by the County that is supported by state and federal aid. The largest external aid item is the state payments on the personal property tax. These are now capped as to amount. Thus, *on the margin,* we have not assumed any increase in state assistance, which means that any increase is costs will be supported by the County from its own revenues. This is a very conservative perspective, but the one we think is correct for planning purposes.

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[17] While we have not undertaken an examination of the County costs on a micro-level between the residential and on-residential sectors, we have relied on previous analyses in Loudoun and our own experience with other Virginia jurisdictions. See *Fiscal Impact Analysis of Silo Apartments,* Robert Charles Lesser (October 27, 2000). Lesser uses the same population/employment distribution for several functions that appear to be shared benefits between the sectors. We follow Lesser's analysis on allocations for on Health and Welfare and Parks and recreation and update the allocations for more recent County population and employment numbers. However, we allocate general administration on the basis of the subtotal of all other non-education spending, which leans more heavily on the resident sector spending.

[18] In 2005, the County had a residential population of 241,468 and employment of 119,993 for a total of 361,961 combined population and employment.

Table A-5 provides the derivation of the per-worker and per-resident operating costs, for both non-education and, in the note, the public school education costs. The allocation factors sum to 100 and thus the spending is fully allocated. The education operating costs reflect spending from County general revenues after the allowance for state and federal assistance. The other categories of spending do not, and thus are very conservative as regards spending that needs to be financed from County own-sources. The employee and per resident figures are rounded to the nearest dollar.

Table A-5: Allocation of Non-Education Operating Expenditures
Based on 2005 County Budget Actuals

	Actual 2005	*Allocation Factors*		*Budget Allocation*			
Department	*(000s)*	*Employment*	*Residents*	*Employment*	*Residents*	*Per Worker*	*Per Resident*
Government Administration	34146	23.6	76.4	8058	26088	$67	$108
Judical Administration	8160	33.2	66.8	2709	5451	$23	$23
Public Safety	86288	33.2	66.8	28648	57640	$239	$238
Public Works	29386	33.2	66.8	9756	19630	$81	$81
Health & Welfare	63262	10	90	6326	56936	$53	$235
Education	0	0	0	0	0	$0	$0
Parks, Recreation	31873	4	96	1275	30598	$11	$126
Community Development	31168	33.2	66.8	10348	20820	$86	$86
Non-Education County	284283			67120	217163	$559	$897
			Adjusted to 2006 (x 1.025) →			**$573**	**$920**

NOTE:

Population	241968	66.8%	Public School Enrollment 2005	44104
Employment	119993	33.2%	County-financed Operating Cost Per Student	7995
Total	361961	100.0%	Adjusted to 2006 (x 1.025) →	**$8,195**

Appendix A-2: By-right Alternative Assumptions and Calculations

The property on which Kincora is located has a use by right for "flex" industrial and office. In examining the alternative development under current zoning, we relied upon the following assumptions:

Of the 420 acres, 260 acres represent buildable land, of which 19 acres are to be used for the interchange on Rt. 28, leaving a net of 241 acres. On this, improvements at an FAR of 0.27 are to be made using a straight line development of 5 per cent a year of the property for a period of 20 years, commencing deliveries in 2009 (consistent with Kincora's first delivery date). It is assumed that the improvements would be valued at $184 per square foot (2006 dollars) and that the mix would be 65% light office and 35% light industrial uses. It is assumed that there would be 2.2 employees per 1000 square feet for office use and 1.2 employees for industrial use.[19]

We used the same general approach for estimating County costs and revenues, albeit there is only one land use (light office/industry). Revenue estimates were based on property tax bases and the same sets of assumptions for other revenue generation and County operating costs per employee as are used for Kincora. All numbers are in 2006 equivalents. However, we have further assumed that the alternative would generate added revenues in the form of machinery and tools taxes. This tax was assumed to be at a level of $80 per employee for workers in the light industry at the site. This was assumed to be 1186 workers (22.6 per cent of the employment) at the time of final build out.[20] Since the by-right development scenario is a use by right under current zoning and has no residential element, we have assumed that there would be no capital contributions to the County. The construction period fiscal impacts are discussed in Appendix A-3.

[19] This conforms to County standards of analysis. See Loudoun County, *2002 Annual Update: Demographic, Revenue and Expenditure Modules*

[20] The $80 was calculated by dividing total machinery and tools collections for 2005 by 14,860 workers, which represented total manufacturing and information industry employment in the County in 2005. ($1,156, 000 / 14,860). The resulting figure ($77.77) was then multiplied by 1.025 to make comparable to 2006.

Appendix A-3: Construction Period Fiscal Impacts

The above analysis of the operations of Kincora does not include the construction-related fiscal impacts. While these impacts are not permanent, they will be significant since the construction period will last for several years and lead to employment and purchases that will increase County revenues. By the same token, there will be costs associated with the construction period, as people come into the County to work on the project and the County will need to provide services to the temporary increase in workers and other activities related to the construction and related development activities.

