The Fiscal and Economic Impacts of Stafford County's Proposed 2008 and 2010 Comprehensive Plans

Final Report

Prepared for

The Stafford County Board of Supervisors

By

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Executive Summary

The objectives of this fiscal and economic analysis are to measure the impacts of alternative development scenarios, as reflected in the proposed 2008 and 2010 comprehensive plans for Stafford County, on the County's future fiscal conditions and economic growth. The time period for these analyses is 2010 to 2030; that is, the fiscal and economic analyses will assess the expected land use development that is provided for under the alternative comprehensive plan proposals for Stafford County over the next twenty years.

Fiscal Impacts

The fiscal impact analysis of the land use development provided for under the proposed 2008 and 2010 comprehensive plans is designed to measure the revenue and expenditure effects on the County's annual budget as if these land uses existed in 2009, reflecting the tax rates and levels of services at that time. This approach will determine whether the future growth patterns envisioned in the alternative comprehensive plans would have been fiscally beneficial to the County while also identifying the fiscal differences between two alternative proposed plans.

The results of the fiscal analysis, as presented in the following table, show that the land use mix provided for in the proposed 2008 comprehensive plan would have resulted in a net fiscal deficit ranging from $2.5 million to $5.1 million annually (holding tax rates and levels of service at 2009 levels), a variation reflecting a range of average values for new multi-family housing. In comparison, the proposed 2010 comprehensive plan would have fiscal impacts ranging from a positive $1 million to a negative $1.1 million.

The fiscal analyses found that on average the residential land uses—single-family detached, single-family attached and multi-family units—all generated a net fiscal cost to the County; that is, their demand for county-provided services exceeded their generation of revenues and that the fiscal impact of the single-family attached housing units on average was three times greater than for the other two categories of housing. This fiscal impact differential is explained by the nearly identical household size and school-age child generation rates for single-family detached and attached units while the real estate taxes generated by the attached units were one-third less than for the detached units. This imbalance between revenue base and expenditure demand between these two types of housing largely explains the fiscal impact differences associated with the two proposed comprehensive plans.

The importance of commercial land uses in providing fiscal balance in the future growth of Stafford County is also evident from these analyses. The projected growth of the County's economy and the job growth and required land use to accommodate this growth will be largely driven by non-local forces at the regional level. However, how commercial land use is accommodated in the comprehensive plan and the County's competitiveness as a good place to locate and operate a business will determine whether the County is able to realize its full economic potential. In the final analysis, the County's fiscal health will be determined by its ability to grow its non-residential sectors at a greater rate than its projected increases in residents with the goal of increasing its jobs to population ratio.

The Proposed 2008 and 2010 Stafford County Comprehensive Plans: Comparative Fiscal Impacts

Comprehensive Plan Proposal	Net Residential Uses	Net Commercial Uses	Total Fiscal Impact
2008	-$18,840,041	+$16,295,133	- $2,544,908
2008*	-$21,365,945	+$16,295,133	- $5,070,812
2010	-$15,265,294	+$16,295,133	+$1,029,839
2010*	-$17,427,738	+$16,295,133	- $1,132,604

Sources: Tables 7, 8, 11, 12. *fiscal calculation based on alternative assessed value for multi-family housing reflecting average for all multi-family units in the County in 2009 not only units added to the inventory in 2009.

Economic Impacts

Stafford County's future economic growth will be largely determined by the performance of the national and Washington area economies and the County's competitive position within these larger economies. While this growth rate will be influenced by the growth of the County's population as it generates new demands of retail and consumer services, an increasing share of its future growth will result from the export of goods and services produced locally to non-local markets. As a result, the County's economic future will not vary significantly under alternative comprehensive plan proposals as each will accommodate the same population growth and employment growth will be determined largely by external market conditions.

The value of goods and services produced by the Stafford County economy in 2010 is estimated to total $4.013 billion. This economy will grow as the County adds jobs and increases the proportion of new jobs that are supported by non-local spending. Stafford County is projected to add a total of 33,060 net new full-time jobs between 2010 and 2030. As a result of projected job growth across all sectors, the structure of the County's economy is also expected to shift slightly to more, higher-value added (higher wage) jobs although retail and other consumer services will continue to be a major source of new jobs. By 2030, this growth is projected to add $4.642 billion to the County's total output (measured in 2010 dollars) for a total value of $8.655 billion for a gain of 115.7 percent.

