

**Envision Loudoun:**  
*Break the*  
*“Hooked on Growth”*  
*Cycle*

**Make**  
**The 1% Growth Choice**

**For**  
**The Loudoun 2040 Comprehensive Plan**

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# **Break the “Hooked on Growth” Cycle**

## **Make the 1% Growth Choice**

### **Summary**

**The 1% Growth Choice – Why We Need It.** The current draft of Loudoun’s 2040 Plan portrays continued rapid growth over the coming twenty years reminiscent of Loudoun’s past 20 years of experience. The draft Plan ignores voices of Loudoun residents, who have repeatedly identified growth, development and traffic as their “biggest problem”, and ignores the heavy costs and impacts of Loudoun’s past record of galloping growth. The Plan is ‘developer-centric’ rather than ‘resident-centric’, and would continue new housing development through 2040 at levels rivaling the past two decades. It fails to portray a low growth option for residents to even consider. And the Plan’s Chapter 6 on fiscal management contains mostly short-term, process-oriented descriptions and fails to incorporate a prudent fiscal policy framework that would ensure integrated and balanced land use planning that is fiscally viable.

**The ‘hooked on growth’ cycle – meaning and menace.** Particularly since 2010, the County has demonstrated a repeating sequential process of (1) an aggressive land use housing development policy, (2) that generates heavy demographic growth in population, schools and traffic, (3) that drives an exorbitant public spending growth spiral, (4) that relies on more residential and commercial development to pay for it, (5) that enables popular reductions in real estate tax rates; and (6) that generates further dependence on new growth to pay mounting bills.

This hooked on growth cycle is reflected in the draft Plan and is *unsustainable* from long-term land use and fiscal perspectives. It is *deceptive* for County residents, who receive the ‘gift’ of lower real estate taxes but are not aware that the unspoken tradeoff is a high indirect ‘growth tax’ on the quality of life that comes with such growth. And it is *risky and imprudent*, as it drives a level of land development that is eventually infeasible and demands levels of fiscal revenues and indebtedness that are highly vulnerable to changing business and economic conditions. This cycle needs to be broken in the design and implementation of the 2040 Plan.

**The Last 20 Years – What Not to Repeat in the Next 20.** There is a substantial list of negative behaviors and impacts resulting from Loudoun’s past 20 years of experience. *Why are these important for the 2040 Plan now? Because the very elevated housing development proposed under the current draft Plan threatens to substantially repeat all of those enumerated below in the absence of the adoption of a plan that approximates 1% Growth*<sup>1</sup>.

- 1. Hyper Housing Development.** New housing development in Loudoun has been 2-3 times the rates of *both* the Inner DC Metro area and Outer DC Metro area Counties – such as Frederick, Montgomery, Arlington, Fairfax and Prince William (see page 8).

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<sup>1</sup> “1% Growth” is defined as the average annual rate of new housing units in Loudoun County over 2020 – 2040.

2. ***Booming Demographics.*** Driven by this housing boom, Loudoun’s population growth of about 5% per year over 2000-2019 has been more than 3 times the Washington Metro regional rate and created a doubling of population density in its suburban area (now comparable to Fairfax and Montgomery Counties). School enrollment has tripled and daily vehicle miles traveled doubled by 2017 as 244,000 more vehicles were registered within Loudoun County during that time (page 9).
3. ***The “We’re Number 1” Growth Mantra.*** The County has heralded in its management and marketing over many years “We’re Number 1” benchmarks that reflect a heavy emphasis on growth rankings, highlighting such metrics as median income, purchasing power, population growth and data centers, given little note to quality of life (page 9).
4. ***Quality of Life – Declining Public Services per Resident.*** Loudoun operating appropriations for quality of life-related services have consistently diminished per resident in real terms (i.e., after price inflation). This contrasts sharply with the dramatic rise of the County’s appropriations for the transportation-driven Capital Improvement Program (CIP) by 14% per resident in real terms over the same period (page 10).
5. ***Quality of Life – the “Growth Impact Tax”.*** Loudoun has boasted about reducing real estate property tax rates. Unsaid is that existing residents also pay indirectly a ‘growth impact tax’ as they experience, for example, widespread housing sprawl, constant traffic congestion and waiting, school crowding, air pollution, other environmental degradation, growth of data centers in suburban areas and diminished green space (page 11).
6. ***Galloping Government Expenditures.*** With booming demographic changes, heavy capital expenditures for new schools and more recently for the transportation network have rocketed and external net tax supported debt has risen over sixfold. Overall, the total appropriations budget rose at 9.7% per year on average over FY2000-2019, two to three times other major DC area counties over the past 10 years (page 12)
7. ***Spiraling Spending per Resident.*** The high rate of government spending is not driven by population growth alone. Beyond new residents, Loudoun has had an persistent operational spending spiral over the past two decades that averages about 2.0% annual growth per resident in real terms, particularly for schools, debt service and capital projects (page 13), and has been aggravated further in the County’s robust F2020 budget.
8. ***Fiscal Revenue Dependence – on New Development.*** The vast majority of the increase in County real property tax base and revenues over the past 10 years has come from an unsustainable reliance on new residential and commercial property development rather than the revaluation of existing property, which represented on average only 34% of the total. This “hooked on growth” approach, among other things, is at substantial variance with regional fiscal policy practices: e.g., neighboring Fairfax and Arlington Counties derived 74% and 78% from existing property revaluation over the same period (page 14).
9. ***Fiscal Revenue Dependence - on a Single Industry.*** Data centers appear to have become a fiscal fix. Between FY2015-FY2020, data centers have been the source of a

phenomenal one-half - \$243 million - of the total growth in public budget revenues. This dependency for new tax funding on a single source is extraordinarily high and leaves the County exposed, fiscally and physically, to broader shifts in corporate business and global technological risks and jarring fiscal adjustments to close fiscal gaps (page 15).

**10. *The Expedient Equalized Tax Rate Policy.*** Since 2010, the BOS has kept the average homeowner's real property tax bill stable in current terms for nearly a decade. But accounting for inflation, the average homeowner's tax bill has actually fallen by nearly 20%. This "equalized tax rate policy", while attractive to taxpayers in the short run, is highly growth-dependent and drives the need for heavy new development and the 'growth impact tax' on the quality of life of existing Loudoun residents. It also stands out among other DC Metro counties which tend to make partial or complete corrections to their real property tax rates to compensate for inflation (page 16).

**11. *The Loudoun Home Equity Growth Gap.*** The annual revaluation rate of existing real property in areas with a slower pace of housing development tends to be higher than in Loudoun. For example, Loudoun reflects about a 1% per year lower revaluation rate in relation to Fairfax and Arlington Counties, creating a penalty on home-equity building for Loudoun residents under the expansive County housing policies (page 18).

**Key Benefits of 1% Growth.** A 1% growth path would from a fiscal perspective *embody four drivers*: (1) reducing average housing growth to 1% per year over 2020-2040, thereby lowering demographic growth, (2) reducing the growth rates of public expenditures, (3) redirecting some savings to public quality of life programs, and (4) establishing sustainable fiscal revenue flows. A simplified fiscal planning model, described in Annex 1, is used to visualize the benefits.

**1. Lower Demographic Growth.** Adopting a 1% growth option would imply a new housing plan totaling about 32,300 units, versus the proposed 60,100 Medium Scenario in the latest draft Plan or 84,400 units High Scenario in the updated Fiscal Impact Study. It would sharply reduce demographic pressures --- and, by this alone, improve the life quality of existing residents. The population growth rate would be in line with DC regional trends, with about 83,000 more residents over 2020-2040 instead of 184,000 - 262,000 more. School enrollment would average less than one-third of the higher growth proposals, adding about 16,000 pupils over 2020-2040 rather than the 41,400 - 62,000 new pupils implied by higher growth proposals that substantially repeat rates of the past decade. And new vehicles registered in Loudoun would approximate 91,100 rather than 200,900 - 286,100 new vehicles (page 19).

**2. Lower Government Spending.** With lower demographic growth, the growth in public operating and investment expenditures would yield substantial savings: the model suggests about 9% -16% over the 2020 - 2040, or \$9 billion - \$17 billion in total. Nearly two-thirds would come from lower school operating expenditures resulting from lower growth in enrollment. Note, however, that the model incorporates continued real increases in per pupil spending for school quality improvements. Another \$2 - \$4 billion would come from tax-funded outlays for the Capital Improvement Program (CIP), largely related to reduced transportation investments (page 21).

3. **Higher Funding for Quality of Life.** Lower overall public spending offers a public policy opportunity to redirect some budget savings to initiatives to improve Loudoun’s quality of life. As an example, the model incorporates a 4% per resident per year real growth over 2020-2040 for this purpose, yielding about \$3 billion more than the PC cases to grow the quality of life operational services, plus finance capital expenditures for land conservation (PDR/TDR) and to “catch up” on the backlog of stalled County capital projects mostly in the Suburban Policy Area (page 22).
4. **Lower Tax-Supported Debt.** Lower overall public spending would also enable the County to issue a lower level of new tax-supported bond debt over 2020-2040 than the higher growth proposals – about \$11 billion versus some \$12 - 13 billion in the higher growth cases. Alternatively, the 1% Growth Choice could enable some additional debt, while remaining within County guidelines and still not exceed the higher total net tax-supported debt of the higher growth proposals. Caution is warranted, though, as more elevated debt levels could expose residents and the County to the effects of higher market and business risks (page23).
5. **Sustainable Fiscal Revenues.** Breaking Loudoun’s “hooked on growth” cycle would be partially enabled by lower new housing development with its moderating impact on demographics and total government expenditures. A 1% Growth Choice that slows the introduction of new houses into the market would also promote progressively higher rates of revaluation of existing County housing and shift substantially the source of new real property revenues from perpetual dependence on new development to the revaluation of existing residential and commercial property (page 24).

To maintain fiscal balance, the ‘equalized tax policy’ would need to be replaced from progressively with a policy to maintains the value of the real property tax rate with regular adjustments for inflation. Fortunately, with the FY2020 property tax rates at nearly the same level as those of 1996 (yes, true), the average homeowner tax bill would not regain its past peak level (FY2010) in real terms until after FY2030. This policy could also drive a marked acceleration in the rate of home equity growth. It would also coincide with the long-held policies of other major jurisdictions in the DC area and, given that Loudoun real estate taxes are among the most affordable in the DC area, the County would be likely to maintain its tax competitiveness.

**Fiscal Policy Framework for the 2040 Plan.** Chapter 6 of the current draft Plan on fiscal management is very weak, referencing almost exclusively short-term, process-oriented elements that provide no long-term framework within which land use planning can be done and fiscal viability ensured. *Bringing about the benefits of a 1% Growth Choice will not only require annual budget actions but amendments to Chapter 6 of the Plan to establish commitments and lock in a fiscal policy framework of core policies and actions.*

1. **A Specific 1% Growth Policy:** adopt an overarching 1% growth policy for the FY2020-2040 Plan, representing principally the target for average annual rate of growth of housing units in Loudoun County over 2020 -2040. This would imply reducing by approximately one - half the current draft Plan target of 60,100 unit under the Medium Growth Scenario.

2. **Transitional Period:** establish a transition period of about 10 years over FY2020-FY2030 in which annual new housing would diminish to help meet the overall 1% growth target and accompanying annual budgets, public programs and zoning regulations would be adjusted.
3. **Fiscal Transparency.** The draft 2040 Plan does not include estimates of its public costs nor how to pay for it. Chapter 6 needs to include a summary of the *indicative* public operating and capital investment costs associated with it and a fiscal revenue strategy that includes its impact on County residents.
4. **Fiscal Policy Compliance.** The current draft 2040 Plan has been prepared without regard to the County's fiscal circumstances and policies. The Plan's adoption and implementation must fall within established fiscal policies which, among other things, ensure that current expenditures are met with current revenues and that new external indebtedness is consistent with market creditworthiness standards.
5. **Expenditure Management.** Under the transition, as per the County's integrated approach to land use and fiscal management, the growth in overall total appropriations budgets should be reduced in a manner consistent with the lower demographic pressures resulting from the 1% growth policy for housing. Given the County's past extraordinary public spending growth rates, the BOS should establish a *Spending Affordability Committee*, as can be found elsewhere in the DC Metro area, to formulate a sustainable revenue strategy and set guidelines on expenditure ceilings to ensure fiscal balance.
6. **Quality of life program package.** The 2040 Plan needs to incorporate and commit to frontloading over FY2020-FY2030 a package that will substantially step up in real terms the County's programs to advance toward the goal of being Number 1 in quality of life. This needs to embrace operational upgrading, such as for health, family services, land use, workforce housing, parks and recreation programs, as well as capital investments to eliminate the current deficits in community-related facilities and the financing of property conservation and protection.
7. **Sustainable Revenue Strategy.** An upfront commitment is needed to replace under the transition period the current 'equalized tax rate' policy with a sustainable fiscal revenue policy. This new policy, to be phased in progressively, would provide that real property taxes be raised primarily from existing residential and non-residential property rather being mainly dependent upon new land development to meet the growth in expenditures under the Plan, and that inflation adjustments be made as required to maintain the real value of the real property tax.
8. **Revenue Diversification:** under this transition, strengthen the current fiscal revenue policy provision promoting the diversification of fiscal revenue sources to ensure that significant dependence of General Fund revenues upon any one source is limited.