As in the case of the operations of the Kincora development, similar comparisons with the by-right construction-related revenues and service costs need to be considered. County revenues will be generated by the construction process and related activities. These revenue-generating activities can be described as follows. First, the construction companies will be subject to County BPOL taxes. Second, the construction-related purchases of materials will be subject to retail sales taxes for those goods bought in the County. Third, construction-related workers working at the site will make various personal consumption purchases in the County. Fourth, the construction activities will generate tax revenues for the various added taxes, such as the personal property tax, utility taxes, and incidental taxes and fees. Of added importance are the development-related charges and fees of the County that will be collected in conjunction with the development process. Following the general methodology described above, several of these County revenue sources are aligned to the estimated number of workers associated with the construction at Kincora and the countywide revenues and costs associated on a per-worker basis. Other revenue sources, such as the BPOL taxes that can be attributed to the development are related particularly to the construction values in the development. It is assumed that 21 percent of all construction-related costs for materials and incidental services are subject to the County retail sales tax.[21]

[21] This estimate is based on the results of the *IMPLAN* regional model, using the secondary effects that estimate those purchases made in the County as result of direct construction spending. The calculated value at 2006 values was .20518, which we round to 21 per cent.

To attribute these impacts, several assumptions must be made. First, it is assumed that the following construction and fit-up expenditure values (in 2006 dollars) on a square foot basis are effective:

Office	$173
Retail	$156
Hotel	$245
Apartments	$198
Condominiums	$238

Following the approach used in the County operating revenues, certain County revenues and its operating costs were calculated on a per construction-related worker basis per year. Others are based on the taxable basis:

BOPL taxes	calculated at construction spending (0.13 per cent)
Utility taxes	$10 per employee
Personal Property Taxes	$53 per employee
Retail sales (per worker)	$26 per worker
Retail sales (construction)	21% of construction purchases taxable in County
Other taxes/charges	$88 per worker
Title/transfer Tax	calculated at 0.45% on residential condominium sales prices
County operating costs	$573 per worker

In addition, certain revenues specifically related to the construction period were calculated using their particular tax/fee bases. The County BPOL tax was calculated on the basis of construction spending at the rate of 0.13 percent per dollar spent. The County title/transfer tax was calculated at an effective rate of 0.45% in the case of condominiums at the sales price of the condominium.[22]

[22] The tax consists of two parts, with a tax on title at 0.30 percent and a tax on recording mortgages at 0.20 percent. We assume that mortgages on average are 75 percent of the value of the deed, for an effective rate of 0.45 on the sale.

The construction and fit-up spending will take place in the County and a portion of that will be subject to County sales taxes. Reviewing regional economic models, we assume that 30 percent of the total construction spending will be subject to the County sales tax.

Last, fees and charges that are related to development/construction are a significant part of the County's budget. These make up the great bulk of fees and charges charged by the County. Development-related fees and charges are collected over the life of a project with certain charges early in the process and others coming at the time of occupancy and start up. Several of the fees are situation-specific. Table A-6 provides an analysis of the Development Permits and Fees for fiscal years 2004-2005.

Table A-6: Permits and Privledge Fees
Loudoun County 2004-2005

	2005	*2004*
County Collections	23,102,300	17,779,983
Non-Development*/	2,185,000	1,135,200
Development-related Charges	20,917,300	16,644,783
County Building Activity (Sq.Ft. 000's)		
Non-residental	3,797	3,848
Est.Residential**/	12,669	16,848
Total Activity	16,466	20,696
Fee per sq. Ft.	1.27	0.80

*/ Does not include various subdivision or rezoning fees
**/ average of 2,500 sq. ft. per residential unit

Source: Loudoun County Adopted Fiscal Plan (2007) vol.1, pp R-8-9

Overall, based on the above results, we estimate that the various associated development fees of the County will amount to $.90 per square foot of development in Kincora (not including any rezoning or subdivision fees). As in the foregoing analysis, these are expressed in 2006 dollars. For the condominium residential units in Kincora, this works out to about $2,000 per unit. Setting off against the construction-period revenues are the costs to the County of having that activity take place. We use the calculated value of $573 per worker in County operating costs to calculate the annual costs. The same calibrations and tax rates are used for estimating the by-right construction. The by-right construction and fit-out value for flex office and industrial use was set at $140 per square foot in 2006. In both the case of the Kincora Project and the alternative by-right Development, we assume one construction job per $100,000 in construction-related spending.

A final point relates to the capital contributions made by the Kincora development over the construction period. The Kincora development will generate a total of $53 million in capital contributions during the construction period. This will consist of cash contributions to transit funds, land contribution for a fire station, trail contributions, an interchange and road improvements. (See Table A-7 for listing.) In the case of the latter, the Kincora project will provide $53 million in improvements to Pacific Avenue and Gloucester Parkway. These latter improvements will be in part supported by a CDA special taxing district. Much of the improvements will serve through traffic and is of value to the County beyond the footprint of the Kincora project.

