New Comprehensive Plan Review Committee

Loudoun County

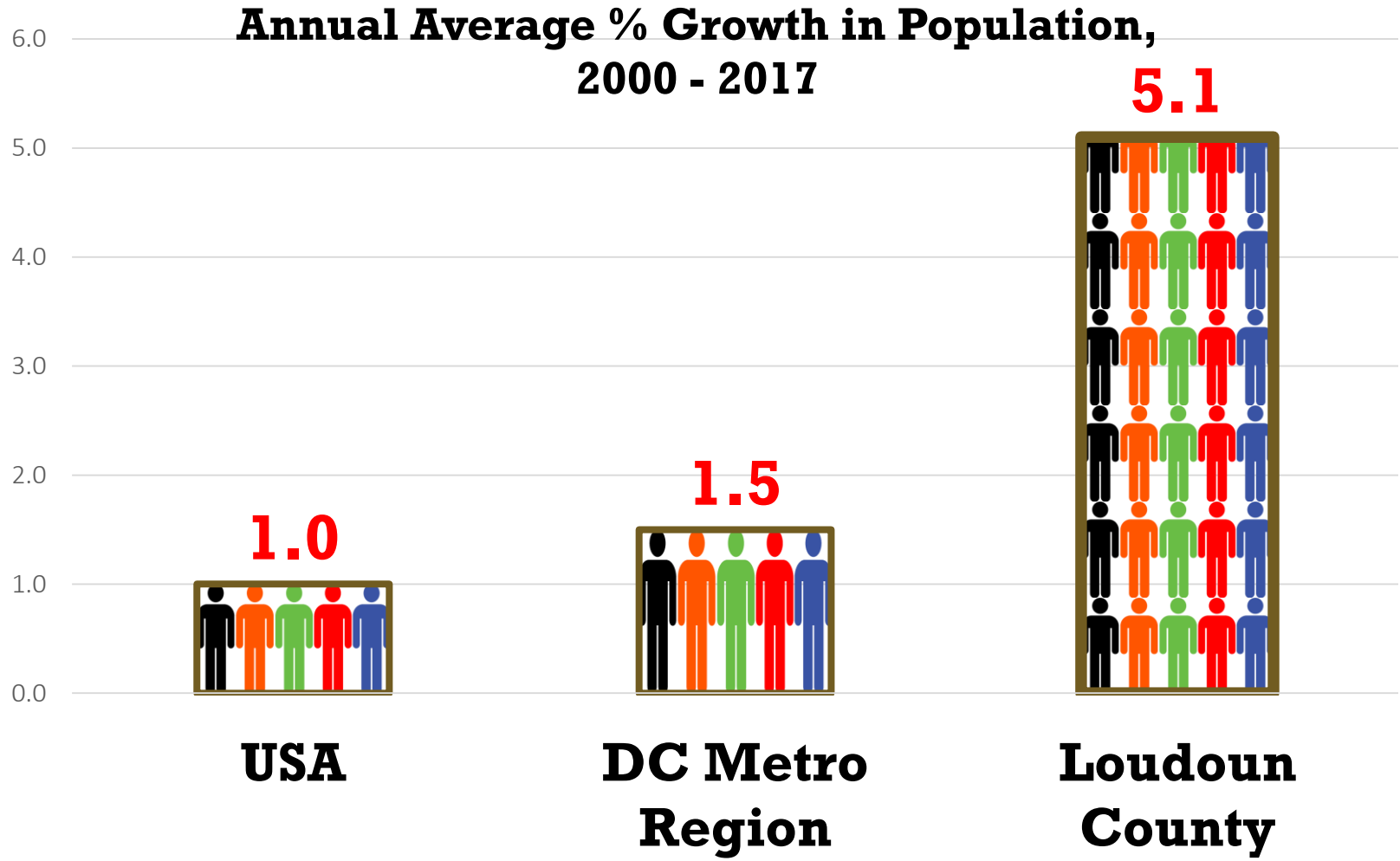
Preservation and Conservation Coalition

Envisioning Loudoun - 2040

Understanding the Numbers

RGP, Stakeholder, Planning Commission
TischlerBise Fiscal Impact Report
COMPARISONS & CHRONOLOGY

POPULATION GROWTH in Perspective:



Loudoun absorbing more than its fair share of REGIONAL GROWTH:

Five times US growth rate;
Three times the DC area

Growth rate is not sustainable.

* Population density comparison to Fairfax and Montgomery counties to Suburban & Transition Planning areas in Loudoun.

"Market Demand" – *Actual Definition*

Table 3. Market Analysis* and RGP Comparison (2021 – 2040)

	Housing Units			
	SFD	SFA	MF	Total
Market Demand	22,470	18,760	18,890	60,120
RGP Forecast	10,510	4,140	14,180	29,470
Difference	11,960	14,620	4,710	30,650

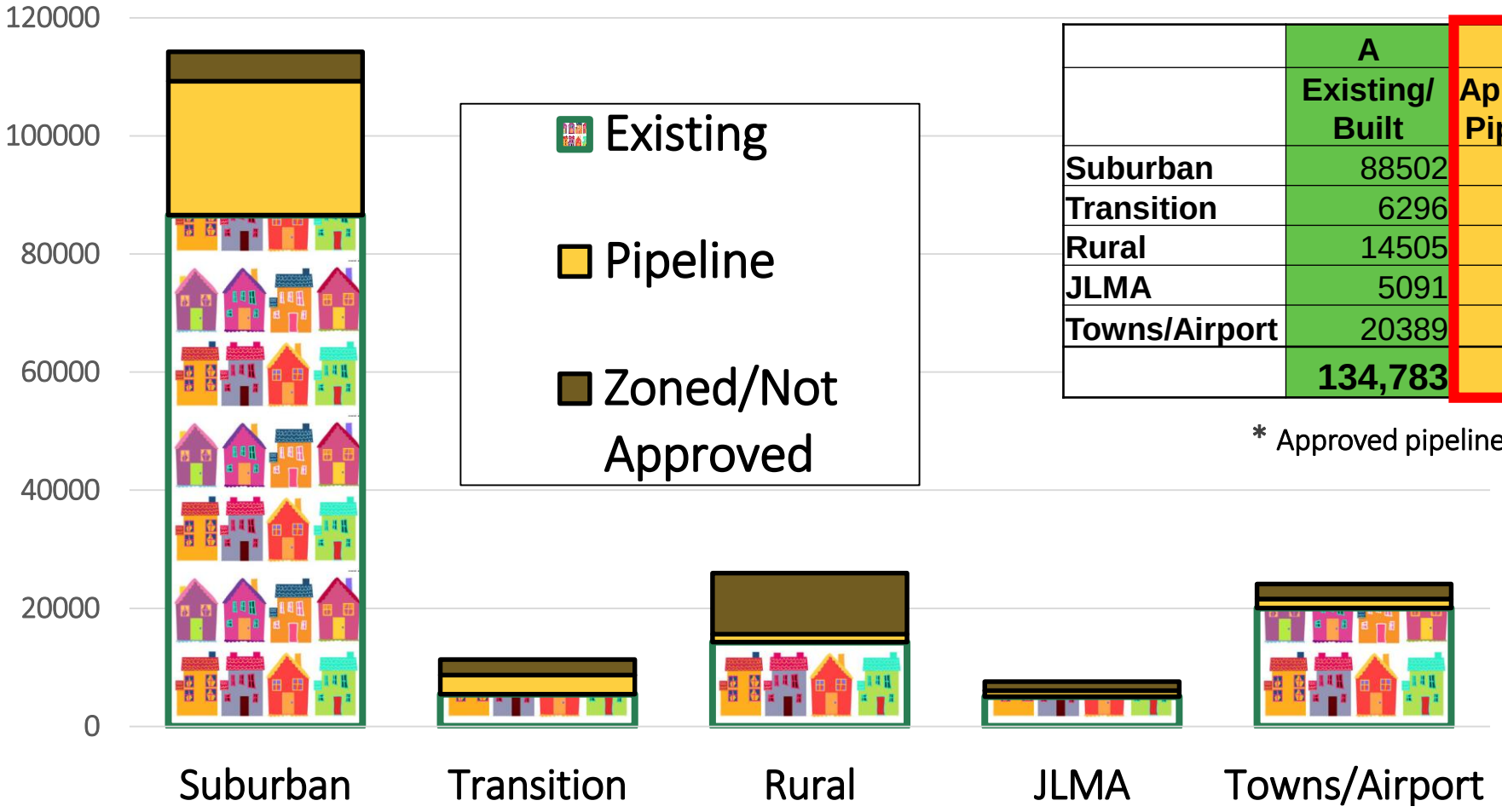
*Market Analysis conducted by Kimley Horn represent potential demand unconstrained by policy decisions, land availability, and public sentiment that could impact future growth. They focus solely on what the real estate market would support from a demand perspective through 2040 with no barriers to development.

