2023 Midyear Update

July 13, 2023

TEXAS A&M UNIVERSITY
Texas Real Estate Research Center

Prepared for CCIM Houston/Gulf Coast

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Objective and Time

1. Review macroeconomic drivers of real estate through mid 2023

2. Consider business and industry changes influencing commercial real estate choices – site selection, investment and staffing

3. Evaluate current Texas commercial market drivers of supply and demand: office, industrial, retail, multifamily

4. Risk an outlook on commercial markets and the economy for 2023 and beyond

20 Minute Presentation

15 Minute Discussion

Texas Real Estate Research Center (TRERC)

- Created by Texas Legislature in 1971
- Advisory board of real estate professionals approves research agenda
- Texas A&M University in Division of Academic & Strategic Collaborations

Rural Land

Residential

Legal

Commercial

Special Projects
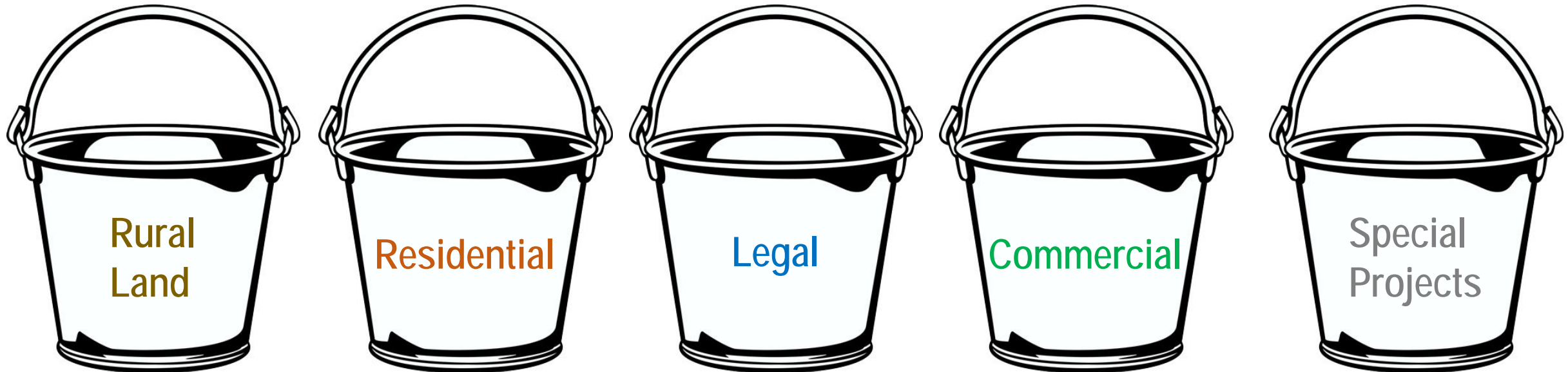
How we boost commercial agenda

- Data and research infrastructure

- Statewide coverage

- Interpreting the economic and demographic drivers
  - Economic output
  - Employment
  - Finances
  - Demographic

- Occupier perspective

- 2023 focus on industrial

Macroeconomic Drivers

Global picture: Slow growth in U.S., trade mixed

U.S. to grow below trend, goods trade values up as supply chains ease.

GDP

2.8% 3.0% — World
1.3% 1.4% — Advanced
3.9% 4.2% — Dev/Emerging
1.3% 1.4% — USA

■ 2023 ■ 2024
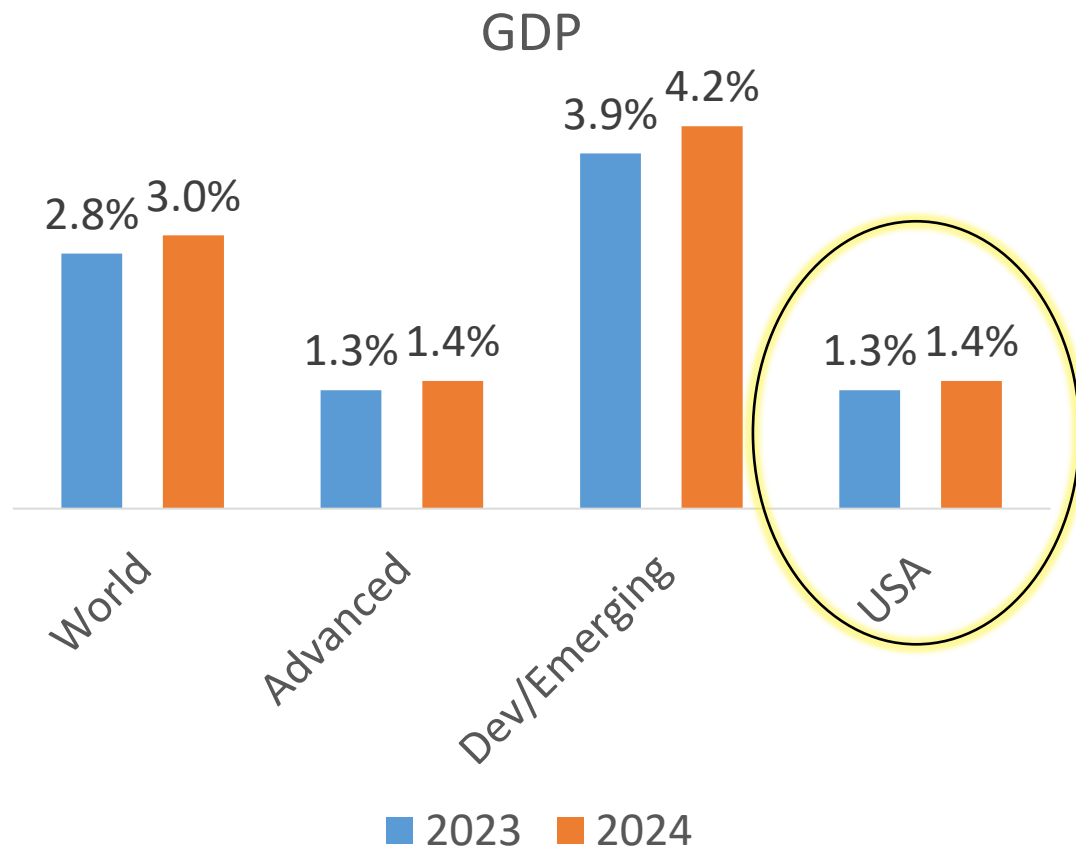
Global Supply Chain Pressure Index
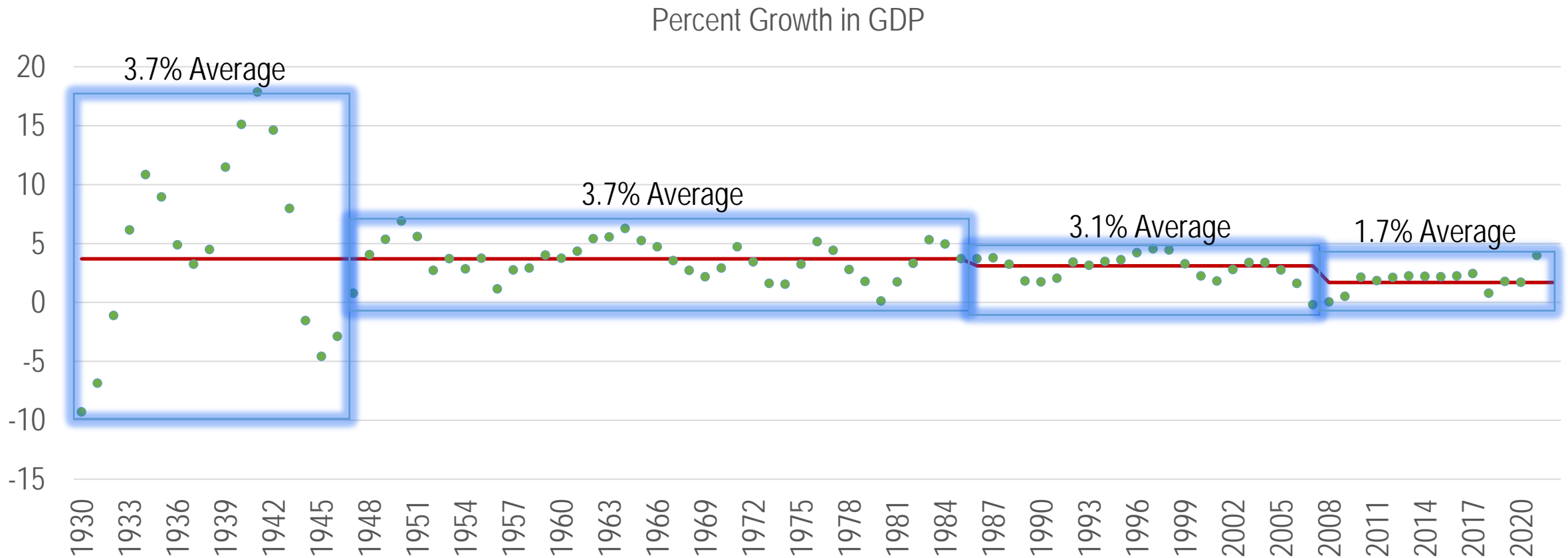-1.32 April '23
(4.32 in Dec '21)

WTO Goods Trade Barometer
92.2 Mar '23

Global Exports up 11%

Source: IMF, New York Federal Reserve, World Trade Organization

U.S. growth slows down over time

Economic output has become less volatile, but gradually slowed for almost a century

Percent Growth in GDP

3.7% Average
3.7% Average
3.1% Average
1.7% Average

Source: Texas Real Estate Research Center analysis of BEA data.

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Texas outgrows the U.S., but by less over time

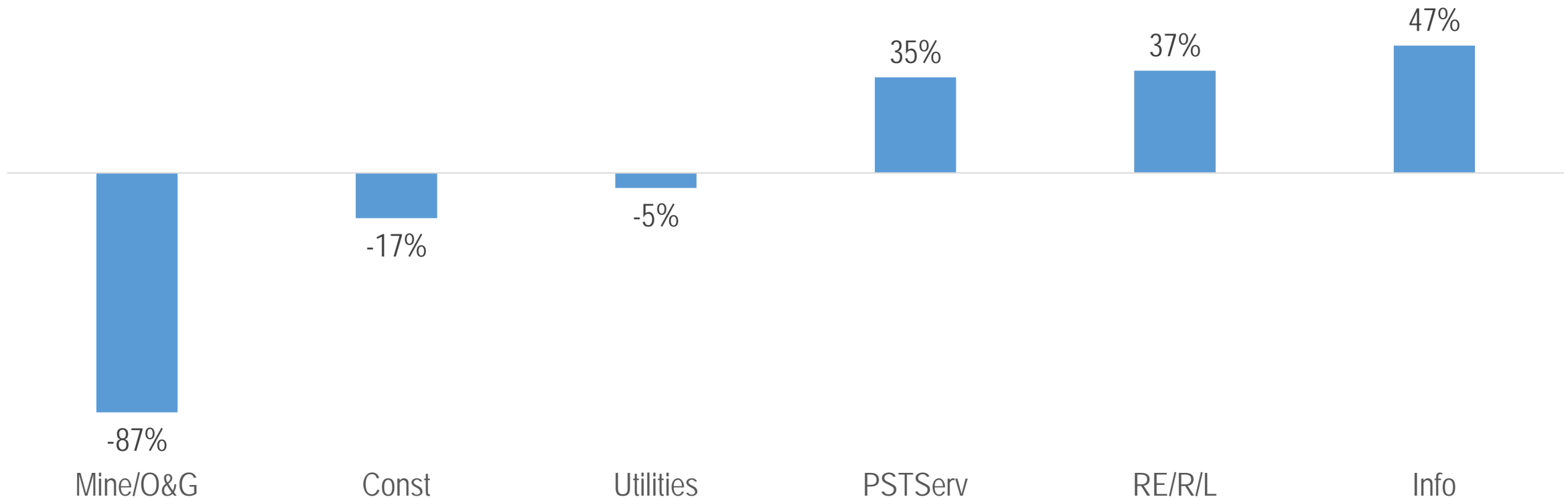While still growing faster than the U.S., Texas' *growth rate* lead has declined in recent years

Compound Annual Growth

US
TX

2.1% 2.9%
2.0% 2.6%
1.6% 1.7%

10-Yr CAGR   5-Yr CAGR   3-Yr CAGR
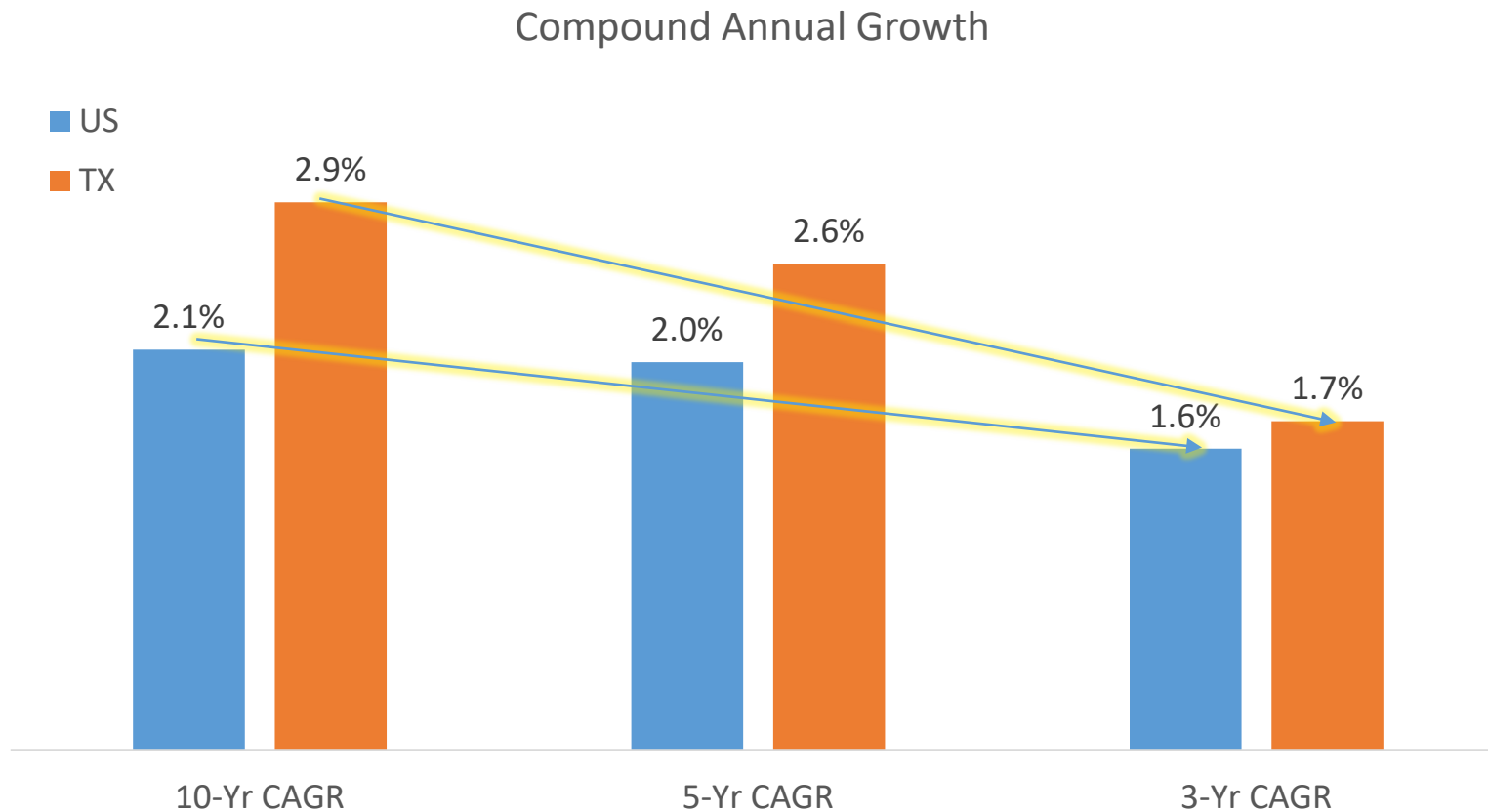
Total 10-Year Increase in GDP:
Texas: 69%
U.S.: 36%

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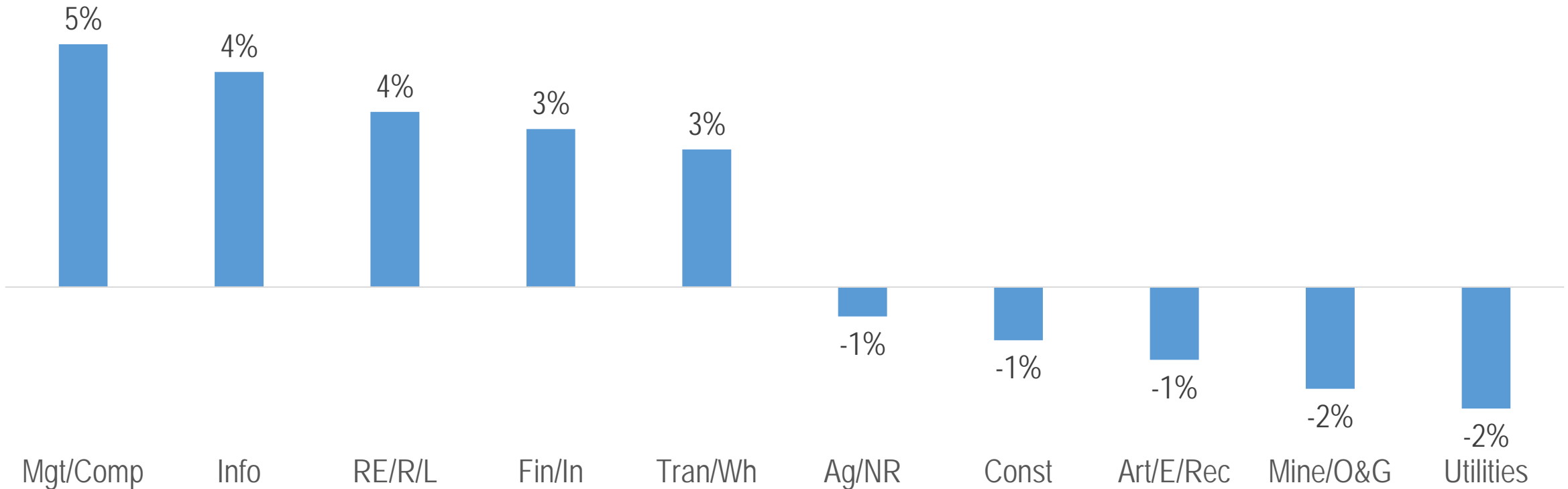
Texas services outgrow, "real" sectors lags U.S.

Texas' growth beats the nation in services, not in goods-related sectors.

Texas Advantage (minus U.S. 3-Yr CAGR)

Sector	Value
Mgt/Comp	5%
Info	4%
RE/R/L	4%
Fin/In	3%
Tran/Wh	3%
Ag/NR	-1%
Const	-1%
Art/E/Rec	-1%
Mine/O&G	-2%
Utilities	-2%

Source: TRERC analysis of BEA data.

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GDP components influence real estate

Consumption, international trade in goods and investment in structures make up a large share of GDP.
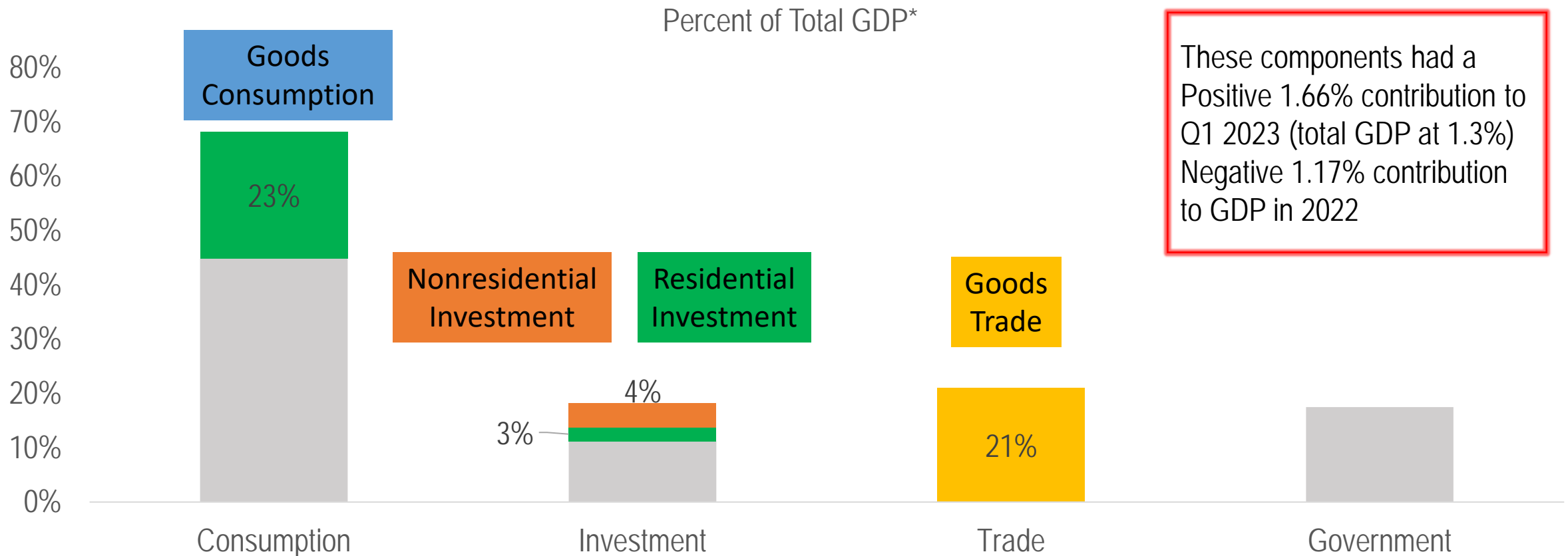
Percent of Total GDP*

These components had a Positive 1.66% contribution to Q1 2023 (total GDP at 1.3%) Negative 1.17% contribution to GDP in 2022

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Goods consumption consistently adds to GDP

Goods exports and residential investment contribute modestly, non-residential is neutral, goods exports is negative long-term.


Contributions to GDP
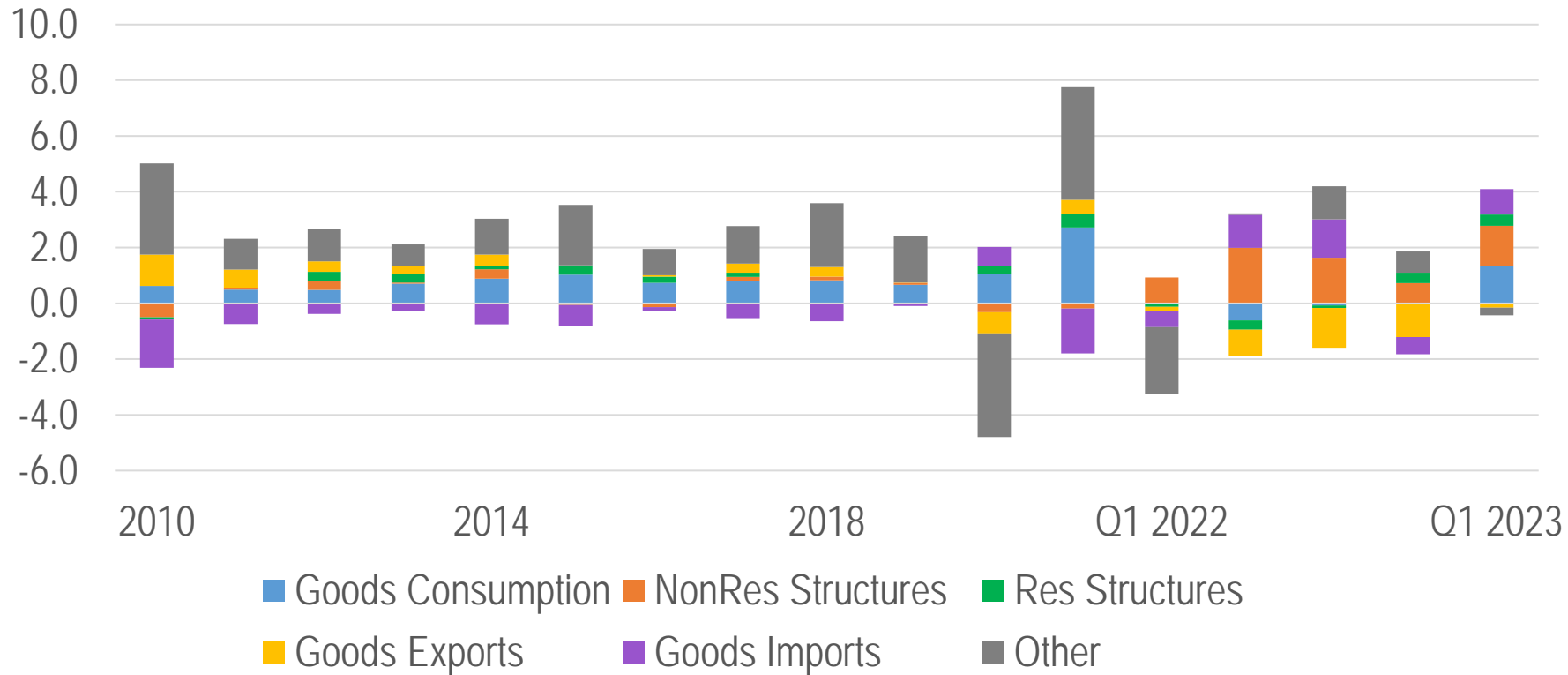
Annual Average Contribution Since 2010	
Goods Consumption	0.8%
NonRes Structures	0.0%
Res Structures	0.1%
Goods Exports	0.3%
Goods Imports	-0.6%
Total GDP	2.1%

Legend: Goods Consumption, NonRes Structures, Res Structures, Goods Exports, Goods Imports, Other

Source: Texas Real Estate Research Center analysis of BEA data.

