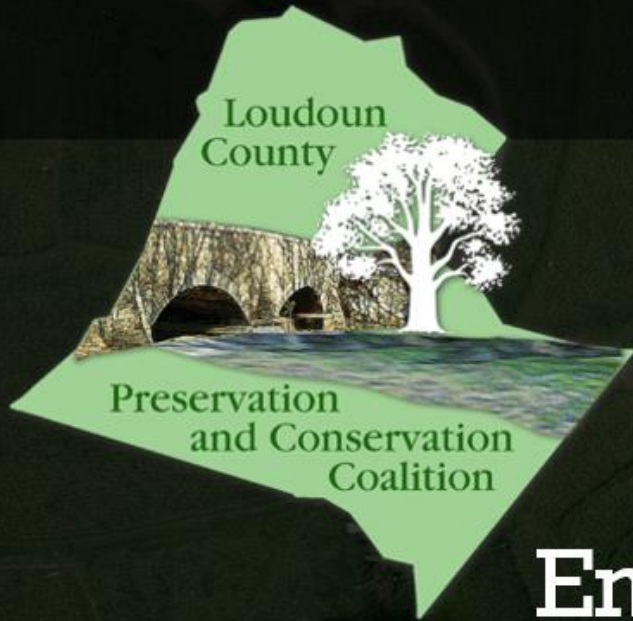
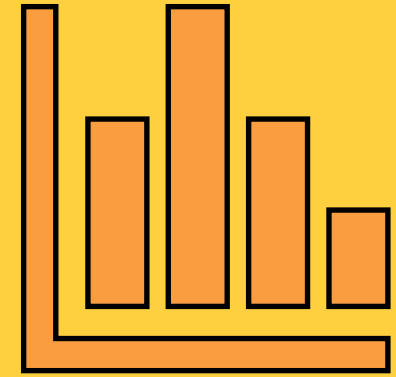


New Comprehensive Plan Review Committee



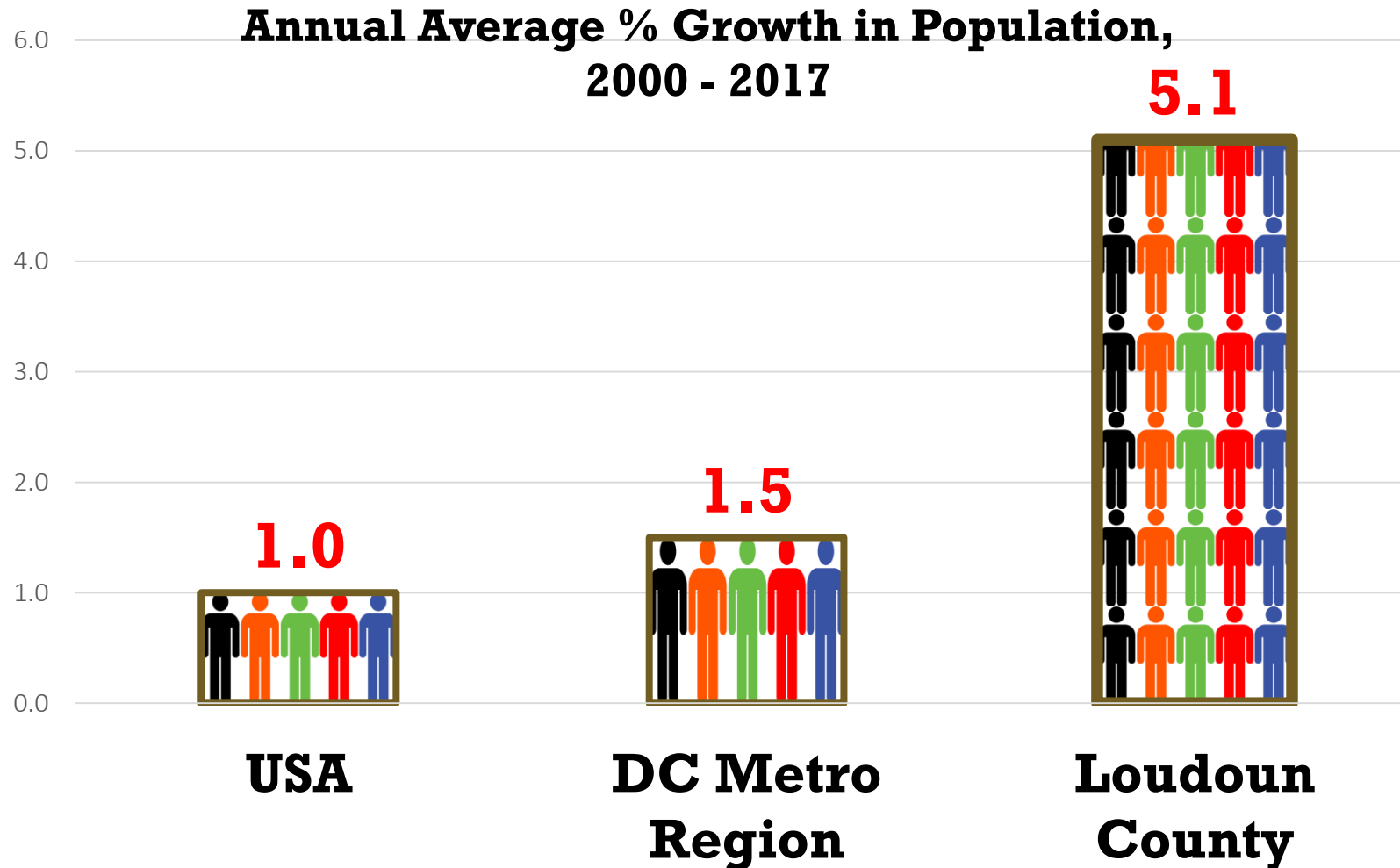
Envisioning
Loudoun - 2040



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.