THE FINE PRINT:

**Market Analysis conducted by Kimley Horn represent potential demand unconstrained by policy decisions, land availability, and public sentiment that could impact future growth.*
They focus solely on what the real estate market would support from a demand perspective through 2040 with no barriers to development.

Understanding the Numbers: JULY, 2017 Snapshot

Residential Units at Build Out by Revised General Plan (RGP) Policy Area



	A	B	C	D	E
	Existing/ Built	Approved Pipeline*	Zoned / Not Approved	Sub-Total =B+C	TOTAL =A+D
Suburban	88502	22346	3242	**25588**	**114090**
Transition	6296	2603	2483	**5086**	**11382**
Rural	14505	1190	10706	**11896**	**26401**
JLMA	5091	809	1171	**1980**	**7071**
Towns/Airport	20389	2215	1574	**3789**	**24178**
	134,783	**29,163**	**19,176**	**48,339**	**183,122**

* Approved pipeline = Approved lots + By-Right Zoning Approved

RGP Snapshot:

~50K Houses approved, by-right & zoned

= ~150,000 additional population

Source: BOS Staff Report and PPT, July 19, 2018

Equating Housing to Population Growth – Revised

CHRONOLOGY: RGP, Forecasted New Housing Unit Estimates & "Market Demand" 2040

Forecasted Growth 2021-2040	Existing Built (July 2017)	RGP New Units@ 2040[1]	RGP 2040 TOTAL	Revised Stakeholder May 7, 2018[2]	Revised Stakeholder May 7, 2018 TOTAL[2]	TischlerBise Med. Scenario July 6, 2018[3]	TischlerBise Med. Scenario July 6, 2018[3] Total	Planning Commission Proposed Med. Scenario[4] 9/27/18	Planning Commission Proposed Med. Scenario[4] 9/27/18	Oct. 23rd Med. Scenario[5] Planning Commission	Oct. 23 Med. Scenario[5] Planning Commission	TischlerBise Med. Scenario Feb.1 2019[6]	TischlerBise Med. Scenario Feb.1 2019 TOTAL[6]	Loudoun 2040 March 13th[7] 4/3/19 Rpt	Loudoun 2040 March 13th TOTAL[7] 4/3/19 Rpt	Kimley Horn "Market Demand"[8]	Kimley Horn "Market Demand" TOTAL[8]
Suburban Policy Area and Urban Policy Areas	88,502	16,250	104,752			35,725	124,227			27,660		38,968		**27,660**			
Transition Policy Area	6,296	3530	9,826			7,559	13,855			17,640		20,897		**17,640**			
Rural Policy Area, Towns, and JLMAs	39,985	9,690	49,675			12,327	52,312			11,060		13,923		**11,060**			
Total Countywide Units	**134,783**	**29,470**	164,253	**38,190**	**172,973**	**55,611**	**190,394**	78,066	212,849	56,360	191,143	**73,788**	**208,571**	**56,360**	191,743	**60,120**	**194,903**
Difference from RGP				8,720				48,596		26,890		44,318		26,890		30,650	
Non-Res Sq Feet (Mil)		**55.7**				**59.4**				**50.0**		**66.4**		**73.6**			
Est. Population Growth		**88,410**		**114,570**		**166,833**		**234,198**		**169,080**		221364		**169,080**		**180,360**	
Est. Total 2040 Population	~400,000		488,410		514,570		566,833		634,198		569,080		621,364		569,080		580,360

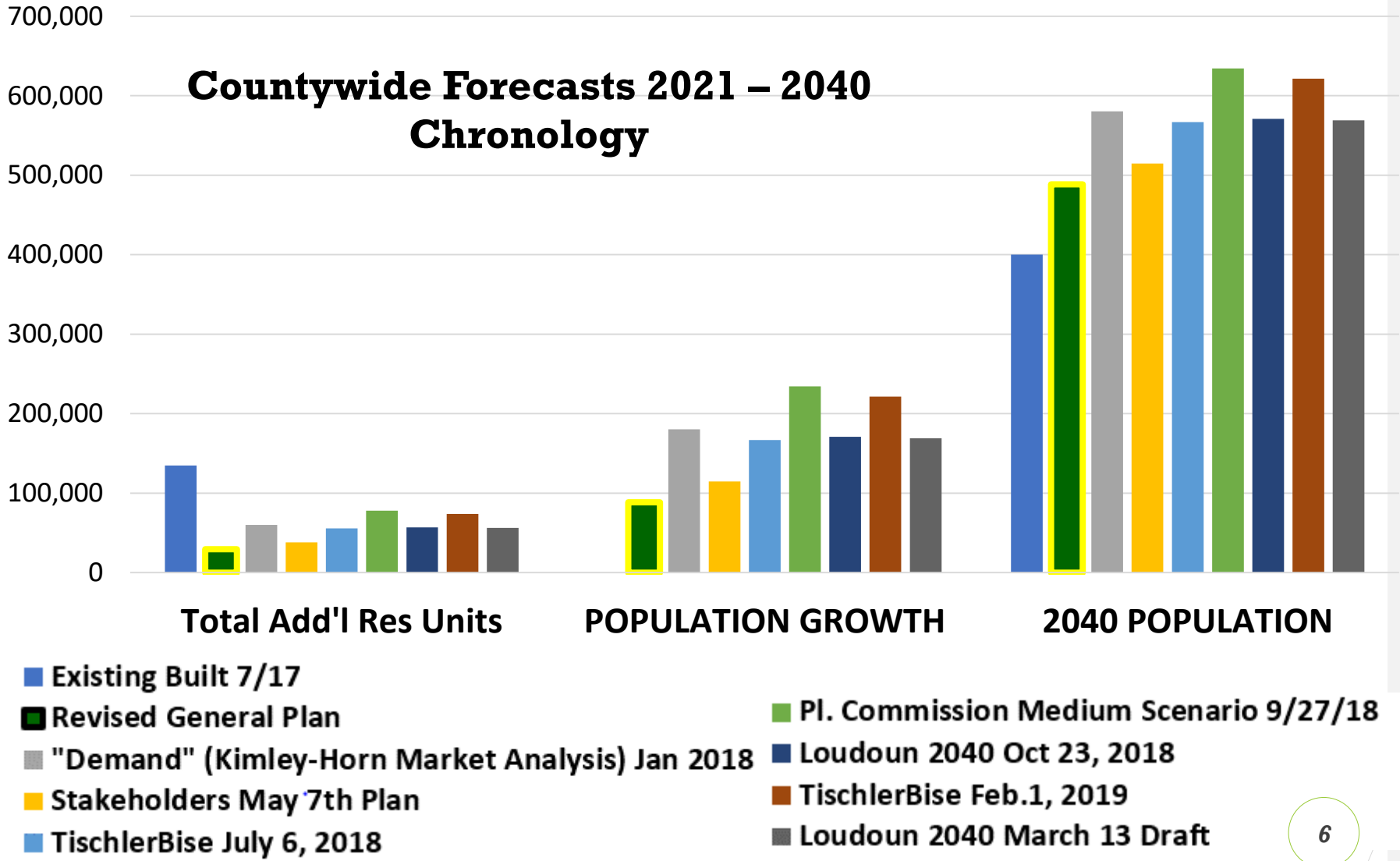
How Much can Loudoun Afford to Grow?