Recent quarterly GDP strongly influenced by real estate

Real-estate related drivers average 1.7 percentage point contribution to an overall average GDP of 2.6 percent
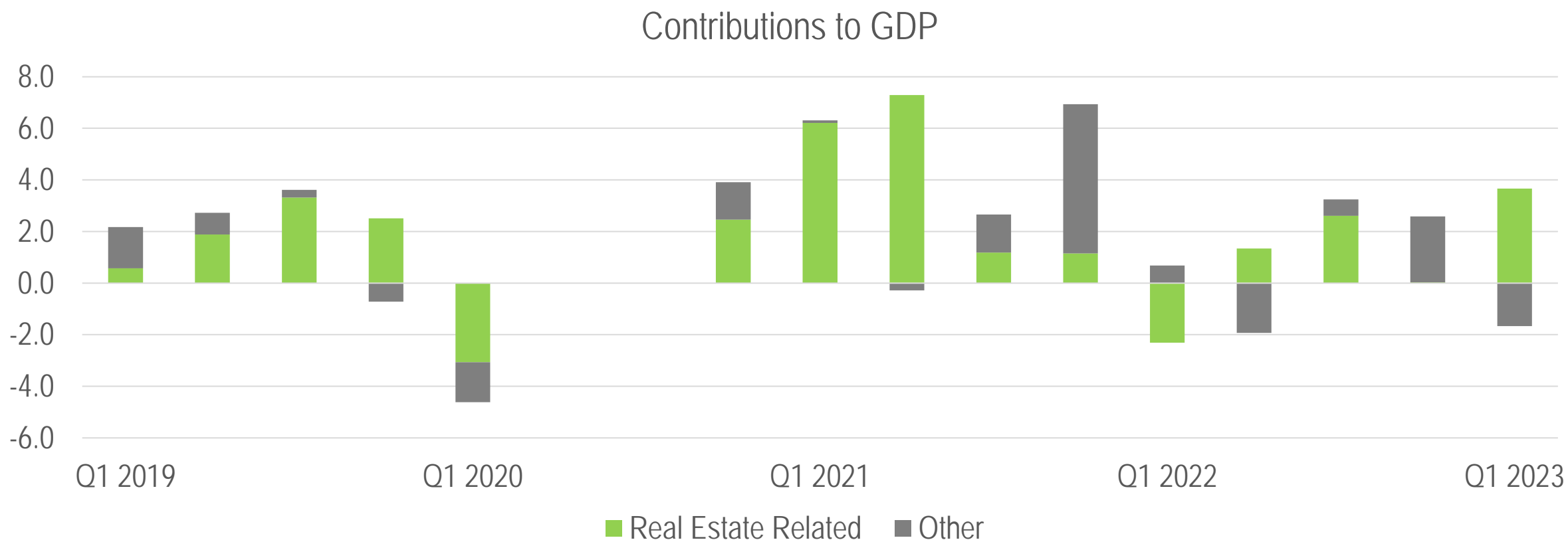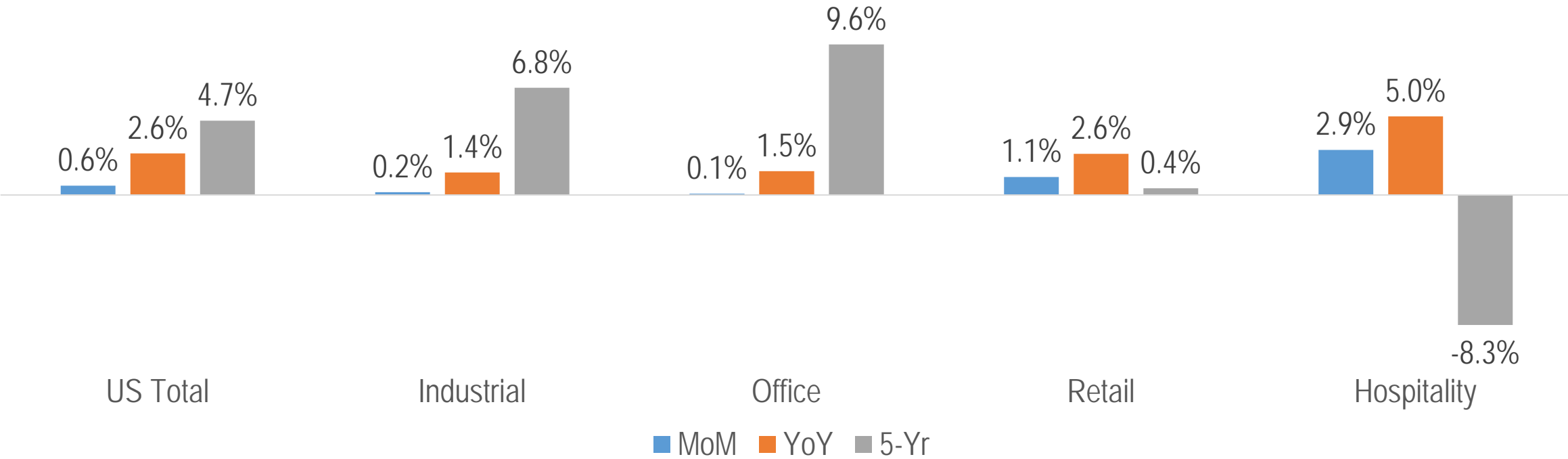

Contributions to GDP
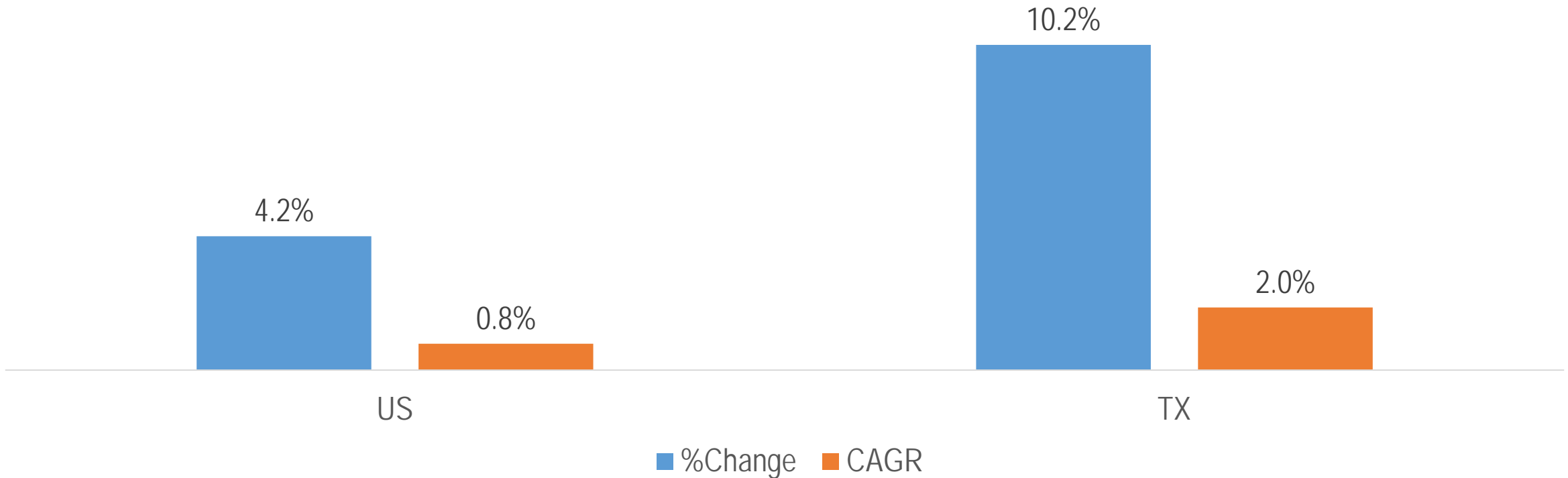
Source: Texas Real Estate Research Center analysis of BEA data.

Texas job growth is double the U.S.

Texas has consistently seen faster payroll employment growth than the U.S.

5-Yr Payroll Growth Rate
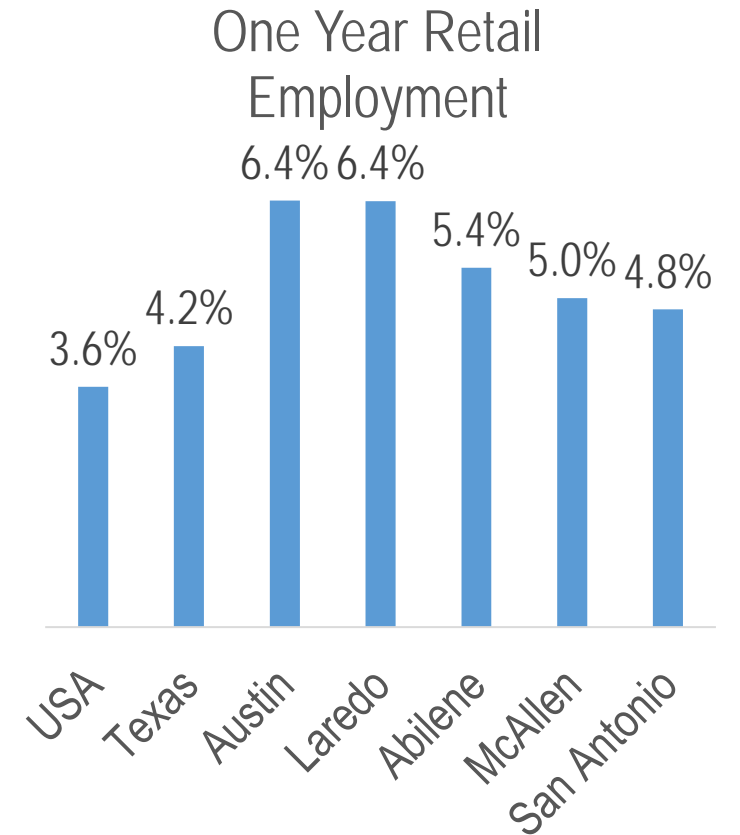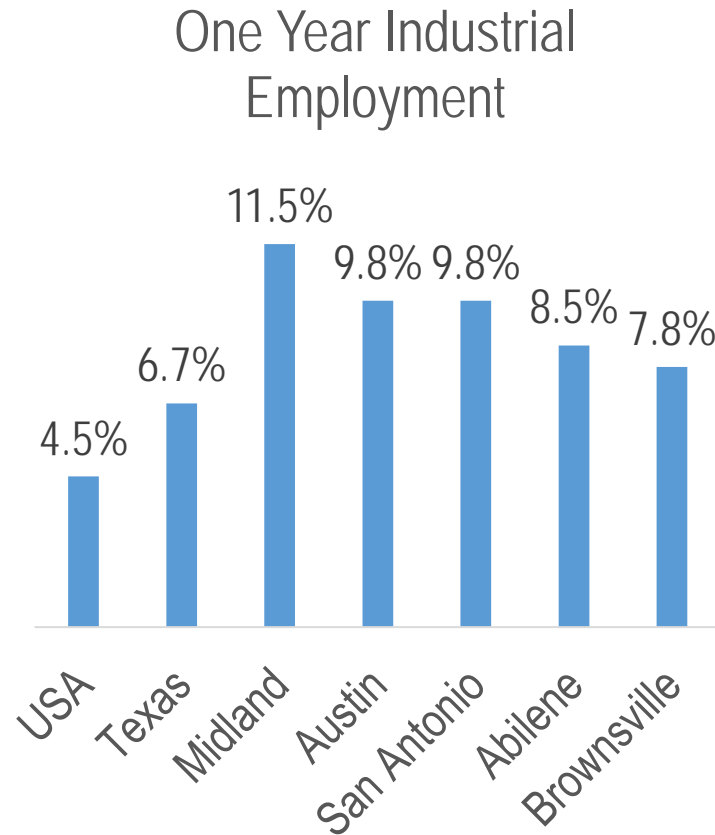

US: %Change 4.2%, CAGR 0.8%
TX: %Change 10.2%, CAGR 2.0%

■ %Change ■ CAGR

Source: BLS

Austin leads office, retail CRE-using employment

Other percentage growth leaders are smaller markets + San Antonio

One Year Office Employment Change
- USA: 3.8%
- Texas: 6.6%
- Austin: 9.4%
- Longview: 6.5%
- Midland: 6.1%
- College Station: 5.8%
- Abilene: 5.1%

One Year Industrial Employment
- USA: 4.5%
- Texas: 6.7%
- Midland: 11.5%
- Austin: 9.8%
- San Antonio: 9.8%
- Abilene: 8.5%
- Brownsville: 7.8%

One Year Retail Employment
- USA: 3.6%
- Texas: 4.2%
- Austin: 6.4%
- Laredo: 6.4%
- Abilene: 5.4%
- McAllen: 5.0%
- San Antonio: 4.8%
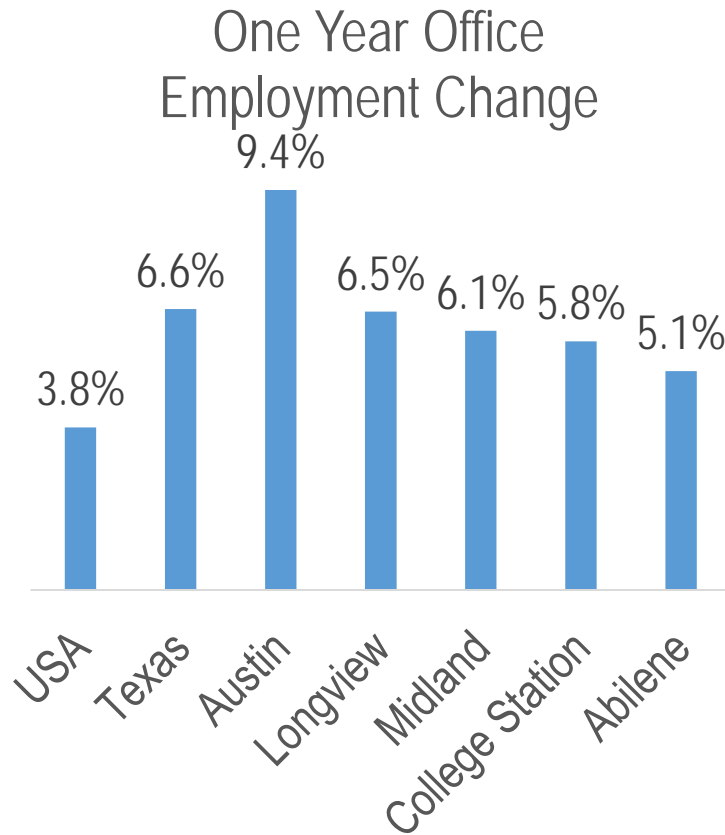
Houston: Office = 2.2%, Industrial = 5.7%, Retail = 4.7%

Source: Chmura, JobsEQ

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DFW is absolute job gainer in CRE-using employment

DFW adds 93K jobs, followed by Houston at 63K in key CRE-using industries

One Year Office Employment Gains

- DFW: 20,415
- Austin: 12,196
- Houston: 5,154
- San Antonio: 2,761
- El Paso: 560

One Year Industrial Employment Gains

- DFW: 45,918
- Houston: 31,648
- Austin: 14,278
- San Antonio: 13,090
- El Paso: 2,778

One Year Retail Employment Gains

- Houston: 26,205
- DFW: 26,093
- Austin: 12,899
- San Antonio: 10,054
- McAllen: 2,956

Source: Chmura, JobsEQ

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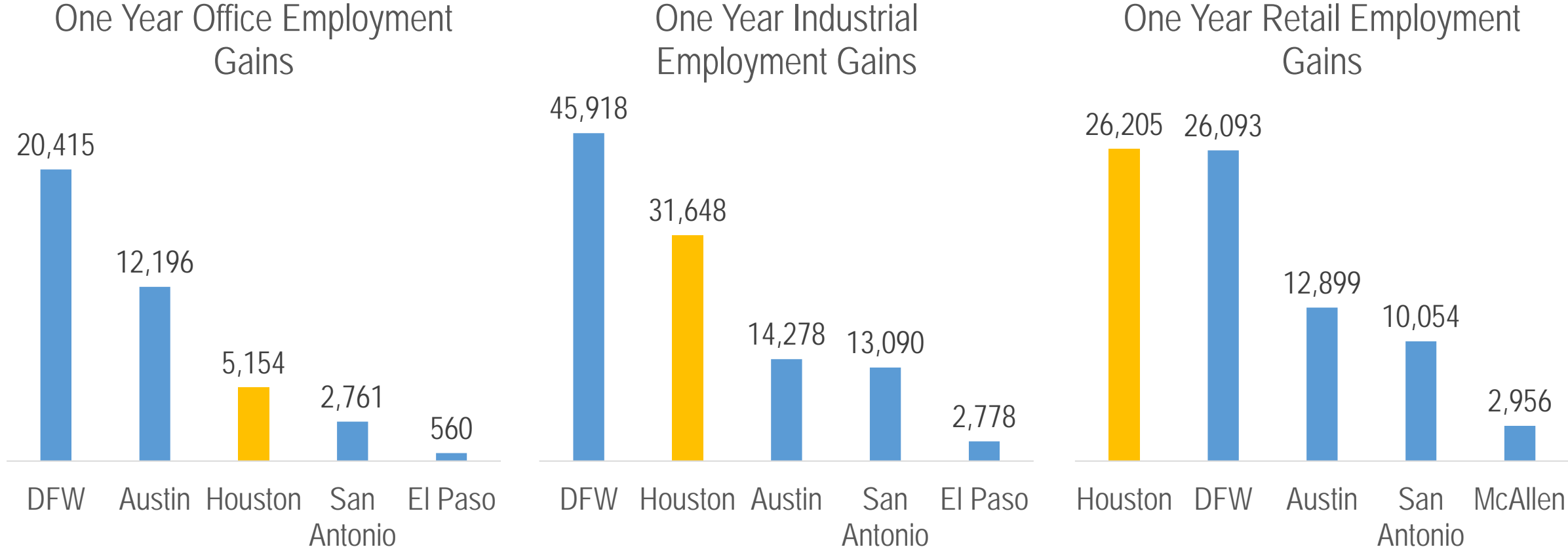
Rate of job openings falling from COVID highs

In Texas and nationally, job openings are at about 6/100 existing employe positions.
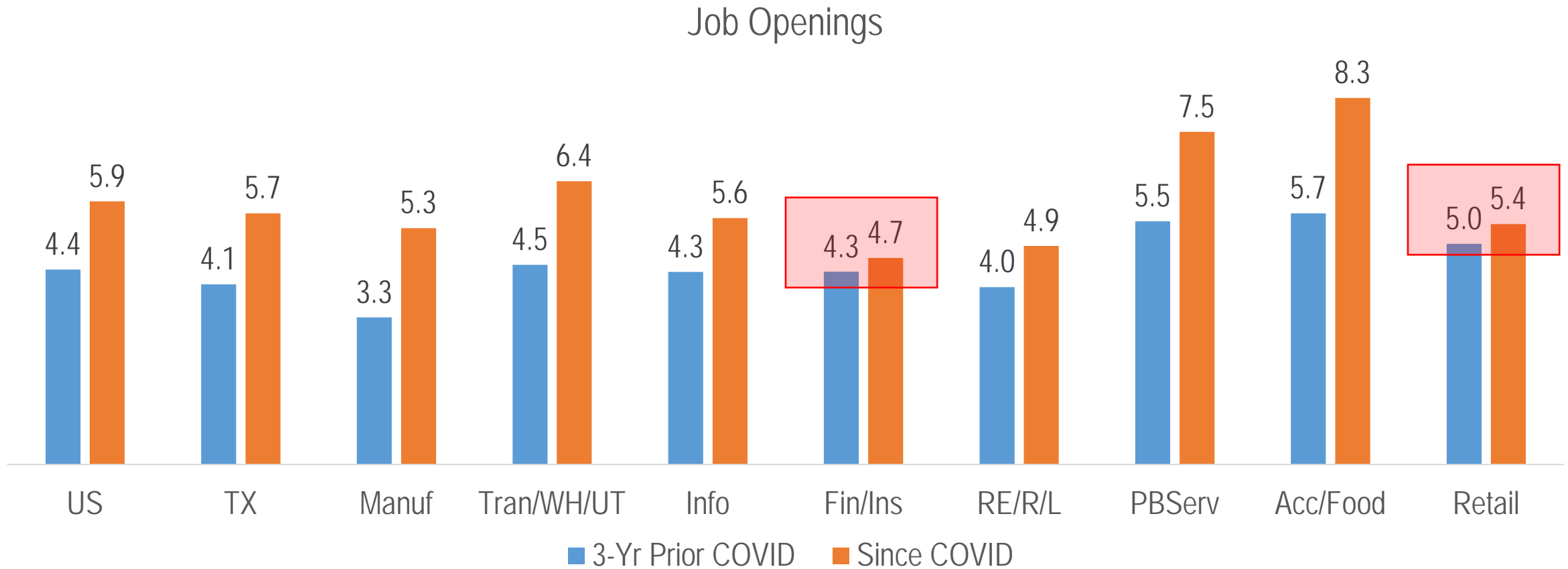

Job Openings
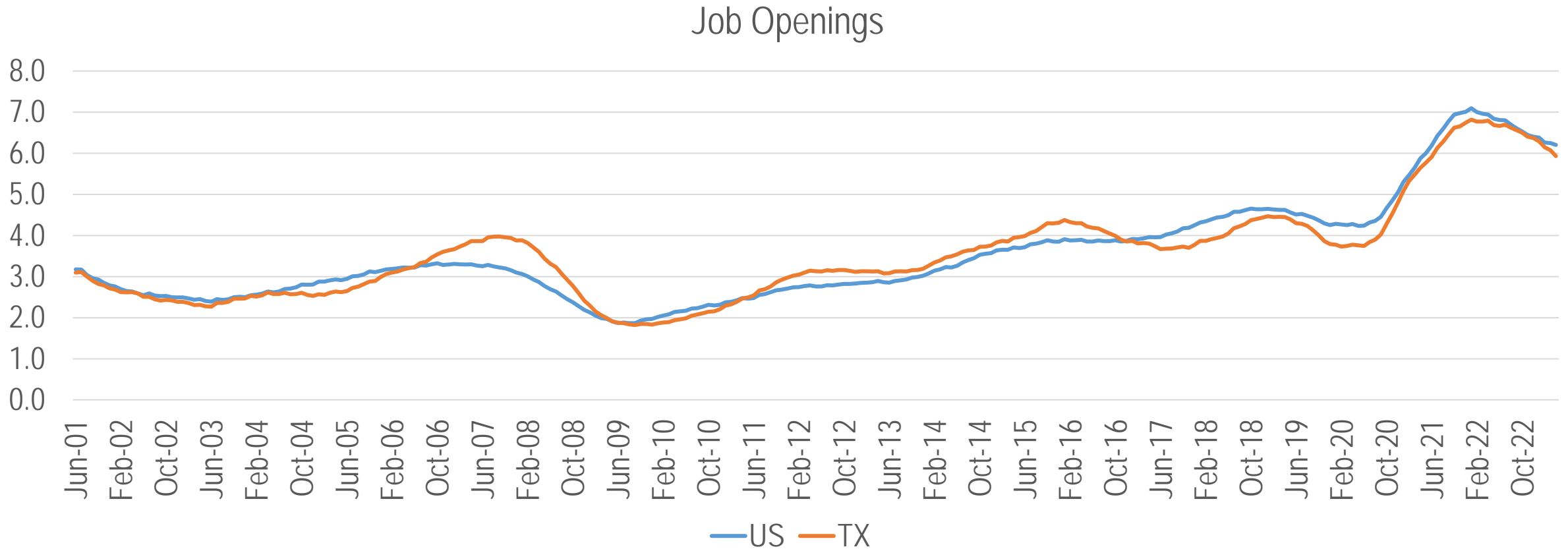
Source: BLS

Mostly strong job demand in commercial using sectors

Job shortage was real across industries, nationally and in Texas overall – except for retail and finance/insurance.

Job Openings

	US	TX	Manuf	Tran/WH/UT	Info	Fin/Ins	RE/R/L	PBServ	Acc/Food	Retail
3-Yr Prior COVID	4.4	4.1	3.3	4.5	4.3	4.3	4.0	5.5	5.7	5.0
Since COVID	5.9	5.7	5.3	6.4	5.6	4.7	4.9	7.5	8.3	5.4

■ 3-Yr Prior COVID ■ Since COVID

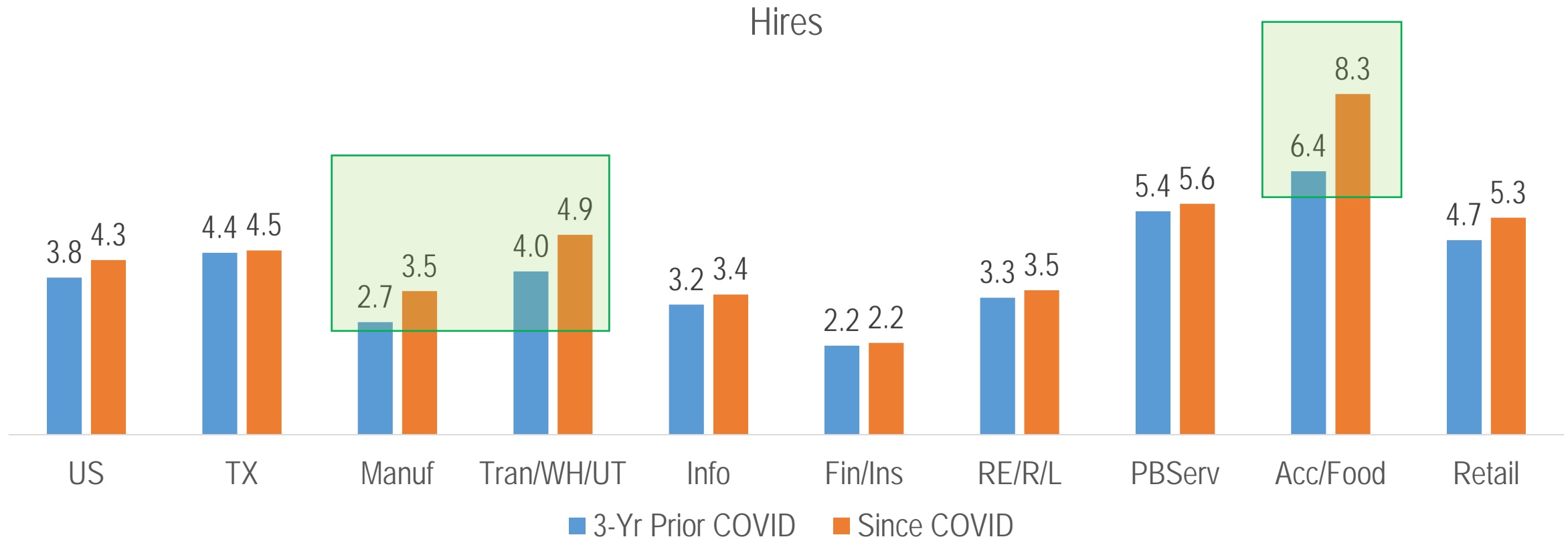Source: BLS

Hiring rate at pre-COVID levels

Gradual increase since Great Recession, then COVID spikes, now trending down.

Hires

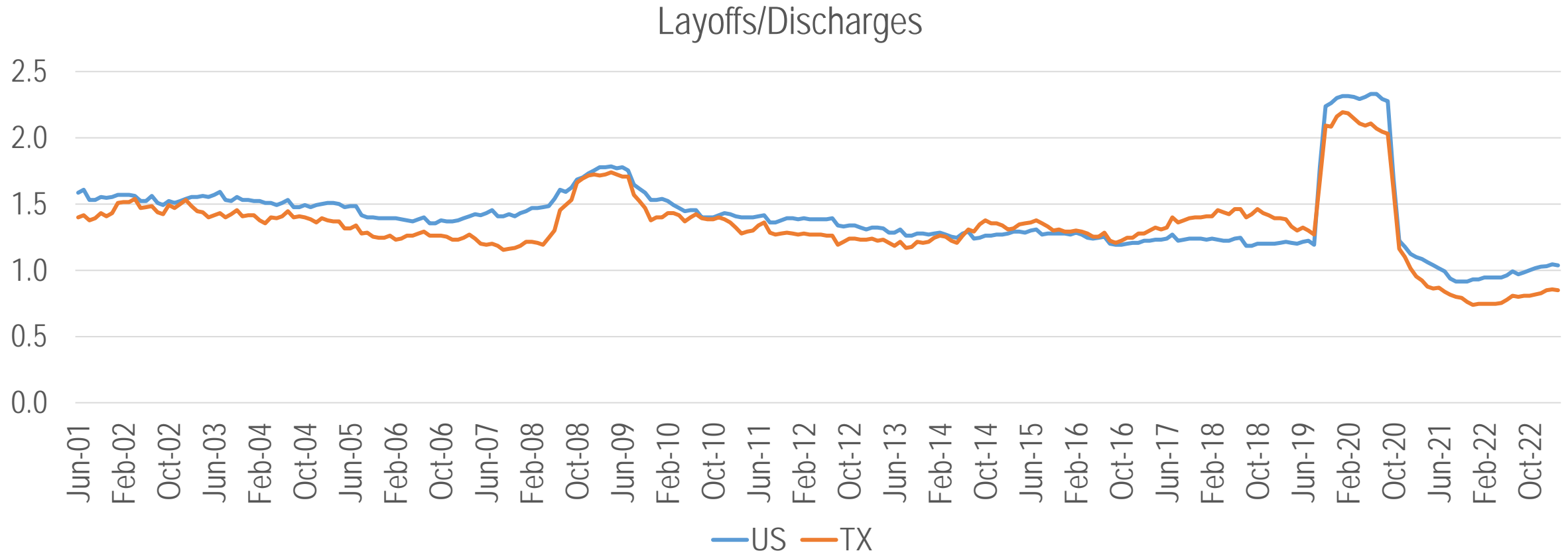Source: BLS

Manufacturing, goods moving, hospitality up the most

Most other sectors have unchanged hiring rates before and after COVID.