# Break the “Hooked on Growth” Cycle

## Make the 1% Growth Choice

### 1. Key Concepts

**1.1 The 1% Growth Choice – Why We Need It.** The current draft of Loudoun’s 2040 Plan (as updated to March 13, 2019) portrays continued rapid growth over the coming twenty years reminiscent of Loudoun’s past experience since 2000. The current draft Plan:

- ignores the voices of Loudoun residents, who have repeatedly identified *growth, development and traffic as the “biggest problem” that the County needs to address in the Surveys of Loudoun Residents of 2001, 2005, 2012, 2014 and 2016;*
- ignores the heavy costs and impacts of Loudoun past record of galloping growth and would *perpetuate them at high physical and fiscal risks to the County;*
- is ‘developer-centric’ rather than ‘resident-centric’, focusing mainly on future opportunities to generate more growth and wealth --- *this in a County that holds for over ten years the number 1 ranking in per capita household income in the USA;*
- continues new housing development to 2040 at levels rivaling the past 2 decades, during which roughly 72,000 housing units were built over 2000-2017;
- fails to portray a low growth option for Loudoun’s existing residents to consider, which would enable them to see its benefits and the tradeoffs with higher growth; and
- fails to establish and incorporate in the 2040 Plan a prudent fiscal policy framework within which land use planning is done to ensure its long-term fiscal viability.

This paper outlines from a fiscal perspective (1) what a low-growth 1% growth choice for Loudoun’s 2040 Plan would look like, (2) how it compares with the Plan’s “Medium and High Scenarios”, and (3) elements of a 2040 Fiscal Policy Framework that should be incorporated in the Plan’s Chapter 6 (Fiscal Management) to implement it. *The “1% Growth Choice” is defined here as the average annual rate of growth of housing units in Loudoun County over 2020 – 2040.*

**1.2 The “Hooked on Growth” Cycle – Meaning and Menace.** Loudoun’s growth over the past 20 years is extraordinary, not only compared to the DC Metro Region, but the USA and internationally – it even rivals that of China since 2000. Particularly since 2010, the County has demonstrated under its Board of Supervisors (BOS) a repeating year-to-year process with 6 key sequential ingredients:

1. An aggressive land use development policy (particularly new housing);
2. That generates heavy demographic growth (population, schools, traffic);
3. That drives an exorbitant public spending growth spiral;

4. That relies on more residential and commercial development to pay for it;
5. That enables popular reductions in real estate tax rates; and
6. That generates further dependence on new growth to pay the mounting bills.

Ingredients 1 - 3 are clearly evident in the first five chapters of the draft 2040 Plan, even though – perhaps by design – there are no numerics embedded in them (only two side fiscal impact studies). Ingredients 4 – 6 are implied by the silence in the Plan’s Chapter 6 on specific fiscal revenue policies and the BOS unswerving devotion over 10 years to reduce real estate tax rates.

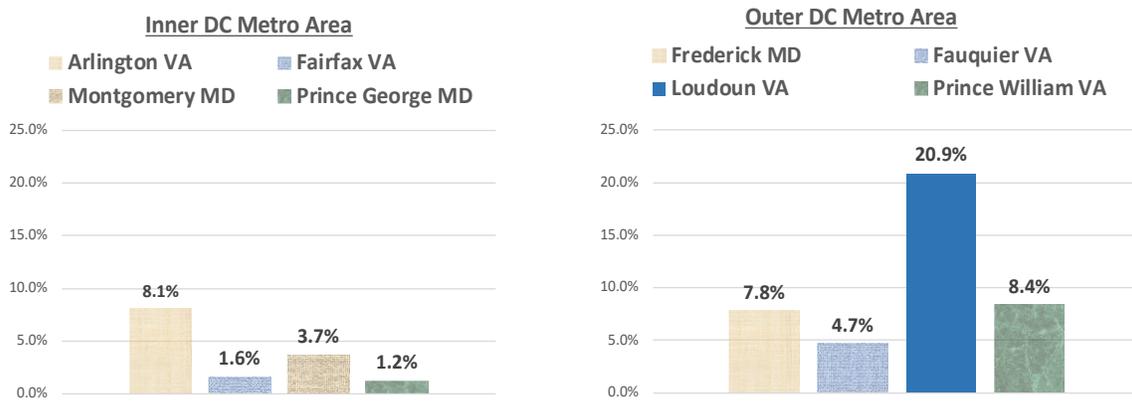
This hooked on growth cycle is *unsustainable* from long-term land use and fiscal perspectives. It is *deceptive* for County residents, who receive the ‘gift’ of lower real estate taxes but are not aware that the unspoken tradeoff is a high indirect ‘growth tax’ on the quality of life that comes with such growth. And it is *risky and imprudent*, as it drives a level of land development that is eventually infeasible and has unsupportable infrastructure needs, and it demands levels of fiscal revenues and indebtedness that are highly vulnerable to changing business and economic conditions. This cycle needs to be broken by the design and implementation of the 2040 Plan.

## 2. The Last 20 Years – What Not to Repeat in the Next 20

**2.1 Hyper Housing Development.** New housing development in Loudoun has been 2-3 times the rates of *both* the Inner DC Metro area and Outer DC Metro area Counties – such as Frederick, Montgomery, Prince George, Arlington, Fairfax and Prince William.

**Total Growth in Housing Units  
Selected Counties in the DC Metro Area, 2010 - 2017**

***Loudoun - More than Triple the Rate of Other Counties***

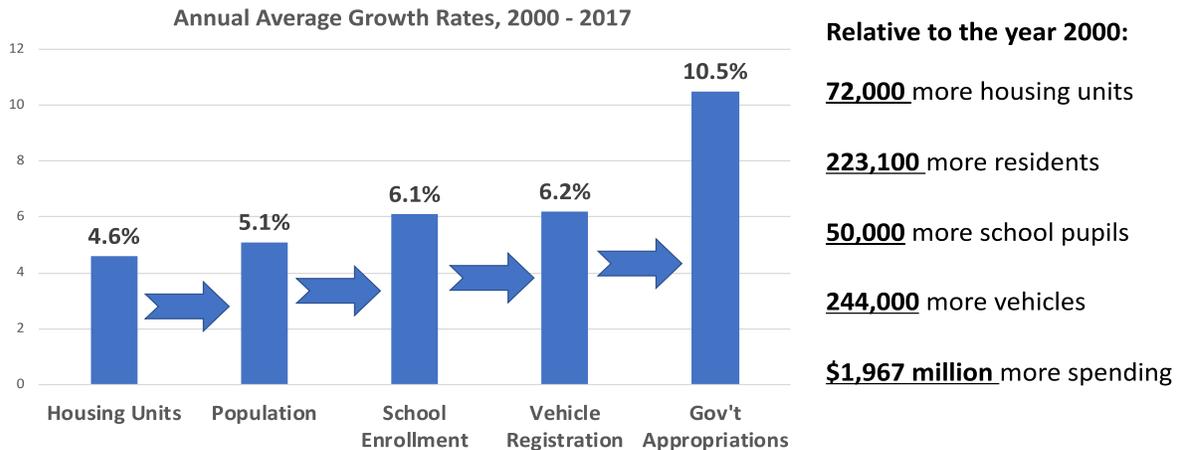


Increase in Housing Units	Per County Avg.	Loudoun Co.
Total 2010–2017	7,784	23,014
Annual Avg Growth 2010-2017	0.8%	2.8%

Sources: US Census Bureau, Population Division, 2019.

**2.2 Booming Demographics.** Driven by this housing boom, Loudoun’s demographic development experience has consequently been chaotic. Population growth of about 5% per year over 2000-2019 has been more than 3 times the Washington metro regional rate and created a doubling of population density in its suburban area (now comparable to Fairfax and Montgomery Counties). School enrollment has tripled and, with the large segment of Loudoun residents commuting outside the County, daily vehicle miles traveled doubled by 2017 as 244,000 more vehicles were registered within Loudoun County during that time.

## Loudoun Housing Policy Drives Impacts On Population, School Enrollment, Traffic and Gov’t Spending 2000-2017



Source: Various Loudoun County Government Reports and Budgets, 2000 – 2017,

**2.3 The “We’re Number 1” Growth Mantra.** Loudoun County has heralded in its management and marketing over at least the past 20 years “We’re Number 1” benchmarks that reflect a heavy emphasis on growth rankings. A good representation of this is reflected in the County’s 2018 publication of “10 Ways Loudoun County, Virginia is No. 1”,<sup>2</sup> which highlights top rankings in metrics like median income, purchasing power, population growth, volume of investment and data centers.

**Box 1: The Loudoun “We’re Number 1” of Today**

- Top US Median household income (at over twice the national average)
- Top purchasing power in Virginia
- Fastest growing county in Virginia (listed under “Quality of Life Factors”) with 30 new residents a day and ranking 20<sup>th</sup> in population growth among the United States 3,142 counties.

***Really? Shouldn’t we be Number one in other things....?***

Source: LC Dept of Economic Development in “10 Ways Loudoun County, Virginia is No 1”, (Jan 30, 2018)

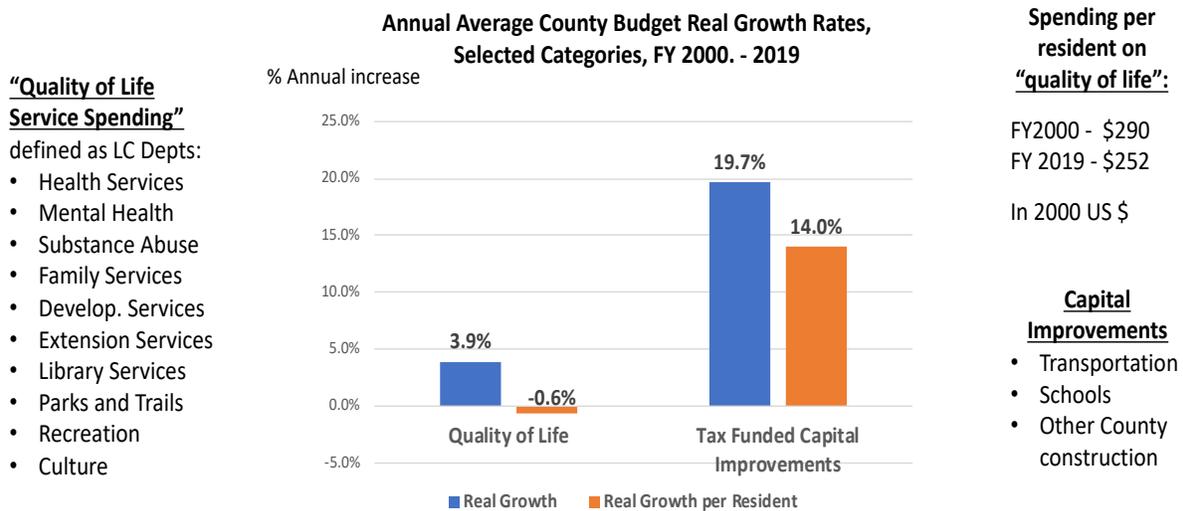
<sup>2</sup> <https://biz.loudoun.gov/2018/01/30/10-ways-loudoun-county-virginia-no-1/>

This contrasts sharply with other counties, including neighboring Fairfax, which has adopted a wide range of long-range planning indicators that balance economic indicators with many priority quality of life metrics: such as, its “child opportunity index”, “walkability score in activity centers”, “art access”, “parks access”, “air quality” and “community engagement”.<sup>3</sup>

**2.4 Quality of Life – Declining Public Services per Resident.** Loudoun County’s operating appropriations for quality of life-related services have been *consistently diminishing per resident in real terms* (i.e., after price inflation). “Quality of life” services refer to Loudoun Departments responsible for Family Services, Health, Mental Health, Substance Abuse, Development and Extension Services, Library Services, Parks, Recreation and Community Services.

Operating expenditures for these services stagnated in the first decade after 2000 and *declined thereafter, on average by 0.6% per year per resident in real terms over FY2000 – FY2019*. Per resident, they fell from \$290 to \$252 over this period. Contrast this with the *dramatic rise over the same period of the County’s appropriations for the transportation-driven Capital Improvement Program (CIP) by 14% per resident in real terms*.