The Economic Impact of Projected Future Growth in Stafford County, 2010-2030
(in billions of 2010 dollars)

Year	Total Employment	Total Output ($)
2010	34,174	$4.01269
2030	67,234	$8.65519
Change	33,060	$4.64250
% Change	96.7	115.7

Source: GMU Center for Regional Analysis

Conclusions

The net fiscal impacts of the proposed 2008 and 2010 comprehensive plans confirm that the residential land uses in Stafford County generate a greater demand for County-provided services, as measured by its expenditures, than they generate in revenues. This fiscal deficit was found to be substantially greater for single-family attached housing units than for either single-family detached or multi-family housing units. This fiscal analysis also confirmed that commercial land uses generate a fiscal surplus that has the potential to balance the fiscal deficit generated by the County's residential land uses. While these proposed comprehensive plans do have different fiscal impacts, their magnitudes are sufficiently small that each plan's other merits or demerits should be thoroughly considered before selecting one proposed plan as being preferable to the other.

Stafford County has a bright economic future regardless of which comprehensive plan is selected. Its competitive position within the Northern Virginia economy points to substantial economic growth over the next twenty years resulting in a stronger mix of export-based businesses to complement local-serving businesses supporting the retail and consumer service demands of a growing residential market. To accommodate this future economic growth, land for commercial uses should be protected from residential encroachment and efforts should be continued to maintain and enhance the County's favorable business image.

The Fiscal and Economic Impacts of Stafford County's Proposed 2008 and 2010 Comprehensive Plans

Introduction

The objectives of this fiscal and economic analysis are to measure the impacts of alternative development scenarios, as reflected in the proposed 2008 and 2010 comprehensive plans for Stafford County, on the County's future fiscal conditions and economic growth. The time period for these analyses is 2010 to 2030; that is, the expected land use development that will be accommodated in the County under the alternative comprehensive plan proposals over the next twenty years.

The fiscal impact analysis is designed to calculate the revenue and expenditure impacts of the projected land use development provided for in each of the alternative comprehensive plan proposals over the 2010-2030 period as if this land use development had existed in fiscal year 2009. Fiscal year 2009 was selected as the analysis year because it was the latest year for which audited revenue and expenditure data for the County were available, as reported in its Comprehensive Annual Financial Report (CAFR). By loading the proposed land use development for the 2010-2030 period into the FY 2009 budget, its impacts on revenues and expenditures can be assessed in constant dollars (holding inflation constant), at current tax rates, and at constant levels of services and costs.

The results of this fiscal analysis will inform policy makers regarding the net fiscal impacts of future land use growth as provided for in the comprehensive plan. The analysis will answer the fundamental question: will future development, as provided for in each of the alterative comprehensive plan proposals, generate a surplus of revenues compared to demand for (cost of) expenditures for county-provided services, will it be neutral, or will it result in a budget deficit?

While the proposed alternative comprehensive plan must be assessed using a wide range of metrics (e.g., measures of quality of life, energy and environmental impacts, transportation requirements, regional competitiveness and others), understanding the public costs and benefits of these proposals as measured against the alternative proposals' relative tax burdens provides the basis for balancing the costs of future growth against benefits that may accrue to individual businesses, current and future residents, investors, and other special interests. The results of the fiscal impact analysis are intended to provide a measure of the effects of future growth on the County budget, and, therefore on the current and future County's residents as taxpayers and recipients of County services.

The economic impact analysis of the proposed comprehensive plan alternatives is designed to calculate the value of future economic growth over the twenty-year planning period. The County's economy is valued by what is produces, not what is earns or consumes. The value of the goods and services produced in Stafford County constitutes its Gross County Product (GCP), a concept similar in scope and definition to Gross Domestic Product (GDP), the value of annual output at the national level.

Gross County Product will not be significantly affected by the differences embodied in the alternative comprehensive plan proposals as each provides for substantial land areas identified as appropriate for commercial development. As the comprehensive plans will not constitute a constraint to economic development, the drivers of future economic growth in Stafford County will be largely external to the County—the growth and vitality of the Washington metropolitan area and Northern Virginia economies and the performance of the national and global economies.

The economic growth projected for the Northern Virginia over the 2010-2030 period will largely establish the limits of growth within Stafford County. What will be important in determining whether Stafford County captures its projected share of Northern Virginia's future growth will be its relative competitiveness compared to other jurisdictions within Northern Virginia and its business and investment climate. However, the determinants of the County's competitiveness will be impacted by its comprehensive plan as a statement of the County's land development policies and preferences.