Hires

Sector	3-Yr Prior COVID	Since COVID
US	3.8	4.3
TX	4.4	4.5
Manuf	2.7	3.5
Tran/WH/UT	4.0	4.9
Info	3.2	3.4
Fin/Ins	2.2	2.2
RE/R/L	3.3	3.5
PBServ	5.4	5.6
Acc/Food	6.4	8.3
Retail	4.7	5.3

■ 3-Yr Prior COVID   ■ Since COVID

Source: BLS

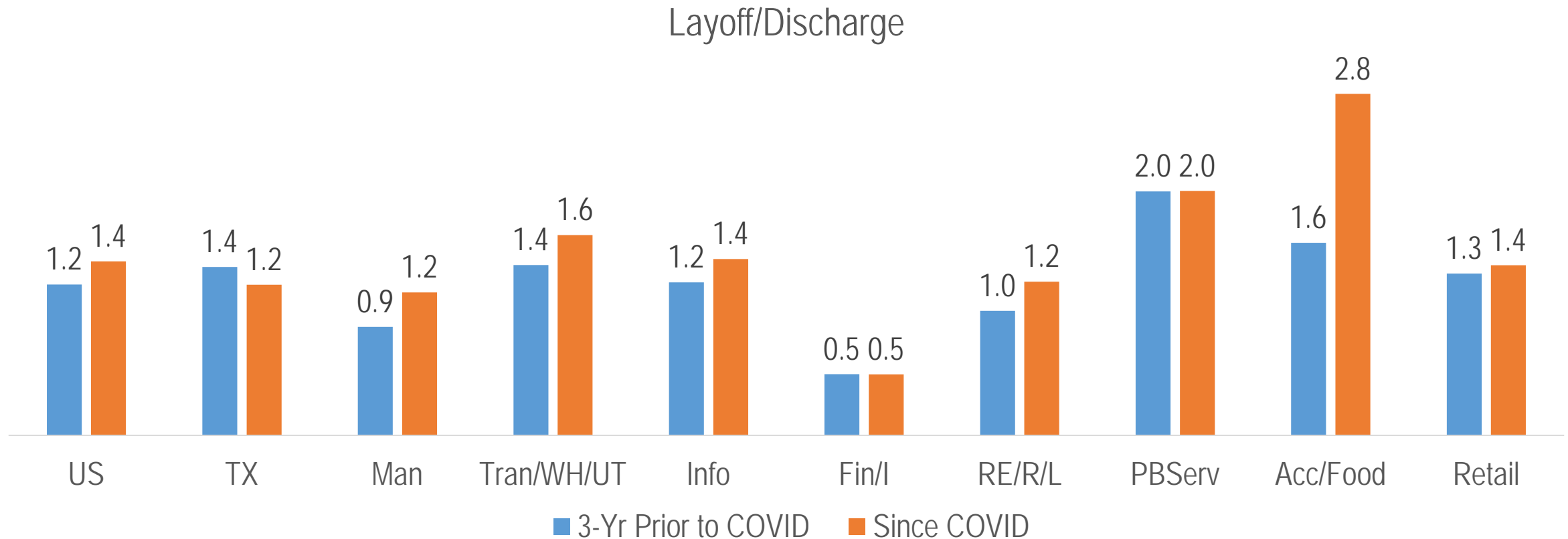# Layoff rates are increasing, but below trend

After historic jump, and historic low, layoffs returning to historic levels.

Layoffs/Discharges

Source: BLS

Layoffs mostly comparable before and after

Accommodation & food services saw largest layoff increase, followed by manufacturing, transportation and information.

Layoff/Discharge

	3-Yr Prior to COVID	Since COVID
US	1.2	1.4
TX	1.4	1.2
Man	0.9	1.2
Tran/WH/UT	1.4	1.6
Info	1.2	1.4
Fin/I	0.5	0.5
RE/R/L	1.0	1.2
PBServ	2.0	2.0
Acc/Food	1.6	2.8
Retail	1.3	1.4

Source: BLS

Wages beat private unearned income

Over five years wages grow 10X faster than dividend, interest and rental income.

	1-Yr Change	5-Year Change
DIR	2.0%	0.8%
W&S	1.4%	9.9%
Disposable	3.5%	6.5%

Real Per Capita Income

Legend: — Div, Int, Rent Income — Wage and Salary Income — Total Disposable Income
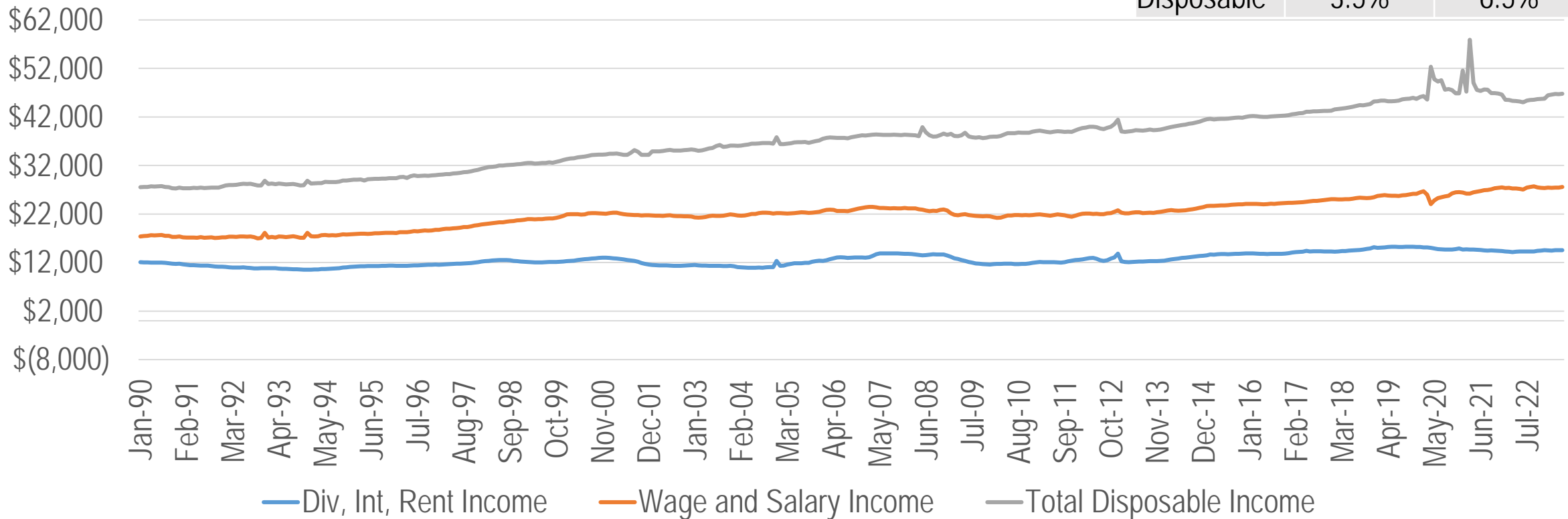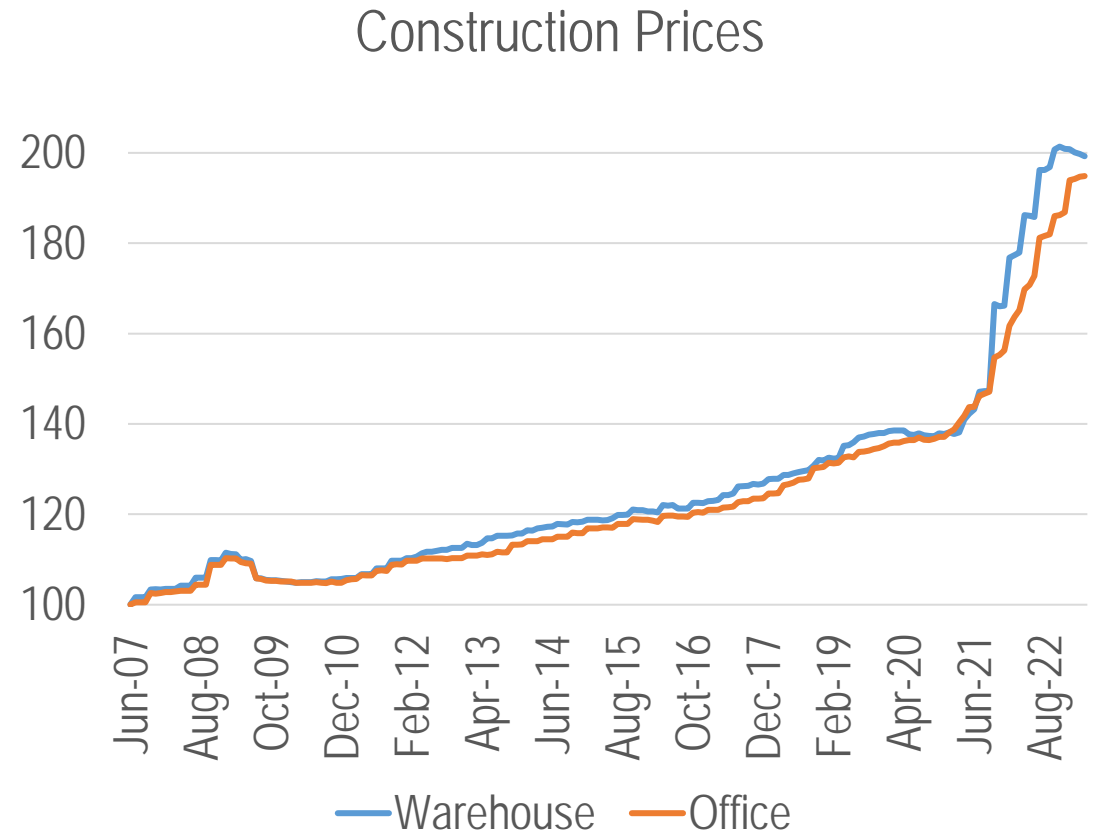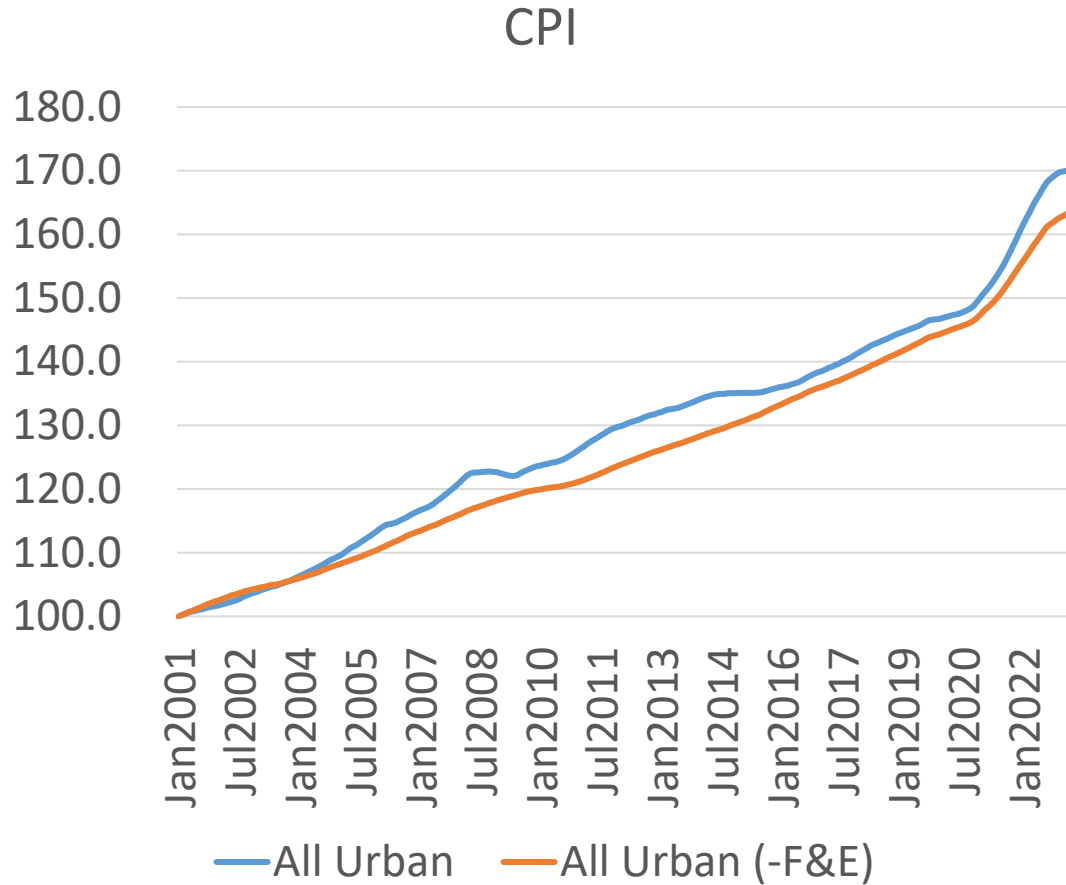
Source: BEA

Inflation moderating after fast increases

Consumer price increases outpaced by building construction price increases.

Source: BLS, NAHB

Ten rate increases…so far

Date	Increase (basis points)	Range
May 4	25	5.00-5.25
March 23	25	4.75-5.00
February 2	25	4.50-4.75
December 15	50	4.25-4.50
November 3	75	3.75-4.00
September 22	75	3.00-3.25
July 28	75	2.25-2.50
June 16	75	1.50-1.75
May 5	50	0.75-1.00
March 17	25	0.25-0.50

Source: BOG Federal Reserve.

Fastest mortgage rate increase in 50 years

Percent Change in 30-Year Fixed Rate

475bp increase by Federal Reserve
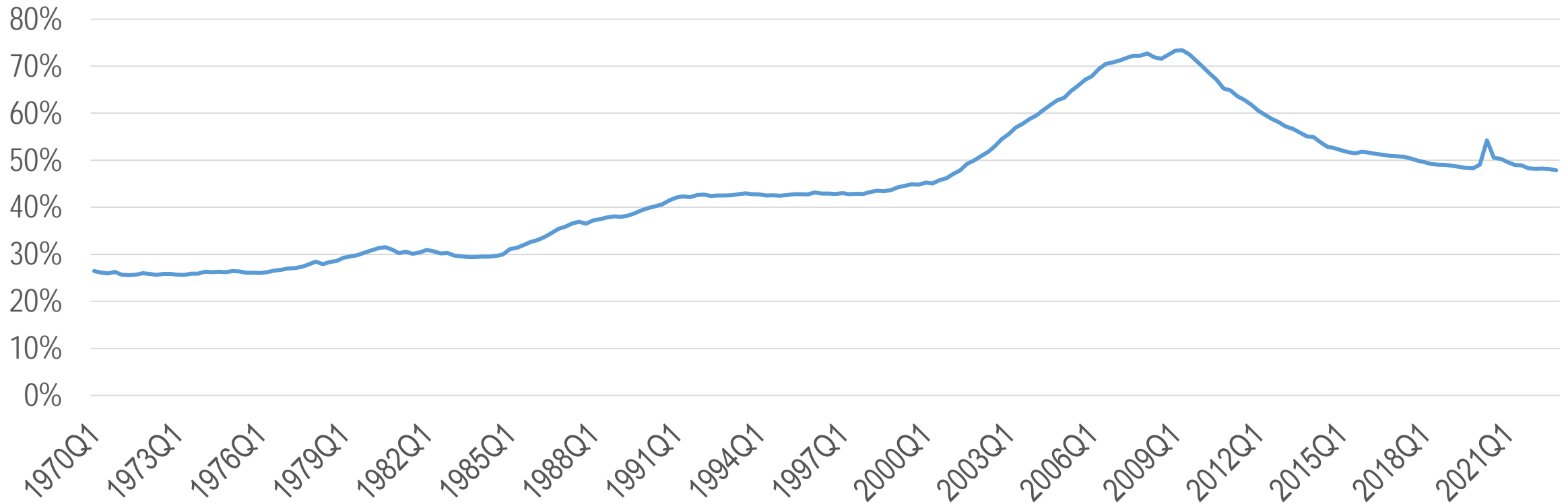since March 2022.
FF target: 5.00 to 5.25%

Source: FRED

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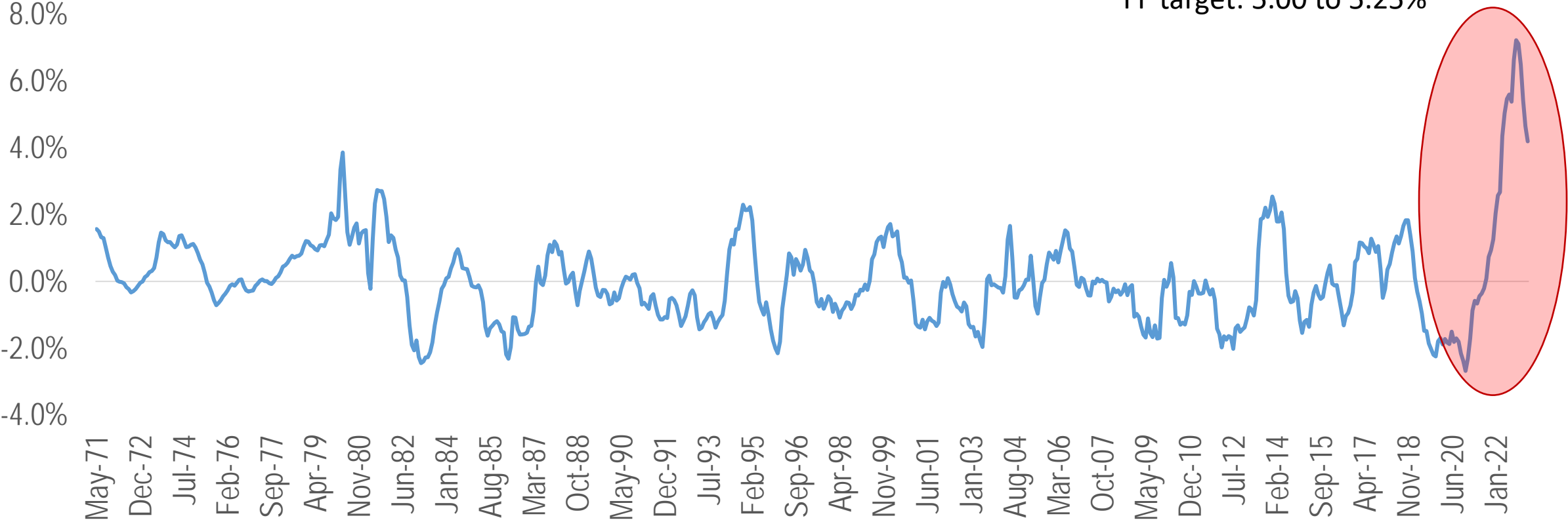
Mortgage liability closer to historic levels

Mortgage debt higher than per financial crisis, but well off peak
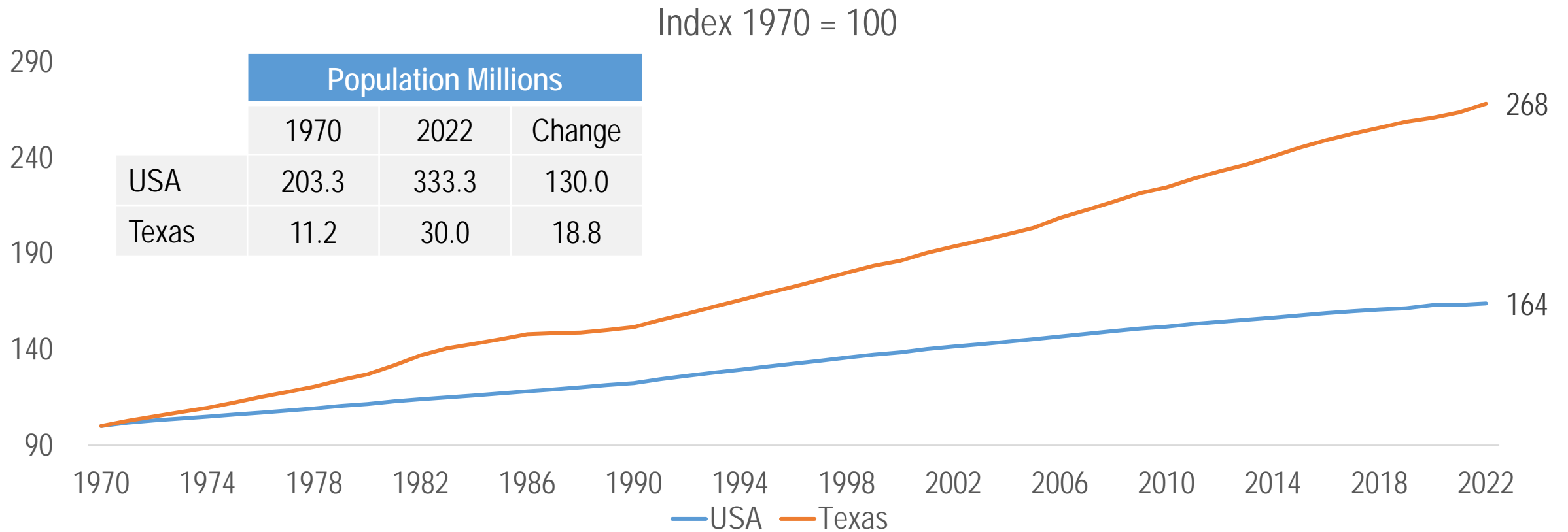

Home Mortgage Debt as Percent of GDP

Source: BOG FRB

Demographic Drivers

Texas' population up 2.7X since 1970

Index 1970 = 100

Population Millions			
	1970	2022	Change
USA	203.3	333.3	130.0
Texas	11.2	30.0	18.8

268

164

290
240
190
140
90

1970 1974 1978 1982 1986 1990 1994 1998 2002 2006 2010 2014 2018 2022

— USA — Texas

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Texas net migration at decade high

Domestic migration grew through COVID, international migration back up after falling in COVID.

230,961

118,614

Domestic   International

Source: Census Bureau.

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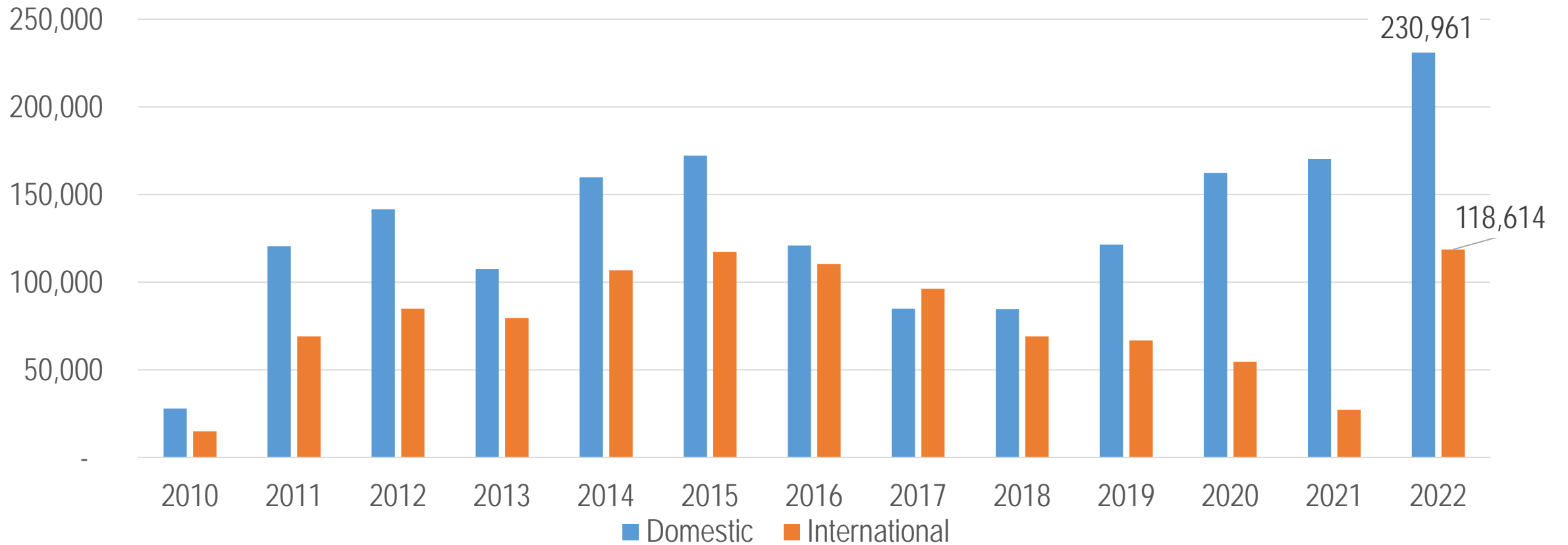
Texas Population Change July 1 2021 to July 1 2022

Every day in Texas:

- 449 people move here from another country
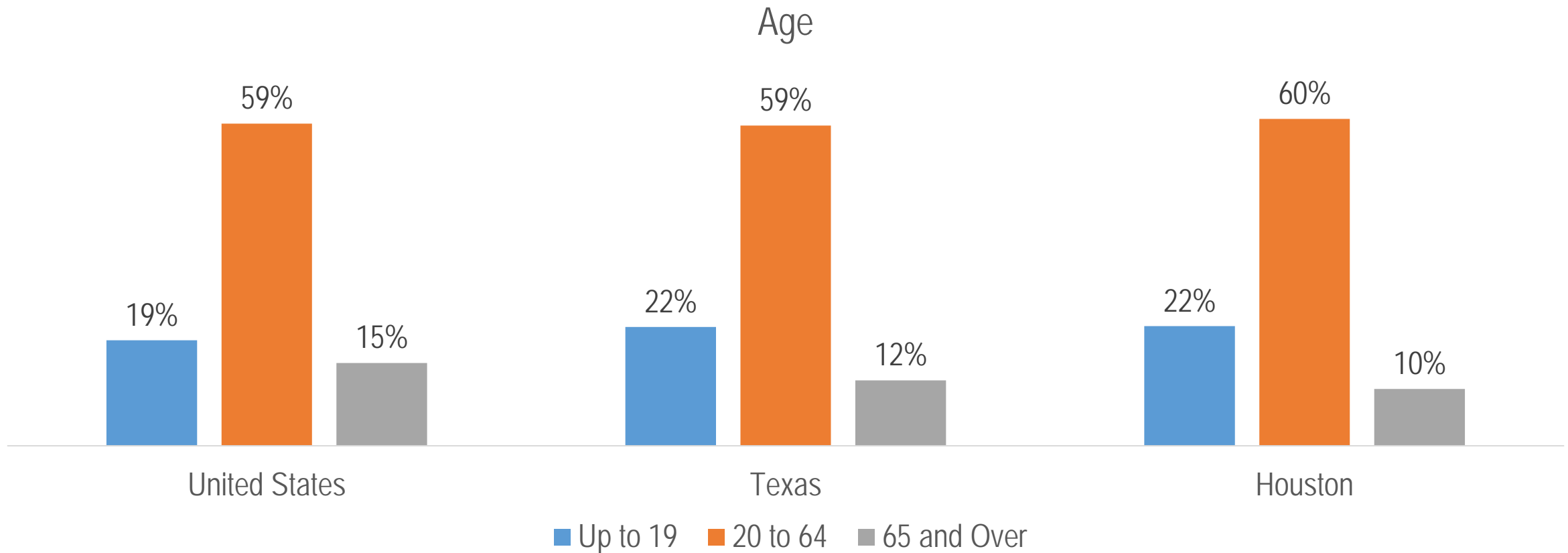- 1,302 people move here from another state
- 1,039 people are born
- 716 die

Annual Components of Change

379,412	Births
230,961	Domestic Migration
118,614	International Migration
-261,253	Deaths

Source: U.S. Census Bureau.