Table A-7: Capital Contributions: Kincora (2006 dollars)

Cash Transportation	667,500
Trail Construction	633,600
Fire Station land	2,600,000
Intersection	10,000,000
Roads/Bridges	39,100,000
Total	**53,001,100**

Summary of Construction Period Results:

Examination of the construction period during the 16-year horizon (2007 – 2022) provides the following results. The Kincora project generates a cumulative net fiscal benefit during construction of $7.1 million, as compared to $1.8 million for the by-right alternative for the same period. During the period, Kincora development is completed, whereas the alternative continues to be under construction. Thus, the Kincora construction impacts take place in a shorter period, whereas the by right alternative is only partially completed under its 20-year build-out scenario. Table A-8 provides a cumulative summary of the fiscal impacts for both Kincora and the by-right alternative. The figures are in 2006 dollars.

Table A-8: Cumulative Fiscal Impacts: Construction 2007-2022 (2006 dollars)

County Revenues	*Kincora*	*By Right*
BPOL Tax - const. firms	1,561,840	399,765
Retail Sales - const. purchases	2,522,972	645,774
Retail Sales - const. workers	312,368	79,953
Personal Property	636,750	162,981
Utility	120,142	30,751
Other Taxes	1,057,245	270,610
Fees/charges - const. related	6,175,890	1,976,860
Title - Transfer Tax	1,703,700	0
Total Revenue	14,090,906	3,566,695
(Minus) County Operating Cost	6,884,108	1,762,041
Net Fiscal Impact: Construction	7,206,798	1,804,653
Capital Contributions	53,001,100	0

Appendix A-4: Impacts of Price Inflation on the Net Fiscal Benefit Estimates

The foregoing analysis is based on constant 2006 dollars. The use of constant dollars helps us distinguish the current dollar values (real values) from the impacts of future inflation. From the County's perspective, the central issue is whether or not the taxable bases in the development will grow faster, slower or at the same rate as the costs of its providing services. As a rapidly growing County in a rapidly growing region, the County has experienced rapid growth in taxable values, especially in property values. On the other hand, such growth in prices can decline rapidly and become negative, as the county has seen in early periods. In this analysis we have used constant-dollar 2006 numbers that can then be examined in terms of inflation rates, where those rates can be specifically studied.

It is our view that the best starting point is to examine the U.S. Congressional Budget Office's longer-term projections for prices levels in the U.S. Economy. The most recent perspective for the next ten years is that the Gross Domestic Deflator will grow by 1.8 per cent per year and that the consumer price index by 2.2 percent.[23] We believe that the Washington D.C. region will continue to show a somewhat faster growth in activity and prices than the nation as a whole. We believe that a price inflation rate assumption of 2.5 percent a year is a reasonable projection for the Loudoun County area.

Overall, we believe that both the County's tax bases and its costs of services will both reflect this rate of inflation. Analytically, this means that both County revenues and costs will tend to increase over time at that inflation rate. Correspondingly, the net fiscal benefits that are described in foregoing discussion can be projected to reflect that overall inflation rate. As Table A-9 below illustrates, the net fiscal benefits to the County in future dollar terms (assuming a 2.5% uniform annual inflation) from Kincora would be approximately $319 million (including the capital contributions), as opposed to the $202 million value in 2006 dollars. For the alternative by-right development, the net benefit is $32 million in future dollars, as opposed to $24 million in constant 2006 dollars.

[23] Statement of Peter Orszag, *The Budget and Economic Outlook*, U.S. Congressional Budget Office (January 30, 2007)

Table A-9: Net Fiscal Benefits: 2207-2022
Kincora and By Right Development
(In 2006 dollars and at a Uniform 2.5% Annual Inflation Rate)

Item:	*2006 dollars*	*2.5% Inflation*
Kincora		
Operations	141,903,347	257,534,485
Construction	7,206,798	8,252,783
Capital Contribution	53,001,100	53,016,401
Total	202,111,244	318,803,669
By-Right		
Operations	23,400,170	29,821,598
Construction	1,804,653	2,198,243
Capital Contribution	0	0
Total	25,204,824	32,019,841

Note: Price inflation at 2.5% per year is uniform for the period 2007-2022.

No one can be assured as to future price inflation developments in any particular sector. However, projections that assume that tax bases in the County will have faster growth in price levels than the growth in the prices of County services build a positive bias into the estimation of fiscal impact. Therefore, we believe that prices on both sides of the revenue-cost equation should be assumed to grow at the same rate.

Disclaimers and Conditions on this Report

This report is effective at the date of its issuance and is based on information available through January 31, 2007. The study uses information supplied by the client, NA Dulles Real Estate Investor LLC (Owner), and by various other sources, including reports and studies by and of Loudoun County, that are believed reliable and correct. In addition, the authors have relied on their experience and various professional studies and papers in preparing the estimates.

The report is based on projected expected values that depend on estimated future behavior and economic values and relationships. Future behavior, values and relationships are uncertain and will vary. While we believe that the estimates used in this report are reasonable at the time of this report, we provide no assurances that the expected values will be realized at any given time or in the amounts as projected.

This report is intended only for the use of the Owner and for distribution by the Owner to Loudoun County in conjunction with its application to the County for purposes of rezoning the Kincora property as is described above. This report is not to be used or cited in conjunction of any private or public offering of securities where it might be relied upon by any person other than the Owner without prior written permission of the authors of this report.