The economic impact analysis reported herein is based on forecasts for the Washington region, Northern Virginia and Stafford County. The actualization of the economic growth projected for the next twenty years could be greater and less than what is forecast depending on many external forces beyond the County's control. Still, internal factors such as the quality of the County's management, its levels of services, and its business image will be important in shaping its economic future. What is reported here will establish a baseline measure of the County's current economy—its current GCP—and the economic value of the projected changing mix and growth of economic activities over the next twenty years.

The Proposed 2008 and 2010 Comprehensive Plans: Inputs for the Fiscal Analysis

The proposed 2008 and 2010 comprehensive plans for Stafford County that are to be assessed for their fiscal impacts can be differentiated in terms of their mix of residential land use; that is, the numbers of housing units by type required to house the projected 29,737 net new households to be accommodated between 2010 and 2030. These distributions are presented in Table 1.

Based on the average number of persons per housing unit (for each general type of housing unit) as presented in Table 2, the projected population for each type can be calculated as well can the total additional population that will move into in Stafford

County between 2010 and 2030: 82,535 residents under the 2008 comprehensive plan proposal and 83,988 residents under the 2010 comprehensive plan proposal.

Table 1

Land Use Elements of Proposed Comprehensive Plans 2010-2030

Element	2008 Proposal	2010 Proposal
Residential Units		
Detached	17,426	22,076
Attached	6,105	2,348
Multi-family	6,206	5,313
Total Units	29,737	29,737

Source: Stafford County Department of Planning and Zoning

Commercial Uses	Jobs	Building Space(1)	Land Absorption(2)
Office	18,780	3.756	360
Retail	3,350	1.508	101
Other	7,770	6.993	803
Totals*	29,900	12.257	1,264

Source: GMU Center for Regional Analysis
*excludes 3,160 jobs housed in tax exempt properties
(1) millions of square feet
(2) acres of land based on permitted FAR.

The commercial land uses that will be accommodated by the proposed 2008 and 2010 comprehensive plans will be the same as both proposed plans have made provision for more land area designated for future commercial use than can be absorbed over the 2010-2030 period. Consequently, the projected demands by the major types of commercial land use in this analysis are developed from economic forecasts for job growth in Stafford County by sector and these are grouped into land use categories and converted to land requirements as shown in Table 1.

Only those commercial land uses are included here that generate tax revenues and have corresponding requirement for County-provided pubic services. The excluded jobs and associated land uses are government activities (federal, state and local). These activities will add jobs and demands on the County budget but do not generate off-setting revenues, although these functions will contribute to the County's economic growth as described subsequently in the economic impact analysis. These tax exempt land uses would be the same in either the 2008 or 2010 proposed comprehensive plan and therefore will not affect the results of the fiscal impact calculations presented here for the future residential and commercial land uses provided for respectively in each comprehensive plan proposal.

Table 2

Persons Per Unit and Student Generation Rates By Housing Type

Residential Unit Type	Average Persons Per Unit	Average Number School-Age Children Per Unit
Detached	3.0015	0.66
Attached	2.8326	0.63
Multi-family	2.0847	0.32

Sources: Stafford County Department of Planning and Zoning, Stafford County Schools

Direct County expenditures for education constitute the largest single category of annual spending. To assess the fiscal impact of future residential growth fairly requires that the direct County expenditures for the public schools associated with each new residential unit be calculated based on the expected average school-age student generation rate associated with the different housing types in the County. These rates are shown in Table 2 and are based on the school-age student generation rates that currently exist in the County according to the County Schools. Based on the number of students (26,384) in the County's public schools in 2009 and the annual direct expenditures for education ($99,474,959), as reflected in the budget, the average direct expenditure by the County by student was $3,770.28.

Real estate taxes account for the largest single source of revenues in Stafford County and vary according to type of land use. Within residential and non-residential categories, revenues also vary directly by assessed valuation reflecting the size of units and their respective land parcel size. For the fiscal analysis, the assessed values of residential units added to the stock in 2009 were used for calculating the contribution of new residential units (as provided for in the proposed comprehensive plans) to the fiscal base.

Data available for multi-family units were limited and the average unit value appears to be higher than the actual average value due to the small sample size and wide range of housing values. Also, these data do not reflect rental units (apartments). An alternative analysis used the average per unit contribution to the 2009 real estate revenue base inclusive of all existing multi-family units is provided as an alternative assessment (see Tables 9, 10, 11, 12).