[1]PC Draft to BOS, 3/21/2019, pp.9,11 (~90% RGP Build from 183K)
[2]Staff Rpt to BOS, 7-19-18-(May7 StakeholderDraft with constraint assumptions)
[3]TischlerBise 7/6/2018 (2017-2040) – Stakeholder Committee Forecast
[4]Planning Commission, Proposed 21K to TPA, 9/27/18 TLUC PPT
[5]PlanningCommWorksession-2-7-2019 PPT
[6] TischlerBise 2/1/2019 – Planning Commission Forecast
[7] Loudoun 2040 Planning Comm. Draft, 3/13/19, p.I-7
[8]KimleyHorn Market Analysis, Jan. 2018

Housing to Population Growth – Revised Chronology View

	Total Add'l Res. Units	Population GROWTH	Est. 2040 Population
Existing Built July, 2017	134,783		~400,000
Revised General Plan (RGP)	29,470	88,410	488,410
"Market Demand" (Kimley-Horn Market Analysis, Jan., 2018)	60,120	180,360	580,360
Stakeholders Cte May 7, 2018 Draft	38,190	114,570	514,570
TischlerBise July 6, 2018 (Stakeholder's)	55,611	166,833	566,833
Pl. Commission initial Medium Scenario 9/27/18	78,066	234,198	634,198
Loudoun 2040 Oct 23, 2018 Draft	56,960	170,880	570,880
TischlerBise Feb.1, 2019 (Pl. Commission)	73,788	221,364	621,364
Loudoun 2040 March 13, 2019 Draft	56,360	169,080	569,080

How Much can Loudoun Afford to Grow?



Housing Type Report Comparisons

Forecasted Growth 2021-2040	Existing Built (July 2017)	RGP New Units@ 2040[1]	Revised Stakeholder May 7, 2018[2]	TischlerBise Med. Scenario July 6, 2018[3] Stakeholders	Oct. 23rd Med. Scenario[5] Planning Commission	TischlerBise Med. Scenario Feb.1 2019[6] PI Commission	Loudoun 2040 March 13th[7] 4/3/19 Rpt	KimleyHorn "Market Demand"[8]
July 19, 2018 Staff	Report	as of 5/2018				Feb. 1 2019 PC	Memo	
SFD	5,433	10,513	12,144		20,260		20,260	22,470
SFA	4,934	4,144	7,160		17,420		17,420	18,760
MF	18,796	14,808	18,888		18,690		18,690	18,890
TOTAL	**29,163**	**29,465**	**38,192**		**56,370**		**56,370**	**60,120**
Diff from RGP			***8,727***		*26,905*		*26,905*	***30,655***
				TischlerBise	7/6/2018	TischlerBise	2/1/2019	
SFD Suburban		11,177		12,808		20,923		
SFD Rural		4,790		4,790		4,790		
SFA		8,404		11,420		21,683		
MFA		14,481		14,481		14,484		
MFA-Urban		2,176		2,176		2,176		
MF Stacked		2,506		6,586		6,382		
Group		1,758		3,350		3,350		
		45,292		**55,611**		**73,788**		
Mkt Rate		41,647		51,130		67,022		
Affordable Units		3,645		4,481		6,766		
		45,292		**55,611**		**73,788**		

[1] PC Draft to BOS, 3/21/2019, pp.9,11 (~90% RGP Build from 183K)
[2] Staff Rpt to BOS, 7-19-18-(May7 StakeholderDraft w/ constraints)
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[8] KimleyHorn Market Analysis, Jan. 2018

Report Comparisons:
RGP to TischlerBise July 2018, Feb. 2019

Forecasted Growth 2021-2040	RGP New Units@ 2040[1]	TischlerBise Med. Scenario July 6, 2018[3] Stakeholders	TischlerBise Med. Scenario Feb.1 2019[6] PI Commission	TischlerBise CHANGE	TischlerBise % Inc.
Population	122,113	148,155	208,084	59,929	40.5%
School Enrollment	22,948	28,001	41,755	13,754	49.1%
Qty Schools	18	22	33	11	50.0%
Employment	87,079	92,700	103,620	10,920	11.8%
Land Acres for Facilities	3,018	3,495	4,171	676	19.3%
Non Res Sqft				-	
Retail	5,317,762	6,601,112	9,000,309	2,399,197	36.3%
Retail Urban	294,040	328,293	328,293	-	0.0%
Other Non-Public	4,925,538	5,760,418	7,953,974	2,193,556	38.1%
Other Public	3,817,756	5,355,808	7,713,886	2,358,078	44.0%
	14,355,096	**18,045,631**	**24,996,462**	6,950,831	38.5%
			Assumes proffers & w/o CTP costs needed		
Revenue [3]	15,302	16,792	20,615	3,823	22.8%
Expenses[3]	13,216	15,150	18,218	3,068	20.3%
Net Fiscal Impact[3]	2,086	1,642	2,397	755	46.0%
Diff. from RGP		(444)	311		

[1]PC Draft to BOS, 3/21/2019, pp.9,11 (~90% RGP Build from 183K)
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[3]TischlerBise 7/6/2018 (2017-2040): Stakeholder Forecasts
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[6] TischlerBise 2/1/2019: Planning Commission Forecasts
[7] Loudoun 2040 Planning Comm. Draft, 3/13/19, p.I-7
[8]KimleyHorn Market Analysis, Jan. 2018