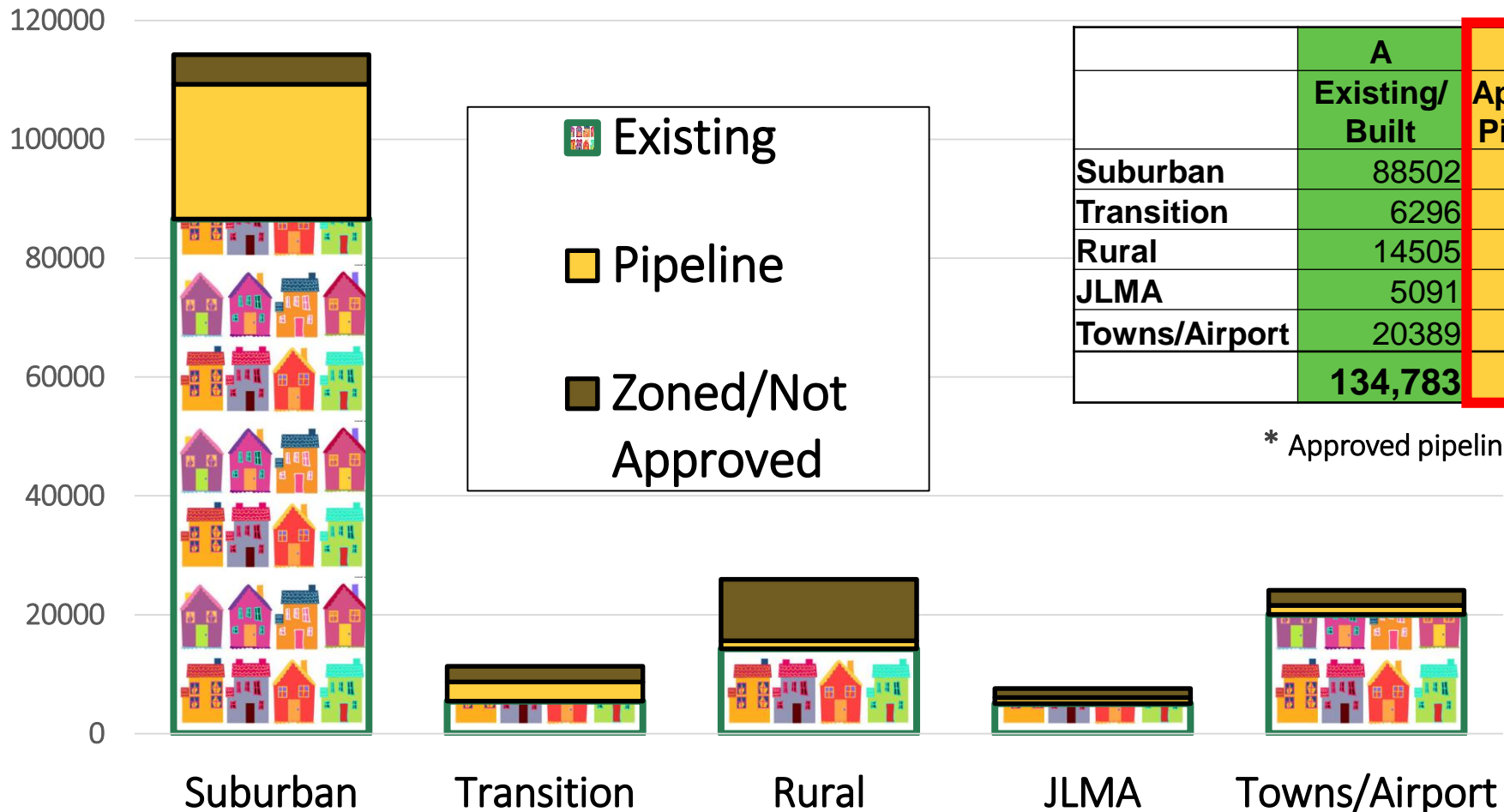
THE FINE PRINT:

**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 4/3/19 Rpt	Loudoun 2040 March 13 th 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	3,530	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		221,364		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?

¹PC Draft to BOS, 3/21/2019, pp.9,11 (~90% RGP Build from 183K)

²Staff Rpt to BOS, 7-19-18-(May7 StakeholderDraft with constraint assumptions)