The per unit contribution to the County's revenue base for each residential housing type is shown in Table 3. These values, combined with the per capita revenue contributions excluding real estate tax revenues of the residents occupying each unit type (Table 2), provide the basis for calculating the average revenue generated by each type of housing unit, as presented in Table 5.

Table 3

Average Assessed Value of Housing Units Built in 2009

Residential Unit Type	Assessed Value	Real Estate Tax @ $0.84
Detached	$433,052	$3,637.64
Attached	$298,289	$2505.63
Multi-family*	$217,321	$1,825.32

Sources: Stafford County Department of Finance
*reflects a small number of new and re-sale condos sold over the 2005-2008 period.

Similarly, the real estate tax differential associated with the major classes of commercial land use can be converted to the respective job bases for each land use type. These values are shown in Table 4. When these values are combined with the per value of job revenue generated per job excluding real estate tax revenue, these provide the basis for calculating the total revenue impact of each type of commercial land use projected between 2010 and 2030 as presented in Table 6.

The key variables for calculating comparative fiscal impacts of the proposed 2008 and 2010 comprehensive plans are: number of residents per housing unit type, the school-age children generation rate by housing unit type, the average real estate revenue generated per housing unit type, and the proposed mix of housing units by type—single-family detached, single-family attached, and multi-family. On the non-residential side of the equation, the number of jobs projected by sector to be added between 2010 and 2030 and the average real estate revenue per job by land use type—office, retail and other—are the key variables driving the fiscal analysis. These per resident, per housing unit and per job variables are applied to the land use projections in the proposed 2008 and 2010 comprehensive plans in the following sections.

Table 4

Non-Residential Real Estate Tax Revenue Generated Per Job in 2009

Commercial Land Uses	Real Estate Taxes Per Job
Office	$281.77
Retail	$1,780.78
Other*	$410.83

Source: Stafford County Department of Finance, GMU Center for Regional Analysis
*includes manufacturing, warehouse, flex space, construction yards, mining, utilities, and transportation.

Comparative Fiscal Impacts Analysis of the Proposed 2008 and 2010 Comprehensive Plans

Residential land uses on average to do not generate sufficient tax revenues to off-set their associated expenditure demand for county-supplied public services. On average in 2009, the County's total housing stock generated a per unit net fiscal deficit of $633.56. This is an average across all housing units and reflects a range of net fiscal deficits and benefits depending on the actual number of residents and the number of school-age children living in each housing unit as well as the assess value of the unit. However, using the average numbers of residents in each type of housing unit, the average school-age child generation rates and assessed valuation, the County's housing (its residents) generated a greater demand for public expenditures than they generated in revenues in 2009. This deficit was off-set by the surplus in revenues over expenditure demands generated by non-residential uses.

The net fiscal impacts of projected residential growth associated with the residential housing units to be accommodated by the 2008 and 2010 proposed comprehensive plans are calculated by multiplying the values in Table 5 times the respective number of units presented in Table 1 in each comprehensive plan proposal. The fiscal impacts associated with the projected commercial land use that will develop within the County between 2010 and 2030 are presented in Table 6. The net fiscal benefits of this commercial growth will be the same for the proposed 2008 comprehensive plan as for the proposed 2010 comprehensive plan.

Table 5

Net Fiscal Impact of Residential Units
(expressed in 2009 dollars)

Unit Type	Expenditure Requirements	Revenues Generated	Fiscal Impact
Single-family Detached	$5,534.43	$5,104.92	- $429.51
Single-family Attached	5,258.41	3,890.35	-1,368.06
Multi-family	3,328.38	2,844.43	- 483.95

Source: GMU Center for Regional Analysis

Table 6

Fiscal Impacts of Commercial Land Uses, 2010-2030
(expressed in 2009 dollars)

Type	Expenditure Demand	Revenues Generated	Net Fiscal Impact
Office	$8,777,208.6	$15,228,138.6	6,450,930.0
Retail	1,565,689.5	7,738,098.0	6,172,408.5
Other*	3,631,464.9	7,303,259.8	3,671,794.9
Totals	$13,974,363	$30,269,496.4	$16,295,133.4

Source; GMU Center for Regional Analysis
*includes industrial, wholesale, utilities, information (media), construction activities that may be housed in flex space, warehouse, manufacturing facilities, storage structures and other types of buildings.