Report Comparisons: RGP to Stakeholder & Planning Commission Forecasts

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2021-2040	Forecasted Growth	RGP New Units @ 2040[1]	Stakeholders TischlerBise Med. Scenario July 6, 2018[3]	Oct. 23rd Med. Scenario[5] Planning Commission	PI Commission TischlerBise Med. Scenario Feb.1 2019[6]	TischlerBise CHANGE	TischlerBise % Inc.
Suburban	School Offsets (Rev Proffers)	$529,000,000	$831,000,000		$ 955,000,000	$124,000,000	14.9%
	Gen Gov Offsets (Revenue)	$490,000,000	$699,000,000		$ 827,000,000	$128,000,000	18.3%
	Land Acres for Facilities	1,644	2,068		2,076	8	0.4%
	Non-Res SqFt	45,936,233	47,075,906		49,152,160	2,076,254	4.4%
	SFD	1,255	2,220	2,130	2,945	725	32.7%
	SFA	6,089	8,863	7,800	11,582	2,719	30.7%
	MF	17,443	21,872	17,740	21,671	(201)	-0.9%
	Group	1,178	2,770		2,770	-	0.0%
		25,965	**35,725**	27,670	38,968	**3,243**	**9.1%**
Transition	School Offsets (Rev Proffers)	-	-		$ 704,000,000	$704,000,000	
	Gen Gov Offsets (Revenue)	-	-		$ 428,000,000	$428,000,000	
	Land Acres for Facilities	551	564		1,247	683	121.1%
	Non-Res SqFt	5,213,149	7,431,366		11,722,955	4,291,589	57.7%
	SFD	6,592	7,258	10,250	13,319	6,061	83.5%
	SFA	4	119	7,390	7,396	7,277	6115.1%
	MF	182	182	-	182	-	0.0%
		6,778	**7,559**	**17,640**	**20,897**	**13,338**	**176.5%**
Towns/JLMA/RPA	School Offsets (Rev Proffers)	-	-		$ 97,000,000	$97,000,000	
	Gen Gov Offsets (Revenue)	-	-		$ 55,000,000	$55,000,000	
	Land Acres for Facilities	867	947		1,082	135	14.3%
	Non-Res SqFt	4,570,513	4,903,157		5,486,145	582,988	11.9%
	SFD	8,120	8,120	7,880	9,449	1,329	16.4%
	SFA	2,311	2,438	2,230	2,705	267	11.0%
	MF	1,538	1,189	950	1,189	-	0.0%
	Group	580	580		580	-	0.0%
		12,549	**12,327**	**11,060**	**13,923**	**1,596**	**12.9%**

FISCAL RISKS Summary

FISCAL IMPACT ANALYSIS:
February, 2019 TischlerBise (PC Forecast)

- **Analysis presents four scenarios**
- **Primary comparison:**

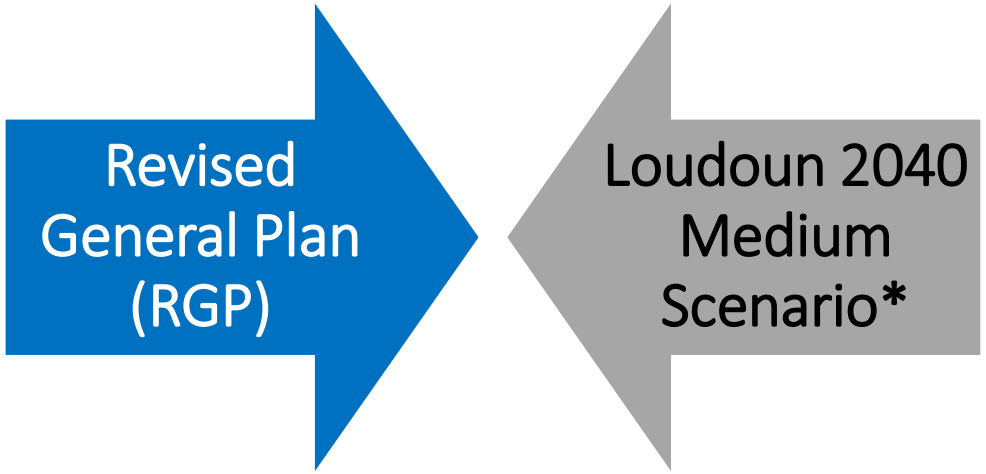
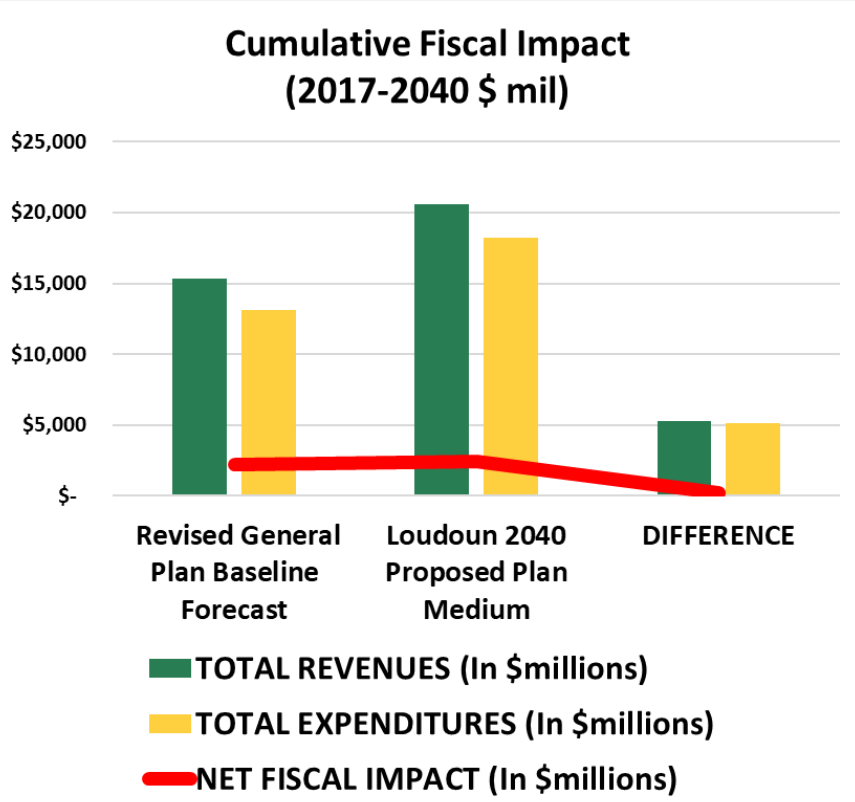


Figure 4. Countywide Cumulative Fiscal Impact

Summary of Cumulative Fiscal Impact (2017-2040) (In $millions) LOUDOUN COUNTY FISCAL IMPACT MODEL COUNTYWIDE				
Category (In $millions)	SCENARIO 1: Revised General Plan (RGP) Baseline Forecast	SCENARIO 2: Loudoun 2040 Proposed Plan Low	SCENARIO 3: Loudoun 2040 Proposed Plan Medium	SCENARIO 4: Loudoun 2040 Proposed Plan High
TOTAL REVENUES	$15,326	$ 19,409	$ 20,615	$ 22,543
TOTAL EXPENDITURES	$13,123	$ 17,259	$ 18,218	$ 20,086
NET FISCAL IMPACT	**$ 2,202**	**$ 2,149**	**$ 2,396**	**$ 2,458**

* Low and High scenarios: how much forecasts could vary if less or more development occurred and if occurred slower or faster.