## Spending Per Resident on Life Quality Has Declined Crowded out by capital improvement requirements



This is directly reflected in the composition of public expenditures, in which direct support for *quality of life is being crowded out*. While average contributions to the CIP rose over the past two decades from an 29% to 38% of total annual operating appropriations, *quality of life*

<sup>3</sup> See the Fairfax “Success Indicators and Performance Measures Data Booklet, 2019” at <https://www.fairfaxcounty.gov/economic-success/sites/economic-success/files/assets/documents/pdf/economic-success-indicators-report.pdf>

government budget appropriations fell from 12% to 8% over the same period. This trend needs to be promptly reversed under a 2040 Plan in favor of a new Number 1 goal that prioritizes the pursuit of top standing in Quality of Life for existing Loudoun residents. By way of example, some areas are can be found in the 2018 Health Rankings and Roadmaps prepared by the University of Wisconsin and the Robert Wood Johnson Foundation, excerpted below in Box 2.

<b>Box 2: Loudoun County – Examples of Quality of Life Lagging Indicators, 2018</b>			
	<b>Loudoun</b>	<b>Virginia</b>	<b>Top US Performers</b>
<b>(1) Health Behaviors</b>			
Alcohol-impaired driving deaths	29%	31%	13%
<b>(2) Clinical Care</b>			
Mental health providers	800:1	680:1	330:1
<b>(3) Social &amp; Economic Factors</b>			
Social associations	6.7	11.2	22.1
<b>(3) Physical Environment</b>			
Air pollution particulate matter	10.0	8.7	6.7
Long commute – driving alone	52%	39%	15%
<b>Source:</b> “Health Rankings and Roadmaps”, 2018 by the University of Wisconsin Population Health Institute and the Robert Wood Johnson Foundation. See <a href="http://www.countyhealthrankings.org/">http://www.countyhealthrankings.org/</a> including category definitions. Note – “Top US Performers” refers to value for which only 10% of counties in the US are doing better.			

**2.5 Quality of Life – the “Growth Impact Tax”.** Loudoun County has boasted annually about reducing real estate property tax rates, which after 10 successive years in FY2020 has descended to the level of 1996 tax rates (see more below). Unsaid is that, as a consequence, existing residents instead pay more indirectly via a daily experiential “growth tax” --- that is, the growth effects generated by extraordinary new residential and business development needed to make up for real estate tax revenues foregone from existing residents (“hooked on growth”).

## The Indirect “Growth Impact Tax” on Existing Residents Physical, Economic Social, and Environmental Experiences

- Housing sprawl
- Traffic congestion and waiting
- School crowding
- Air, other environmental degradation
- Diminishing green space
- Chaotic infrastructure construction
- Crowding out of services for health and family, parks and recreation

### County Surveys of Loudoun Residents:

Results show repeatedly 70% consider the biggest problems to be –

- Growth
- Development
- Traffic

The experiential impacts of Loudoun’s hyper growth are reflected in widespread housing sprawl, massive traffic congestion and waiting times, school crowding, air pollution and other environmental degradation, growth of big data centers in the suburban area, diminished green space, and a transportation infrastructure boom that has among other things crowded out realization of many public County quality of life services and facilities.

**2.6 Galloping Government Expenditures.** Booming demographic changes have placed heavy demands on County Government. In particular, capital expenditures for new schools and more recently for the transportation network have rocketed and external net tax supported debt has risen over sixfold. Overall, the *total appropriations budget rose at above 9.7% per year on average over FY2000-2019 (and 10.5% over FY2000-2017).*

Spending pressures are accelerating not relenting. *The FY2020 budget reveals an eye-popping 23% increase over FY2019 in total budget appropriations: that is, \$587 million more than last year’s \$2,570 million.* This is the largest annual increase in 15 years (FY2005 = +26%), over double the already galloping long-term average annual growth since FY2000 and nearly triple the average rate since FY2011.

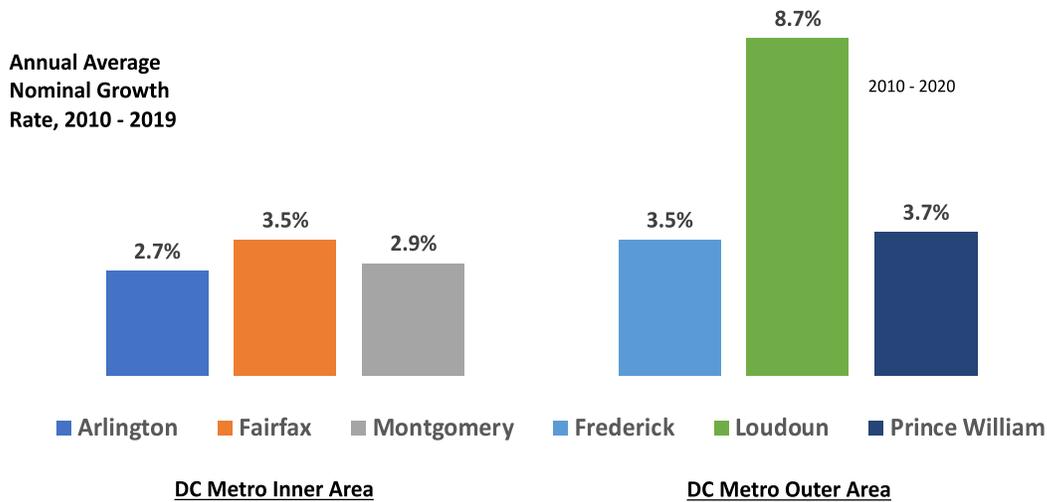
Loudoun County Total Appropriations Budget Values and Growth Rate, FY2011 - FY2020



Sources: Loudoun County Adopted Budgets, FY2011-FY2019 and proposed FY2020 Budget

Loudoun’s total budget record over at least the past 10 years is clearly an outlier in the Washington DC Metro region, running at more than twice to threefold other major counties --- not only in the inner DC area jurisdictions but those in the outer DC area.

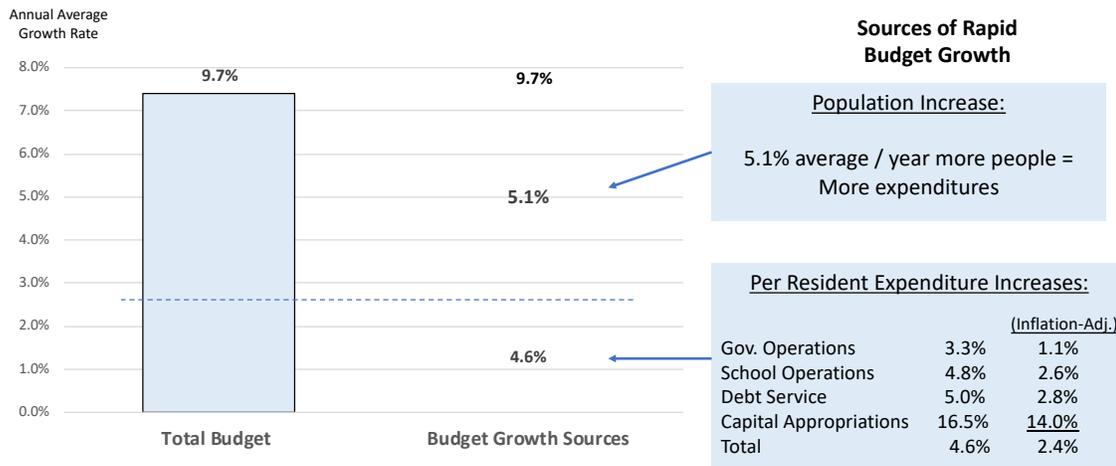
## Growth in Total Budget Appropriations Selected Counties in the DC Metro Area, 2010 - 2019



Sources: Annual Adopted Budgets of each County

**2.7 Spiraling Spending per Resident.** This high rate of government spending is not driven by population growth alone. Yes, for FY2020, the County Government’s continuing expansive housing policies will result in about 11,000 additional residents, or 2.8% more, and remain about threefold the average population growth rate of the DC Metro area, and drive up government and school operating costs accordingly.

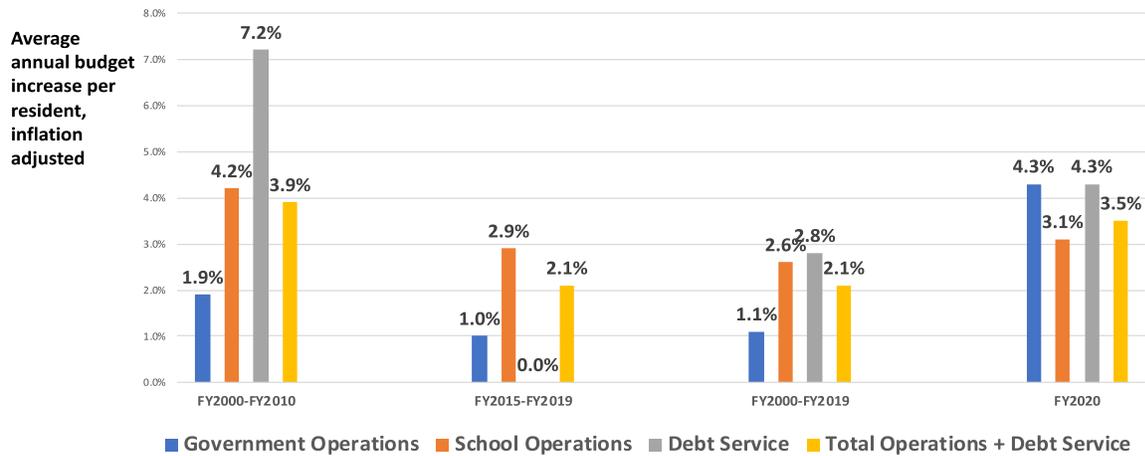
## Galloping Public Budget Expenditures, FY2000-FY2019 Driven not only by Population but by Per Resident Cost Spiral



Source: Calculations based on Loudoun County FY2000 – FY2019 Adopted Budgets

However, beyond new residents, the FY2020 budget continues Loudoun’s worrisome operational spending spiral: government and school operating budgets together will rise about 3.4 % per resident in real terms, exceeding a two-decade old average pattern of 2.0% in real terms yearly.

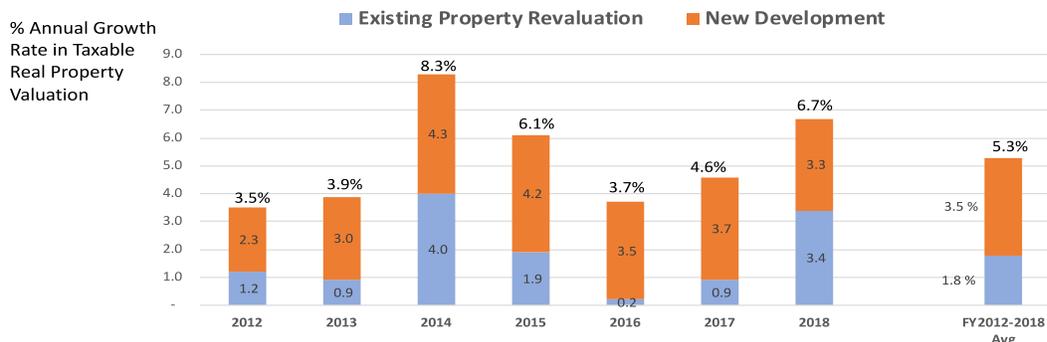
### Loudoun County Operational Budget Spending Spiral Average Real Growth Per Resident, FY2000 - FY2020



Sources: Loudoun County Adopted Budgets, FY2011-FY2019 and FY2020 Budget

**2.8 Fiscal Revenue Dependence – on New Development.** The total growth in Loudoun’s local tax funding has paralleled the County’s high expenditure growth rate history. However, the vast majority of the increase in County real property tax base and revenues over the past 10 years has come from an unsustainable reliance on new residential and commercial property development rather than the revaluation of existing property

### Hooked on Growth – Expansion of Loudoun’s Real Property Tax Base Mostly From New Development not Existing Property, 2012 - 2018



% Existing Property Revaluation / Total Valuation Growth	2012	2013	2014	2015	2016	2017	2018	2012-2018 Avg
	34%	23%	48%	31%	5%	20%	51%	34%
Fairfax								74%
Arlington								78%

Benchmarks



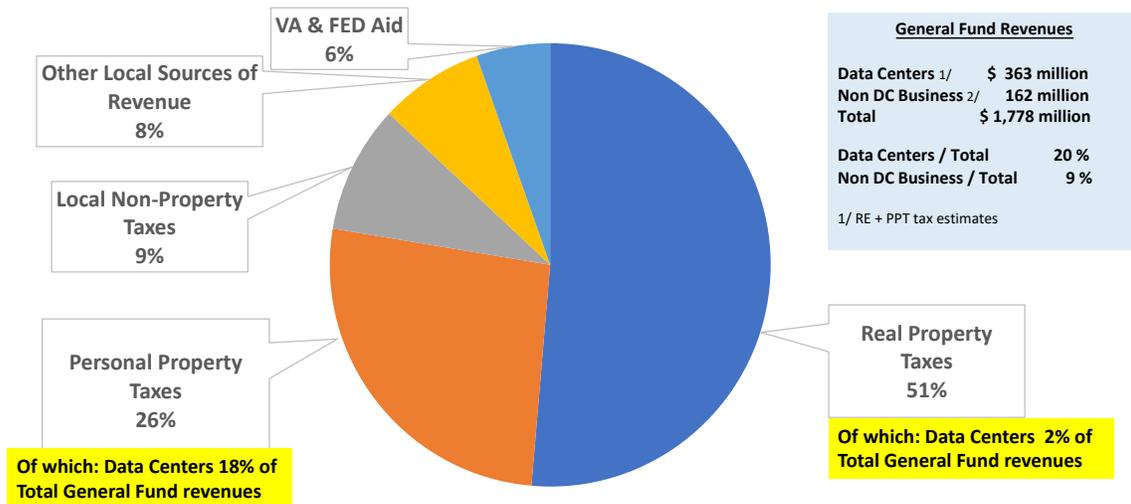
Sources: Loudoun County Adopted Budgets, FY2011-FY2020 Budget

Over the past 10 years, an average only 34% of the growth in Loudoun’s real property tax base has come from the revaluation of existing property. This is a tax revenue strategy that is “hooked on growth” and at substantial variance with regional fiscal policy practices: neighboring Fairfax and Arlington Counties have over the same period derived 74% and 78%, respectively, of the growth in their property tax bases from the revaluation of existing property.