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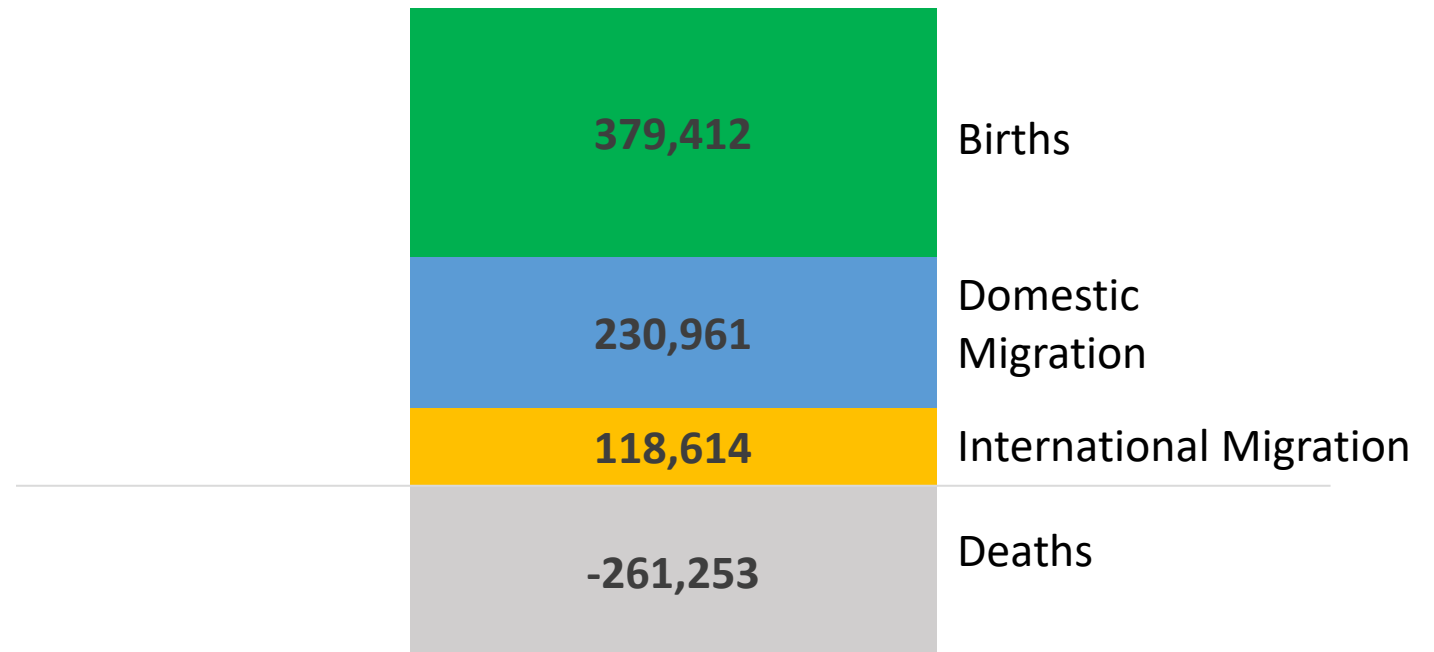
Houston region has a typical age profile

Houston and Texas have same dependency ratio, a little lower than the U.S.

Age

United States
- 19% (Up to 19)
- 59% (20 to 64)
- 15% (65 and Over)

Texas
- 22% (Up to 19)
- 59% (20 to 64)
- 12% (65 and Over)

Houston
- 22% (Up to 19)
- 60% (20 to 64)
- 10% (65 and Over)

Legend: ■ Up to 19 ■ 20 to 64 ■ 65 and Over

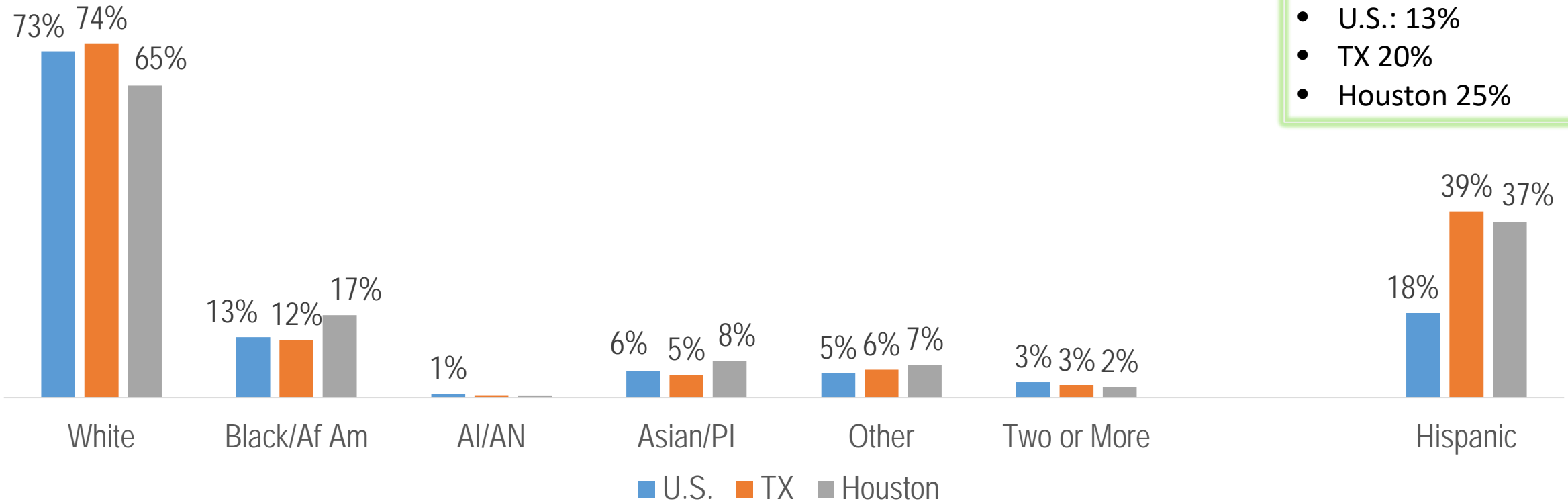Source: U.S. Census Bureau.

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Houston is more racially and ethnically diverse

Houston is more Black/Af.Am. and Asian than Texas, a little less Hispanic.
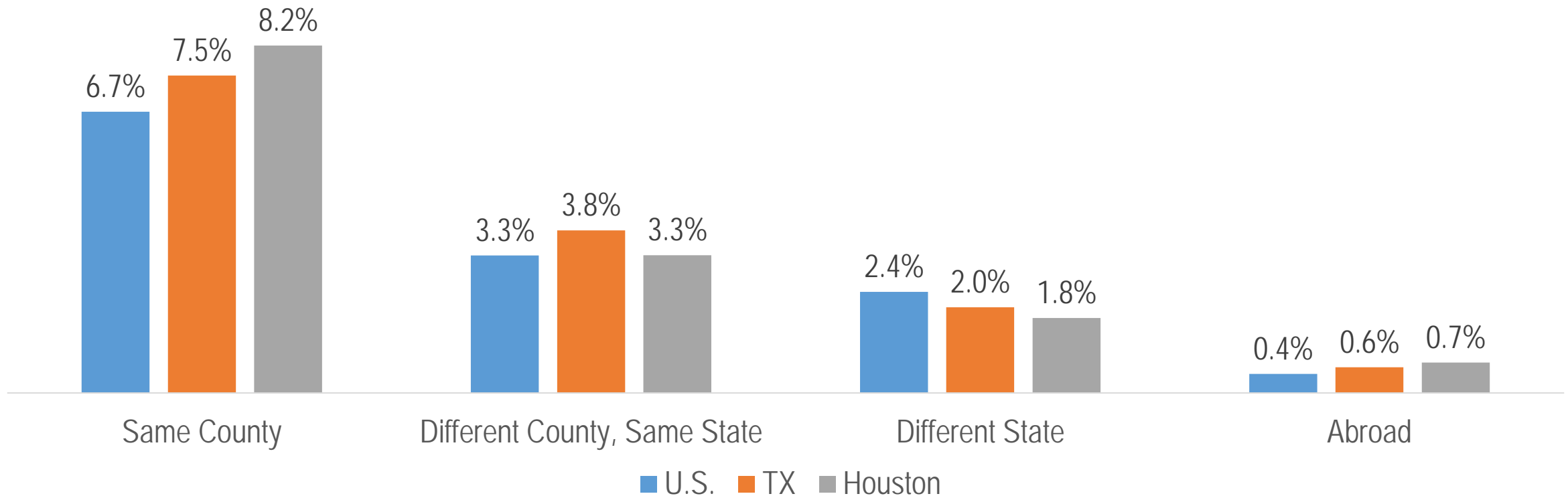
Race and Hispanic Ethnicity

Diversity Index:
- U.S.: 13%
- TX 20%
- Houston 25%

	U.S.	TX	Houston
White	73%	74%	65%
Black/Af Am	13%	12%	17%
AI/AN	1%		
Asian/PI	6%	5%	8%
Other	5%	6%	7%
Two or More	3%	3%	2%
Hispanic	18%	39%	37%

■ U.S. ■ TX ■ Houston

Source: U.S. Census Bureau.

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Houston moves more likely to be from in region

Houston's share of "lived in same house last year" is about the same as U.S. and Texas.
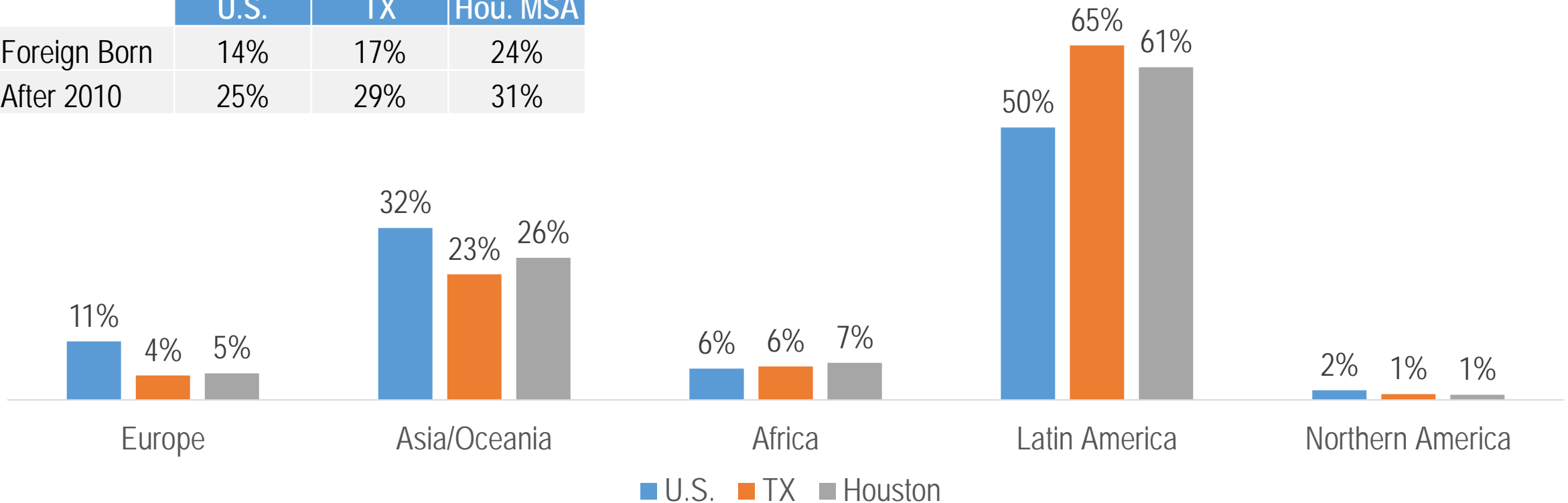

Lived in Different House Last Year

	Same County	Different County, Same State	Different State	Abroad
U.S.	6.7%	3.3%	2.4%	0.4%
TX	7.5%	3.8%	2.0%	0.6%
Houston	8.2%	3.3%	1.8%	0.7%

■ U.S. ■ TX ■ Houston

Source: U.S. Census Bureau.

More foreign born in Houston

More of Houston's foreign born arrived in recent years; larger Asian and African origin than Texas overall.

	U.S.	TX	Hou. MSA
Foreign Born	14%	17%	24%
After 2010	25%	29%	31%

Birth Continent

Legend: U.S., TX, Houston

Categories: Europe (11%, 4%, 5%), Asia/Oceania (32%, 23%, 26%), Africa (6%, 6%, 7%), Latin America (50%, 65%, 61%), Northern America (2%, 1%, 1%)

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Many more non-family households

Married households share decreasing, may have declined in absolute numbers since 2020.

Households by Type (M)

	2000	2022
Non Family	33	47
Single Head Family	17	23
Married Family	55	61
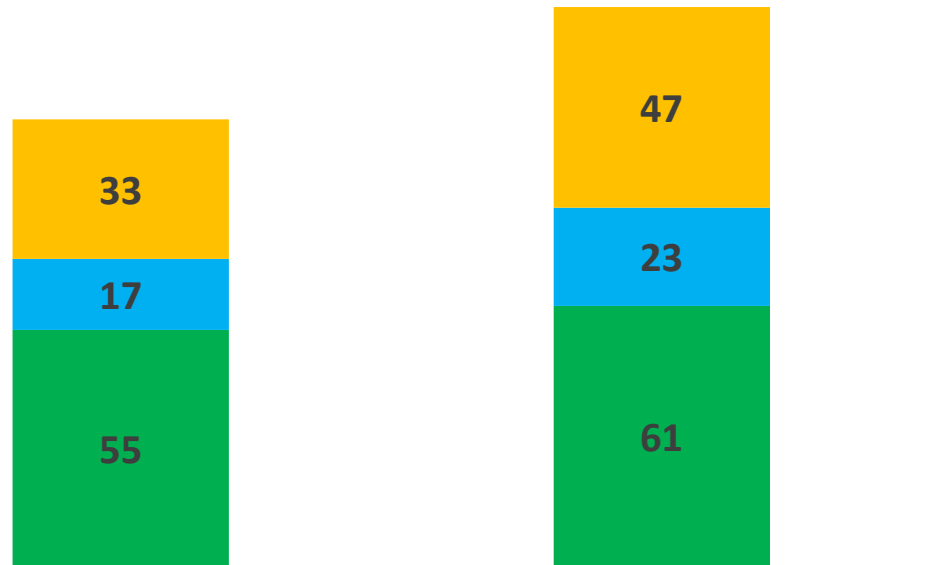
Household Type Share of Total

	2000	2022
Non Family	31%	36%
Single Head Family	16%	17%
Married Family	53%	47%

Married Family   Single Head Family   Non Family
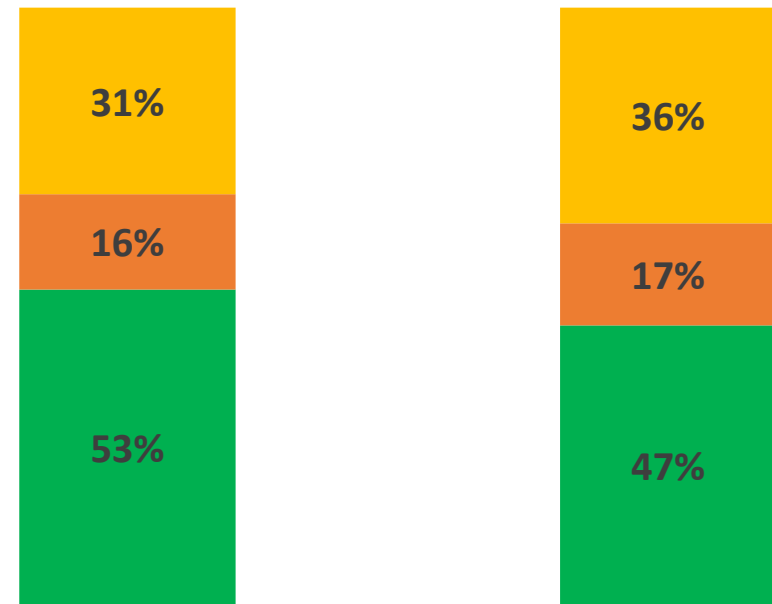
Married Family   Single Head Family   Non Family

Source: Census Bureau Historical Household Tables

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Average household size constant, but a changing mix

There are a larger share of 1 and 2-person households; smaller share of 3 to 5-person.

Share of Households by Size (members)

Source: Census Bureau Historical Household Tables

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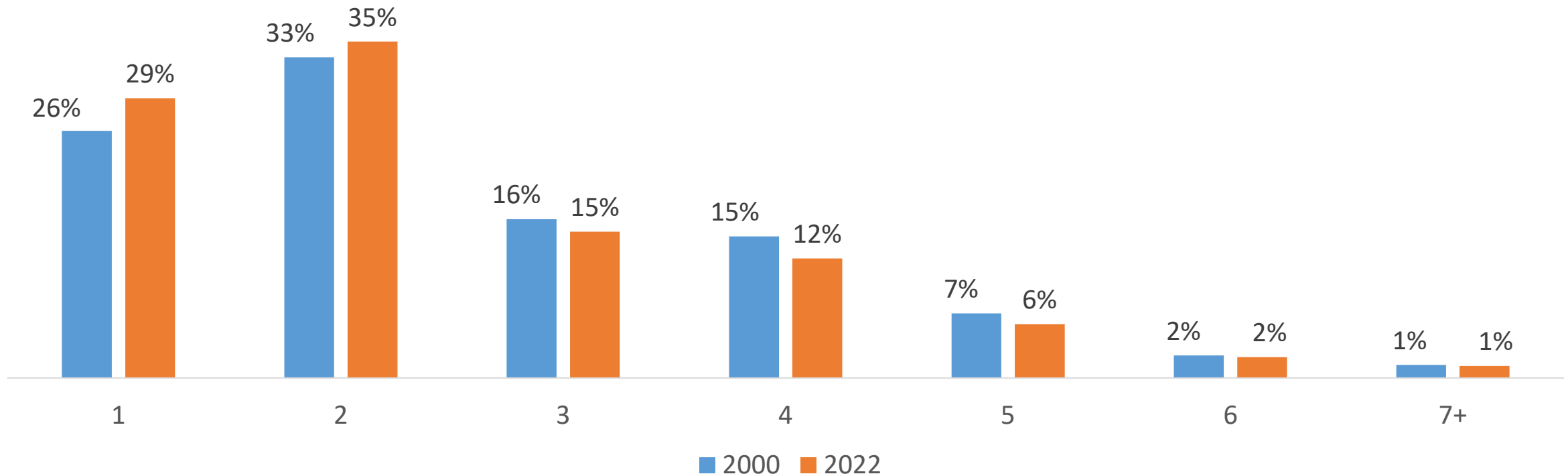
Occupier Trends and Texas Competitiveness

Major occupier trends since COVID

- Office
    - Building and neighborhood amenities more important
    - Weakness in older Class A (low-profile firms may move up only if rent is right)
    - Work from home levels software wages

- Industrial
    - More space per worker
        - Distribution for retail
        - Capital intensive manufacturing (EVs, batteries, semiconductors)
    - Higher entry-level production wages ($5 per hour everywhere)

- Retail
    - Right-size space and inventory
    - Compete on experiences

Assessing client needs is key to success

- Why firms move:
  - Save money
  - Improve talent attraction / retention
  - Change/reinvigorate culture
  - Rebrand
- What real estate professionals can do about it?
  - Local: Commutation & labor analysis, building and neighborhood amenities, financial analysis
  - Stay/go relocation (other markets in play): Total labor availability, state regulations, talent relocation strategy (housing, schools, culture)
- Analysis adds time to close, but client success helps retention, cross selling

Firms face tradeoffs in costs and conditions

MARKET CONDITIONS
Talent
-Availability
-Quality
-Scalability

Operating Conditions
-Access
-Taxes/Regulations

Quality of Place
-Housing Cost/Quality
-Amenities
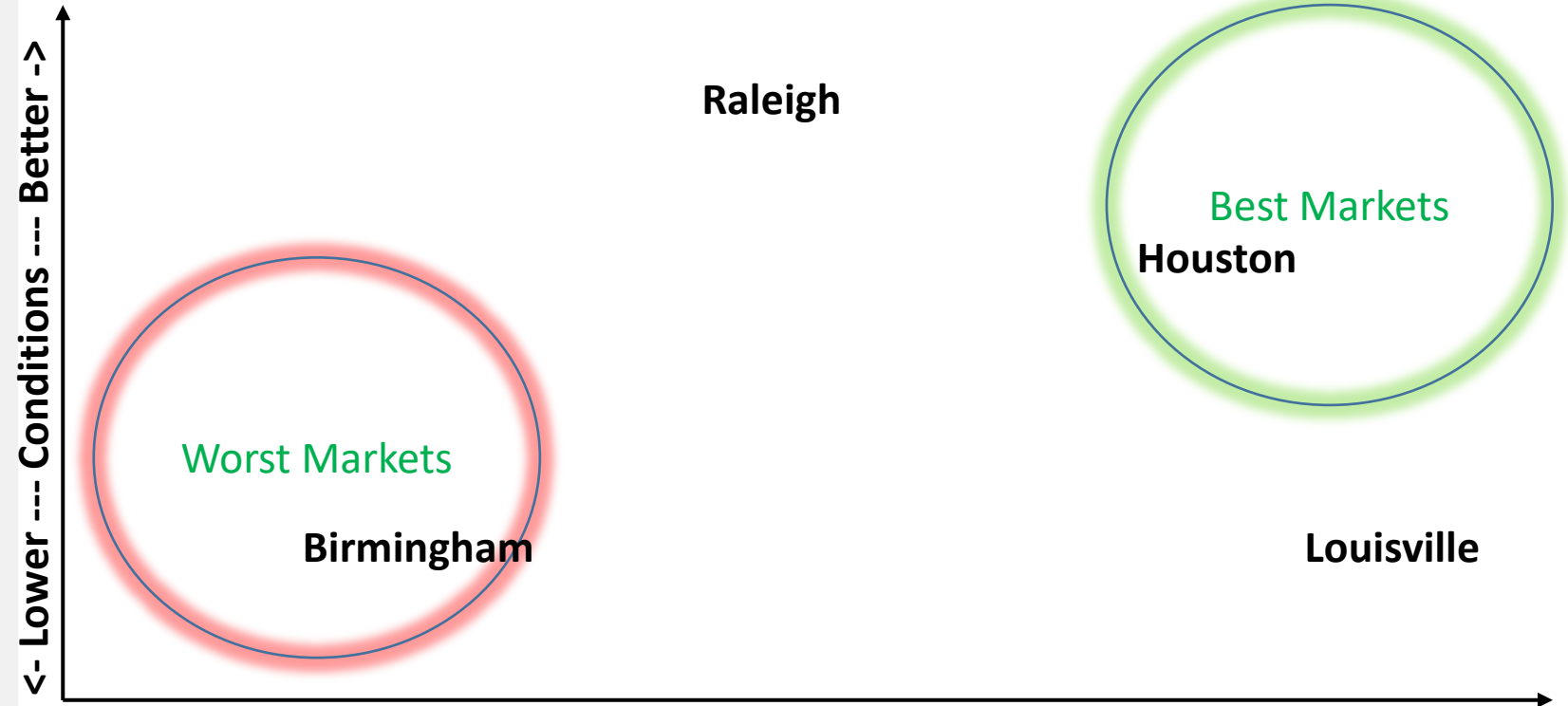
INCENTIVES are a tie-breaker
Firms encourage bidding

<- Lower --- Conditions --- Better ->

Raleigh

Best Markets
Houston

Worst Markets

Birmingham

Louisville

← Lower --- COST SAVINGS --- Higher →
-Labor
-Rent

McAllen, DFW have competitive office labor markets

Texas' largest markets and the Valley have the most favorable labor market for office-using firms.

Office Labor Competitiveness (1.0 = Most Competitive)

Scoring model (office-using workers):
- Total and concentration
- Relative wages
- Unemployment rate

Market	Score
McAllen	1.00
DFW	1.00
Houston	0.96
Brownsville	0.95
Beaumont	0.93
Austin	0.92
Corpus Christi	0.88
El Paso	0.88
Texarkana	0.88
San Antonio	0.87

Source: TRERC analysis of BLS data.

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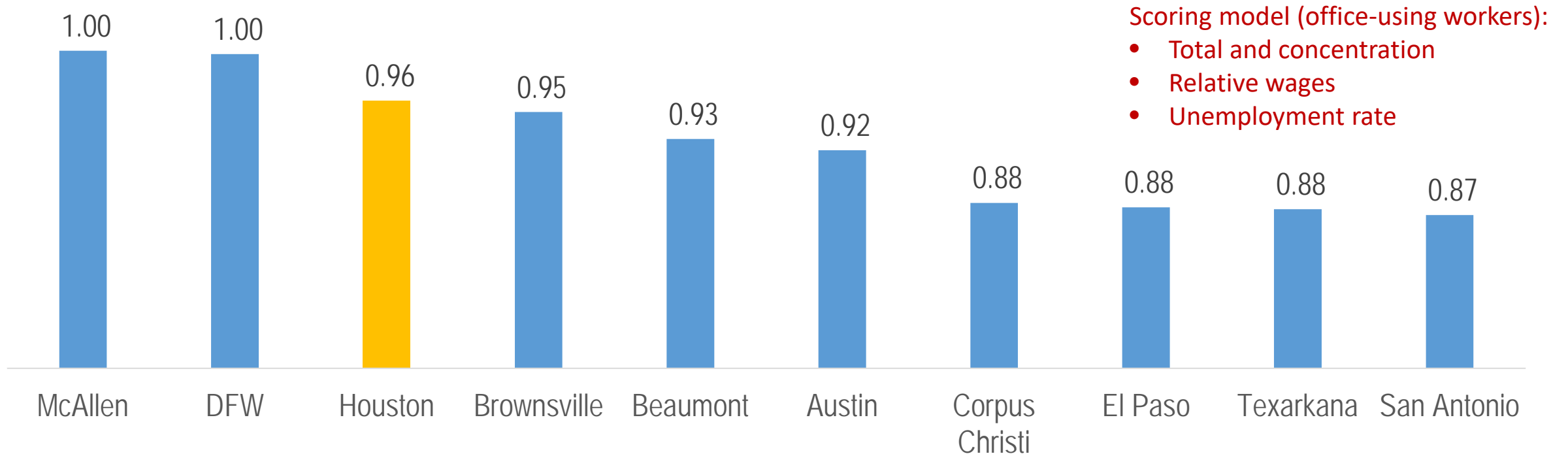
DFW, Houston have competitive industrial labor markets

Texas' two largest markets have the most favorable labor market for industrial space-using firms.

Industrial Labor Competitiveness (1.0 = Best)

Scoring model (industrial-using workers):
- Total and concentration
- Relative wages
- Unemployment rate

DFW	Houston	Beaumont	Longview	McAllen	Laredo	El Paso	Texarkana	Brownsville	Odessa
1.00	0.97	0.96	0.95	0.95	0.94	0.92	0.91	0.91	0.90

Source: TRERC analysis of BLS data.