³TischlerBise 7/6/2018 (2017-2040) – Stakeholder Committee Forecast

⁴Planning Commission, Proposed 21K to TPA, 9/27/18 TLUC PPT

⁵PlanningCommWorksession-2-7-2019 PPT

⁶ TischlerBise 2/1/2019 – Planning Commission Forecast

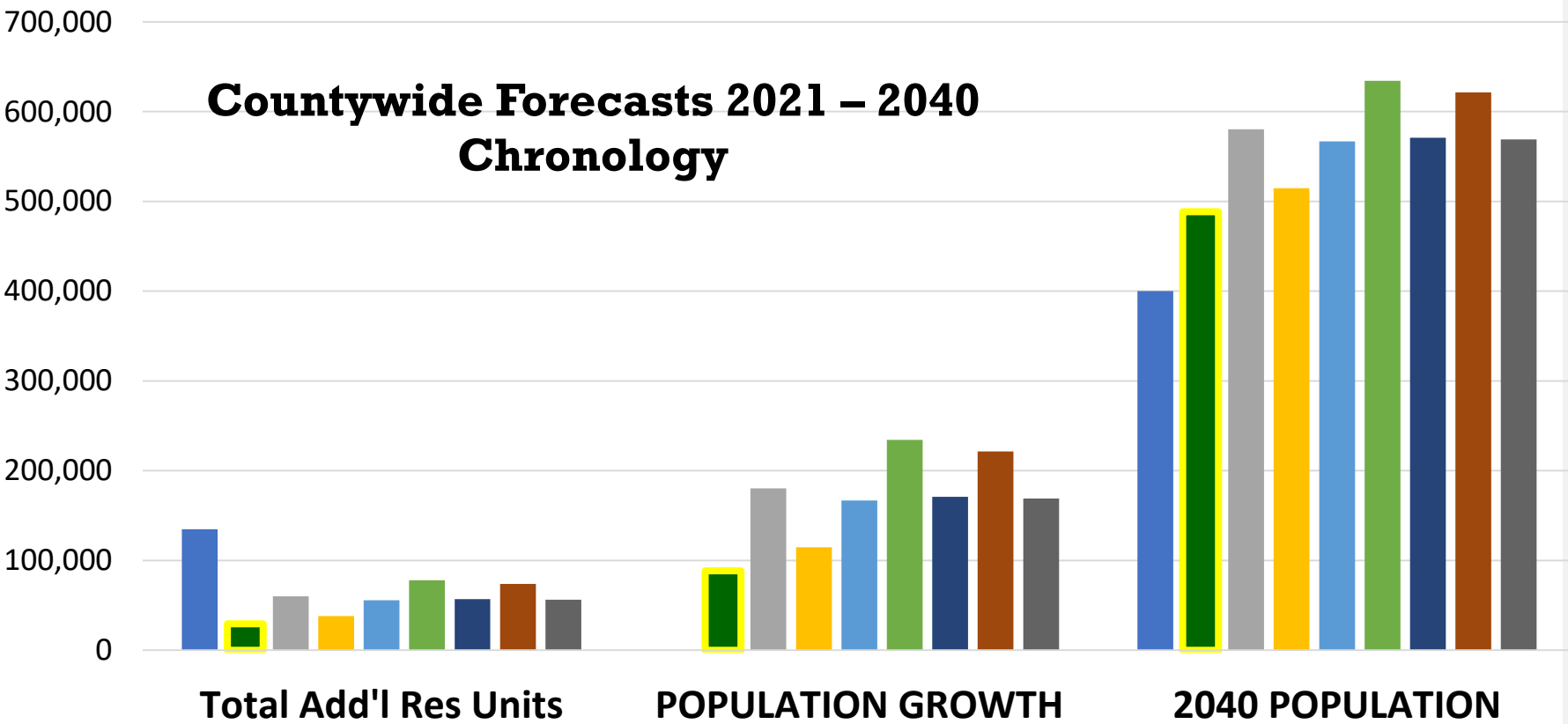
⁷ Loudoun 2040 Planning Comm. Draft, 3/13/19, p.I-7

⁸KimleyHorn 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?

- Existing Built 7/17
- Revised General Plan
- "Demand" (Kimley-Horn Market Analysis) Jan 2018
- Stakeholders May 7th Plan
- TischlerBise July 6, 2018
- Pl. Commission Medium Scenario 9/27/18
- Loudoun 2040 Oct 23, 2018
- TischlerBise Feb.1, 2019
- Loudoun 2040 March 13 Draft

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	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		

¹PC Draft to BOS, 3/21/2019, pp.9,11 (~90% RGP Build from 183K)

²Staff Rpt to BOS, 7-19-18-(May7 StakeholderDraft w/ constraints)

³TischlerBise 7/6/2018 (2017-2040): Stakeholder Forecasts

⁴Planning Commission, Proposed 21K to TPA, 9/27/18 TLUC PPT

⁵PlanningCommWorksession-2-7-2019 PPT

⁶TischlerBise 2/1/2019: Planning Commission Forecasts

⁷Loudoun 2040 Planning Comm. Draft, 3/13/19, p.I-7

⁸KimleyHorn 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		

¹PC Draft to BOS, 3/21/2019, pp.9,11 (~90% RGP Build from 183K)

²Staff Rpt to BOS, 7-19-18-(May7 StakeholderDraft w/ constraints)

³TischlerBise 7/6/2018 (2017-2040): Stakeholder Forecasts

⁴Planning Commission, Proposed 21K to TPA, 9/27/18 TLUC PPT

⁵PlanningCommWorksession-2-7-2019 PPT

⁶ TischlerBise 2/1/2019: Planning Commission Forecasts

⁷ Loudoun 2040 Planning Comm. Draft, 3/13/19, p.I-7

⁸KimleyHorn Market Analysis, Jan. 2018

Report Comparisons: RGP to Stakeholder & Planning Commission Forecasts

¹PC Draft to BOS, 3/21/2019, pp.9,11 (~90% RGP Build from 183K)
²Staff Rpt to BOS, 7-19-18-(May7 StakeholderDraft w/ constraints)
³TischlerBise 7/6/2018 (2017-2040): Stakeholder Forecasts
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⁶TischlerBise 2/1/2019: Planning Commission Forecasts
⁷Loudoun 2040 Planning Comm. Draft, 3/13/19, p.I-7
⁸KimleyHorn Market Analysis, Jan. 2018

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:

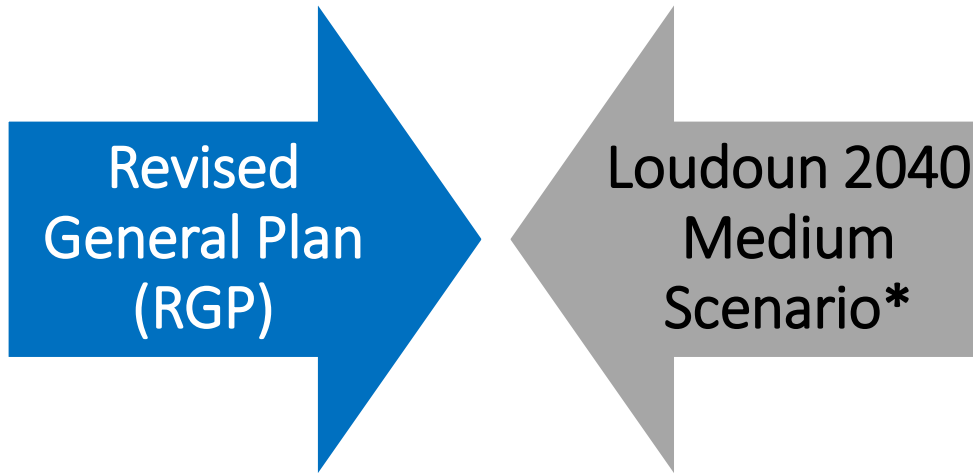


Figure 4. Countywide Cumulative Fiscal Impact

Summary of Cumulative Fiscal Impact (2017-2040) (In \$millions)
 LOUDOUN COUNTY FISCAL IMPACT MODEL COUNTYWIDE

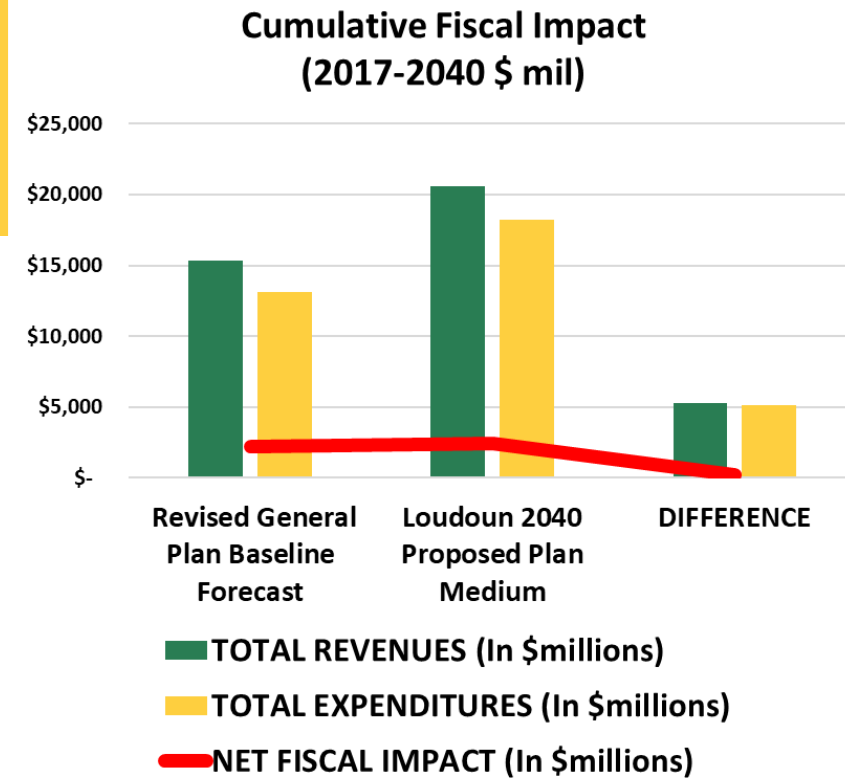
Category (In \$millions)	SCENARIO 1: Revised General Plan (RGP) Baseline Forecast	SCENARIO 2: Loudoun 2040 Proposed Plan Low	SCENARIO 3: Loudoun 2040 Proposed Plan Medium	SCENARIO 4: Loudoun 2040 Proposed Plan High
TOTAL REVENUES	\$15,326	\$ 19,409	\$ 20,615	\$ 22,543
TOTAL EXPENDITURES	\$13,123	\$ 17,259	\$ 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: COMPARISON/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
School Totals	18	33	15	boundary changes
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.**