**2.9 Fiscal Revenue Dependence - on a Single Industry.** Data centers have furthered the revenue diversification aims of the County and placed few demands on social infrastructure. However, they also appear to have become a quick fiscal fix. The FY2020 budget raises the County’s fiscal risk bar with its combination of (1) growth by nearly 50% in personal property tax revenues stoked by new data center development, and (2) the appropriation of these funds to support growth in essentially *non-discretionary* operational budget activities for government services and schools. The concentration of real property and personal property taxes in total budget resources from this single industry of data center for FY2020 has grown to 20 % of total General Fund revenues.

### Loudoun County Composition of General Fund Revenues, FY2020

Single Source Data Centers Now About 20% - Twice Non DC Business



Source: Loudoun County FY2019 Adopted Budget and estimates.

And, between FY2015-FY2020, data centers have been the source of a phenomenal one-half - \$243 million - of the total growth in public budget revenues. This dependency for new tax funding on a single source is extraordinarily high and leaves the County exposed, fiscally and physically, to broader shifts in corporate business and global technological risks that may require jarring fiscal adjustments to close fiscal gaps. Property taxes from the remaining Loudoun business community, estimated for FY2020 to account for about 9% of total General Fund revenues, cannot hope to supplant shortfalls in data center revenues in the short or even medium term, given that they now represent less than half tax receipts from data centers.

## One-Half of All the Growth in Loudoun’s General Fund Revenues Came From Data Centers Over FY2015 - FY2020

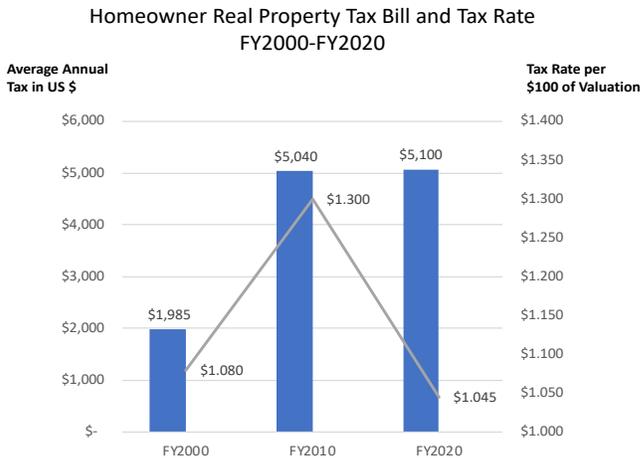


Sources: Loudoun County Adopted Budgets, FY2011-FY2020 Budgets

The Government, instead of engaging in tempting short-term data center revenue fixes, should begin under the 2040 Plan to adopt a sustainable fiscal revenue strategy that no longer depends primarily on vast new development and a single industry to raise new tax funding.

**2.10 The Expedient Equalized Tax Rate Policy.** In the first decade after 2000, to meet growing County public expenditures, Loudoun’s tax revenues were driven primarily by a “pay-as-you-go policy”, with increases in residential real property tax rates moving from \$1.08 to \$1.30 per \$100 of assessed value over FY2000 - FY2010.

### ‘Hooked on Growth’ Is Driven by the “Equalized Tax Policy” FY2020 proposed real estate tax rate level approaching 1996 level



#### **FY2000 - 2010**

- Tax rates raised \$1.08 to \$1.30
- Average homeowner real property tax bill grew 10% per year

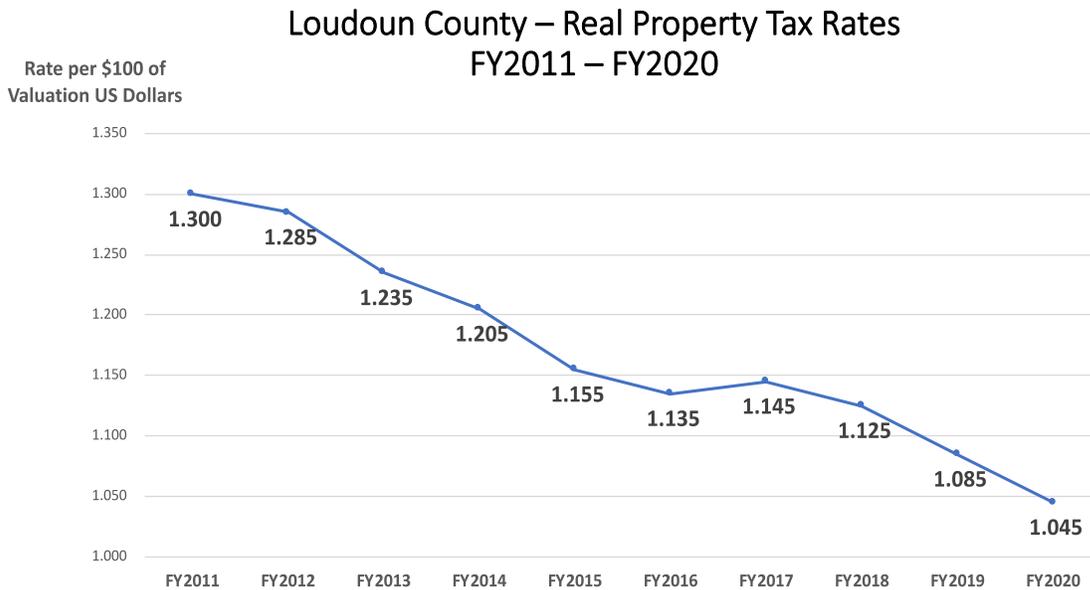
#### **BUT, since FY2010**

- Tax rates reduced \$1.30 to \$1.045
- *In FY2020 – approaches tax rate of FY1996 !*
- Average real property tax bill has stagnated --- and fallen by 18% when inflation-adjusted.
- Sounds appealing, but policy is **flawed !**

Source: Loudoun County FY2010 – FY2020 Adopted Budgets

Since 2010, however, the BOS has decisively changed this fiscal strategy: it has kept the average homeowner’s real property tax bill stable in current terms for nearly a decade --- from \$5,071 in FY2010 to \$5,100 in FY2020. However, accounting for inflation, the average homeowner’s tax bill has actually fallen to about \$4,365, or nearly 20% less than 2010.

This practice on the part of the BOS has been enabled by its “equalized tax rate policy”, which simply means the annual reduction in the real property tax rate that will just compensate for the average annual increase in real property value. For FY2020, the tax rate falls by 3.7% to \$1.045 per \$100 of real property value, nearly the same rate as the \$1.030 in FY1996.

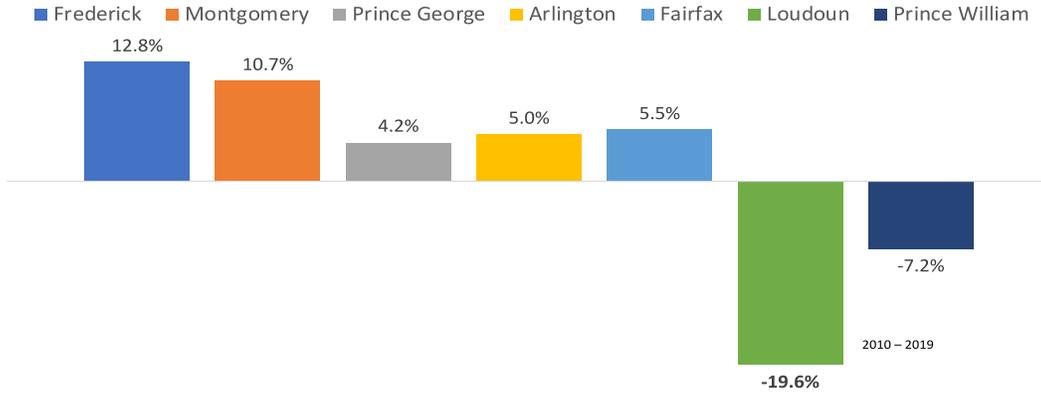


Source: Loudoun County FY2000 – FY2020 Adopted Budgets.

While attractive to taxpayers in the short run, this approach is a highly growth-dependent tax policy that drives indirectly the compensating ‘growth impact tax’ on the quality of life of existing Loudoun residents. It also stands out as an extraordinary practice among the counties in the Washington DC Metro area, which tend to make partial or complete corrections to their real property tax rates to at least compensate for inflation. Frederick, Montgomery, Prince George, Arlington and Fairfax Counties all raised their real property tax rates over 2010-2018 by a total of between 4% - 13%. In Loudoun, the BOS has reduced its rate by a total of nearly 20% (FY2020 inclusive).

## Loudoun's Real Property Tax Rate Policy is an Outlier in the DC Region Tax rate changes of selected DC Metro area counties, 2010 - 2018

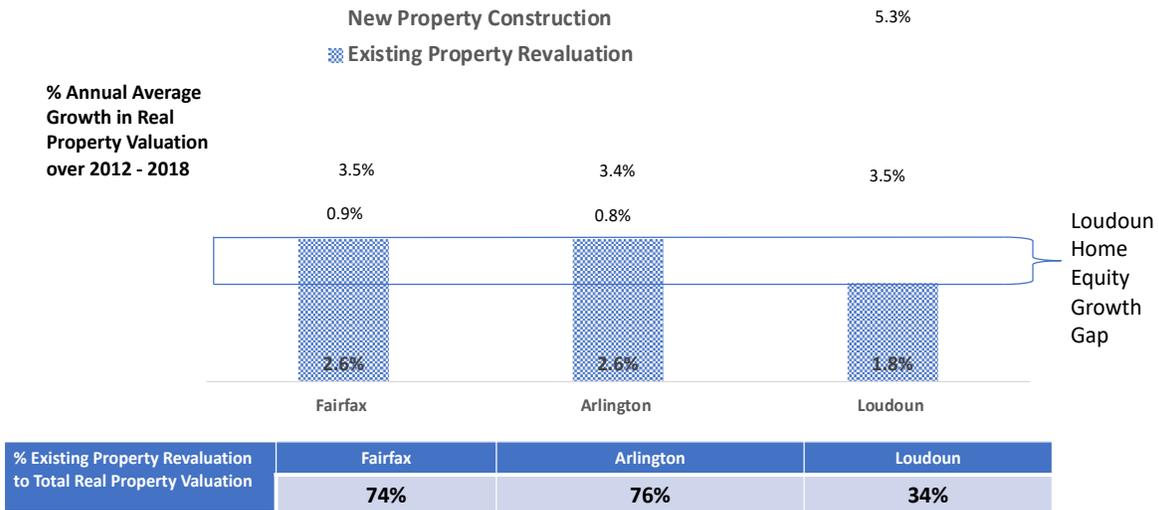
% Total Nominal Change  
in Real Property Tax Rates  
over 2010 - 2018



Sources: Annual Adopted Budgets of each County

**2.11 The Loudoun Home Equity Growth Gap.** The past 5-10 years of trends in property valuation among the major county jurisdictions of the DC Metro area show a distinction with Loudoun County. Data on the annual revaluation of existing real property (residential and commercial) show that those with low rates of growth in development of new housing units have higher existing property revaluation rates. The chart below shows about a 1% per year gap between those of Loudoun and those of Fairfax and Arlington Counties. This can have a marked impact on home equity-building over 5-10 years or more as a result of housing policies that flood the market with new housing units and that is penalizing existing Loudoun homeowners

## The Loudoun Home Equity Growth Gap Shown in Sources of Growth in Real Property Value, 2012 - 2018



Sources: Annual Adopted Budgets of each County

### 3. Key Benefits of 1% Growth

To avoid repeating past negative growth impacts over the next 20 years, the 2040 Plan should adopt a lower 1% growth path. From a fiscal perspective, this would embody the following:

- Reducing average housing growth rates to an average of 1% per year over 2020-2040, and the demographic impacts of population, school enrollment and traffic congestion;
- Reducing the high growth rates of public expenditures that consume private resources;
- Redirecting some savings to expand quality of life programs in health, the family, library services, workforce housing, community parks, recreation and land preservation; and
- Establishing sustainable fiscal revenue flows that enables the County to pay its bills without being dependent upon heavy new residential and business development.