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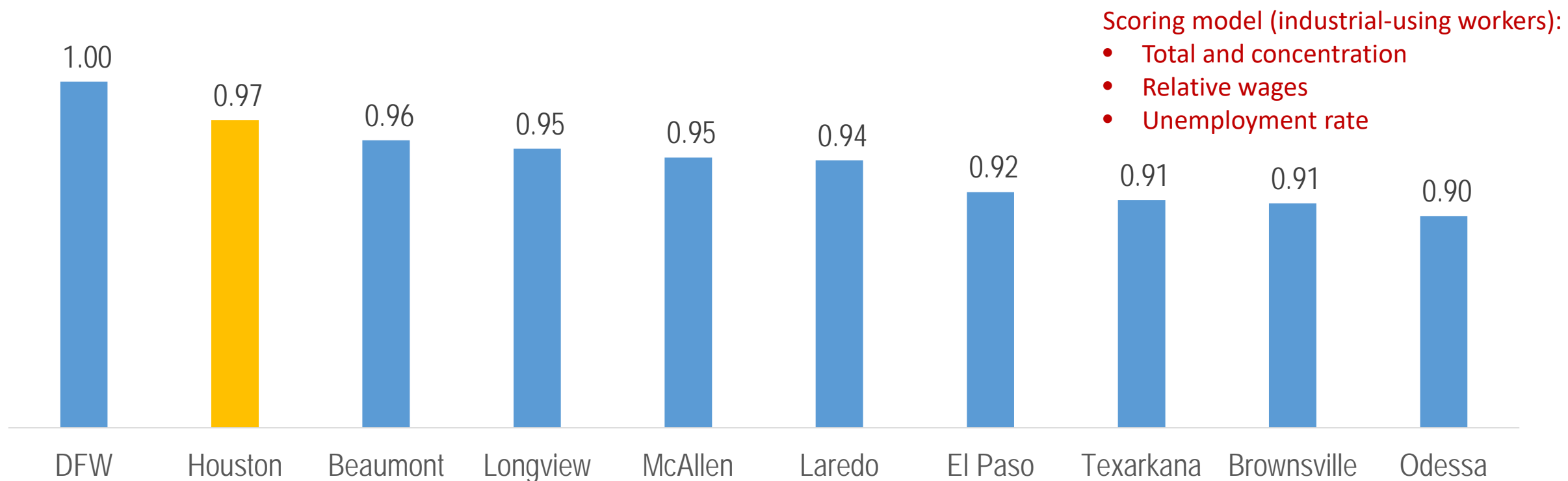
Texas Commercial Market Performance Metrics

5.3 billion square feet in three asset classes

Inventory MSF

Industrial: 2,635
- 416 (21 Smaller)
- 172 (San Antonio)
- 789 (Houston)
- 1117 (Dallas-Fort Worth)
- 141 (Austin)

Office: 1,145
- 150 (21 Smaller)
- 91 (San Antonio)
- 352 (Houston)
- 422 (Dallas-Fort Worth)
- 131 (Austin)

Retail: 1,534
- 377 (21 Smaller)
- 148 (San Antonio)
- 430 (Houston)
- 460 (Dallas-Fort Worth)
- 119 (Austin)

Legend: ■ Austin ■ Dallas-Fort Worth ■ Houston ■ San Antonio ■ 21 Smaller
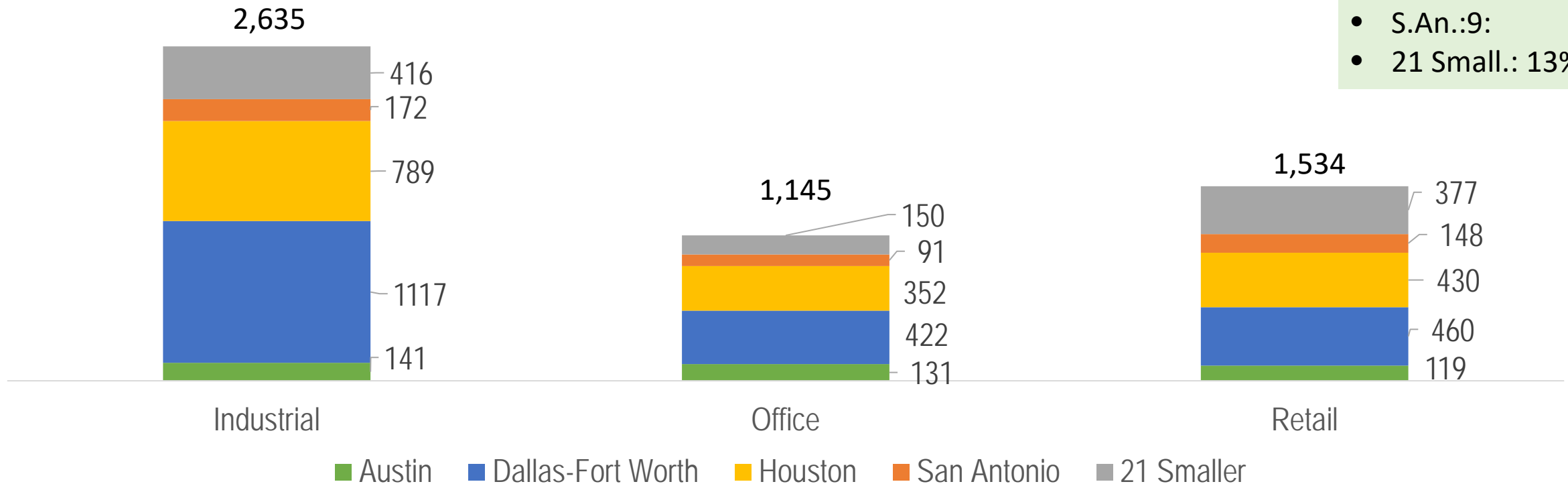
1.6M Apartments:
- DFW: 36%
- Hou.: 30%
- Aust.: 12%
- S.An.:9:
- 21 Small.: 13%

Source: TRERC analysis of Costar data.

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DFW, Houston dominate industrial real estate
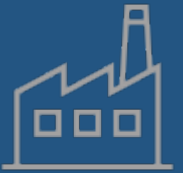
DFW's scale and central location, Houston's scale and port establish their industrial dominance.

Total Inventory (MSF)

Metro	Value
Dallas-Fort Worth	1,117
Houston	789
San Antonio	172
Austin	141
El Paso	72
Lubbock	48
Laredo	41
McAllen	33
Corpus Christi	29
Waco	27
Smallest 15	165
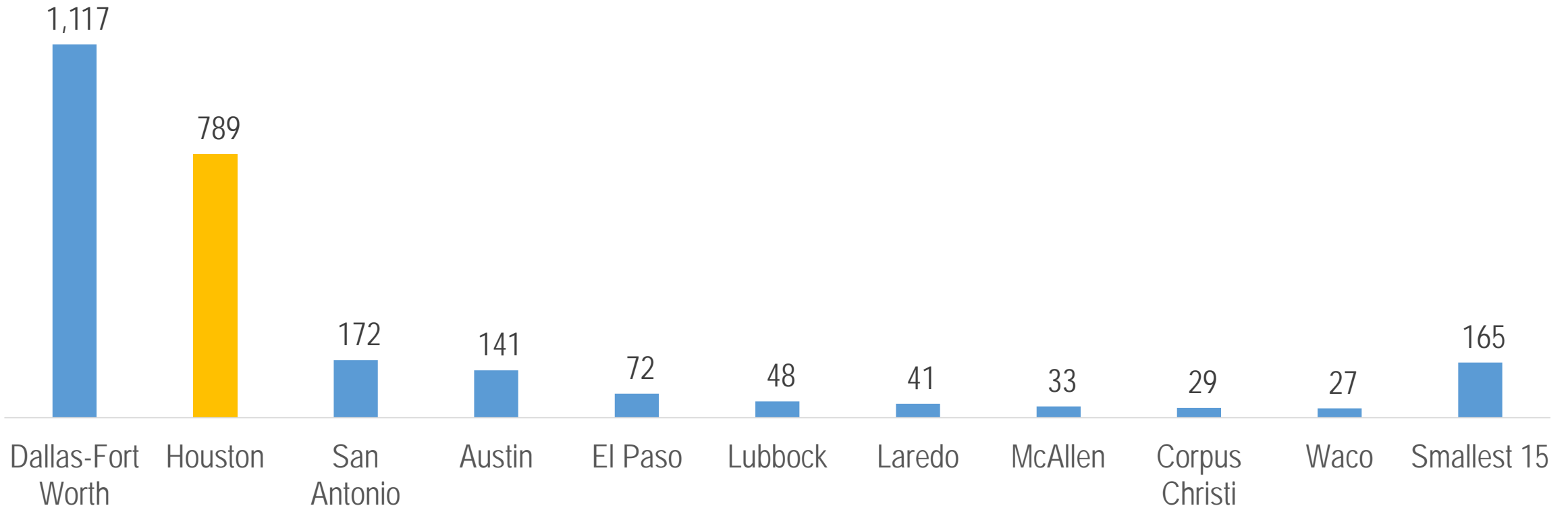
Rent growth up most markets, solid in Big-4
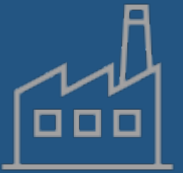
Industrial rent growth strong in most markets, especially El Paso, Waco.

12 Month Industrial Rent Growth
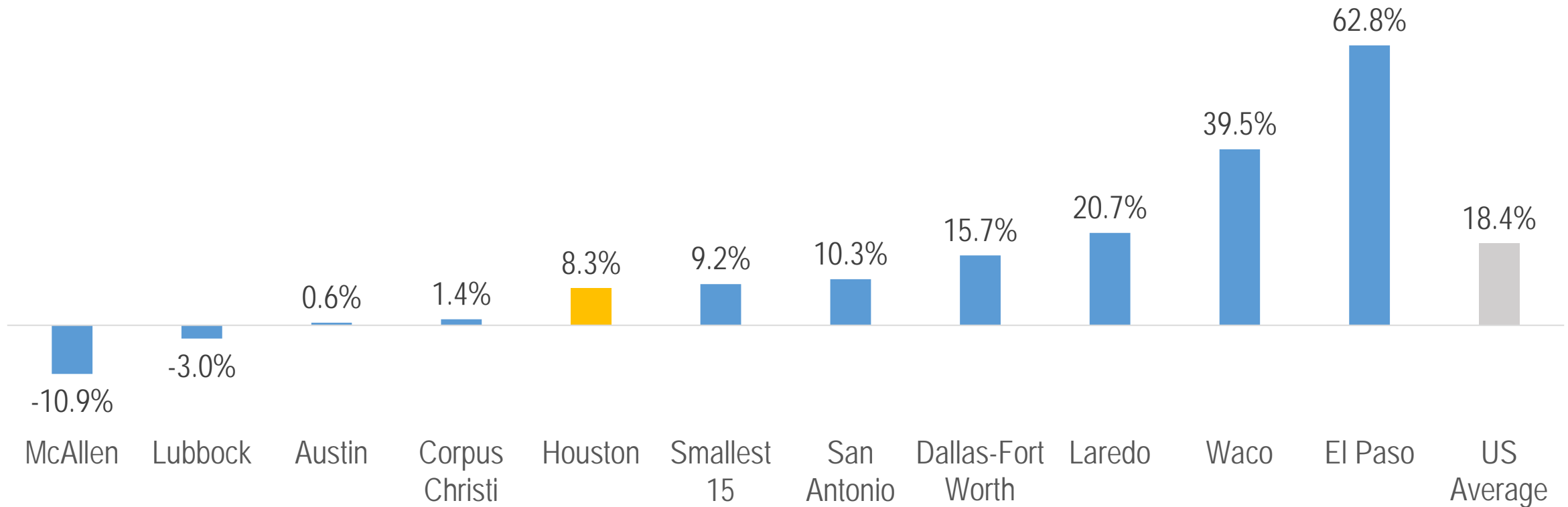
Market	Growth
McAllen	-10.9%
Lubbock	-3.0%
Austin	0.6%
Corpus Christi	1.4%
Houston	8.3%
Smallest 15	9.2%
San Antonio	10.3%
Dallas-Fort Worth	15.7%
Laredo	20.7%
Waco	39.5%
El Paso	62.8%
US Average	18.4%
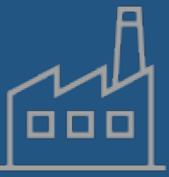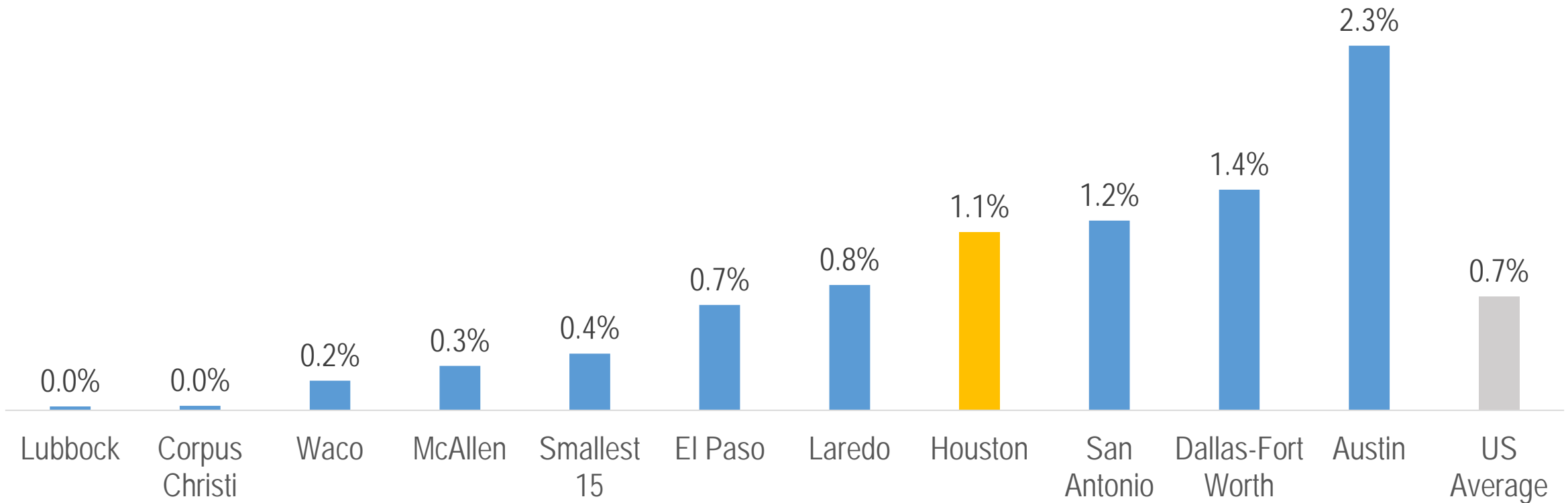
Positive absorption in most large markets
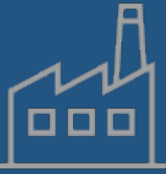
Strong demand kept absorption above deliveries in the last year.

Net Absorption as Percent of Inventory

Market	Value
Corpus Christi	0.0%
Lubbock	0.1%
Smallest 15	0.3%
Laredo	0.3%
Waco	0.4%
El Paso	0.6%
McAllen	0.7%
San Antonio	0.9%
Houston	1.0%
Dallas-Fort Worth	1.1%
Austin	1.6%
US Average	0.5%

Source: TRERC analysis of Costar data.

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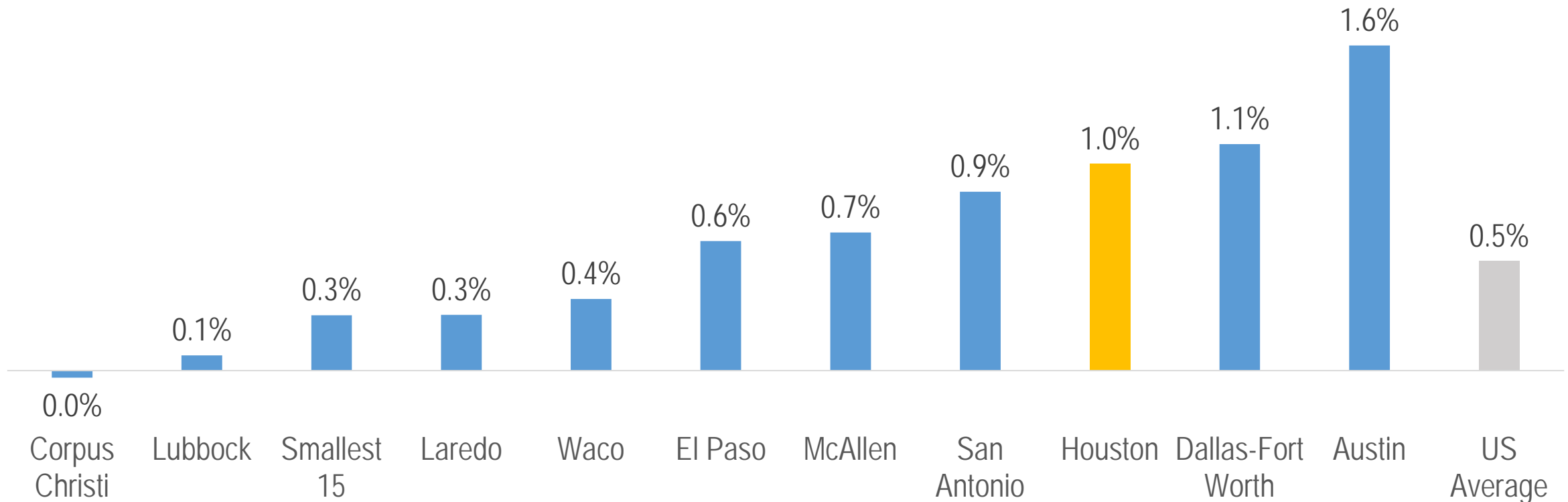
Markets tied less to employment after COVID

Deliveries and absorption per 100 new industrial jobs doubles after COVID.

Industrial Employment Impact
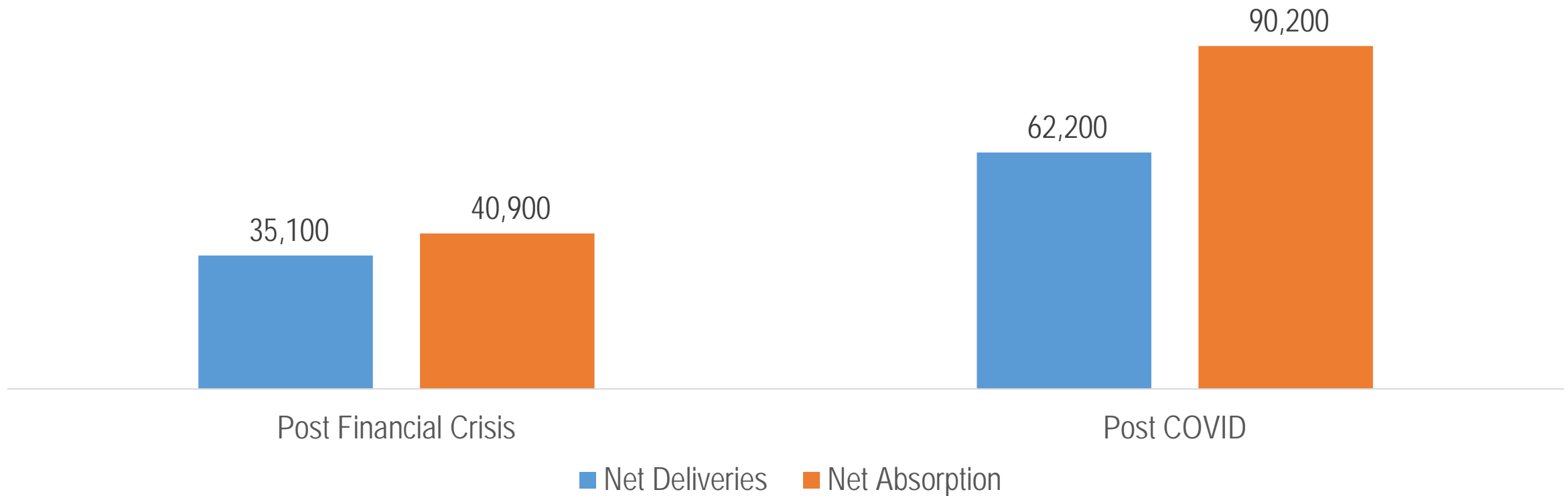
Legend:
- Net Deliveries
- Net Absorption

Post Financial Crisis: 35,100 (Net Deliveries), 40,900 (Net Absorption)
Post COVID: 62,200 (Net Deliveries), 90,200 (Net Absorption)

Dallas, Houston are two-thirds of inventory

The fifteen smallest markets amount to 6 percent of the state total.

Total Inventory (MSF)

	Value
Dallas-Fort Worth	422
Houston	352
Austin	131
San Antonio	91
El Paso	25
McAllen	14
Lubbock	13
Corpus Christi	12
Midland	11
Beaumont	9
Smallest 15	65

Source: TRERC analysis of Costar data.

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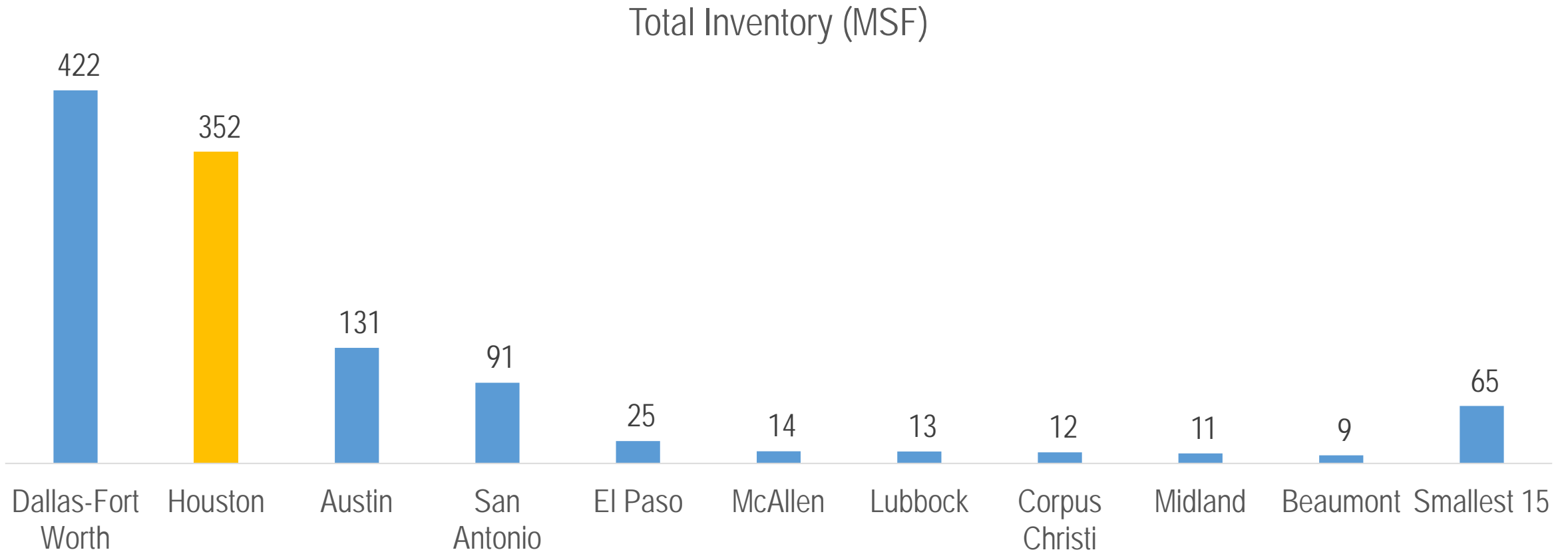
Smaller markets see strongest rent growth

Small and West Texas show strong rent growth. Most major markets beat U.S. growth.

12 Month Office Rent Growth

Market	Growth
Lubbock	-10.9%
McAllen	-8.0%
Corpus Christi	-7.2%
Beaumont	-7.1%
San Antonio	-1.8%
Houston	1.4%
Austin	1.5%
Dallas-Fort Worth	2.4%
Midland	2.6%
El Paso	2.7%
Smallest 15	8.8%
US Average	1.6%
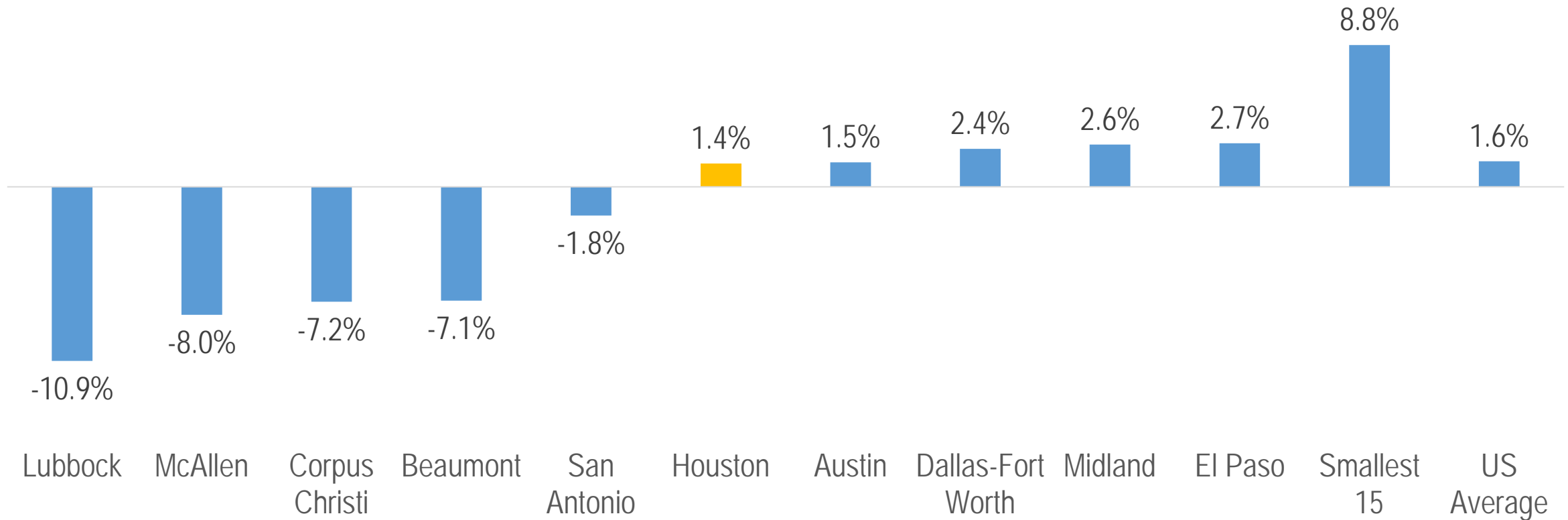
Source: TRERC analysis of Costar data.

New office space is coming on line

Central Texas see's the most new inventory, but all large markets adding.