Fiscal Impact Analysis: COMPARISION/RETURN



Revised General Plan (2002 amended) to Medium Loudoun 2040 - Planning Commission Plan

Summary of Cumulative Fiscal Impact (2017-2040) (In $millions) LOUDOUN COUNTY FISCAL IMPACT MODEL COUNTYWIDE				
Category	SCENARIO 1: Revised General Plan Baseline Forecast	SCENARIO 3: Loudoun 2040 Proposed Plan Medium	Difference	
TOTAL REVENUES ($mil)	$ 15,326	$ 20,615	$ 5,289	Revenue
TOTAL EXPENDITURES ($mil)	$ 13,123	$ 18,218	$ 5,095	Less Taxpayer contributions
NET FISCAL IMPACT ($mil)	**$ 2,202**	**$ 2,396**	$ 194	= Taxpayer GAIN

CONCLUSION: ***NET RETURN OF 3.8% OVER 23 YEARS***

Equates to: $ 5,000 investment in a stock in hopes of receiving a capital gain of $ 194 at the end of 23 years.

Fiscal Impact Analysis:
What Do Citizens Get for their Investment?

Figure 1. Summary of Countywide Cumulative Growth

Cumulative Growth Projection Detail. Loudoun County Fiscal Impact Model Countywide

Cumulative Years (2017-2040)	SCENARIO 1: Revised General Plan Baseline Forecast	SCENARIO 3: Loudoun 2040 Proposed Plan Medium	DIFFERENCES	
Total Residential Units	45,292	73,788	**28,496**	
Population	122,113 (522,113 Total)	208,084 (608,084 Total)	**85,971**	= New cars on roads
Total Non-Residential Sq.Ft.	55,719,895	66,361,260	**10,641,365**	= Primarily Retail & Public
Total Employment	87,079	103,620	**16,541**	
School Enrollment	22,948	41,755	**18,807**	= Hundreds of school boundary changes
School Totals	18	33	**15**	
Public Safety Buildings, Sq.ft.	170,363	258,562	**88,200**	
Libraries, Sq.ft.	73,268	124,851	**51,583**	
Public Land Acres Needed (Fig.10)	3,018	4,171	**1,153**	Sufficient for existing & new facilities?

Fiscal Impact Analysis
Non-Res Square Feet: What Kind of Jobs?

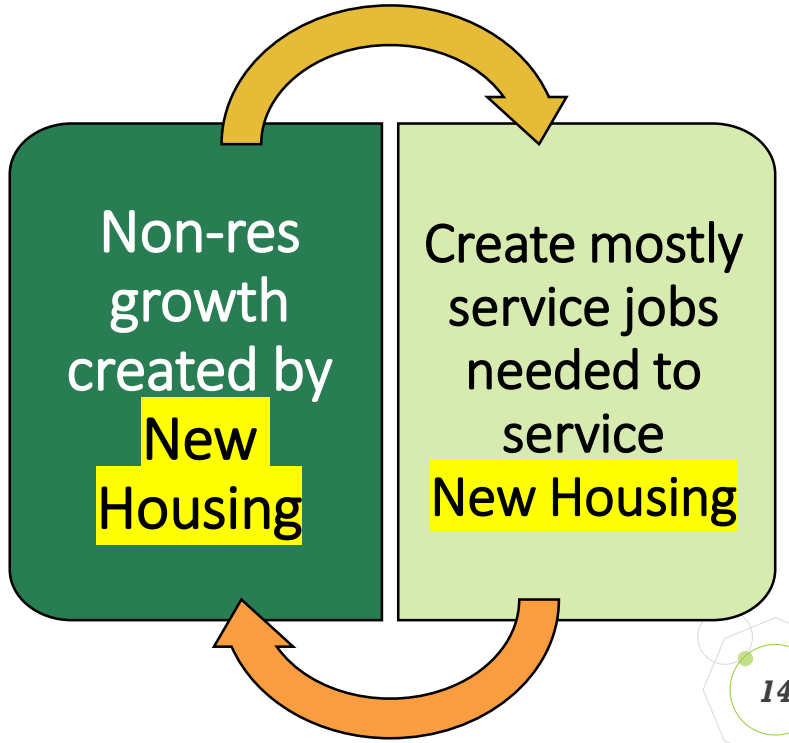
- Non-Res SQFT the same for High Density Office, Office Urban, Low Density Office, Heavy Industrial, Flex Industrial & Data Centers. ***Loudoun gets growth in high value jobs in both scenarios.***

- **Where are the differences?**

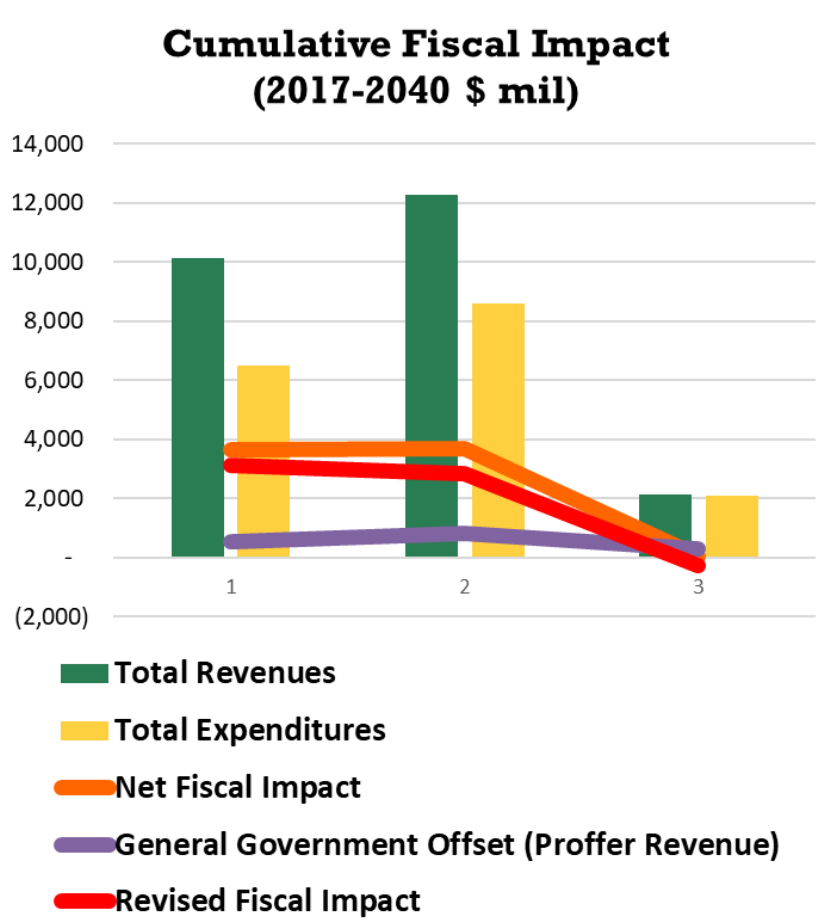
Figure 1. Summary of Countywide Cumulative Growth