This section visualizes through a fiscal perspective these key impacts using a simplified fiscal planning model, which is described in Annex 1.

**3.1 Lower Demographic Growth.** The model illustrates that the 1% Growth Choice substantially reduces the demographic pressures of new development emanating from the higher growth 2040 Plan proposals. Housing unit projections under the 1% Growth Choice trend down progressively from the current pace to substantial completion by 2030. A total of about 32,300 units are added. The higher growth proposals continue the building program over the coming 20-year period and total about 60,100 additional units for the Medium Growth scenario and 84,400 units for the High Growth scenario by 2040 – *that is, 27,800 units and 52,100 units, respectively, more than the 1% Growth Choice.*

#### Loudoun at a Crossroads How Many Housing Units? Location? Timing?

**1% Growth Choice**

- 32,300 new units

**OR**

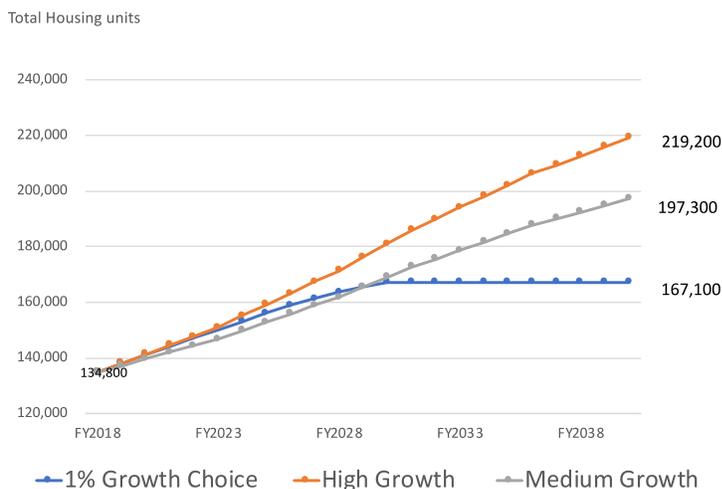
**Medium Growth Proposal**

- 60,100 new units

**OR**

**High Growth Proposal**

- 84,400 new units



Sources: Model (1% Growth) and Kimley-Horn Market Analysis as adjusted by the draft 2040 Comp Plan, March 13, 2019

The 1% Growth Choice for housing development is *under one-fourth the 4.6% average annual growth rate of the past 20 years.*

The 1% Growth Choice would have *a dramatic positive effect* on County demographics:

- *Containing population growth* --- from about 404,000 residents (2018) to about 487,500 residents by 2040 --- instead of 588,000 to 666,200 residents;
- *Reducing school enrollment growth* --- from about 82,500 pupils (2018) to about 97,600 pupils by 2040 --- instead of 122,700 to 143,400 pupils;
- *Cutting the growth of registered vehicles and trips per day*---from about 392,500 vehicles (2018) to about 483,600 vehicles by 2040 --- instead of 576,600 to 678,600 vehicles; and
- Cutting the number of increased Loudoun vehicle trips per day (VTD) by two-thirds: 323,000 VTD versus over 800,000 more per day in the High Growth case.

### Impact of High Housing Growth versus a 1% Growth Choice Population, School Enrollment, Traffic and Budget Over 2020-2040

Estimates of Total Incremental Growth Over 2020-2040	High Growth Proposal	Medium Growth Proposal	1% Growth Choice
Additional Loudoun Population	+ 262,200	+184,100	<b>+83,500</b>
Additional School Pupil Enrollment	+ 62,200	+41,400	<b>+16,300</b>
Additional Registered Vehicles	+ 286,100	+200,900	<b>+91,100</b>
Additional Vehicle Trips per Day	+844,000	+625,000	<b>+323,000</b>
Total budget appropriations (\$ billions)	+110.3	+101.8	<b>+92.7</b>

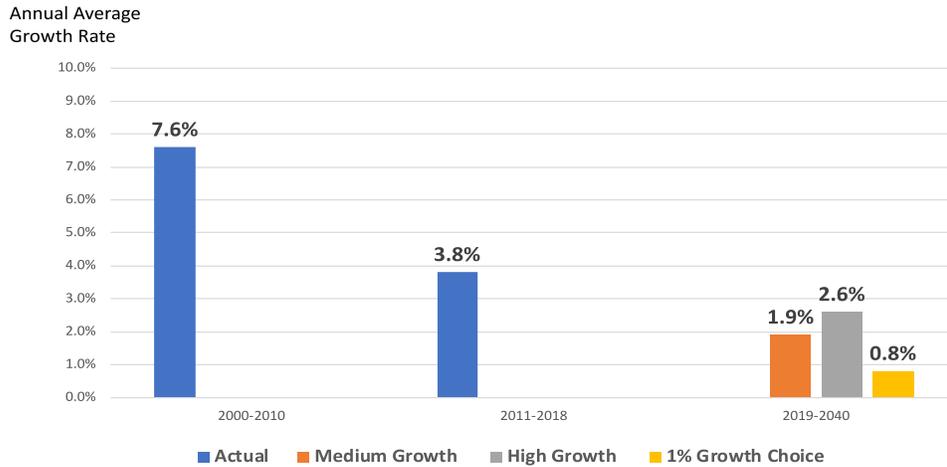
Source: Model estimates.

These demographic differences are accentuated in the Medium and High Growth 2040 Plan proposals, as they contain a higher proportion of single family detached and attached housing units than the 1% Growth Choice, and have relatively higher household size and school age children per new household than multi-family units. These differences and impacts, of course, also flow through to the County budget as discussed below.

The County’s long-term population growth rate under the 1% Growth Choice would be comparable to the rates expected for the overall Washington DC metro region.

The long-term school enrollment growth rate would average 0.8% per year under the 1% Growth Choice, *less than one-third of the High Growth scenario*, which would largely repeat the trends of the past decade.

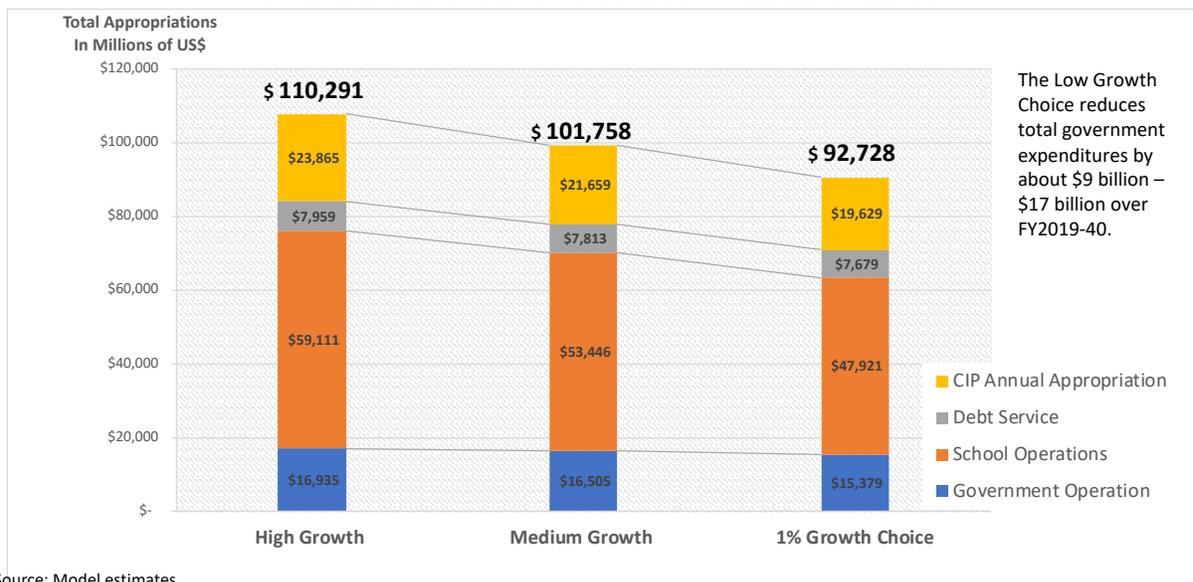
### Loudoun County – School Enrollment Impact Of the 1% Growth Choice Over FY2019-FY2040



Actual Data Source: Loudoun County FY2000 – FY2019 Adopted Budgets

**3.2 Lower Government Spending.** The model suggests that the 1% Growth would reduce County public expenditures by between 9% - 16% of the higher growth proposals over the coming 20 years – that is, by a total of about \$ 9 billion - \$17 billion. How would this happen?

### Loudoun County – Budgetary Spending Impact Of the 1% Growth Choice Over FY2019-FY2040



Source: Model estimates.

- Over half of the budget savings against the higher growth proposals would come from lower school operating expenditures --- as a result of lower growth in enrollment;
- However, the 1% Growth Choice would still enable continuing school quality improvements, which the model frames as a 4% per annum per pupil increase (2% in real terms) in school operating expenditures (also included in the high growth cases);
- Another \$1 billion in savings would come from continued careful control of general government operating expenditures, allowing annually for 0.5%-1.0% in cost increases above projected annual inflation; and
- Additional savings of \$2 – \$4 billion would from the Capital Improvement Program (CIP). Savings from lower transportation investments would account for about three-quarters of the total and lower school investments the remainder.

The long-term average annual growth rate in total Government appropriations under the 1% Growth Choice would be about 4.6% (2.6% in real terms), markedly slower than past trends.

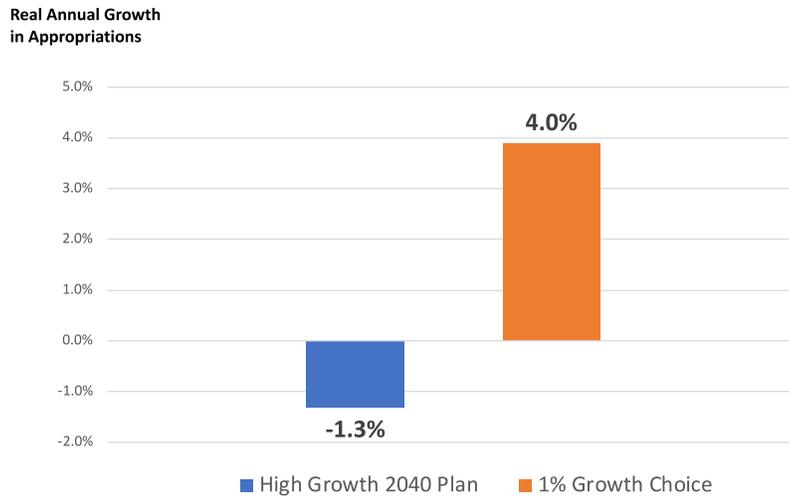
**3.3 Higher Funding for Quality of Life.** As shown in the examples in Box 2 and the deficits in implementation of the latest Capital Needs Assessment, Loudoun County is far from being a Number 1 leader in a variety of quality of life categories. With lower demographic growth and lower related public expenditures, the 1% Growth Choice is an important public policy opportunity to redirect some budget savings to programs that markedly raise quality life standards for Loudoun’s existing residents.

The 1% Growth Choice model incorporates a budgetary average increase of 7% per year over 2020-2040 --- that is, 4% per resident per year in real terms --- aimed to help make Loudoun County Number 1 in Quality of Life in the United States. The model suggests that this would make about \$3 billion more funding available than the higher growth proposals over 2020-2040.

Specifically, this additional funding could, under the existing County budget structure or a new fund, provide priority support for these public quality of life services, facilities and programs:

- Operating expenditures for Loudoun departmental providers of Family Services, Health, Mental Health, Substance Abuse, Development and Extension Services, Library Services, Parks, the Emerald Ribbons trail network, Recreation and Community Services; and
- Capital expenditures for the conservation and preservation of County lands – such as via PDRs/TDRs -- and for projects included in the current Capital Needs Assessment that have been ‘triggered’ for development but delayed due to funding constraints. These include facilities, primarily in the Suburban Policy Area, for community parks, trails and recreation centers, community and senior centers, libraries, an animal services facility, fire and rescue stations, developmental services and residential facilities.