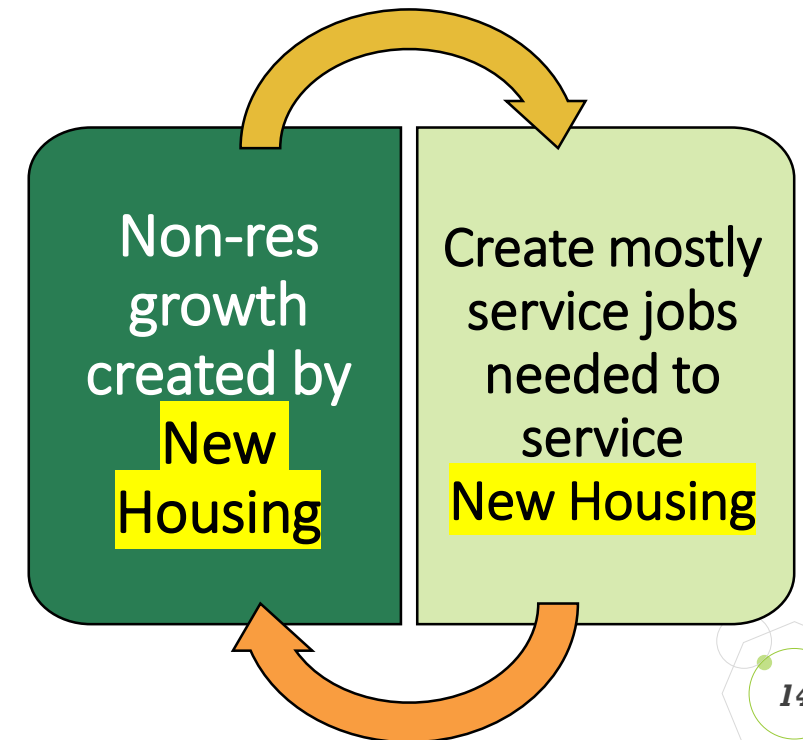
- **Where are the differences?**

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

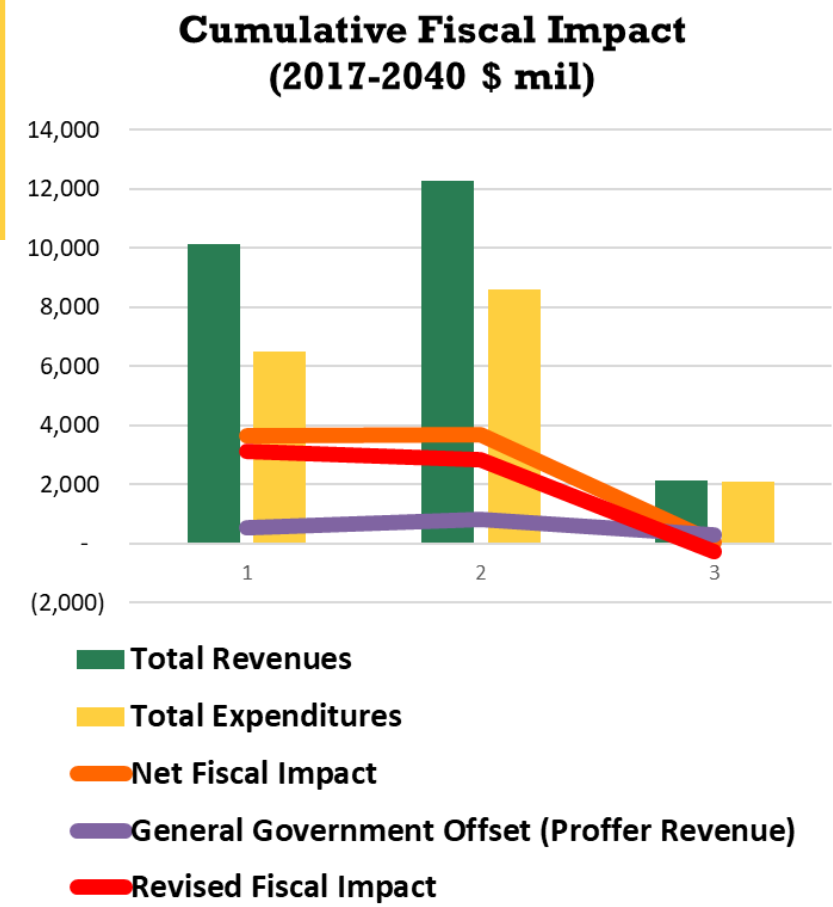
INDICATES:



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

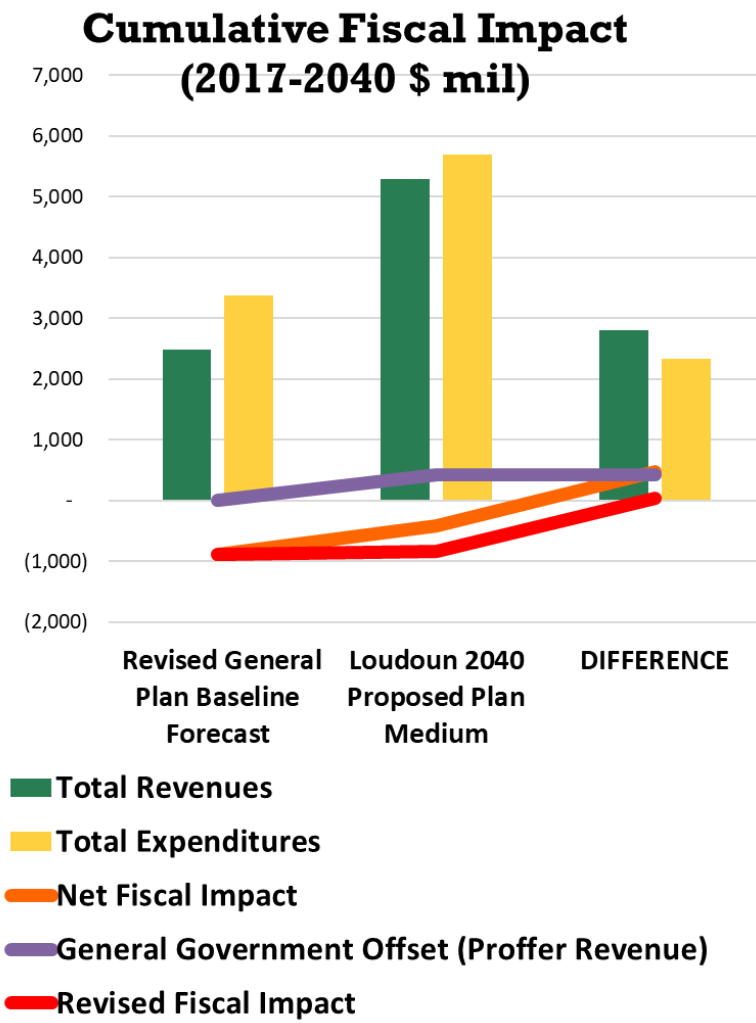
Suburban Policy Area Results			
Figure 31. Growth Projections			
Category	SCENARIO 1: Revised General Plan Baseline Forecast	SCENARIO 3: Loudoun 2040 Proposed Plan Medium	DIFFERENCE
Total Residential Units	25,965	38,968	13,003
Total Population	58,127	92,120	33,993
Total School Enrollment	7,985	14,580	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