Cumulative Growth Projection Detail. Loudoun County Fiscal Impact Model Countywide			
Cumulative Years (2017-2040)	SCENARIO 1: Revised General Plan Baseline Forecast	SCENARIO 3: Loudoun 2040 Proposed Medium	DIFFERENCE
Retail	5,317,762	9,000,309	3,682,547
Retail Urban	294,040	328,293	34,253
Other Non-Public	4,925,538	7,953,974	3,028,436
Other Public	3,817,756	7,713,886	3,896,130
Total Non-Residential Sq.Ft.	55,719,895	66,361,260	10,641,365

INDICATES:



Fiscal Impact Analysis:
Suburban Policy Area Results



Suburban Policy Area Results			
Figure 32 & 33. Cumulative Revenues & Expenses (in $mil)			
Category	**SCENARIO 1: Revised General Plan Baseline Forecast**	**SCENARIO 3: Loudoun 2040 Proposed Plan Medium**	**DIFFERENCE**
Total Revenues	10,116	12,261	**2,145**
Total Expenditures	6,489	8,590	**2,101**
Net Fiscal Impact	3,627	3,671	**44**
General Government Offset (Proffer Revenue)	526	827	**301**
Revised Fiscal Impact	3,101	2,844	***(257)**

* If expected proffer revenue is not realized, or delayed, Medium Scenario could result in $257 million public facilities financing deficit.

Fiscal Impact Analysis:
Suburban Growth Projections

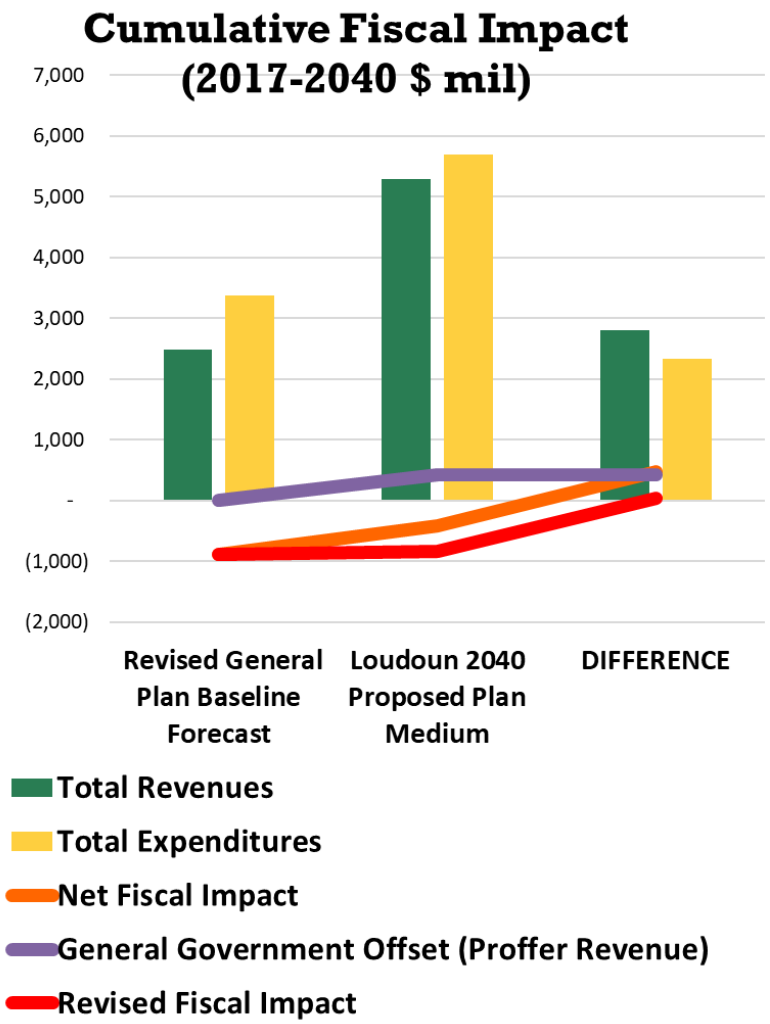
Suburban Policy Area Results			
Figure 31. Growth Projections			
Category	**SCENARIO 1: Revised General Plan Baseline Forecast**	**SCENARIO 3: Loudoun 2040 Proposed Plan Medium**	**DIFFERENCE**
Total Residential Units	25,965	38,968	**13,003**
Total Population	58,127	92,120	**33,993**
Total School Enrollment	7,985	14,580	**6,595**
Non-Residential Sq. ft	45,936,233	49,152,160	**3,215,927**
Total Employment	72,394	77,545	**5,151**
Facilities Land Needed (acres. Fig.36)	1,624	2,076	**452**

How much in vs. out of Loudoun?

Sufficient to support public facilities?

Fiscal Impact Analysis: Transition Policy Area

Transition Policy Area Results			
Figure 38 & 39. Cumulative Revenues & Expenses (in $mil)			
Category	SCENARIO 1: Revised General Plan Baseline Forecast	SCENARIO 3: Loudoun 2040 Proposed Plan Medium	DIFFERENCE
Total Revenues	2,491	5,288	**2,797**
Total Expenditures	3,375	5,701	**2,326**
Net Fiscal Impact	(884)	(413)	**471**
General Government Offset (Proffer Revenue)	-	428	***428**
Revised Fiscal Impact	(884)	(841)	**43**



* No Proffers currently required in TPA

- TischlerBise key assumption: proffers will be permitted.
- If expected proffer revenue is not realized, or delayed, Medium Scenario Net Fiscal Impact reduced to $43 million.

Fiscal Impact Analysis:
Transition Growth Projections

Transition Policy Area Results			
Figure 37. Growth Projections			
Category	**SCENARIO 1: Revised General Plan Baseline Forecast**	**SCENARIO 3: Loudoun 2040 Proposed Plan Medium**	**DIFFERENCE**
Total Residential Units	6,778	20,897	**14,119**
Total Population	24,986	72,175	**47,189**
Total School Enrollment	6,280	17,077	**10,797**
Non-Residential Sq. ft	5,213,149	11,722,955	**6,509,806**
Total Employment	4,929	15,645	**10,716**
School Projects (Fig. 41)	5	14	**9**
Transportation Lane Miles (Fig.41)	95.41	91.26	**(4.15)**
Facilities Land Acres (Fig.42)	626	1,247	**621**