The results of these computations for the proposed 2008 and 2010 comprehensive plans are presented in Tables 7 and 8. The difference in outcomes reflects the difference in housing unit mix (Table 1) and associated differences in fiscal impacts (Table 5). The specified mix of housing units in the proposed 2008 comprehensive plan results in a net fiscal deficit of $18.8 million. This deficit is partially off-set by the positive fiscal impacts of the commercial growth ($16.3 million) projected for the County and results in a net fiscal deficit of $2.5 million.

The same number of housing units is included in the 2010 proposed comprehensive plan but they reflect a different unit mix. This mix of housing units generates a deficit of $15.3 million. However, the fiscal surplus of $16.3 million generated by the commercial land uses forecast for 2030 results in an overall net fiscal surplus of $1 million.

The key difference in the fiscal comparison between the proposed 2008 and 2010 comprehensive plans (Tables 7 and 8) is the number of single-family attached housing units. The 2010 plan has 4,650 more single-family detached units than in the 2008 plan, each having a fiscal deficit of $429.51 while the 2008 plan has 3,757 more single-family attached units, each with a fiscal deficit of $1,368.06, and 893 more multi-family units, each with a fiscal deficit of $483.95 than the 2010 plan. The total fiscal deficit associated with the new housing units in the proposed 2010 comprehensive plan is $3.575 million less than the fiscal deficit generated by the same number of units (but in a higher density mix) in the proposed 2008 comprehensive plan.

Table 7

Fiscal Impacts of Proposed 2008 Comprehensive Plan, 2010-2030
(expressed in 2009 dollars)

Unit Type	Expenditure Demand	Revenues Generated	Net Fiscal Impact
Detached	$96,442,977.2	$88,958,335.9	- $7,484,641.26
Attached	32,102,593.0	23,750,586.8	- 8,352,006.30
Multi-Family	20,655,926.3	17,652,532.6	- 3,003,393.70
Totals	$149,201,496.5	$130,361,455.1	-$18,840,041.26
Commercial	$13,974,363.0	$30,269,496.4	$16,295,133.40
Fiscal Impact	$163,175,859.5	$160,630,951.5	-$2,544,907.86

Source: GMU Center for Regional Analysis

Table 8

Fiscal Impacts of Proposed 2010 Comprehensive Plan, 2010-2030
(expressed in 2009 dollars)

Unit Type	Expenditure Demand	Revenues Generated	Net Fiscal Impact
Detached	$122,178,076.6	$112,696,213.9	-$9,481,862.70
Attached	12,346,746.7	9,134,541.8	- 3,212,204.86
Multi-Family	17,683,682.9	15,112,456.6	-2,571,226.31
Totals	$152,208,506.2	$136,943,212.3	-$15,265,293.87
Commercial	$13,974,363.0	$30,269,496.4	$16,295,133.40
Fiscal Impact	$166,182,869.2	$167,212,709.7	+$1,029,839.53

Source: GMU Center for Regional Analysis

Alternative Fiscal Impact Analysis Reflecting Lower Real Estate Assessment for Proposed Multi-family Housing Units

As explained previously (top of page 8), the assessed value and related real estate tax revenue associated with the proposed housing mix provided for in the alternative comprehensive plans under study is a critical determinant of their respective fiscal impacts. It was noted that the assessed values used on the fiscal analyses, as reported in Table 3, reflected the values of units added to the inventory in 2009 but that the sample for multi-family units had to be drawn from the 2005-2008 period because of the small number of units and that this sample did not reflect rental apartments.

A second calculation has been undertaken to provide an alternative representation of the assessed value for multi-family units in the fiscal analyses. The values for single-family detached and attached housing units remains the same as shown in Table 3 while for multi-family housing units, an assessed value reflecting all existing multi-family units existing in 2009 has been used. This value includes apartment units and condominiums of all sizes and ages and so will likely understate the average value, even in 2009 dollars, of new units to be added to the housing stock in the future. This alternative value for multi-family housing units is presented in Table 9.

Using this lower assessed value for multi-family housing units in the calculation of fiscal impacts reduced the average revenues generated per unit (occupancy remained the same). With the expenditure demand for multi-family units unchanged (number of school-age children was not affected), the net per unit fiscal deficit increased from $483.95 to $890.96 (Table 10). This change in assessed value had the effect of increasing the average fiscal cost of each multi-family housing unit by 84 percent.