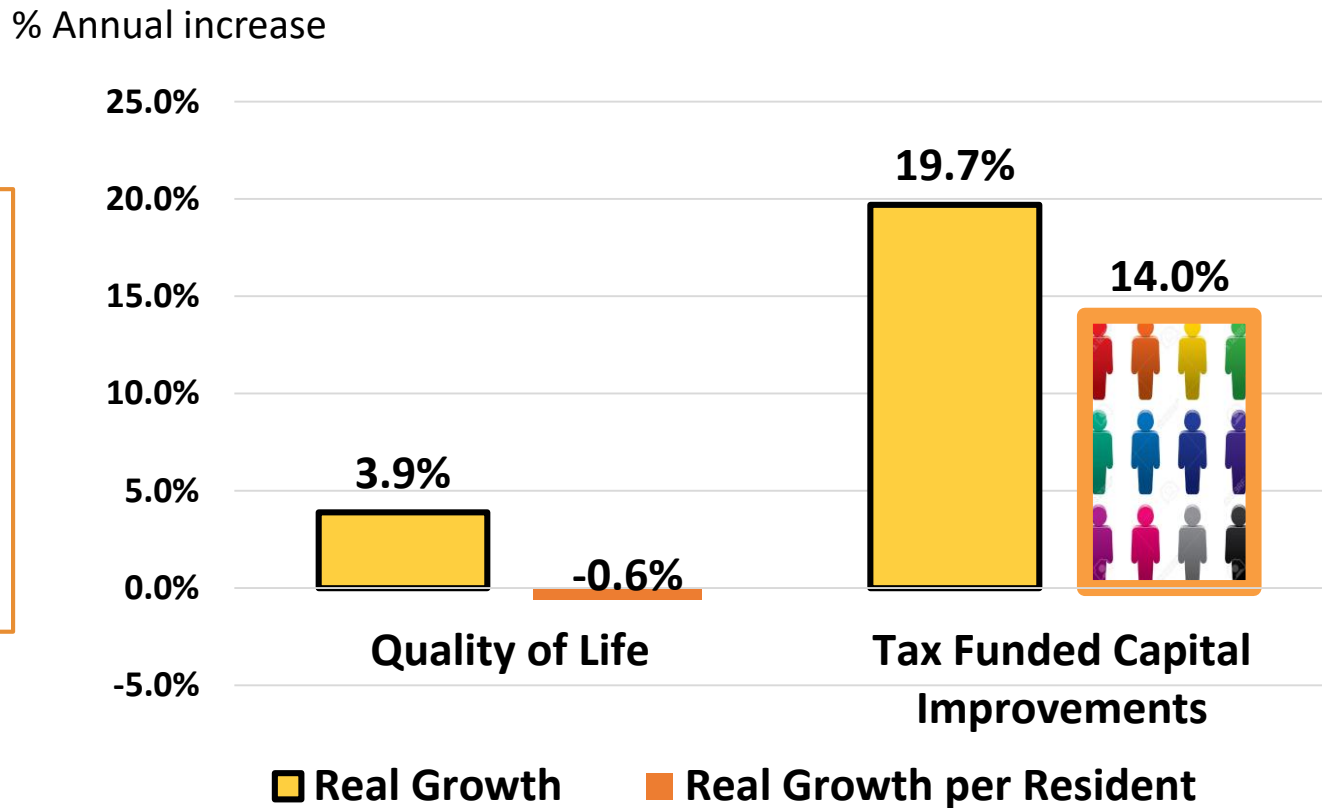
Category	SCENARIO 1: Revised General Plan Baseline Forecast	SCENARIO 3: Loudoun 2040 Proposed Plan Medium	DIFFERENCE
Total Residential Units	6,778	20,897	14,119
Total Population	24,986	72,175	47,189
Total School Enrollment	6,280	17,077	10,797
Non-Residential Sq. ft	5,213,149	11,722,955	6,509,806
Total 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

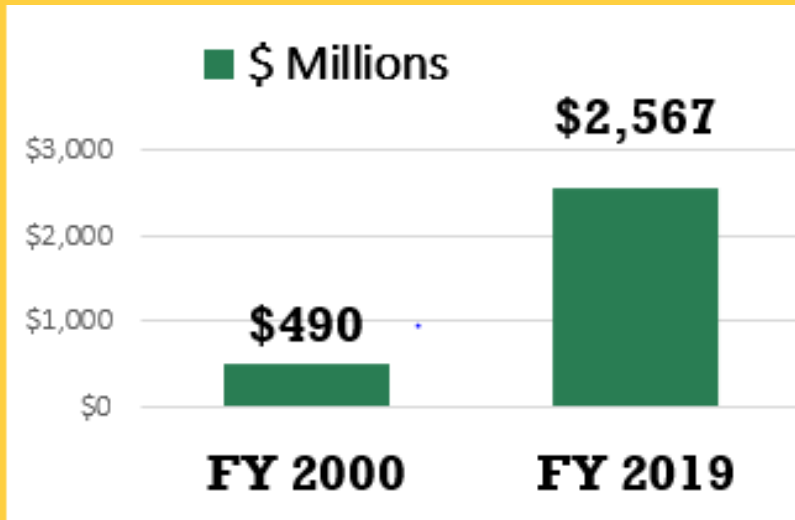
- Transportation
- Schools
- Other County construction