## Increasing Budget Appropriations for Quality of Life Needs With the 1% Growth Choice, FY2019-FY2040



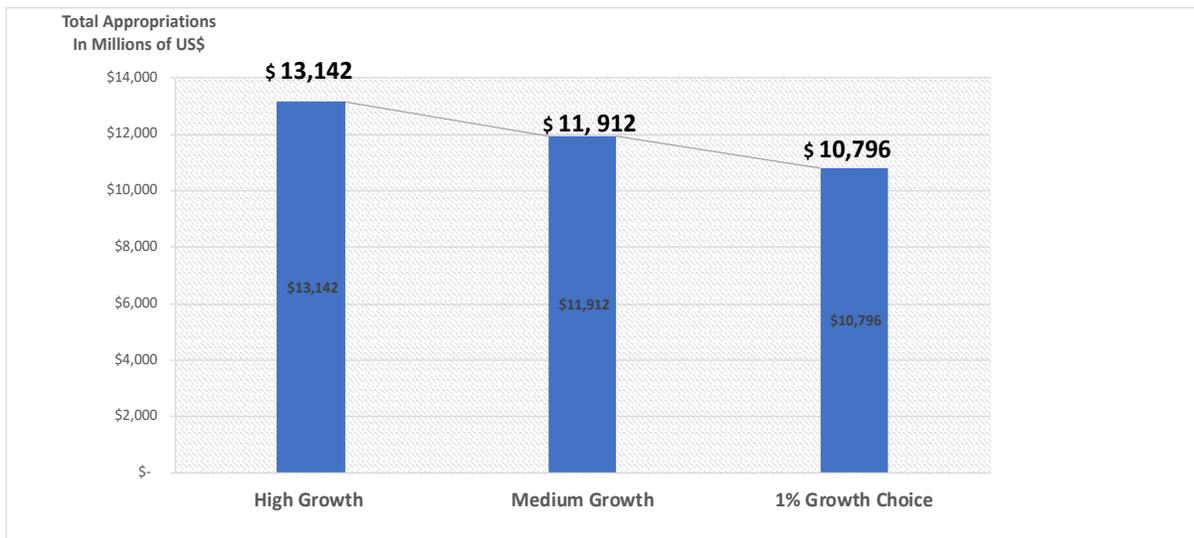
Source: Model estimates.

*Overall, the 1% Growth Choice would more than double the support level from its current \$252 per resident to about \$580 per resident in real terms --- contrasting with the current trend of crowding out and declining per capital support.*

**3.4 Lower Tax-Supported Debt.** The County incurs debt primarily in the form of new bond issues. Debt financing is an important tool to support annual appropriations; in particular, the implementation of the Six-Year Capital Improvement Program. General obligation bonds in the approved FY2019-FY2024 CIP account for about 30% of financing. Overall, debt financing accounts for about 11% of the total expenditure appropriations for FY2019.

The model suggests that the 1% Growth Choice would require the County to issue lower new tax-supported debt over FY2020-2040 than the two higher growth proposals: \$10.8 billion versus \$11.9 billion and \$13.1 billion, respectively. All three scenarios would, however, remain within the County’s current debt management parameters. Net tax supported debt in relation to total property valuation is projected at 1.9% - 2.0% over the period, and within the current Fiscal Policy Guideline 3%. Debt service as a share of total appropriations is projected in the 7% - 8% range, also within the 10% Policy Guideline.

## Loudoun County – New Tax Supported Debt Options Over FY2019-FY2040



Source: Model estimates.

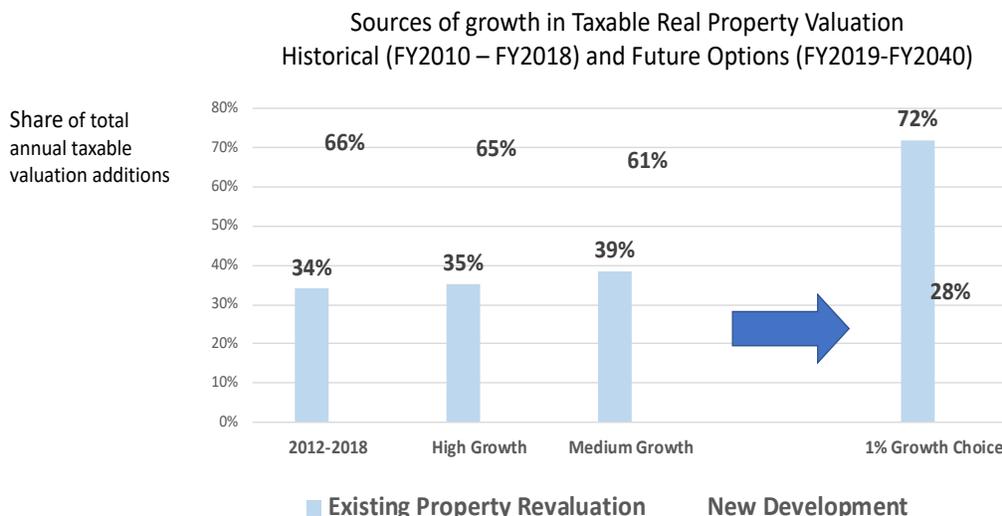
Given lower net debt under the 1% Growth Option, model sensitivity analysis suggests that there would be scope to mobilize, for example, an additional \$1 billion - \$2 billion of debt for additional quality of Life programs, remain within the Fiscal Policy Guidelines, and not exceed the estimated net tax supported debt of both of the higher growth proposals.

However, caution is warranted. Incurring relatively higher tax supported County debt over FY2020-2040 exposes County government and its residents to higher market and business sector risks associated with raising debt, bond interest rates, debt servicing capacity and the potential to exceed the 10% of total budget ceiling.

**3.5 Sustainable Fiscal Revenues.** Breaking Loudoun’s “hooked on growth” cycle would be partially enabled by a 1% Growth Choice that lowers new housing development and moderates the impact on demographics and total government expenditures. A critical additional impact would be a decisive shift in the sources of growth of the real property tax base each year, from which the County obtains more than half of its total General Fund revenues.

The model illustrates major differences between the 1% Growth Choice and both Medium and High Growth proposals. The 1% Growth Choice would be likely to yield a higher rate of annual real property revaluation than the higher growth options, which would continue to flood the market with new housing units. This effect along with fewer new housing units would progressively and substantially raise the share of the County’s new taxable real property derived from revaluation of existing property from an average of about 34% over much of the past 10 years to an eventual average of about 72%. This would be another important contributor to alleviate the County’s perpetual dependence on new development to meet its incremental tax revenue needs.

## Real Property Tax Revenues Alleviating the Dependence on New Development



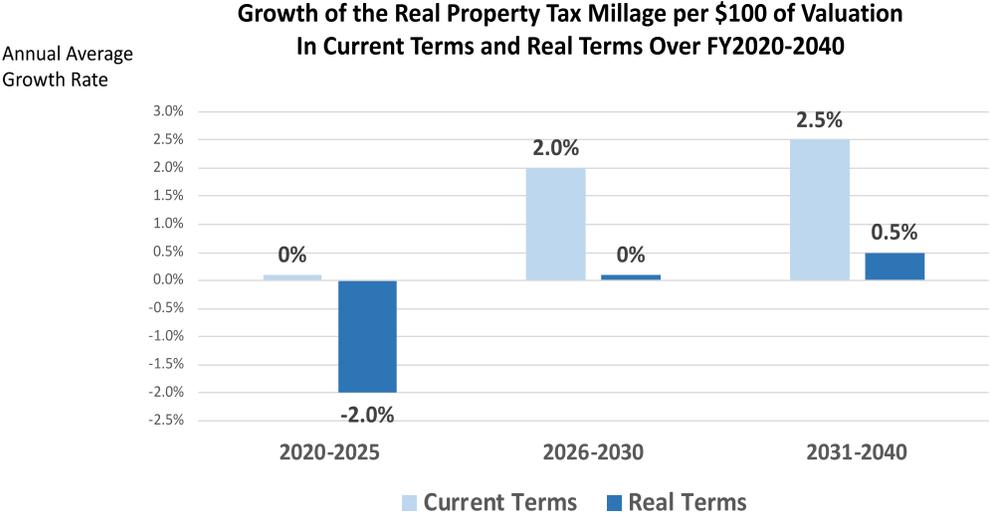
Sources: Loudoun County FY2000 – FY2019 Adopted Budgets and model projections

To ensure balance with the County’s total appropriations budget as outlined above under the 1% Growth Choice, the model suggests that the real property tax rate per \$100 of assessed value over FY2020-2040 would need to be maintained on average at its current level in real terms. This would require that the BOS replace its current “equalized tax policy” with one that adjusts real property tax rates by the annual for the inflation rate.

This policy could be phased in gradually during the implementation of the FY2040 Plan: for example:

- With continued significant new housing development in the early phase of the transition, the model suggests *no increase in tax rate would be required through FY2024*. This would still meet budget appropriations growth and continue the past tax policy;
- Over FY2025-FY2029, institute annual inflation adjustments that cover budget growth; and
- Over FY2030-FY2040, with the substantial completion of the transition to a 1% annual growth rate in housing units in Loudoun, raise the average millage over this next decade by about 0.5% per year to balance the total appropriations budget.

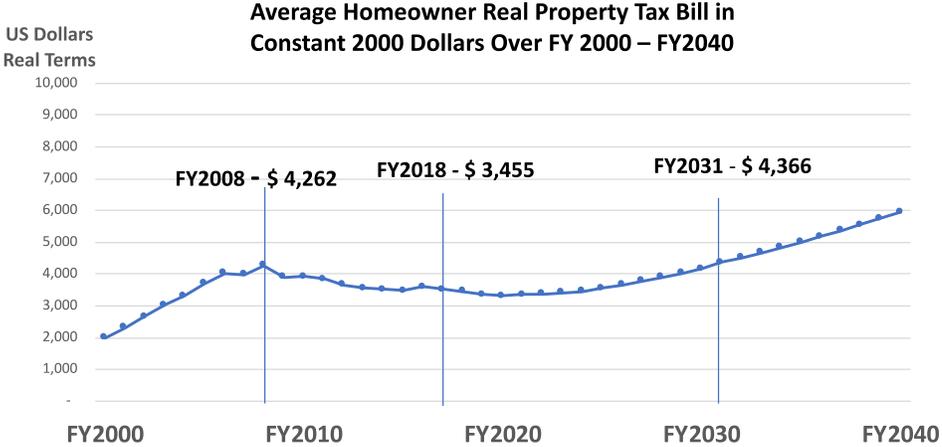
# Real Property Tax Policy Illustration Under a Transitional 1% Growth Choice



Source: Model estimates.

What would be the impact of these rate adjustments on real property taxes? Applied to the expected rise in property revaluation, this scenario would result over 20 years in a 2.8% per year increase in the average homeowner’s real property tax bill. *It would take about 11 years --- to FY2031 --- for that average homeowner’s real estate tax bill to regain in real terms the County’s peak real property tax bill reached in FY2008.*

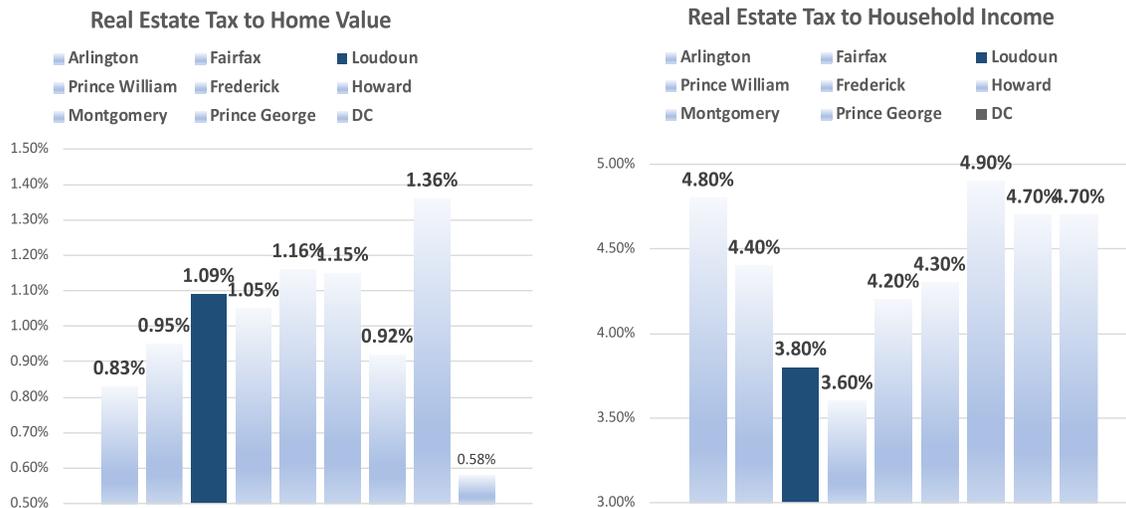
# Homeowners Real Property Tax Bill Illustration Under a Transitional 1% Growth Choice



Source: Loudoun County FY2000- FY2019 Adopted Budgets and model calculations.