Average Quarterly Net Deliveries as Percent of Inventory

Midland	McAllen	Beaumont	Corpus Christi	Smallest 15	El Paso	Houston	Dallas-Fort Worth	Lubbock	San Antonio	Austin	US Average
-0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.2%	0.2%	0.4%	0.8%	0.1%
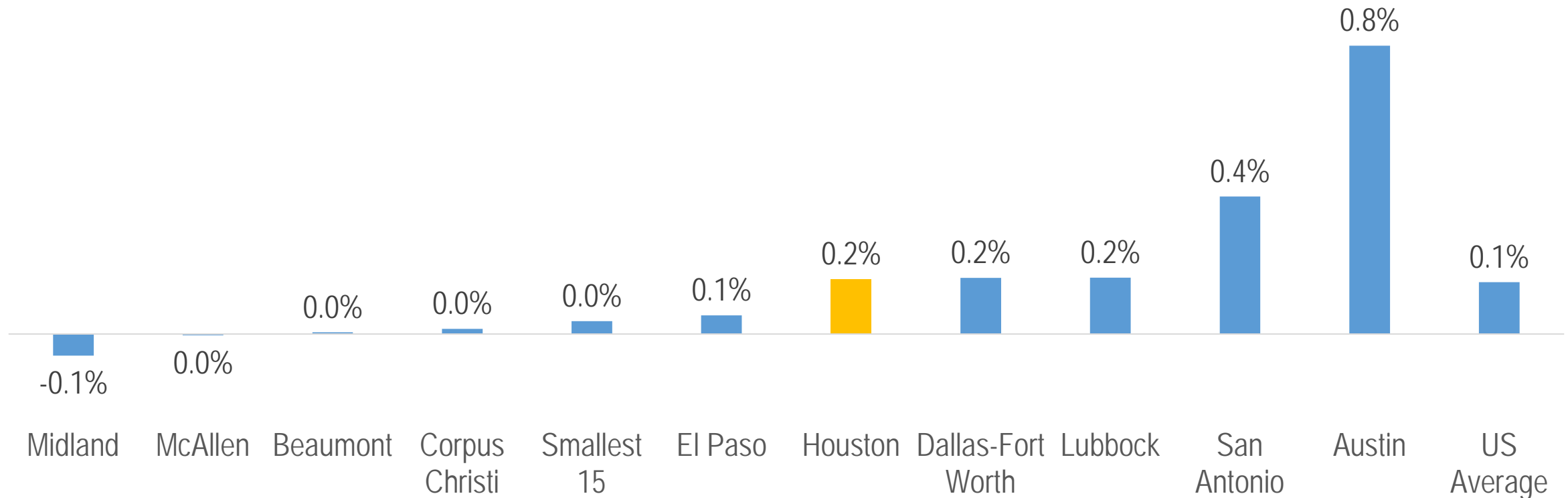
Net absorption varies across the state

There is little geographic pattern in recent absorption rates.

Net Absorption as Percent of Inventory

Location	Value
San Antonio	-0.2%
Beaumont	-0.2%
Austin	-0.1%
Corpus Christi	-0.1%
Smallest 15	0.0%
Dallas-Fort Worth	0.0%
El Paso	0.0%
Houston	0.0%
McAllen	0.0%
Midland	0.3%
Lubbock	0.6%
US Average	-0.1%

Source: TRERC analysis of Costar data.

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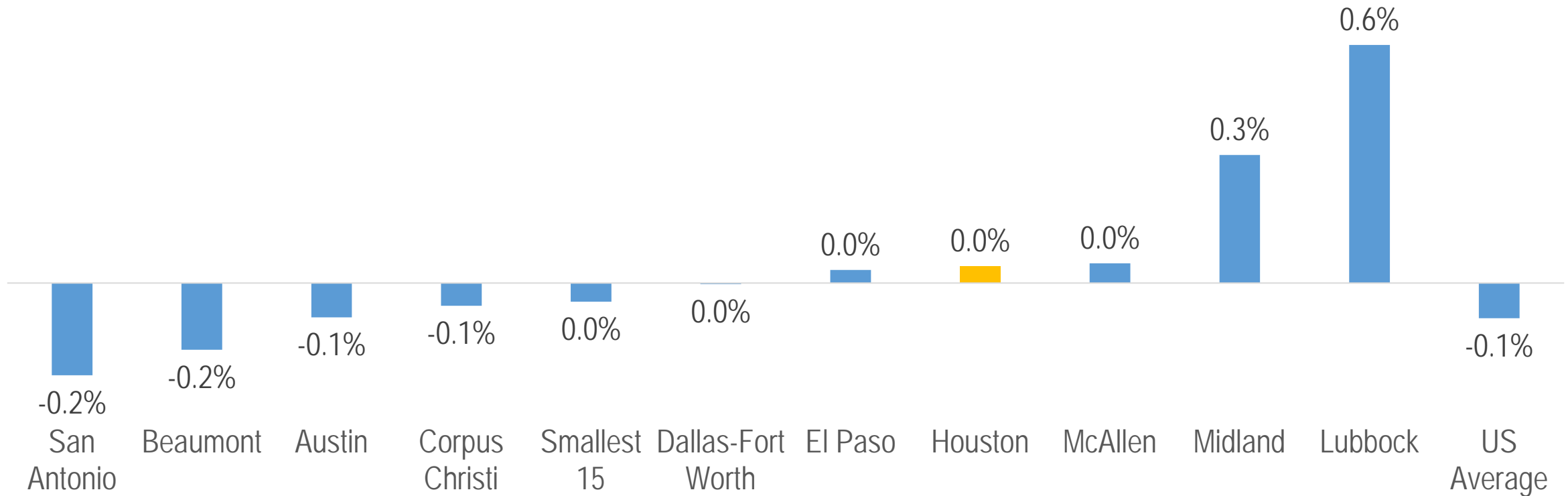
Scale, tourism, regional position define retail

As expected, larger markets dominate retail, but small, regional markets have higher per capita retail.

Total Inventory (MSF)

Sq.ft. per capita (36 in U.S.)

Dallas-Fort Worth	Houston	San Antonio	Austin	El Paso	McAllen	Lubbock	Corpus Christi	Beaumont	Killeen	Smallest 15
460	430	148	119	54	40	29	29	26	24	176
57	58	55	49	61	45	88	64	62	48	55

Source: TRERC analysis of Costar data.
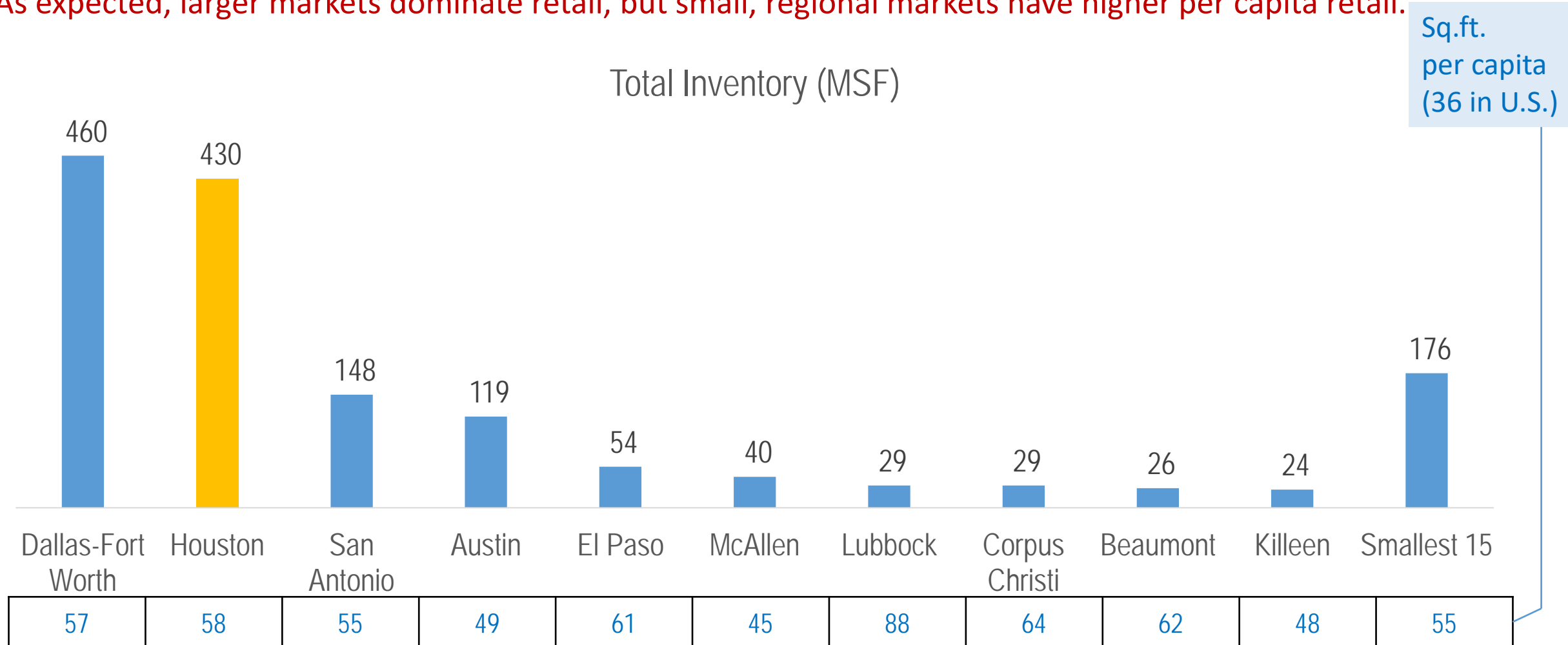
Austin enjoys stand-out retail rent growth

High-incomes and relatively lower retail concentration supports Austin's rent growth.

12 Month Retail Rent Growth

Lubbock	El Paso	Corpus Christi	Dallas-Fort Worth	Killeen	Beaumont	Houston	McAllen	San Antonio	Austin	Smallest 15	US Average
3.1%	3.6%	3.7%	3.8%	3.8%	4.0%	4.0%	4.0%	4.4%	7.7%	3.9%	3.4%
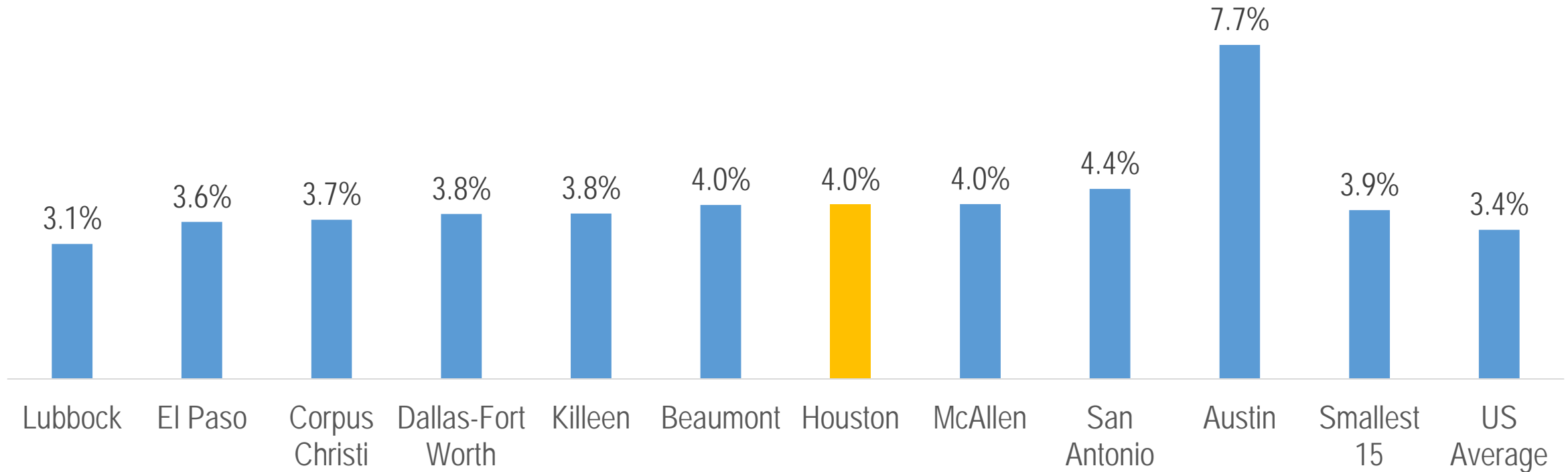
Source: TRERC analysis of Costar data.

Retail deliveries higher in Texas, but still low

Retail deliveries have been lower than other asset classes.

Average Quarterly Net Deliveries as Percent of Inventory

El Paso	Corpus Christi	Killeen	Beaumont	Lubbock	Houston	Dallas-Fort Worth	McAllen	Austin	San Antonio	Smallest 15	US Average
0.06%	0.09%	0.10%	0.12%	0.13%	0.14%	0.15%	0.16%	0.18%	0.24%	0.06%	0.06%
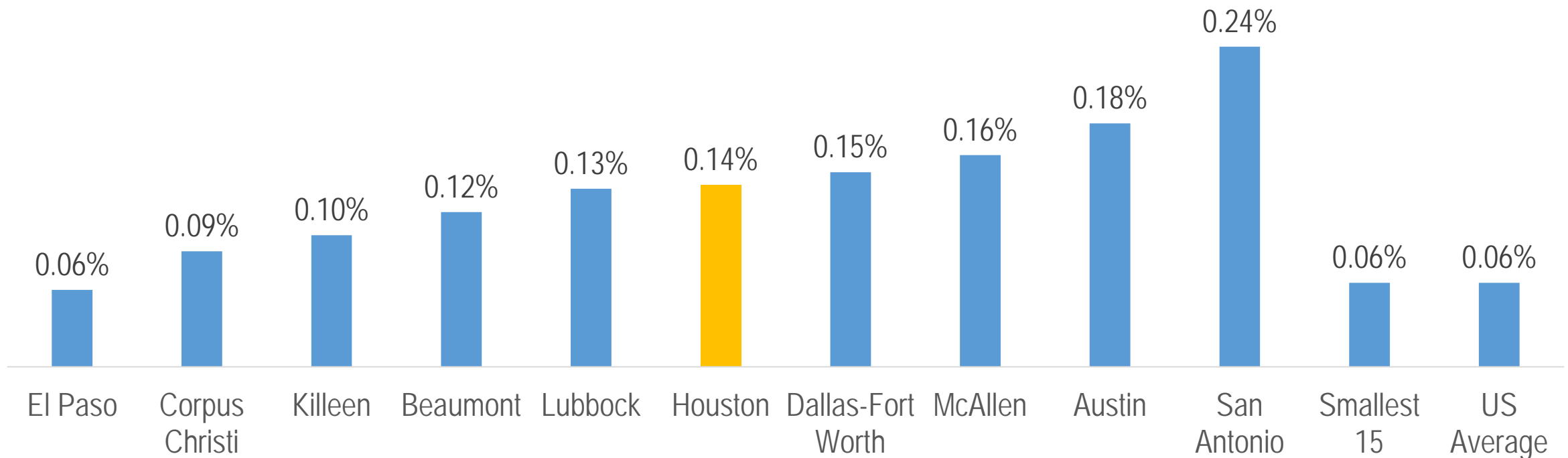
Source: TRERC analysis of Costar data.

Strongest net absorption in Central Texas

Absorption is lower in the largest and smallest markets.

Net Absorption as Percent of Inventory
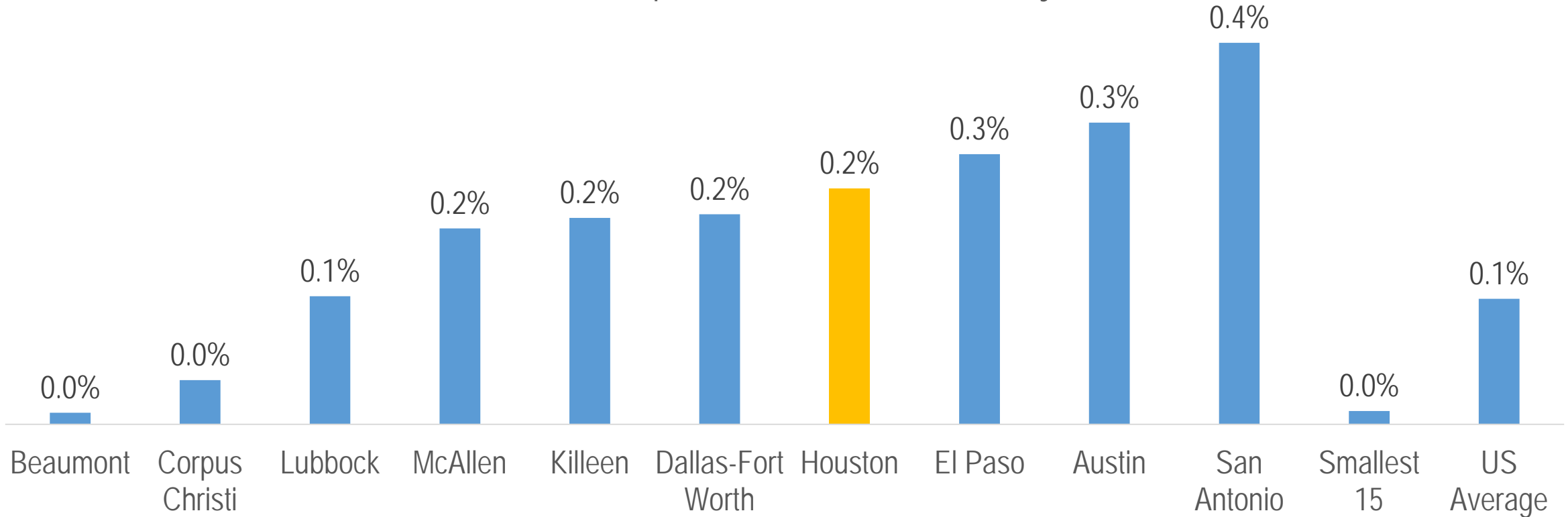
Source: TRERC analysis of Costar data.

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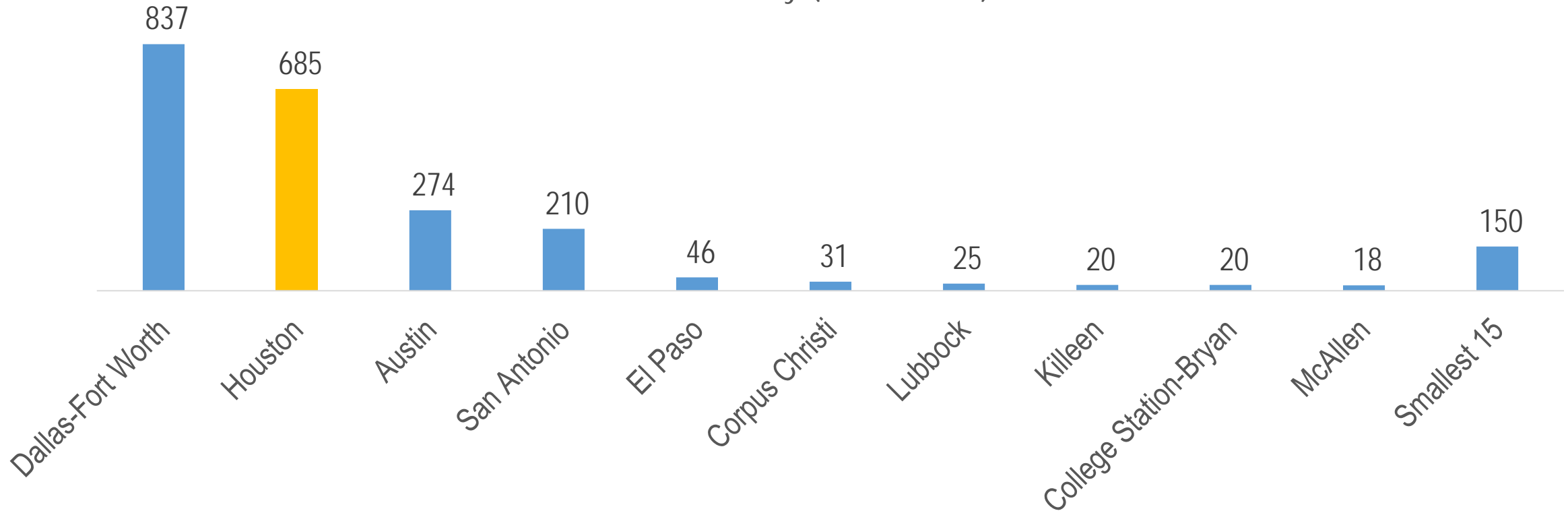
Multifamily construction pull back

After a decade of increasing multifamily construction, new units per capita have fallen.

Quarterly Apartments Completed per 100 Population Gain in Prior Year

7.0

5.3
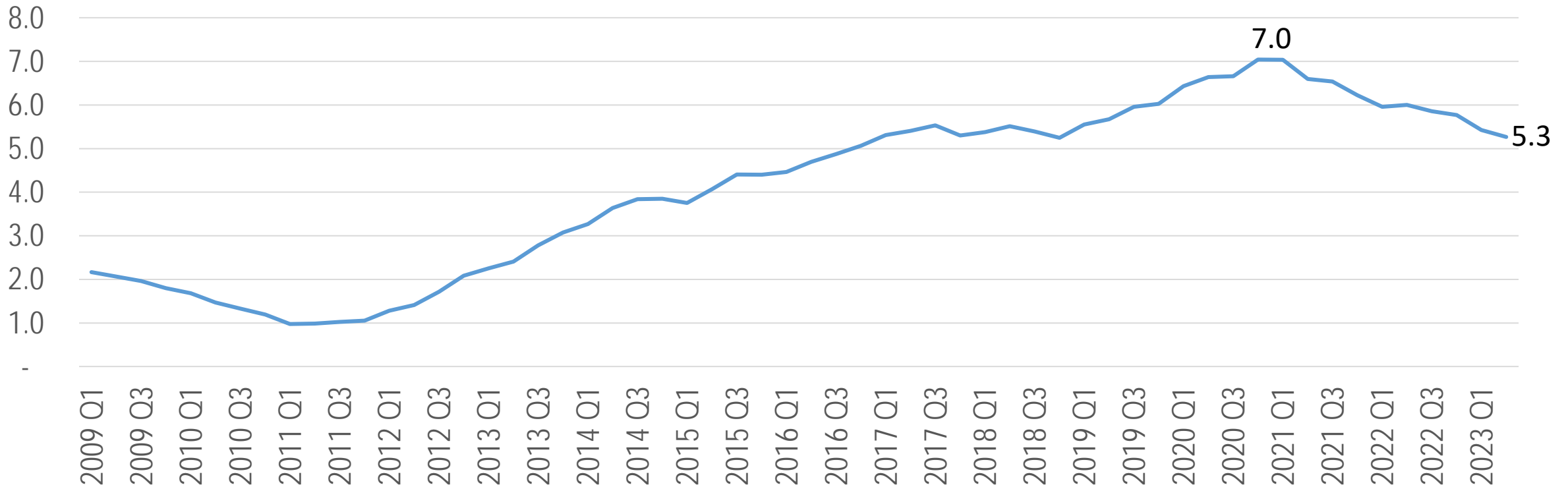
Source: TRERC analysis of Costar data.

Smaller markets have seen strongest rent growth

The big metros have seen negative or soft rent growth.

12 Month Multifamily Rent Growth

Market	Growth
Austin	-3.1%
San Antonio	-0.7%
Dallas-Fort Worth	-0.1%
Houston	1.5%
Corpus Christi	1.8%
McAllen	2.2%
Killeen	2.8%
Lubbock	3.3%
El Paso	4.4%
College Station-Bryan	5.3%
Smallest 15	5.4%
US Average	1.3%

Strong inventory growth around the state

I-35 corridor and the Valley lead in new multifamily growth.

Average Quarterly Net Deliveries as Percent of Inventory

Location	Value
El Paso	0.2%
College Station-Bryan	0.3%
Corpus Christi	0.4%
Killeen	0.6%
Houston	0.6%
Lubbock	0.7%
Dallas-Fort Worth	0.8%
San Antonio	0.9%
McAllen	1.0%
Austin	1.4%
Smallest 15	0.4%
US Average	0.6%
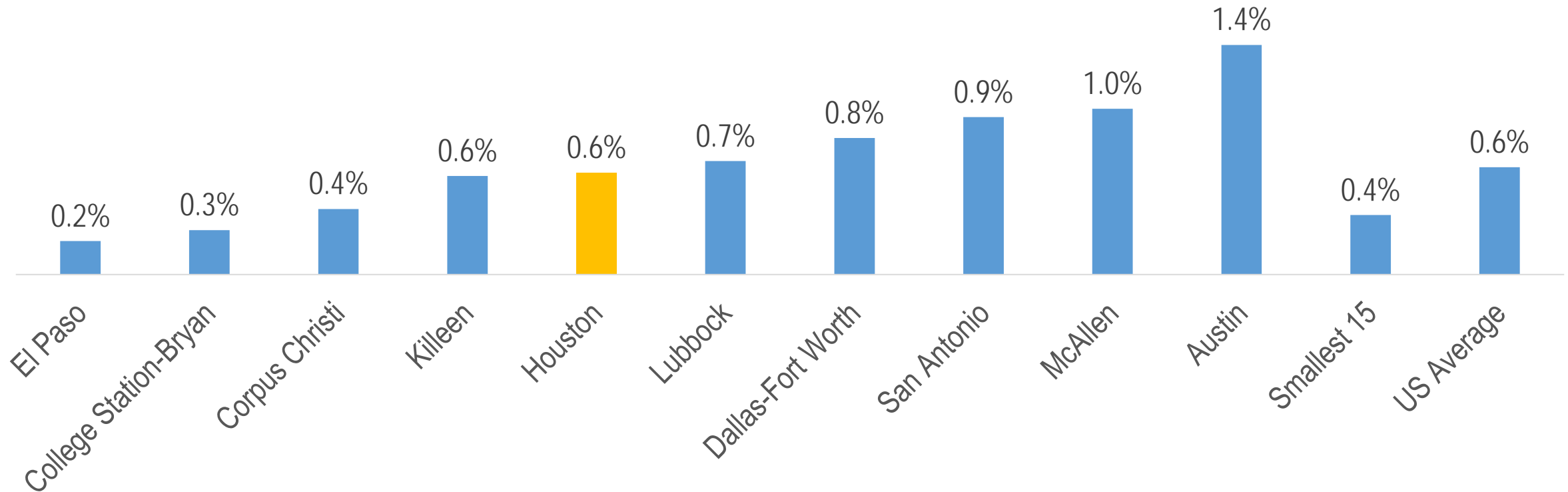
Source: TRERC analysis of Costar data.

Absorption has lagged deliveries statewide

Net absorption rates have been half deliveries even in the best performing markets.

Net Absorption as Percent of Inventory

Market	Value
Killeen	-0.4%
Lubbock	-0.2%
College Station-Bryan	0.0%
San Antonio	0.0%
El Paso	0.1%
Corpus Christi	0.1%
Dallas-Fort Worth	0.2%
Houston	0.2%
McAllen	0.4%
Austin	0.7%
Smallest 15	0.3%
US Average	0.2%
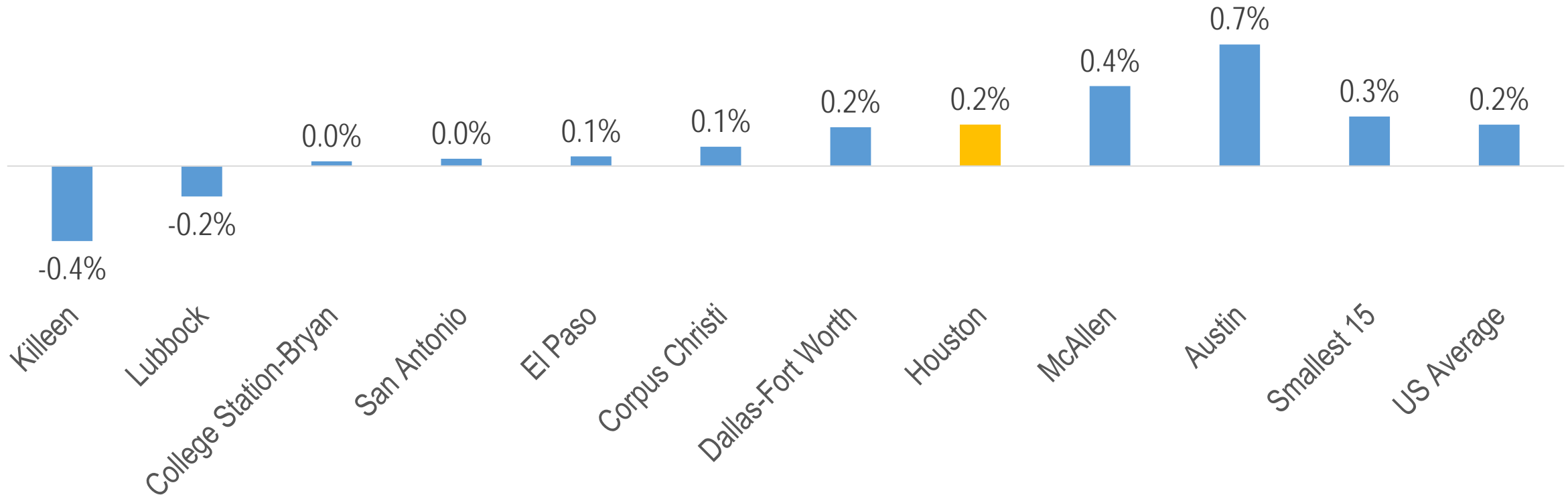
Source: TRERC analysis of Costar data.