Source: Loudoun County FY2010 – FY2019 Adopted Budgets

LAND USE & GROWTH POLICIES

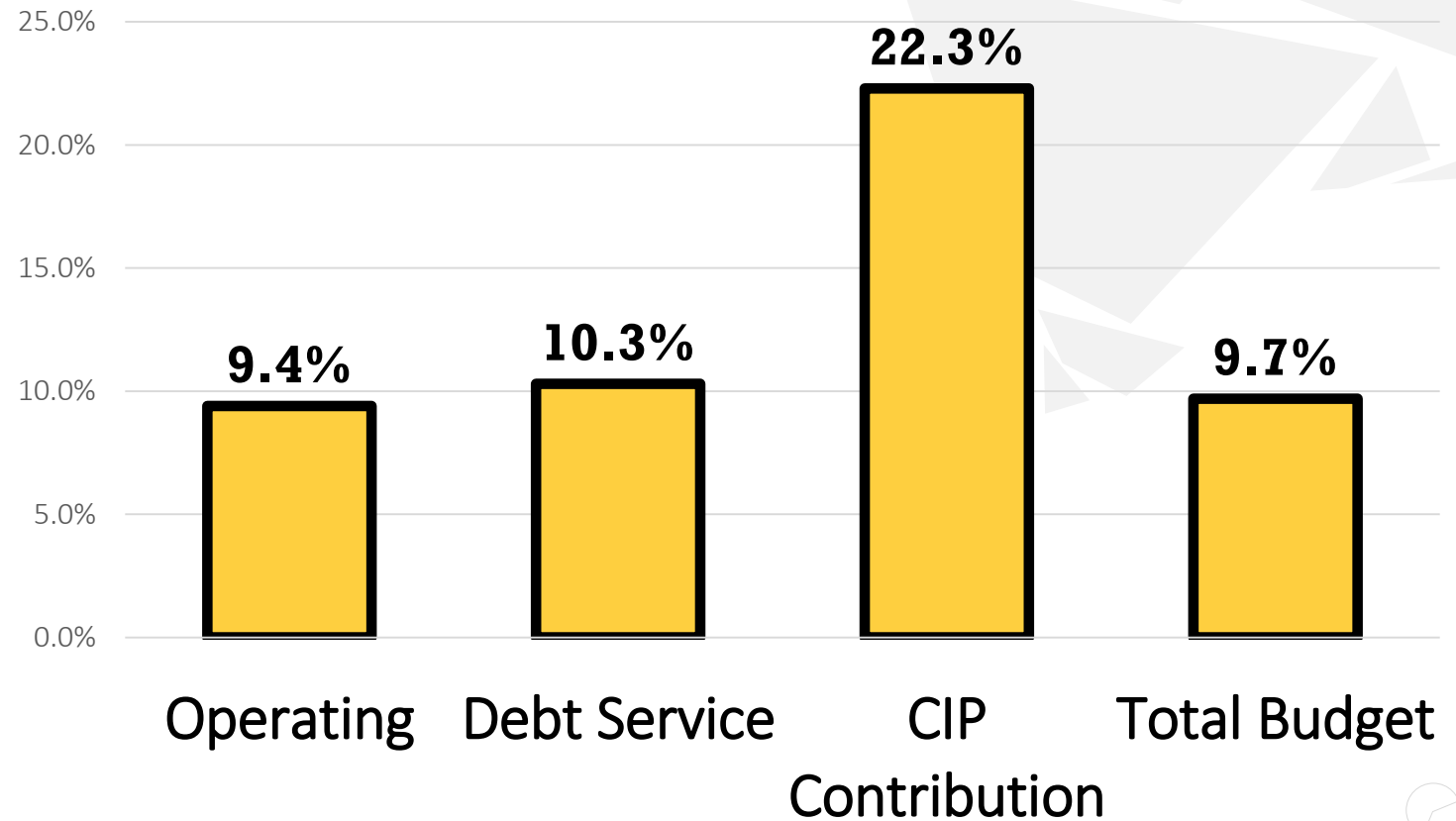
Drive Galloping Public Budget Expenditures

Total Loudoun County Government budgeted expenditures rose:



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

Average Annual Increase in Loudoun County Budget Appropriates, FY2000-FY2019



10% annual average since FY2000

HOOKED ON GROWTH

Since FY2010, BOS depended on new housing & commercial development

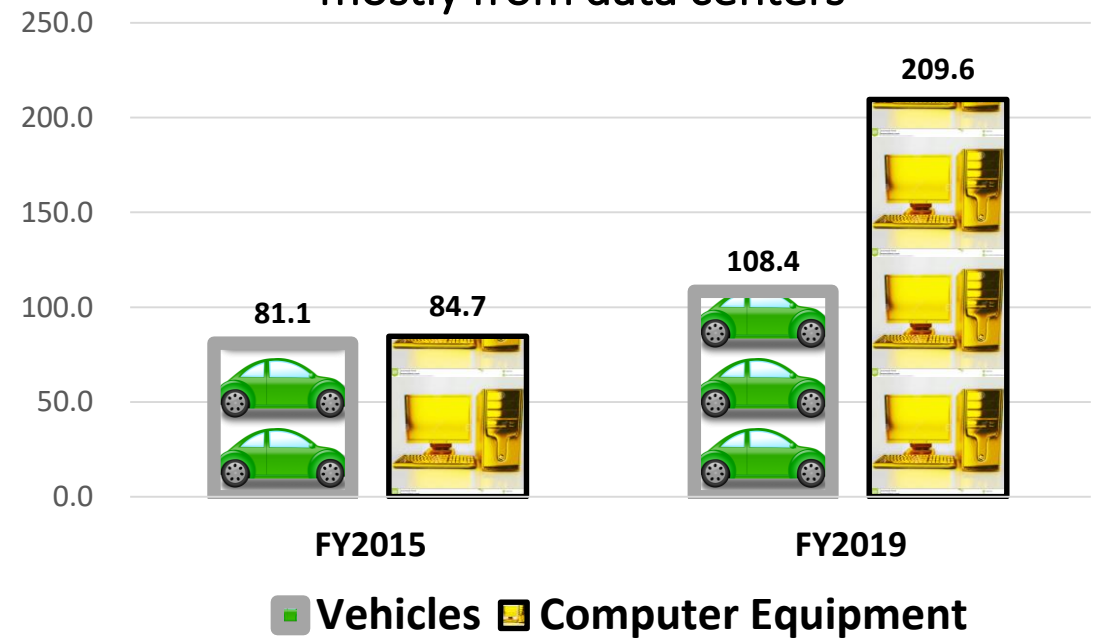
HALF OF GROWTH
Total Local Tax Funding –
mostly from **new development**



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\$)

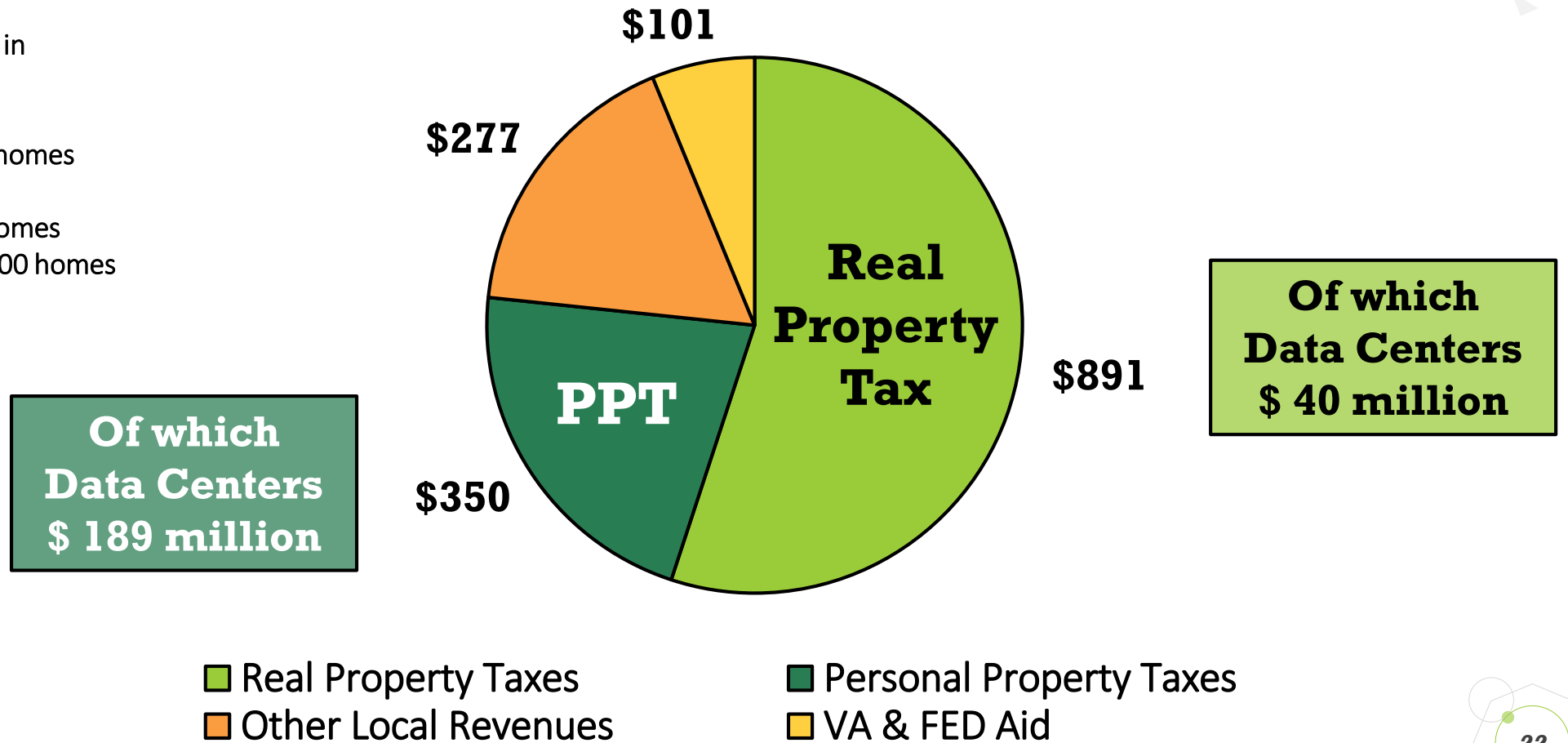
Data Centers in Perspective: Loudoun's Fiscal Revenue Reliance

Loudoun FY2019 Fiscal Revenues Composition (\$ Millions)

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



Source: Loudoun County FY2019 Adopted Budget and estimates.