Additional Boundary changes; Counterintuitive with population increase

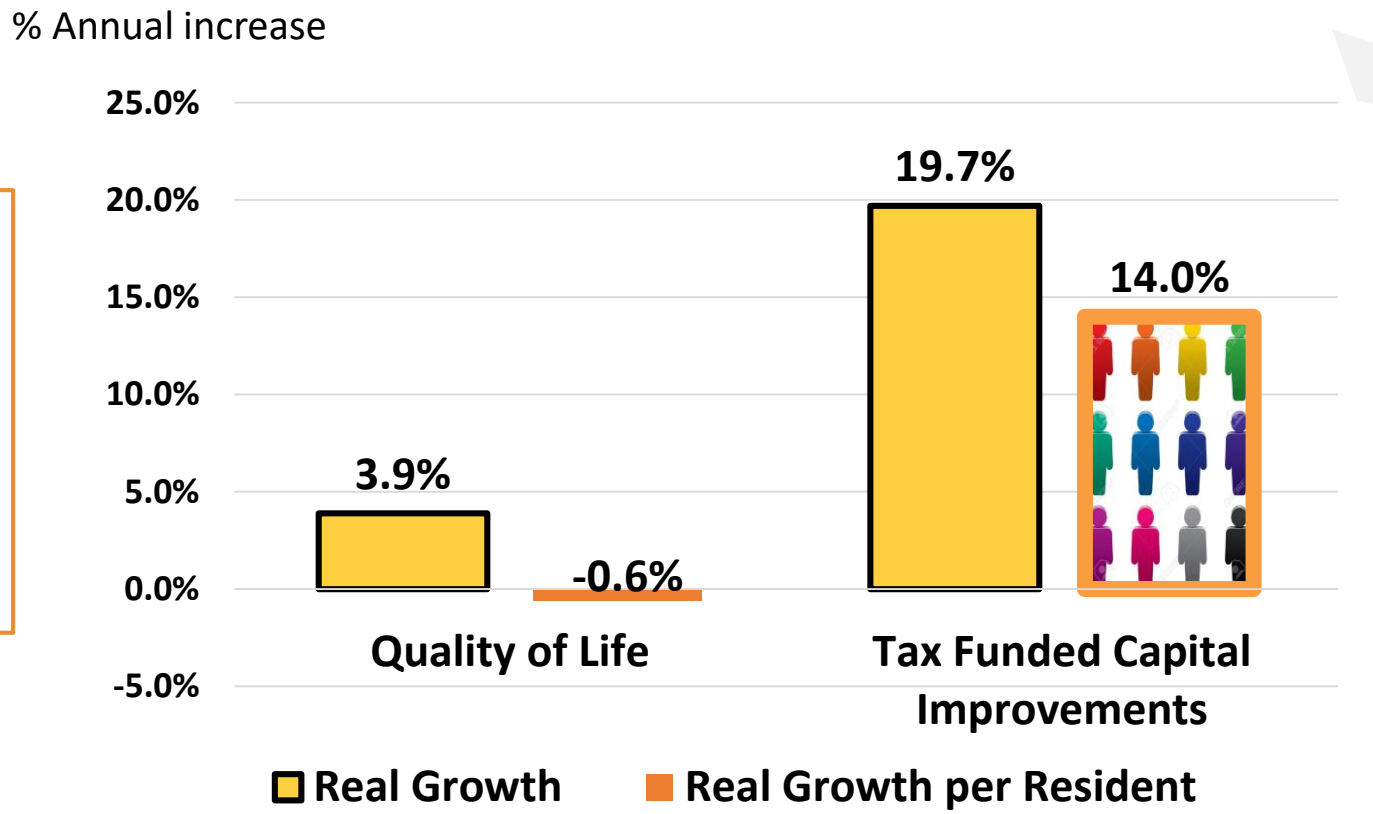
Spending Per Resident on Life Quality Declined

Crowded out by capital improvement requirements

Spending per resident on "Quality of Life":

FY 2000 - $290
FY 2019 - $252

In 2000 US $



Annual Average County Budget Real Growth Rates, Selected Categories, FY 2000. - 2019

"Quality of Life" Service Spending

defined as LC Depts:

- Health Services
- Mental Health
- Substance Abuse
- Family Services
- Develop. Services
- Extension Services
- Library Services
- Parks and Trails
- Recreation
- Culture

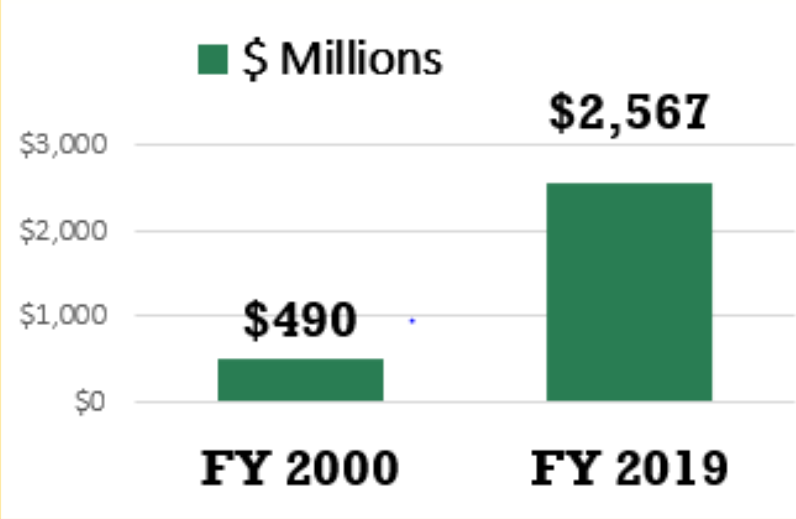
Capital Improvements

- Transportation
- Schools
- Other County construction

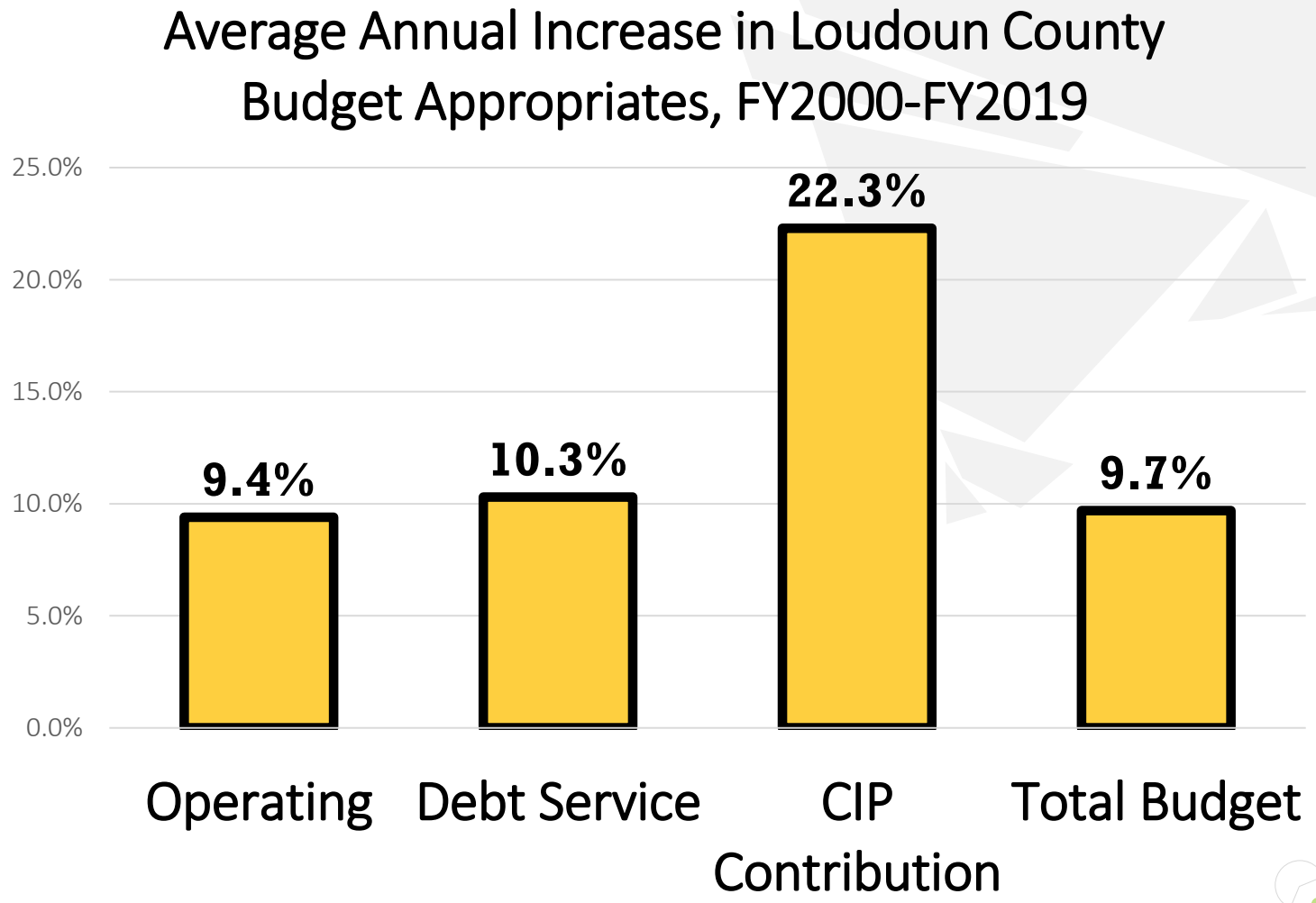
Source: Loudoun County FY2010 – FY2019 Adopted Budgets