Could adjustments be made instead with additional expenditure reductions to mitigate such a policy? Yes! But, in their absence, what might be the scope to make such tax adjustments? Gauging Loudoun in relation to its DC Metro surroundings, in 2016, Loudoun ranked fourth from the top among 9 major area county jurisdictions in average annual real estate taxes in relation to average home value (the “effective tax rate”).

### % Real Property Taxes to Home Value and Household Income Selected Counties in the DC Metro Area, 2016



Sources: National Association of Home Builders (taxes and home values), 2016; County Health Rankings and Roadmaps (median household income), 2016.

However, in terms of affordability (using median household income), given Loudoun ranking as first in the United States (and leading the DC Metro region by far), Loudoun’s real estate taxes are and would be likely to remain among the most affordable in the region.

In addition, the model illustrates that the additional average homeowner real property tax paid would represent only a fraction of the positive impact the 1% Growth Choice could have on existing property revaluation rates and the very desirable goal of building higher homeowner real property equity. Model projections suggest, for example, that the average property valuation per parcel would already in 2030 reach around \$636,000 versus about \$550,000 for the higher growth plan proposals.

Finally, as regards Loudoun’s real property tax policy, the choice between the 1% Growth Choice and the higher growth proposals may not be between raising taxes in the former case and not doing so in the latter cases. The model suggests that budget spending under the higher growth proposals from higher growth in population and real per capita outlays would also need raises in the average homeowner real property tax over 2020-2040 to pay the bills.

## 4. Policies and Actions – Fiscal Policy Framework for the 2040 Plan

Chapter 6 of the current draft Plan on fiscal management is very weak, referencing almost exclusively short-term, process-oriented elements that provide no long-term framework within which land use planning can be done and fiscal viability ensured. To bring about the benefits of a 1% Growth Choice, Chapter 6 needs to be amended to incorporate a 2040 fiscal policy framework containing core and actions. These include:

1. **A specific 1% growth policy.** The 2040 Comprehensive Plan needs to explicitly incorporate and commit to a specific overall growth policy that would govern accompanying zoning regulations, public programs and annual budgets. Specifically,
  - a. The Plan should incorporate an overarching policy to achieve a 1% per year annual average growth rate in total housing units over FY2020-FY2040.
2. **Transitional targets over FY2020-FY2030 to achieve growth targets.** Specifically, these should include:
  - b. Biennial zoning regulations and intermediate permitting targets for the builddown of housing development in the SPA, TPA and RPA;
  - c. Biennial indicative targets reflecting a progressive shift in the share of sources of real taxable property valuation from a majority derived from new development to a majority from existing revaluation of real property; and
  - d. From FY2025, a gradual resumption of the of real property tax rates as housing builds down to help meet future budget expenditure growth.
3. **Fiscal transparency.** The draft 2040 Plan does not include estimates of its public costs nor how to pay for it. Chapter 6 needs to include a summary of the *indicative* public operating and capital investment costs associated with it and a fiscal revenue strategy that includes the impact on County residents.
4. **Compliance with established Fiscal Policy.** The current draft 2040 Plan has been prepared without regard to the County’s fiscal circumstances and policies. It is essential that its adoption and implementation fall within established policies which, among other things, ensure that current expenditures are met with current revenues and that new external indebtedness is consistent with market creditworthiness standards. The current draft of the Plan (March 13, 2019), states that “The County will link the goals of the BOS adopted Fiscal Policy and the County’s Comprehensive Plan.” Specifically,
  - e. Chapter 6, Policy 8 of the draft Plan should be amended to say that “The Comprehensive Plan will be adopted and implemented within the County’s Fiscal Policy (of December 17, 1984 and as revised through January 6, 2016)”.
  - f. It should also be amended to reconfirm explicitly the application to Plan implementation of the current debt capacity parameters in the Fiscal Policy.

5. **Expenditure Management.** Under this transition, as per the County’s integrated approach to land use and fiscal management, ensure that growth in overall total appropriations budgets is reduced in a manner consistent with the lower demographic pressures resulting from this housing policy. Given the County’s past extraordinary public spending growth rates, the BOS should establish a Spending Affordability Committee as part of the County’s Advisory Boards, Commissions and Committees. This instrument is found already in other DC Metro area jurisdictions (Montgomery, Baltimore, Howard and Prince George Counties) and would be an important instrument to formulate a sustainable revenue strategy and set guidelines on expenditure ceilings to ensure fiscal balance.
6. **Quality of life program package.** The 2040 Plan needs to incorporate and commit to frontloading over FY2020-FY2030 a package that will substantially step up in real terms the County’s programs to advance toward the goal of being Number 1 in quality of life. This needs to embrace operational upgrading of health and family services, a PDR/TDR program to transfer development to areas where it is planned and with better infrastructure, workforce housing, library, parks and Emerald Ribbons trails network, recreation and culture programs. It should include capital investments to eliminate the current deficits in community-related facilities and the financing of property conservation and protection.
7. **Revenue diversification.** The current 2040 Plan draft calls for actions that “seek further revenue diversification to increase fiscal stability and thereby mitigate tax burdens on Loudoun taxpayers.” It is essential to clarify that “diversification” is not (1) another way of saying we must prioritize new development, or (2) unduly favor certain sources of such development, such as data centers, to achieve it. Specifically
  - g. Chapter 6, Policy 8 should be amended to say that “The County will continue to ensure the County’s diversified sources of revenue to maintain fiscal stability.”
  - h. It should also strengthen this provision to ensure that significant dependence of General Fund revenues upon any one source is limited.
8. **Sustainable tax revenue policy** – To ensure a sustainable fiscal future, the County needs to commit itself to alleviating its unhealthy reliance on new development of the tax base to pay for the majority of the growth in its bills. Under the above-mentioned transition, the BOS commit in the 2040 Plan to replace the current ‘equalized tax rate’ real property tax policy with a sustainable fiscal revenue policy. This new policy would be phased in from about FY2025. Specifically,
  - i. Chapter 6, Policy 8 should include a new policy provision stating that “The County will establish and maintain a sustainable revenue structure derived primarily from its existing taxable residential and non-residential property valuation. It shall not be substantially dependent upon the development of new County properties to meet the growth in County operational and capital expenditures.”

**Simplified Fiscal Planning Model – Description and Assumptions**

A simplified fiscal planning model has been devised to help express in numerical terms this 1% Choice and to compare it with Medium Scenario and High Scenarios. The model produces a variety of projections and indicators over 2020-2040 in 5-, 10- and 20-year increments on County demographics, public expenditures and revenues, property valuation, homeowner tax burden and public external debt. It incorporates variables for (1) housing unit volumes, types and timing, (2) low and high business development scenarios (including data centers), (3) differing property market valuation rates, (4) government operational and capital expenditure levels, and (5) property tax policies.

New housing units by type is the primary driver of model projections. It uses the existing County-approved housing pipeline for the “1% Growth Choice”. It uses the Kimley Horn *Market Analysis*, as incorporated in the “Medium Growth” (scenario 3) and “High Growth” (scenario 4) in the current March 13, 2019 draft Plan and recent TischlerBise Fiscal Impact Update of February 1, 2019. Projected population and school enrollment are based on housing type, using the parameters in the 2017 Fiscal Impact Committee (FIC) Guidelines.

The model does not aim to be a profound replication of the County’s complex fiscal system. Its descriptions and comparisons should be understood as orders of magnitude. However, the model is based on actual parameters and County guidelines, as detailed below and in Annex 1, and is contextualized by 2000 – 2018 actual data. Some planning parameters, such as those for County subdistricts, are not utilized on the understanding that more detailed modeling is unlikely to alter the thrust of the conclusions drawn.

**Simplified Fiscal Planning Model  
Assumptions for 1% Growth Option and Higher Growth 2040 Plans**

<b>DEMOGRAPHICS</b>		
	<b>1% Growth Option</b>	<b>Higher growth Plan proposals</b>
New Housing Units		
Amount	Approved pipeline only– ref. Staff memo of March 13, 2018	<i>Market Analysis</i> of Kimley-Horn and draft Plan proposals of 3/13/2019
Housing Type	Per approved pipeline – ref. Staff memo of March 13, 2018	Per Kimley-Horn and draft Plan proposals of 3/13/2019
Timing	Completed by 2030	Through 2040
Initial Valuation	Per 2017 FIC Guidelines & updated to 2018	Per 2017 FIC Guidelines & updated to 2018
Population	Per 2017 FIC Guidelines <ul style="list-style-type: none"> <li>• Single family detached 3.78/u</li> <li>• Single family attached 3.09/u</li> <li>• Multi-family attached 1.97/u</li> </ul>	Per 2017 FIC Guidelines <ul style="list-style-type: none"> <li>• Single family detached 3.78/u</li> <li>• Single family attached 3.09/u</li> <li>• Multi-family attached 1.97/u</li> </ul>
School enrollment	Per 2017 FIC Guidelines <ul style="list-style-type: none"> <li>• Single family detached 1.07/u</li> <li>• Single family attached 0.69/u</li> <li>• Multi-family attached 0.23/u</li> </ul>	Per 2017 FIC Guidelines <ul style="list-style-type: none"> <li>• Single family detached 1.07/u</li> <li>• Single family attached 0.69/u</li> <li>• Multi-family attached 0.23/u</li> </ul>
Vehicle registration	1 vehicle per 1 new resident	1 vehicle per 1 new resident

<b>NEW HOUSING UNITS by Area and Type - 1% GROWTH OPTION</b>								
	<b>Additional Units Over 2020-2040</b>						<b>2040 Total Units</b>	<b>Annual Growth Rate</b>
	<b>2018 Existing Units</b>	<b>Approved Pipeline</b>	<b>Zoned - But Not Approved</b>	<b>PC Market Additions</b>	<b>PC TPA Additions</b>	<b>Total New Units</b>		
<b>Total</b>	<b>134,783</b>	<b>29,163</b>	0	0	0	<b>29,163</b>	<b>163,946</b>	<b>0.98%</b>
of which: by policy area								
SPA and UPA	88,502	22,346				22,346	110,848	1.15%
TPA	6,296	2,603				2,603	8,899	1.88%
RPA	14,505	1,190				1,190	15,695	0.37%
JLMA	5,091	809				809	5,900	0.72%
Towns / Airport	20,389	2,215				2,215	22,604	0.49%
	<b>Existing Units</b>	<b>Approved Pipeline</b>	<b>Zoned - But Not Approved</b>	<b>PC Market Additions</b>	<b>PC TPA Additions</b>	<b>Total New Units</b>	<b>Total Units</b>	<b>Annual Growth Rate</b>
<b>Total</b>	<b>134,783</b>	<b>29,163</b>	0	0	0	<b>29,163</b>	<b>163,946</b>	<b>0.98%</b>
of which: by Housing Type								
Single Family Detached	68,394	6,432				6,432	74,826	0.43%
Single Family Attached	41,890	5,632				5,632	47,522	0.61%
Multi Family & Group Quarters	24,499	17,099				17,099	41,598	3.17%

Note - Total existing units estimated per staff report of July 18, 2018 and housing type estimated per updates of 2017 FIC Guidelines.

Note - "Pipeline" figure from Attachment 1 of Staff memo of March 18, 2018 on Fiscal Impact Analysis. Substantially equivalent to RGP figure of 29,465 quoted in "Key Issue: Residential Market Demand vs Loudoun

Note - "pipeline" breakdown by housing type differs from draft Loudoun 2040 differs from "Pipeline", adding 8,728 more houses, substantially all as single family detached: SFD 12,144, SFA 7160, MF 18888 = 38,192

NOTE - 2019 is estimated as identical to 2020 projected

<b>NEW HOUSING UNITS - TIMING by Housing Type - 1% GROWTH OPTION</b>									
	<b>Total</b>	<b>% Total</b>	<b>Avg Annual</b>	<b>SFD</b>	<b>SFD % Total</b>	<b>SFA</b>	<b>SFA % Total</b>	<b>MF</b>	<b>MF % Total</b>
2020-24	18,837	61.3%	3,767	5,889	60.0%	2,748	70.0%	10,200	60.0%
2025-29	11,904	38.7%	2,381	3,926	40.0%	1,178	30.0%	6,800	40.0%
2030-34	-	0.0%	-	-	0.0%	-	0.0%	-	0.0%
2035-39	-	0.0%	-	-	0.0%	-	0.0%	-	0.0%
	<b>30,740</b>	<b>100.0%</b>	<b>1,537</b>	<b>9,815</b>	<b>100%</b>	<b>3,925</b>	<b>100%</b>	<b>17,000</b>	<b>100%</b>

NEW HOUSING UNITS by Area and Type - Medium Growth 2040 PLAN								
	2018		Additional Units Over 2020-2040				2040	Annual
	Existing	Approved	Zoned - But	PC Market	PC TPA	Total	Total	Growth
	Units	Pipeline	Not Approved	Additions	Additions	New Units	Units	Rate
<b>Total</b>	<b>134,783</b>	<b>29,163</b>	<b>19,176</b>	<b>11,781</b>	<b>21,000</b>	<b>81,120</b>	<b>215,903</b>	<b>2.74%</b>
of which: by policy area								
SPA and UPA	88,502	22,346	3242	10,381		35,969	124,471	1.85%
TPA	6,296	2,603	2483	1400	21,000	27,486	33,782	19.84%
RPA	14,505	1,190	10706			11,896	26,401	3.73%
JLMA	5,091	809	1171			1,980	7,071	1.77%
Towns / Airport	20,389	2,215	1,574			3,789	24,178	0.84%
	Existing	Approved	Zoned - But	PC Market	PC TPA	Total	Total	Annual
	Units	Pipeline	Not Approved	Additions	Additions	New Units	Units	Growth Rate
<b>Total</b>	<b>134,783</b>			<b>60,100</b>	<b>0</b>	<b>60,100</b>	<b>194,883</b>	<b>2.03%</b>
of which: by Housing Type								
Single Family Detached	68,394			20,000		20,000	88,394	1.33%
Single Family Attached	41,890			20,000		20,000	61,890	2.17%
Multi Family & Group Quarters	24,499			20,100	-	20,100	44,599	3.73%

Note - Total existing units estimated per staff report of July 18, 2018 and housing type estimated per updates of 2017 FIC Guidelines.