Table 9
Average Assessed Value of Housing Units Built in 2009

Residential Unit Type	Assessed Value	Real Estate Tax @ $0.84
Detached	$433,052	$3,637.64
Attached	298,289	$2,505.63
Multi-family*	168,847	$1,418.31

Source: Stafford County Department of Finance
*reflects the average assessed value of all multi-family housing units in Stafford County in 2009.

Table 10

Net Fiscal Impact of Residential Units
(expressed in 2009 dollars)

Unit Type	Expenditure Requirements	Revenues Generated	Fiscal Impact
Single-family Detached	$5,534.43	$5,104.92	- $429.51
Single-family Attached	5,258.41	3,890.35	-1,368.06
Multi-family*	3,328.38	2,437.42	- 890.96

Source: GMU Center for Regional Analysis
**reflects the average assessed value of all multi-family housing units in Stafford County in 2009.

Recalculating the overall fiscal impacts of the proposed 2008 and 2010 comprehensive plans reflecting the revised fiscal impact associated with multi-family units results in greater overall fiscal deficits as shown in Tables 11 and 12.

For the proposed 2008 comprehensive plan the annual deficit increases to $5.071 million from $2.545 million, for an increase of 99 percent.

Table 11

Fiscal Impacts of Proposed 2008 Comprehensive Plan, 2010-2030
(expressed in 2009 dollars)

Unit Type	Expenditure Demand	Revenues Generated	Net Fiscal Impact
Detached	$96,442,977.2	$88,958,335.9	- $7,484,641.26
Attached	32,102,593.0	23,750,586.8	- 8,352,006.30
Multi-Family	20,655,926.3	15,126,628.5	- 5,529,297.76
Totals	$149,201,496.5	$127,835,551.2	-$21,365,945.32
Commercial	$13,974,363.0	$30,269,496.4	$16,295,133.40
Fiscal Impact	$163,175,859.5	$158,105,047.6	-$5,070,811.92

Source: GMU Center for Regional Analysis

For the proposed 2010 comprehensive plan, using this lower assessed value for multi-family housing units yields a net fiscal deficit of $1.133 million as shown in Table 12, erasing the net fiscal benefit of $1 million reported in Table 8 that was based on the higher assessed value for multi-family units.

Table 12

Fiscal Impacts of Proposed 2010 Comprehensive Plan, 2010-2030
(expressed in 2009 dollars)

Unit Type	Expenditure Demand	Revenues Generated	Net Fiscal Impact
Detached	$122,178,076.6	$112,696,213.9	-$9,481,862.70
Attached	12,346,746.7	9,134,541.8	- 3,212,204.86
Multi-Family	17,683,682.9	12,950,012.5	-4,733,670.44
Totals	$152,208,506.2	$134,780.768.2	-$17,427,738.00
Commercial	$13,974,363.0	$30,269,496.4	$16,295,133.40
Fiscal Impact	$166,182,869.2	$165,050,264.6	- $1,132,604.60

Source: GMU Center for Regional Analysis

Summary of Fiscal Impact Findings

These fiscal analyses demonstrate the factors that determine whether the proposed mix of land uses provided for in the County's proposed comprehensive plans will generate sufficient new revenues to compensate for the new fiscal demands that these new land uses will generate on county-supplied public services. The mix between commercial and residential growth is a key determinant in developing a fiscally balanced future land use pattern. If the County is able to attract and accommodate more commercial growth than is presently projected over the next twenty years while not increasing the number of net new housing units delivered from the number included in the proposed comprehensive plans, the net positive fiscal contribution of this land use mix would be enhanced.

Furthermore, within each major category of land use—residential and commercial—the mix of uses can increase or decrease the fiscal contribution. Within the commercial mix of land uses, retail uses currently have the highest per worker fiscal benefit (although the contribution of retail to the County's economy, the value of goods and services produced by its business activities, is less than office uses). However, as the office inventory develops and the quality of new buildings rises, future office uses may generate greater levels of fiscal benefit replacing retail as the most productive non-commercial land use in terms of fiscal contribution.

The fiscal cost differentials among residential housing types is clearly evident in Stafford County. This fiscal differential is based on the relatively large average household size and school-age child generation rates associated with single-family attached housing units. Due to their smaller building and lot sizes and resultant lower assessed value, this type of housing is fiscally expensive to the County. It also is the most affordable type of housing for younger families with young children who are attracted to Stafford County for its high quality of life and good public services at competitive costs.