LAND USE & GROWTH POLICIES
Drive Galloping Public Budget Expenditures

Total Loudoun County Government budgeted expenditures rose:



- Led by growth in capital investment contributions (CIP) and debt service.



10% annual average since FY2000

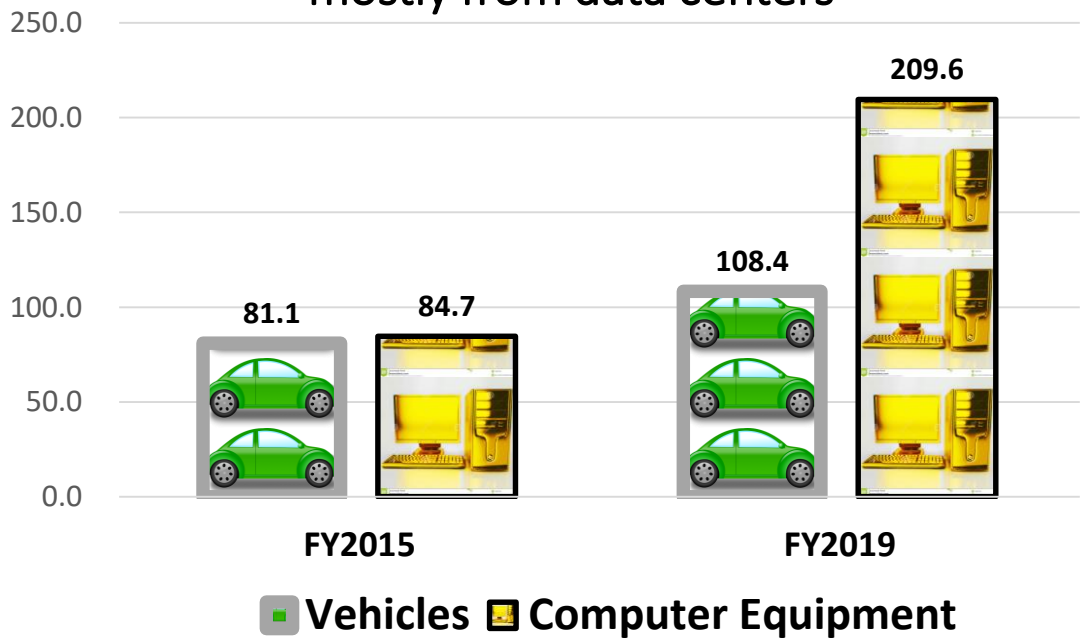
HOOKED ON GROWTH

Since FY2010, BOS depended on new housing & commercial development

HALF OF GROWTH
Total Local Tax Funding –
mostly from new development

Sources of Growth in Total Taxable Real Property Value
over FY2010-FY2018

OTHER HALF OF GROWTH –
Local Tax Funding
from Personal Property Taxes –
mostly from data centers



Loudoun Personal Property Taxes – Selected Categories
FY2015 and FY2019 (Millions of US$)

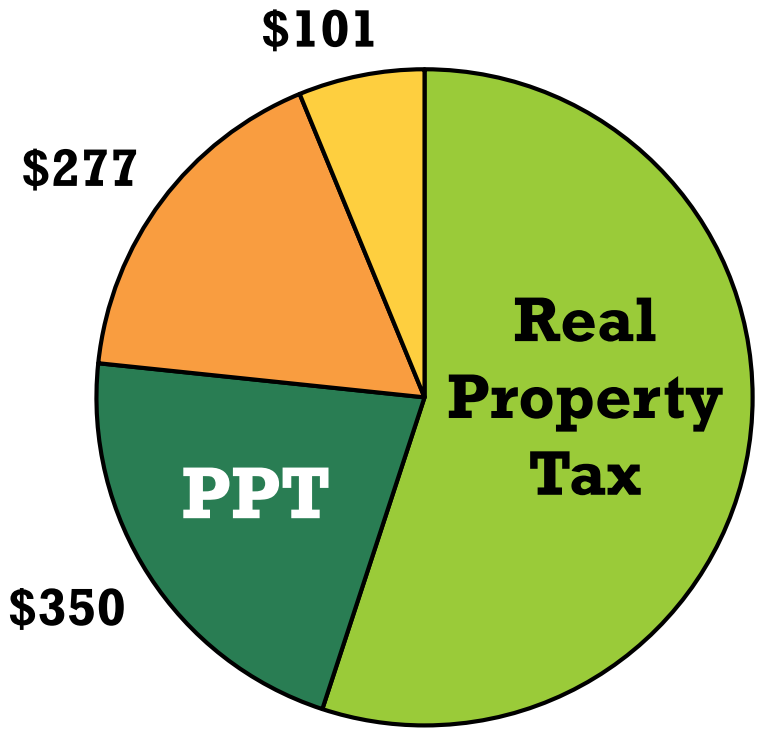
Data Centers in Perspective: Loudoun's Fiscal Revenue Reliance

STATISTICS:*

- 100+ Datacenters operating in Loudoun
- 3 switching stations
- Data Center power = 7,500 homes
- Current data center ~ 100
- Power demand = 750,000 homes
- Forecasted demand = 870,000 homes

*Washington Business Journal, 3/12/2019

Loudoun FY2019 Fiscal Revenues Composition ($ Millions)



Of which Data Centers $ 189 million

Of which Data Centers $ 40 million

Source: Loudoun County FY2019 Adopted Budget and estimates.