Sales volumes dropped from various highs

Office peaked before COVID, retail in Q12022, multifamily Q22022, industrial most recently (Q32022.)

Total Sales Volume ($M)

Source: TRERC analysis of Costar data.

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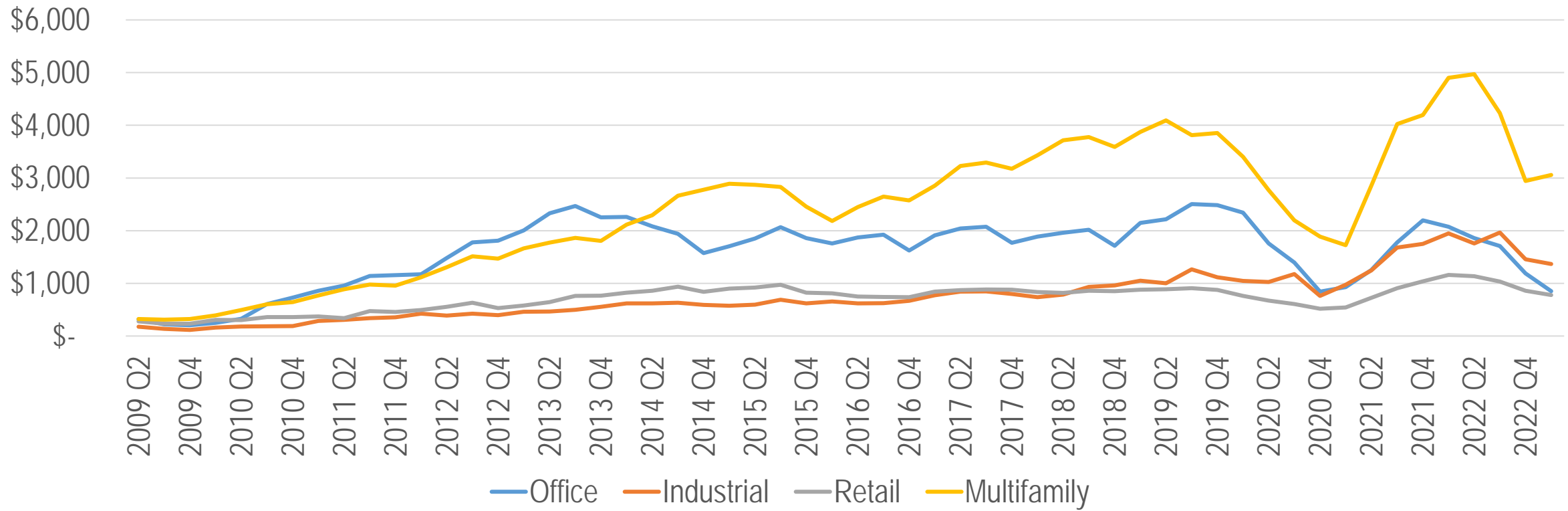
Lending continuing continues

New, real highs reached through COVID recovery (recent drop may be artifact of inflation adjustment.)

Commercial Real Estate Loans (Banks, $B SAReal)
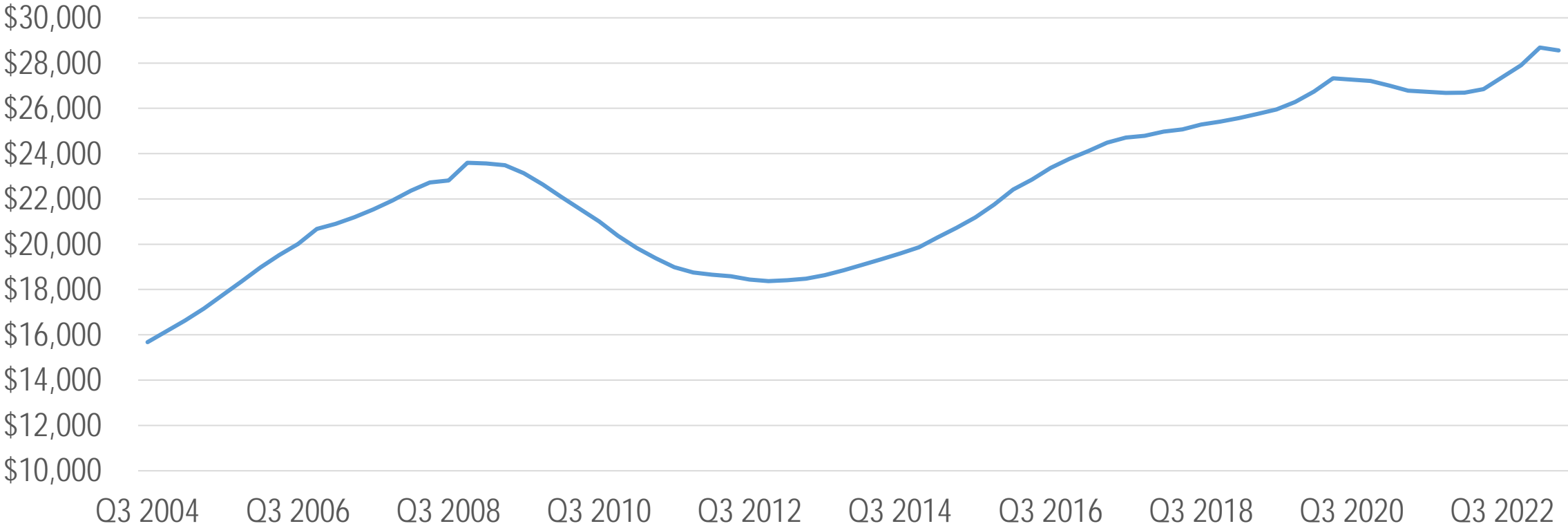
Banks continue tightening standards

Banks near COVID level of tightening.

Net Percent of Banks Tightening Standards
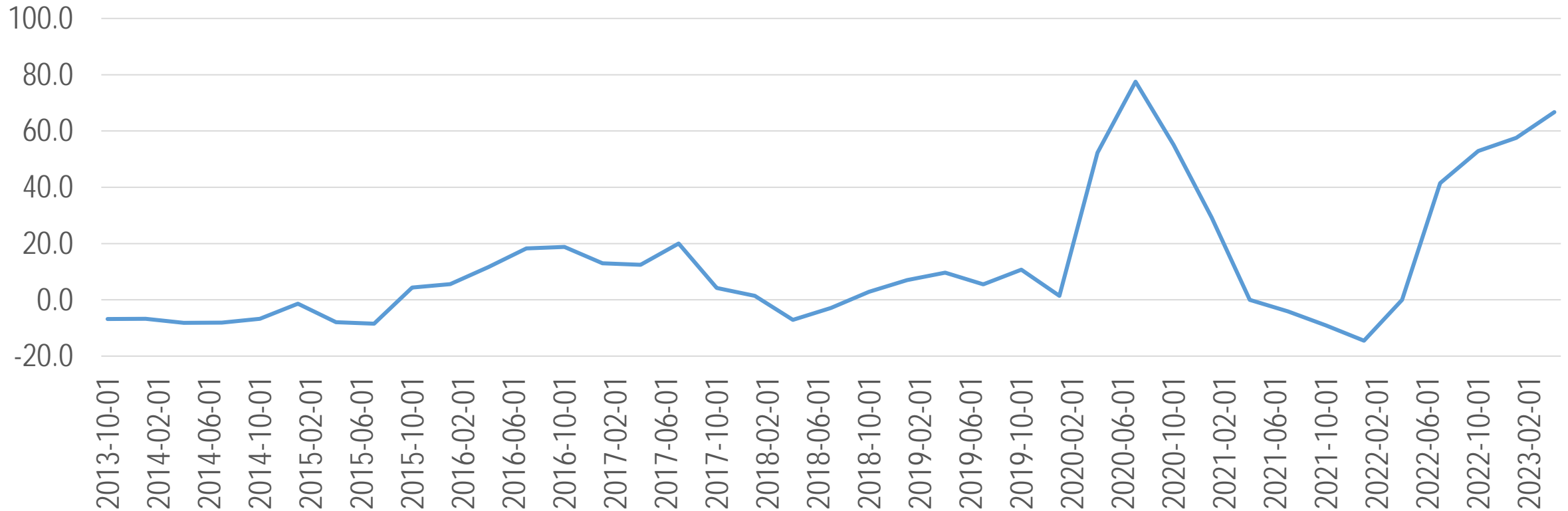
Cap rates up across assets

Twelve-month cap rates are up most for industrial and multifamily, least for retail.

Big-4 Average Cap Rates (June 2023)

Asset	Cap Rate	BP Change
Office	7.3%	90
Industrial	8.2%	185
Retail	6.2%	56
Multifamily	6.8%	184

BP Chang →
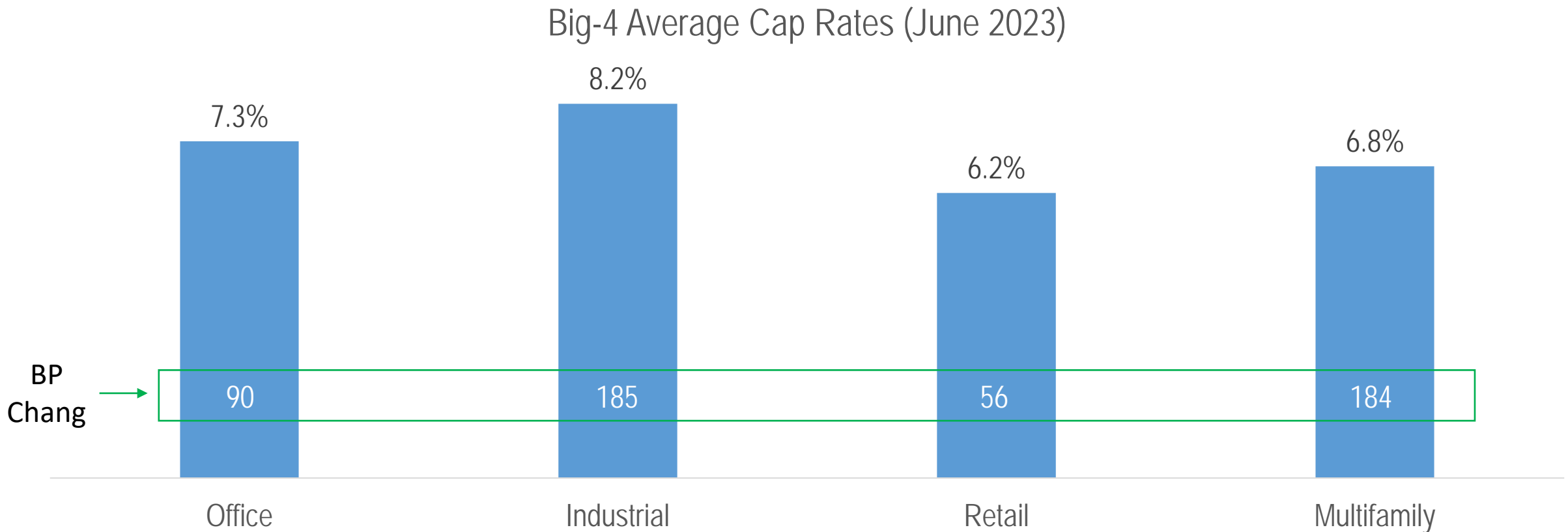
Source: TRERC analysis of Costar data.

Debt refinancing an issue for all assets

Office rollovers top headlines, but substantial refinancings due across the board at higher rates.

Non-Bank CRE Loan Maturities by Property Type (billions)
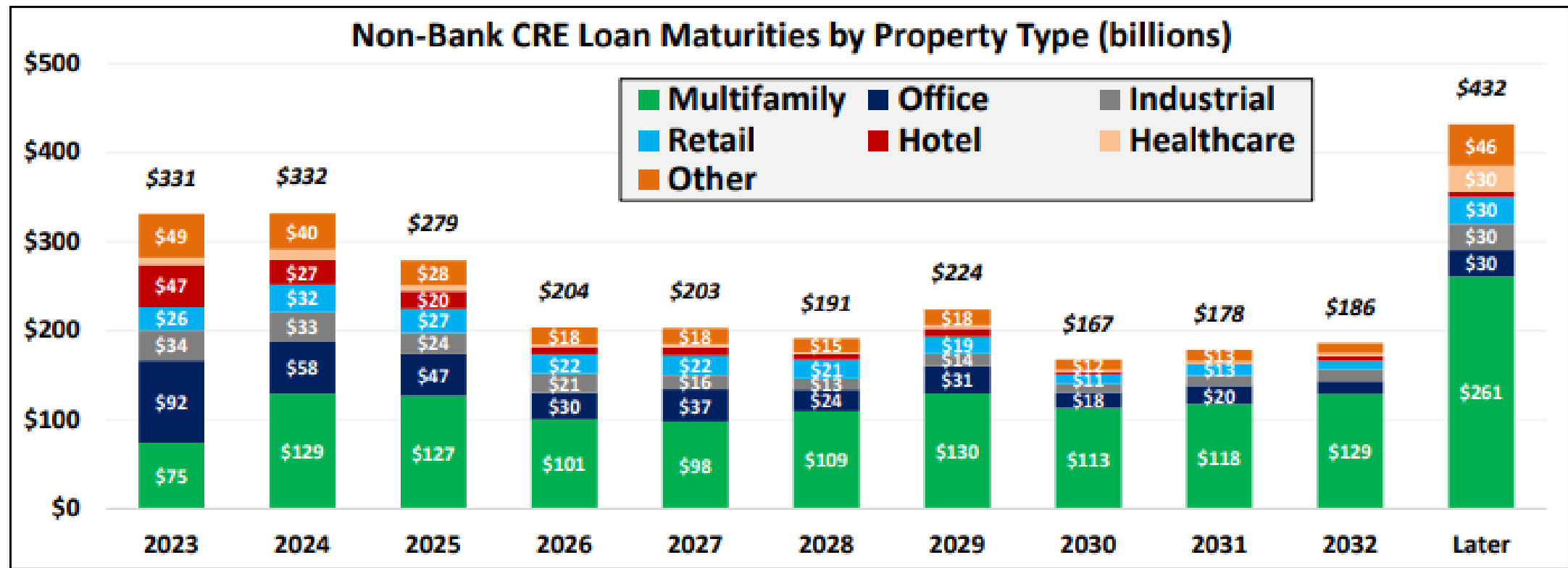
Source: Mortgage Bankers Association

Texas Housing Markets
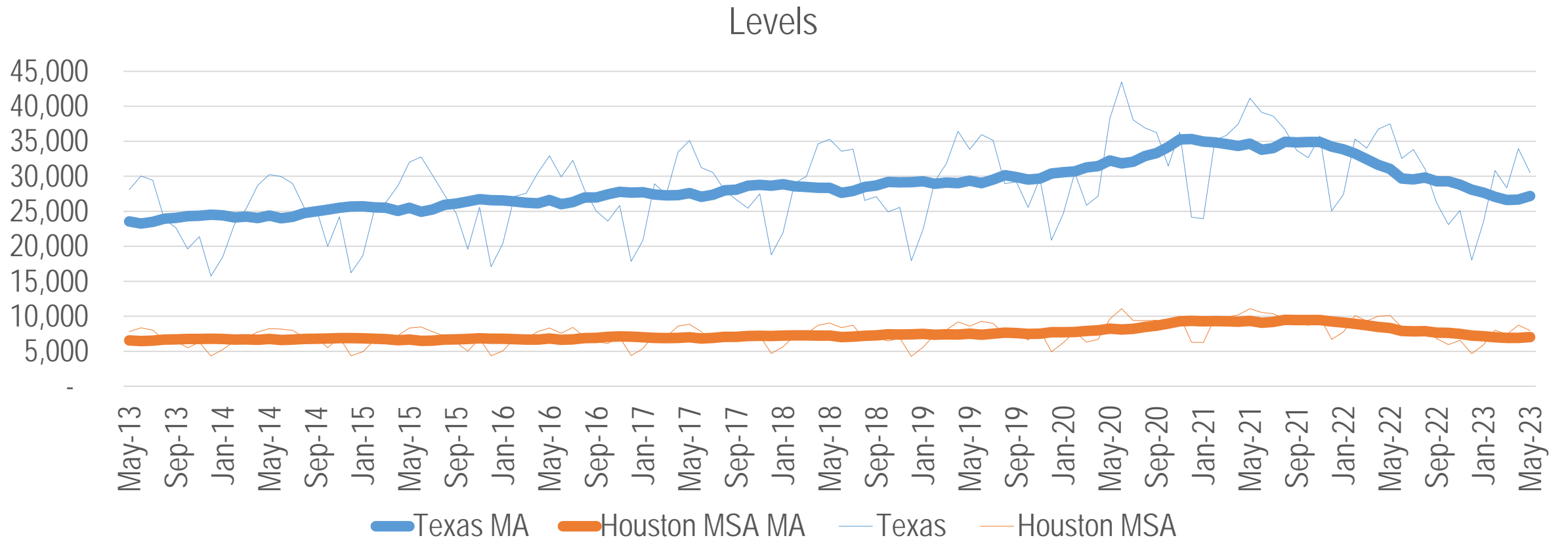
Sales running below pre and post COVID levels

March raw number down 22 percent from post-COVID average, down 11 percent pre-COVID average
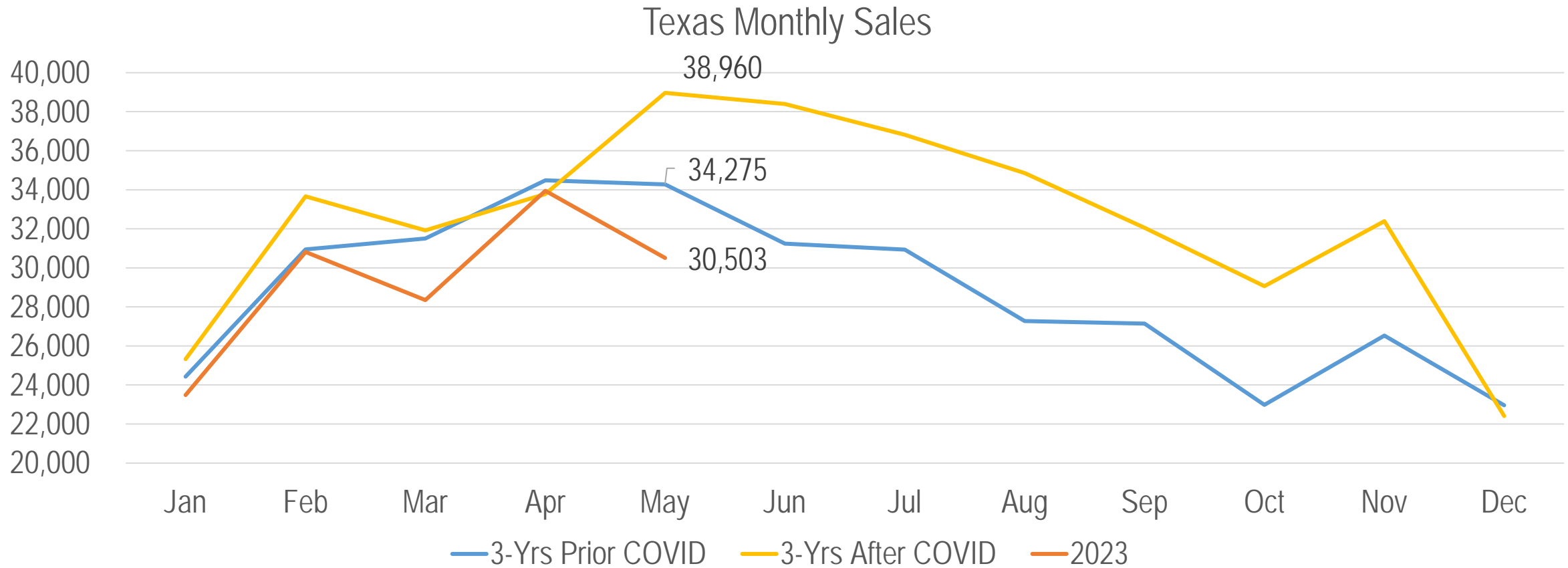
Texas Monthly Sales

Source: Texas Real Estate Research Center analysis of HRIS data.

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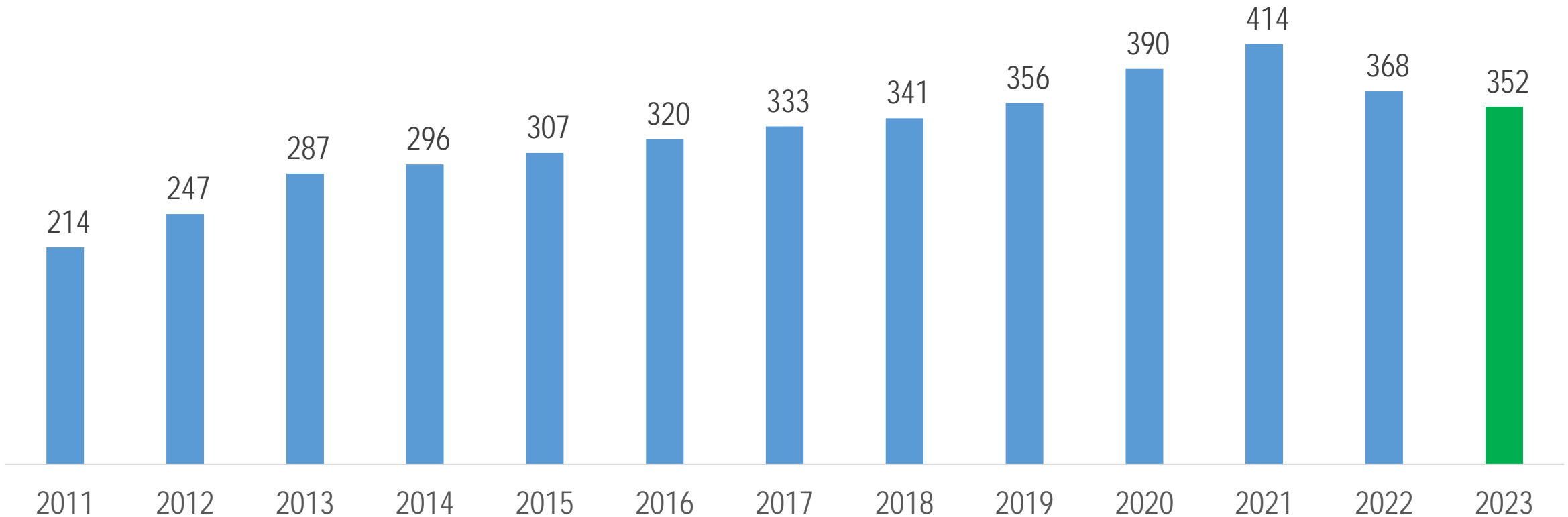
Median price falling since December

Rate of growth negative in Texas and Houston – in seasonally-adjusted terms.

Levels

YoY Percent

Source: Texas Real Estate Research Center analysis of HRIS data.

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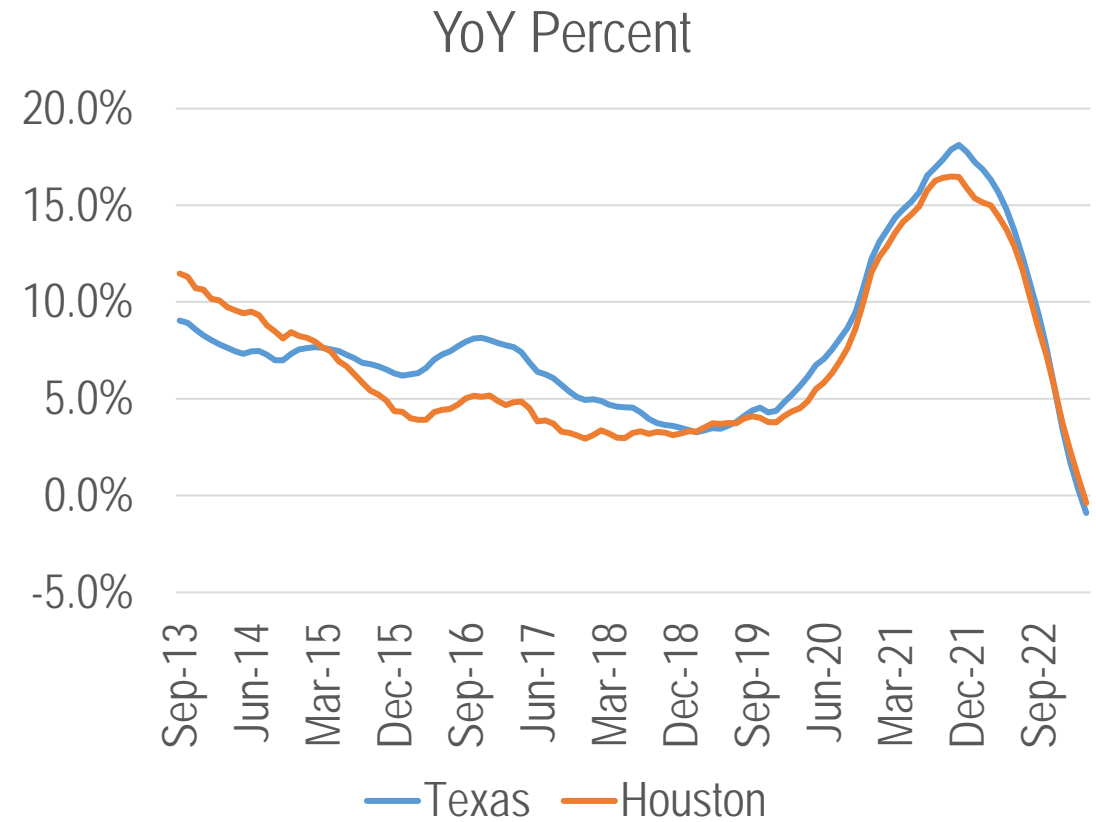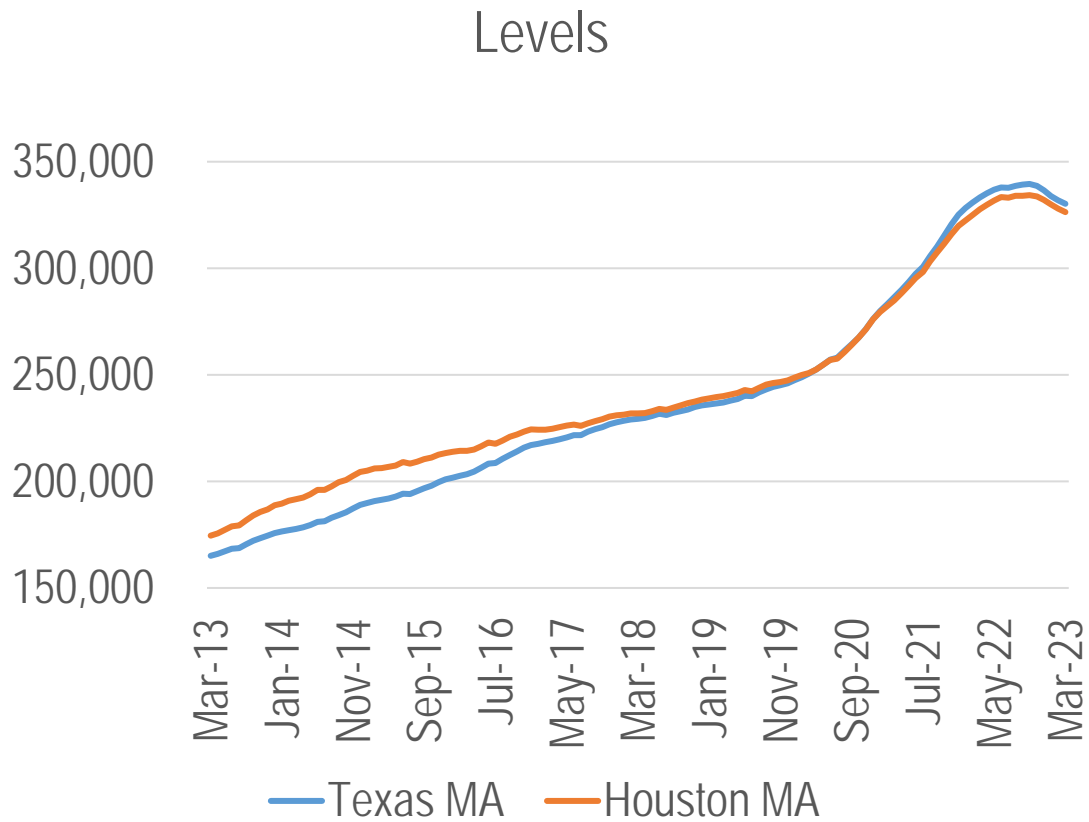
Median price per square foot falling slightly

Rate of growth has come down dramatically – still positive in seasonally-adjusted terms.