In the final analysis, the fiscal impacts associated with the proposed 2008 and 2010 comprehensive plans are small and the net fiscal differences between the two plans are insufficient by themselves to determine which plan is better for the County. Fiscal impact is only one measure by which these planning alternatives should be judged. The bigger question is what should the future of Stafford County look like? Twenty years from now, the land use pattern put in place today will have shaped the County's future and its ability to compete for the economic development and investment necessary to support an increasing quality of public services and a advancing economic base that will favor higher value added employment opportunities within the County making it less of a bed-room suburb and more of an employment center.

The Economic Impacts of Stafford County's Projected Economic Growth to 2030

Stafford County's future economic growth will be largely determined by the performance of the national and Washington area economies and the County's competitive position within these larger economies. This growth rate will be influenced by the growth of the County's population that will generate new demands of retail and consumer services while an increasing share of its growth will result from the export of goods and services produced locally for non-local markets. As a result, the County's economic future will not vary significantly under alternative comprehensive plan proposals as each will accommodate the same population growth and employment growth will be determined largely by external market conditions (assuming that each proposed plan can accommodate the level of commercial growth that will be supported by the regional economy).

The value of goods and services produced by the Stafford County economy in 2010 is estimated to total $4.013 billion (expressed in 2010 dollar). As the County's economy grows in the future its success in adding new jobs that are supported by non-local spending—that export their services or serve non-local residents—will determine how much larger the economy will become. The projected size of the future economy, therefore, will be both a function of the number of new jobs that businesses located in the County add over the planning period and what types of jobs are added. Higher wage jobs typically will generate greater levels of earnings for their employers and support a rate of economic growth greater than their associated job growth rate.

Stafford County is projected to add a total of 33,060 net new full-time jobs between 2010 and 2030. This forecast adds 15,190 net new jobs during the 2010-2020 period bringing the County's job total to 49,346 in 2020 and adds an additional 17,888 net new jobs during the 2020-2030 period for a total job base of 67,234 in 2030.

Additionally, the County will add other workers that are not included in the tabulation of full-time regular employees. These other workers include self-employed, part-time and contract workers. These typically will account for another 30 percent on top of the formal jobs reported in official statistics. As a result of projected job growth across all sectors, the structure of the County's economy is expected to shift slightly to more higher-value added (higher wage) jobs although retail and other consumer services will continue to comprise a major source of new jobs reflecting projected population growth over this twenty-year period of between 82,500 and 84,000 people or 29,737 net new households.

The addition of 29,900 full-time regular private sector net new jobs, plus 3,160 net new public sector jobs and possibly as any as 14,200 self-employed, part-time and contract workers, to the labor force currently working in Stafford County will add a projected $4.642 billion to the County's total output (measured in 2010 dollars; inflation adjusted dollars) for a total value of $8.655 billion or a gain of 115.7 percent as shown in Table 13. The GCP growth rate compares to 94.2 percent projected for the Washington metropolitan area over this same period.

This more rapid growth of the County's economy, its gross county output, than its employment base is consistent with a suburban economy that is becoming more urban. This shift from suburban to urban economies is reflected in a growing share of new jobs being supported by external market demand while the historic consumer services and retail base continues to grow in parallel with the County's internal demand—its residential base. This restructuring will be more easily detected in the net new jobs being added but it is also occurring in job shifts within the existing employment base as new businesses replace older ones. The ability to accommodate the growing public service requirements for this new economy that will emerge over the next twenty years will place new demands on the County's budget, although these will be off-set by the surplus in revenues this economic growth will generate.

Table 13

The Economic Impact of Projected Future Growth in Stafford County, 2010-2030
(in billions of 2010 dollars)

Year	Total Employment	Total Output ($)
2010	34,174	$4.01269
2010-2030	33,060	$4.64250
Total 2030	67,234	$8.65519
Percent Change	96.7	115.7
Washington Metro Area % Change, 2010-2030	38.9	94.2

Source: GMU Center for Regional Analysis

Fiscal Impact Methodology

The fiscal impact analysis reported in this document is based on Stafford County's fiscal year 2009 expenditures and revenues as reported in its 2009 Comprehensive Annual Financial Report. This is a "balanced budget" based analysis. By employing the most recent audited financial statements for the County, the analysis enables the fiscal impact of alternative land use growth patterns to be assessed relative to the average revenues and expenditures generated for similar types of land uses in 2009 with the resultant calculations to be based on real revenue and expenditure flows, tax rates, and operating costs. The results of this comparative fiscal analysis provide the net fiscal impact on the proposed land use growth over the 2010-2030 period on the 2009 budget; that is, would the budget have been balanced had this new growth existed in 2009 or would have the budget shown a deficit or surplus? And, would the fiscal results be different had the 2008 or 2010 comprehensive plan proposal been adopted?