Note - "Pipeline" figure from Attachment 1 of Staff memo of March 18, 2018 on Fiscal Impact Analysis. Substantially equivalent to RGP figure of 29,465 quoted in "Key Issue: Residential Market Demand vs Loudoun 2040"

Note - "pipeline" breakdown by housing type differs from draft Loudoun 2040 differs from "Pipeline", adding 8,728 more houses, substantially all as single family detached: SFD 12,144, SFA 7160, MF 18888 = 38,192

NOTE - 2019 is estimated as identical to 2020 projected

NEW HOUSING UNITS - TIMING by Housing Type - Medium Growth 2040 PLAN							
	DEMAND - Medium Case					PC TPA	Total
	2020-2025	2025-2030	2030-2035	2035-2040	Total Demand		New Units
SFD	5,580	5,880	5,860	5,150	22,470	10,500	32,970
SFA	4,650	5,060	4,930	4,120	18,760	10,500	29,260
MF	5,270	5,390	4,620	3,610	18,890		18,890
<b>Total</b>	<b>15,500</b>	<b>16,330</b>	<b>15,410</b>	<b>12,880</b>	<b>60,120</b>	<b>21,000</b>	<b>81,120</b>
5-year share	26%	27%	26%	21%	100%		

Source: Market Analysis Forecasts: Residential Development, Kimley-Horn, January 2018, p 2-71

HOUSING UNITS - High Growth 2040 PLAN								
	2018		Additional Units Over 2019-2040				2040	Annual
	Existing	Approved	Zoned - But	PC Market	PC TPA	Total	Total	Growth
	Units	Pipeline	Not Approved	Additions	Additions	New Units	Units	Rate
<b>Total</b>	<b>134,783</b>	<b>29,163</b>	<b>19,176</b>	<b>23,941</b>	<b>29,400</b>	<b>101,680</b>	<b>236,463</b>	<b>3.43%</b>
of which: by policy area								
SPA and UPA	88,502	22,346	3242	22541		48,129	136,631	2.47%
TPA	6,296	2,603	2483	1400	29,400	35,886	42,182	25.91%
RPA	14,505	1,190	10706			11,896	26,401	3.73%
JLMA	5,091	809	1171			1,980	7,071	1.77%
Towns / Airport	20,389	2,215	1,574			3,789	24,178	0.84%
	Existing	Approved	Zoned - But	PC Market	PC TPA	Total	Total	Annual
	Units	Pipeline	Not Approved	Additions	Additions	New Units	Units	Growth Rate
<b>Total</b>	<b>134,783</b>			<b>72,280</b>	<b>29,400</b>	<b>101,680</b>	<b>236,463</b>	<b>3.43%</b>
of which: by Housing Type								
Single Family Detached	68,394			27,010	14,700	41,710	110,104	2.77%
Single Family Attached	41,890			22,580	14,700	37,280	79,170	4.05%
Multi Family & Group Quarters	24,499			22,690	-	22,690	47,189	4.21%

Note - Total existing units estimated per staff report of July 18, 2018 and housing type estimated per updates of 2017 FIC Guidelines.

Note - "Pipeline" figure from Attachment 1 of Staff memo of March 18, 2018 on Fiscal Impact Analysis. Substantially equivalent to RGP figure of 29,465 quoted in "Key Issue: Residential Market Demand vs Loudoun 2040"

Note - "pipeline" breakdown by housing type differs from draft Loudoun 2040 differs from "Pipeline", adding 8,728 more houses, substantially all as single family detached: SFD 12,144, SFA 7160, MF 18888 = 38,192

NOTE - 2019 is estimated as identical to 2020 projected

NEW HOUSING UNITS - TIMING by Housing Type - High Growth 2040 PLAN							
	DEMAND - Medium Case					PC TPA	Total
	2020-2025	2025-2030	2030-2035	2035-2040	Total Demand		New Units
SFD	6,460	7,240	7,290	6,020	27,010	14,700	41,710
SFA	5,390	6,230	6,140	4,820	22,580	14,700	37,280
MF	6,100	6,630	5,750	4,210	22,690		22,690
<b>Total</b>	<b>17,950</b>	<b>20,100</b>	<b>19,180</b>	<b>15,050</b>	<b>72,280</b>	<b>29,400</b>	<b>101,680</b>
5-year shares	25%	28%	27%	21%	100%		

Source: Market Analysis Forecasts: Residential Development, Kimley-Horn, January 2018, p 2-71

<b>Simplified Fiscal Planning Model</b>		
<b>Assumptions for 1% Growth Option and Higher Growth 2040 Plans</b>		
<b>GENERAL FUND</b>	<b>1% Growth Option</b>	<b>Higher growth Plan proposals</b>
<b>Markets</b>		
<b>Existing Real Property Valuation</b>		
Residential	3.0% LT rate of 2017 FIC Guideline	1.4% FY2010-FY2018 historical avg
Commercial and Industrial	2.0% LT rate of 2017 FIC Guideline	2.0% inflation rate
Other	2.0% LT rate of 2017 FIC Guideline	2.0% inflation rate
<b>New Development</b>		
<b>Real Residential Property Taxes</b>		
Residential housing units	Build current pipeline + 29,200 units	Build Medium Case +60,100 units; Build High Case +84,400 ;see tables above in this Annex.
Parcels	2018 Actual + models new housing units	2018 Actual + models new housing units
Commercial & industrial property		
Data Centers	Add 2.5 million ft 2 per year thru 2022, then decline per 2017 FICG	Add 2.5 million ft 2 per year thru 2022, then decline per 2017 FICG
Data centers value / ft 2 in 2018	\$249	\$249
Data centers value / ft 2 annual increase	Commercial revaluation rate = 2% inflation rate	Commercial revaluation rate = 2% Inflation rate
Other Business	Add 1.1 million ft2 / year linear through 2040, totaling 25 million total new ft 2	Add 1.8 million ft 2 / year linear through 2040, totaling 41 million total new ft 2
Other business value / ft 2 in 2018	\$163	\$163
Other business value / ft 2 annual increase	Commercial revaluation rate = Inflation	Commercial revaluation rate = Inflation
Other real property	At other existing property revaluation rate	At other existing property revaluation rate
<b>Personal Property Taxes</b>		
Computer equipment - existing	Annual replacement	Annual replacement
Data center new computer equipment	90% of all computer PPT; Growth at data business development rates	90% of all computer PPT; Growth at data center business development rates
Residential & Business computer equipment - except data centers	10% of total computer revenues; growth at new business valuation growth rate	10% of total computer revenues; growth at new business valuation growth rate
Vehicle category growth rate	At population growth rate	At population growth rate
Furniture and fixtures, other	At growth in New Business valuation rate	At growth in New Business valuation rate
Other PPT Revenues	At growth in New Business valuation rate	At growth in New Business valuation rate
<b>Other General Fund Revenues</b>		
Penalties & Interest revenues	At growth in all property revenues	At growth in all property revenues
Local non-property taxes (sales and use taxes, other)	At commercial property valuation growth rate	At commercial property valuation rate
Other local sources (permits, chages for service, other)	At 2% inflation rate + population growth rate	At 2% inflation rate + population growth rate
VA and FED aid	At current FY2019 level	At current FY2019 level
<b>Tax rate policies</b>		

Real property tax rate per \$100 of assessed value	FY2019 rate – no change in thru 2024. Real milage rate declines by 2% per year in real terms; FY2026-30 +2% nominal per year, no change in real rate. FY2031-2040 +2.5% nominal, increase of 0.5% per year real.	Per BOS policy - reduce by equalization rate to maintain stable nominal tax bill and declining in real terms.
Real Property Taxable valuation	Tax revenues based on valuation on January 1 of previous fiscal year	Tax revenues based on valuation on January 1 of previous fiscal year
“Other” real property taxable valuation	Includes agriculture and multi-property residential; excludes SCC and exempt	Includes agriculture and multi-property residential; excludes SCC and exempt
Personal property tax rate	No change - \$4.20 per \$100 valuation	No change - \$4.20 per \$100 valuation

FIC= LC Fiscal Impact Committee

<b>Simplified Fiscal Planning Model</b>		
<b>Assumptions for 1% Growth Option and Higher Growth 2040 Plans</b>		
	<b>1% Growth Option</b>	<b>Higher growth Plan proposals</b>
<b><i>Annual Appropriations Budget</i></b>		
<b>Government Operations</b>		
General operations – except Quality of Life expenditures – 71% of total in 2018	At inflation rate, reducing per capita operational expenditures	At inflation rate + ½ population growth rate, reducing per capita operational expenditures
General operations – Quality of Life – family services, health, mental health, substance abuse & development, library, parks and rec, community services – 29% of total in 2018	Increase by inflation + population growth + 4% real growth	Increase by inflation + 1%, continuing decline in real terms
<b>School operations</b>		
Operating expenditures / pupil	+ 4% per year	+ 4% per year
Other Government operations	At inflation rate, reducing per capita operational expenditures	At inflation rate + ½ population growth rate, reducing per capita operational expenditures
<b>Debt service</b>		
Net tax supported debt	< 3% of property valuation (current policy)	< 3% of property valuation (current policy)
Debt service: net debt	12% of net tax supported debt	12% of net tax supported debt
<b><i>Capital Improvement Budget</i></b>		

<b>FY2019 – FY2024 Total Six-Year CIP</b>		
Model closely tracks total Adopted Six-Year CIP in total and distribution among general capital projects, transportation and school projects, and builds in inflation factor: \$2,677 million model vs. \$2,405 million in FY2019 Adopted Budget. Adopted CIP uses population growth forecast substantially consistent with those used to develop the FY2021-FY2030 Capital Needs Assessment. Assumptions are the same per capita for both scenarios.		
<b>CIP annual appropriations contribution</b>		
Share of Total CIP	>10% of Total CIP (current policy)	>10% of Total CIP (current policy)
Capital Projects Fund - except Trans.	As FY2019-24 CIP - Initial \$1,500 per capita (\$250 per year) + 2% inflation	As FY2019-24 CIP - Initial \$1,500 per capita (\$250 per year) + 2% inflation
Capital Projects Fund – transportation	As FY2019-24 CIP - Initial \$2,400 per capita (\$400 per year) + 10% per year thru 2040	As FY2019-24 CIP - Initial \$2,400 per capita (\$400 per year) + 10% per year thru 2040
School Capital Projects Fund	As FY2019-24 CIP - Initial \$6,600 per pupil (\$1,100 per year) + 5%	As FY2019-24 CIP - Initial \$6,600 per pupil (\$1,100 per year) + 5%
<b>CIP Funding Sources</b>		
Debt financing has represented 55% on average over FY15-19, General Fund 14%, Other 31%. The current FY2019-24 CIP is financed by 16% local tax funding and 54% debt. The remainder is financed primarily by the Northern VA Transportation Authority (NVTA) – 22% of the total CIP, intergovernmental assistance, user fees and proffers (only 1%). Assumptions represent conservative modest increase in self-reliance to ensure County debt outstanding and debt service remain within current Fiscal Policy Guidelines.		
General Revenue Fund	19% of CIP	19% of CIP
Debt funding	55% of CIP	55% of CIP
Other (NVTA, Proffers, CMAQ, RSTP, VA)	26% of CIP	26% of CIP
<b>NOTES</b>		
Projections are in current terms – implicit inflation rate is 2% per year for both Low and High Cases.		
Model builds increased valuation from previous year into valuation of next year, to which annual revaluation rate is applied for each subsequent year.		
New property - residential, business and other - becomes part of 'existing' tax base in the next year.		
Personal property tax - assumes replacement of taxable valuation for existing equipment		