The first step in the fiscal analysis is to disaggregate the revenues and expenditures reported in the County's 2009 CAFR assigning the proportion of each revenue source and category of expenditure to its beneficiaries: residents of the County or non-residential land uses (businesses and non-business activities including tax exempt uses). These assignments were made based on the records of payments where such records were available (provided by the County Department of Finance) and determination of sources and beneficiaries were based on interviews with County representatives.

In some cases, an examination of the purposes for a particular class of expenditures was relied upon for the assignment (e.g., debt service relating to bond issues of school were assigned to residents). In other cases allocations were based on the principal that everyone living or working in Stafford County had equal access to a particular service (e.g., General Government) irrespective of whether the service was utilized or not, it was availability to every one. Therefore, its cost allocation is based on a per capita/per employee basis.

For allocations assigned to the County's residents, all revenues and all expenditures for operations including debt service, but excluding capital spending (current year capital spending would be reflected in debt service costs in future budget years) and cash capital outlays, were assigned on a per capita basis. There were two exceptions to this procedure: school expenditures were calculated on a per student basis and residential real estate taxes were calculated on a housing unit basis to reflect differences for single-family detached units, single-family attached units, and multi-family units.

For non-residential sources of revenues and expenditure beneficiaries were assigned to jobs in both the private and public sectors adjusting for tax exempted land uses. As with residential real estate land uses, the real estate tax revenues generated by each type of commercial land uses were calculated independently and converted to a per job basis reflect the number of jobs associated respectively with office, retail and other commercial uses (this category included manufacturing, warehouses, flex-space, construction yards, transportation services, mining, and agriculture except where this use was classified as residential).

Based on these allocations, the total FY 2009 budget as reported in the CAFR was assigned to residential land uses (based on population) and non-residential land uses (as represented by number of jobs associated with each land use). The results of these allocations, divided respectively by the number of residents in the County and the number of jobs reported in the County in July 2009, yield average per capita and average per job values for the County's revenues and expenditures. These allocations are presented in Tables 14 and 15 and provide the fiscal data for the analysis of each category of land use as provided for in the alternative comprehensive plans. Based on these calculations, the fiscal impact analysis of the proposed 2008 and 2010 comprehensive plans will apply these averages in determining the fiscal impacts of future land uses.

Table 14

Stafford County, Virginia
Revenue By Source and Allocation to Primary Land Use Category
(FY 2009)

Category	Residential	Non-Residential
Real Estate		
Residential	$145,795,528	
Non-Residential		$19,131,540
Other Local Taxes	21,310,841	12,623,394
Permits and Licenses, Fines and Forfeiture	2,917,841	1,728,402
Uses of Money	1,475,369	257,090
Charges for Services	4,204,365	1,158,345
Miscellaneous	2,346,017	646,352
Intergovernmental	28,011,216	1,474,274
Totals	$206,494,810	$37,212,998
per capita @ 124,166		
with real estate	$1,663.05	
without real estate	$488.85	
per job @34,174		
with real estate		$1,088.93
without real estate		$529.10

Sources: Stafford County, Comprehensive Annual Financial Report, Stafford County Department of Finance and Department of Planning And Zoning, GMU Center for Regional Analysis

Table 15

Stafford County, Virginia
Expenditures By Source and Allocation to Primary Land Use Category
(FY 2009)

Category	Residential	Non-Residential
General Government	$13,431,475	$3,700,509
Judicial Administration	5,388,969	1,484,716
Public Safety	35,529,647	6,269,938
Public Works	3,509,472	478,564
Health and Social Services	12,637,060	665,109
Parks and Recreation	11,272,664	593,298
Community Development	5,158,050	703,370
Education	99,474,959	-----------
Debt Service	39,453,214	2,076,485
Totals	$225,855,510	$15,971,989
per capita @ 124,166		
with education	$1,818,98	
without education	$1,017.84	
per job @34,174		$467.37

Sources: Stafford County, Comprehensive Annual Financial Report, Stafford County Department of Finance and Department of Planning And Zoning, GMU Center for Regional Analysis