Source: Texas Real Estate Research Center analysis of HRIS data.

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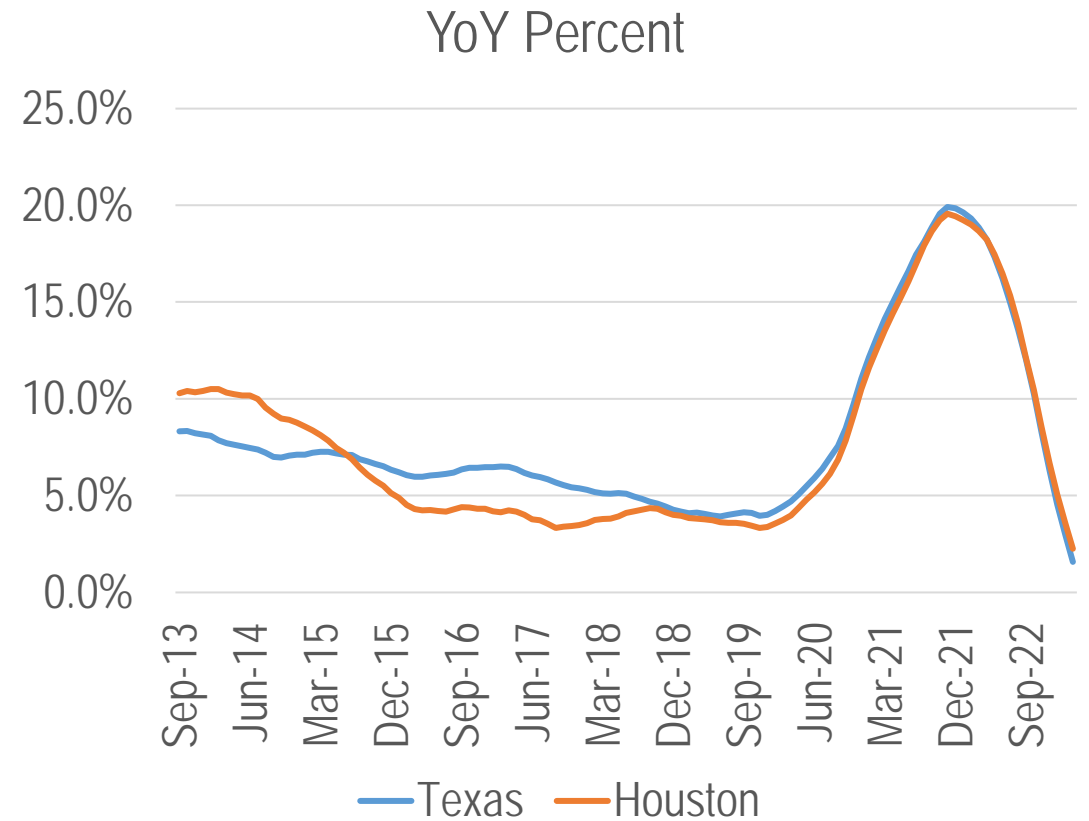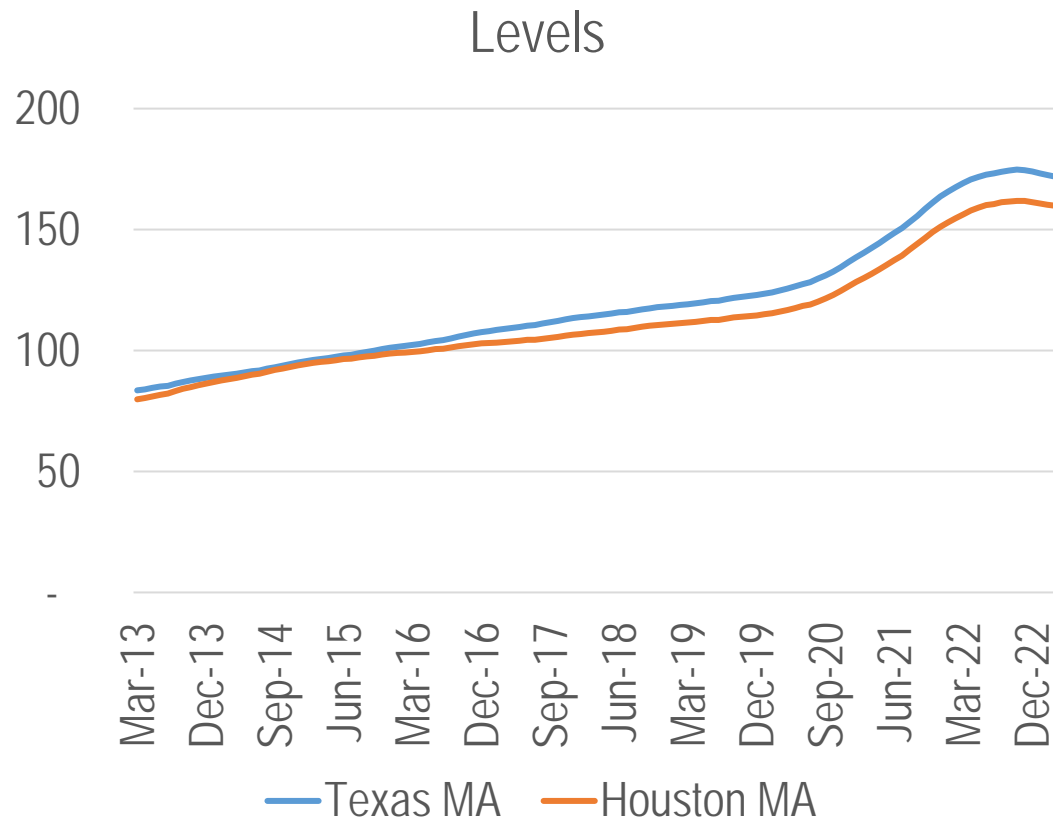
Days on market are moving to pre-COVID level

Sixty days on market was typical pre-COVID, the one-month experience during COVID ending.

Source: Texas Real Estate Research Center analysis of HRIS data.

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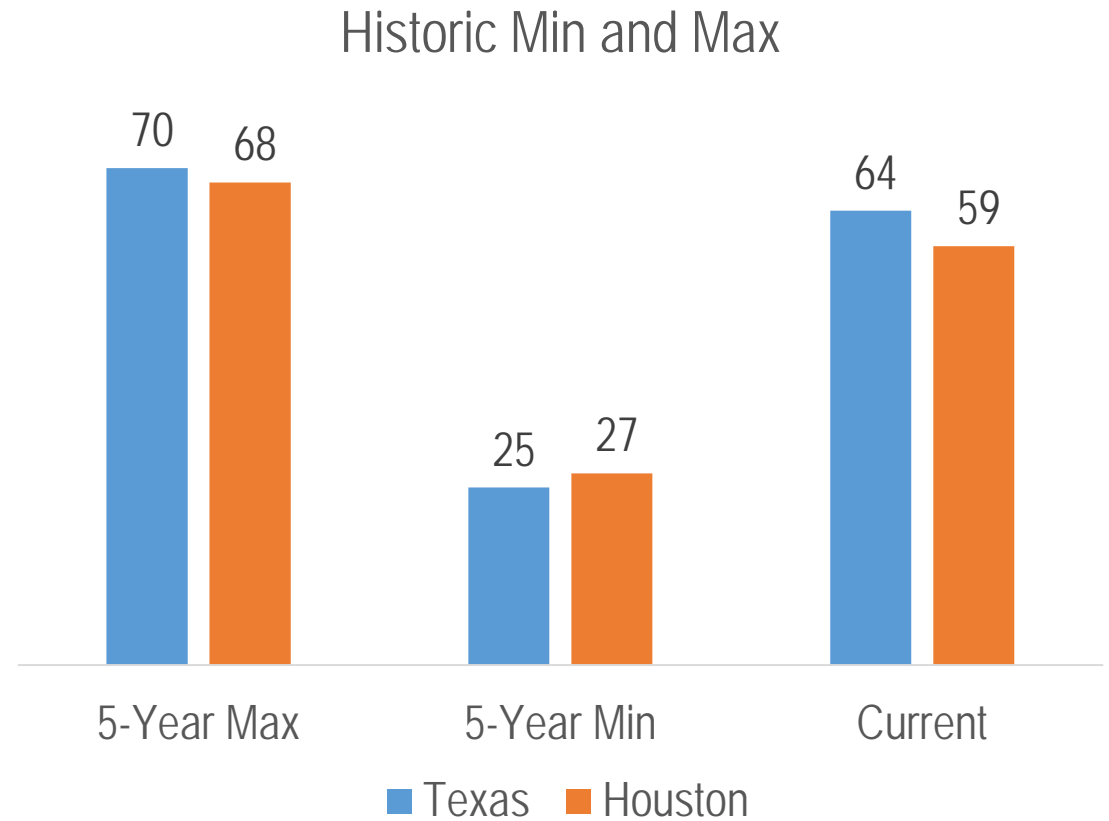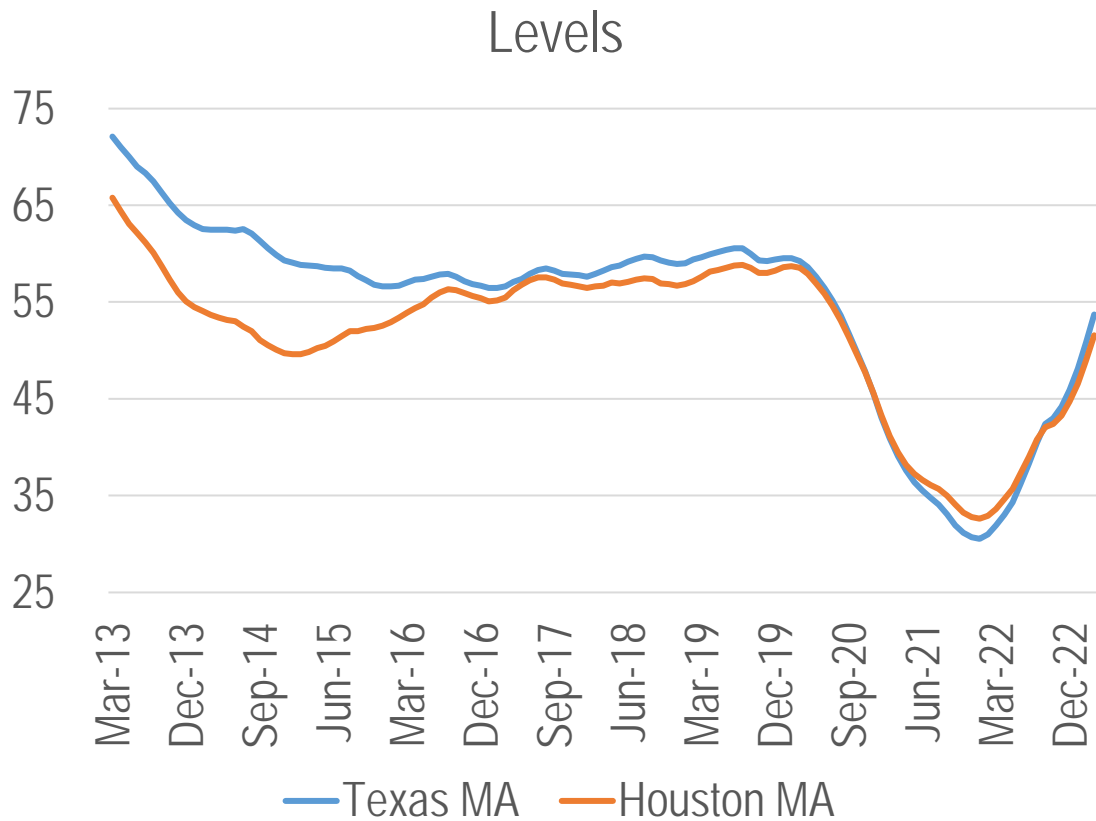
Inventory is increasing, below pre-COVID levels

Three to four months was typical before COVID.

Source: Texas Real Estate Research Center analysis of HRIS data.

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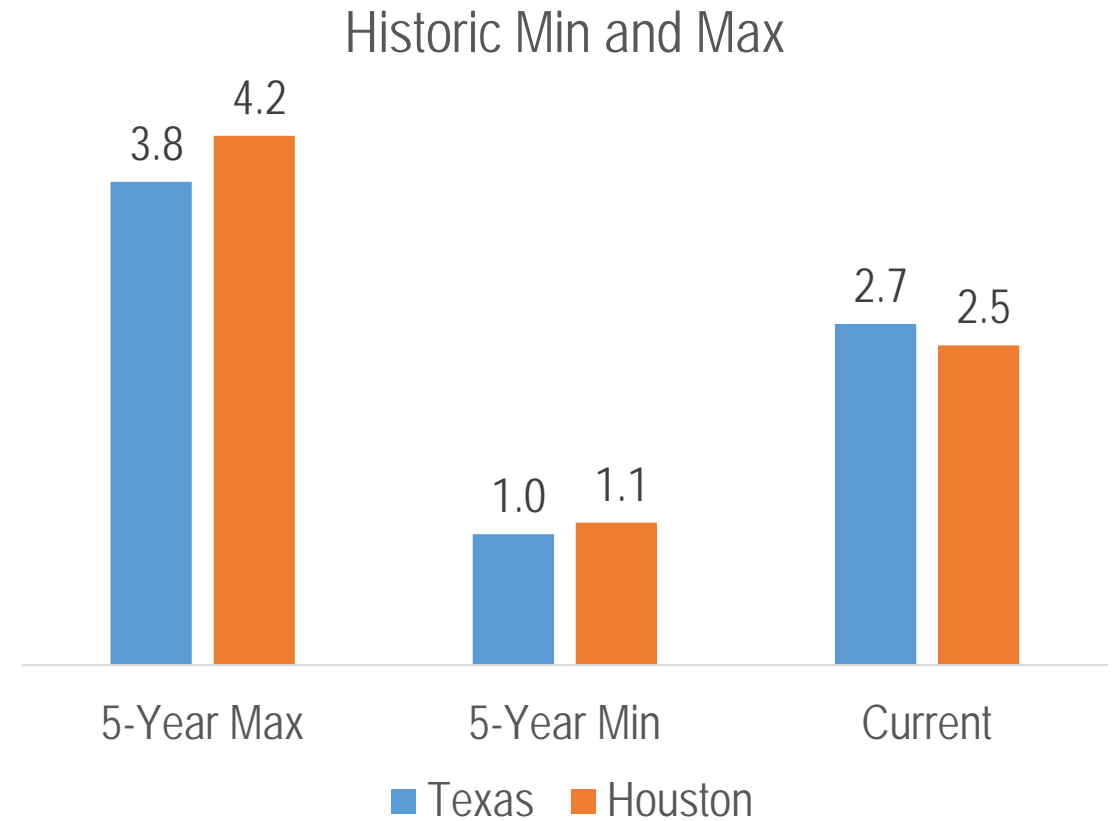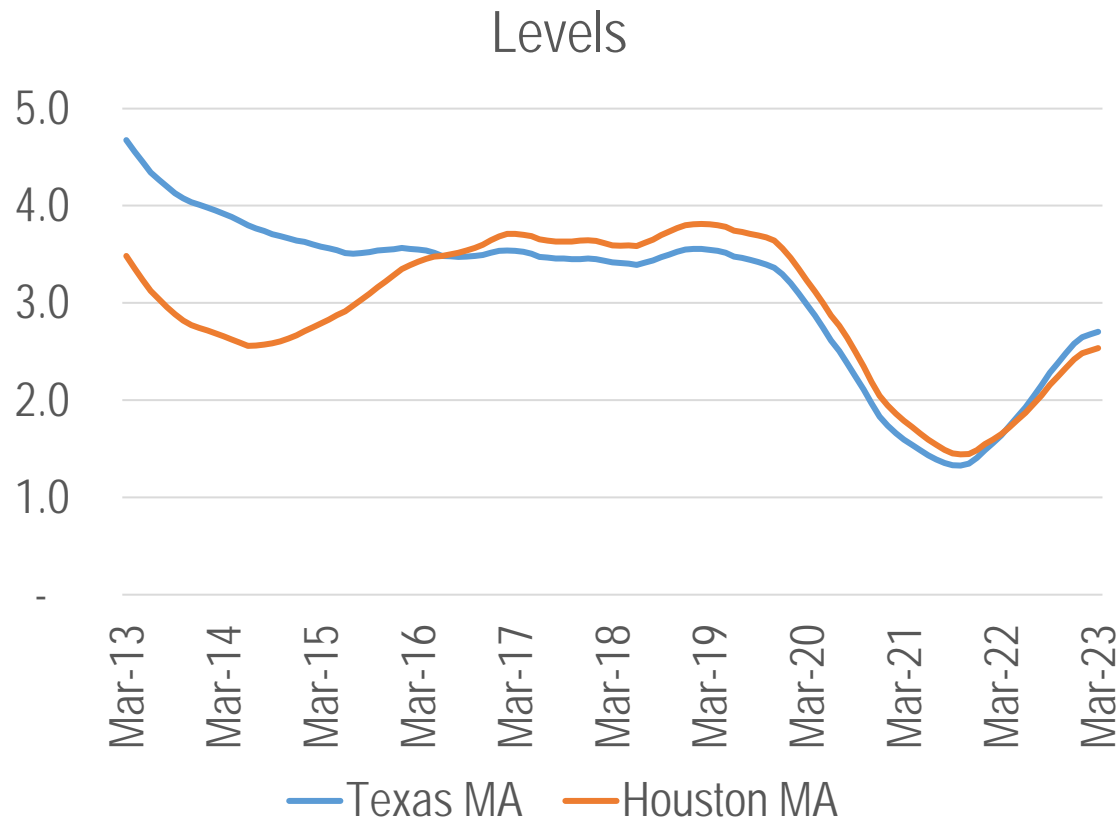
U.S. reduced housing investment

In current year, an extra percentage point of GDP on housing would build 580,000 single-family homes

Residential Investment as % GDP
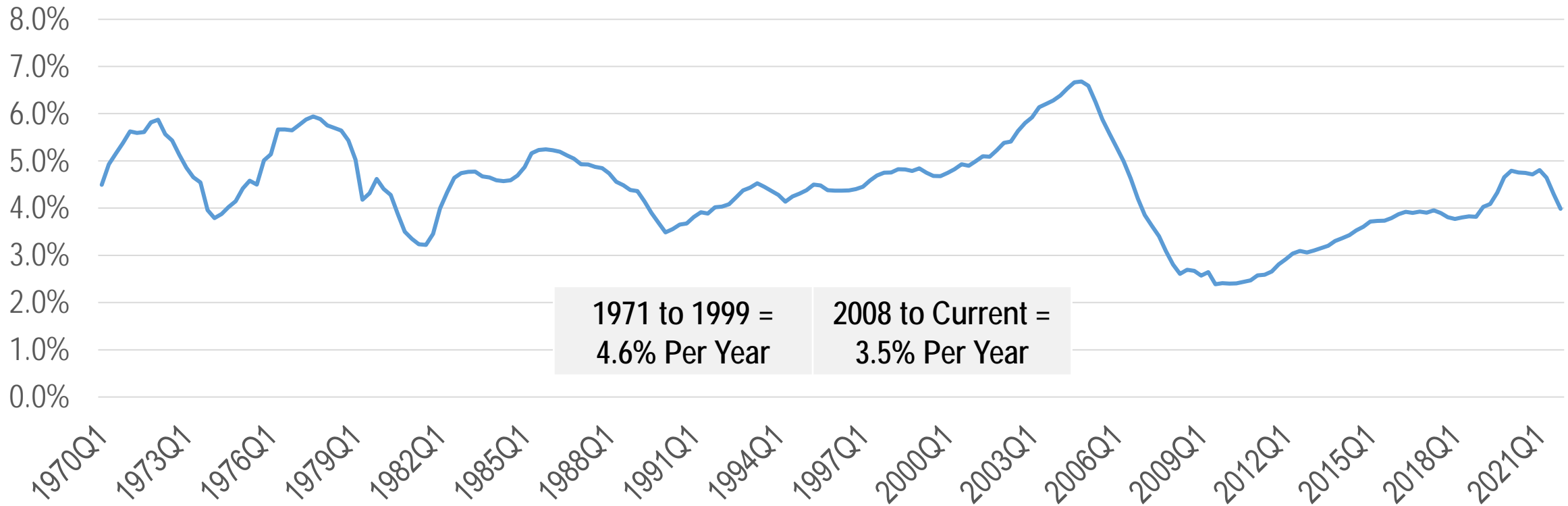
1971 to 1999 = 4.6% Per Year

2008 to Current = 3.5% Per Year

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Housing construction below historic trend

Nation has fallen well below a trend of building a house per 100 households each year.

US 1-Units Per 100 HH

0.74

Source: Census Bureau

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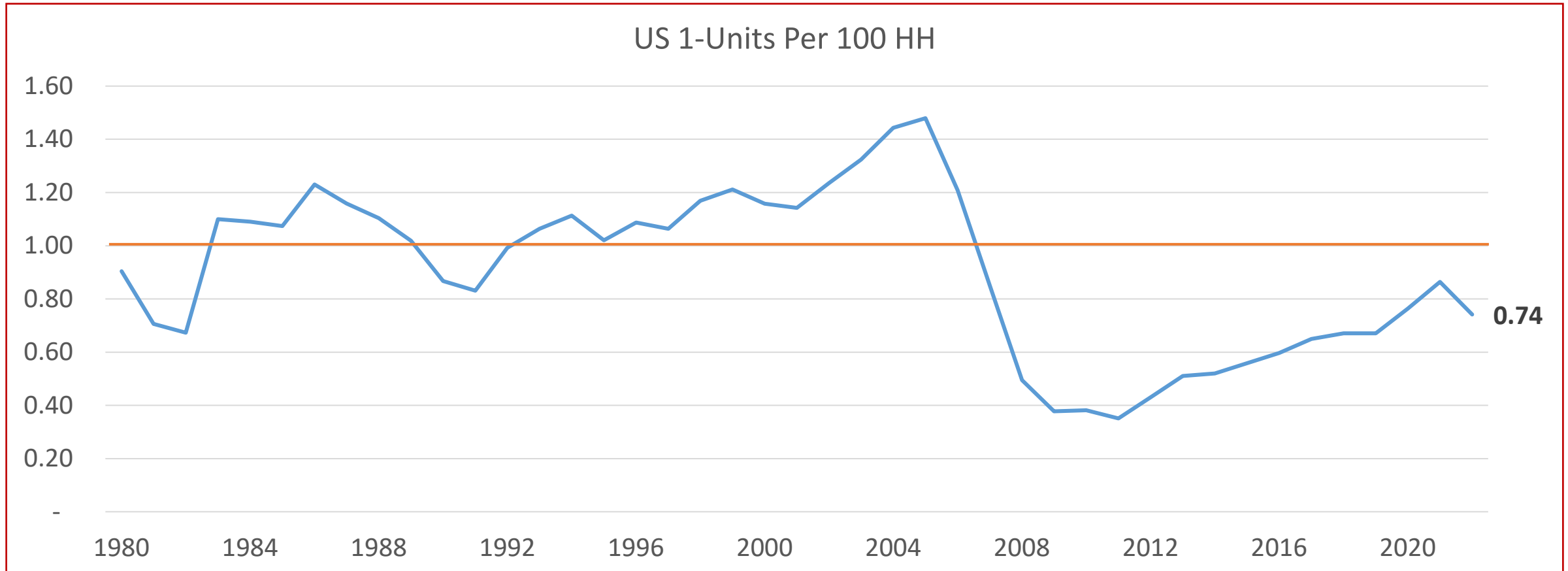
Builder sentiment remains low

Builder sentiment is improving, but similar to the post financial crisis recovery.

Source: NAHB

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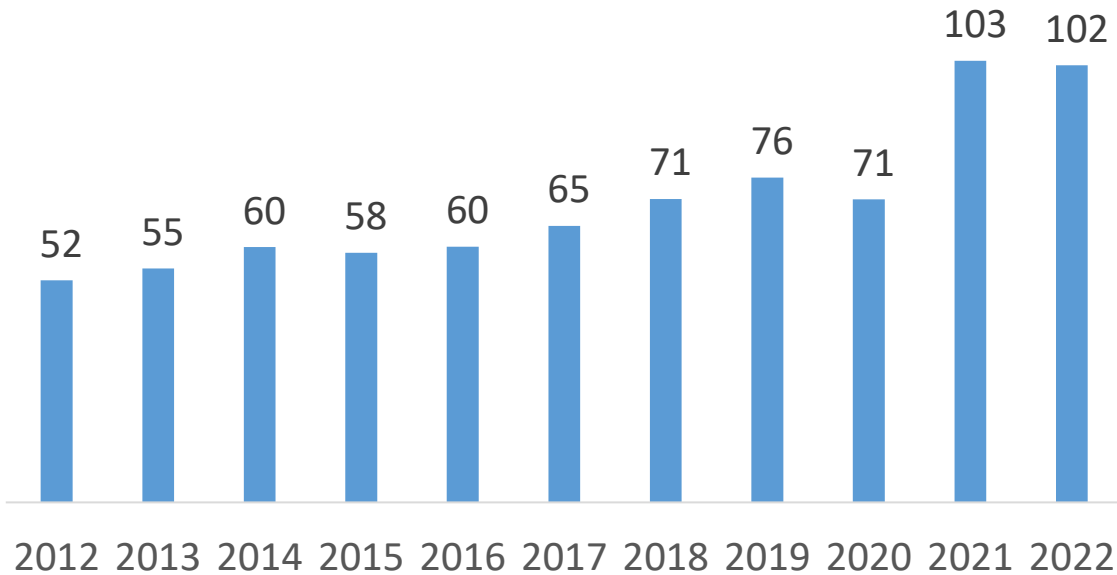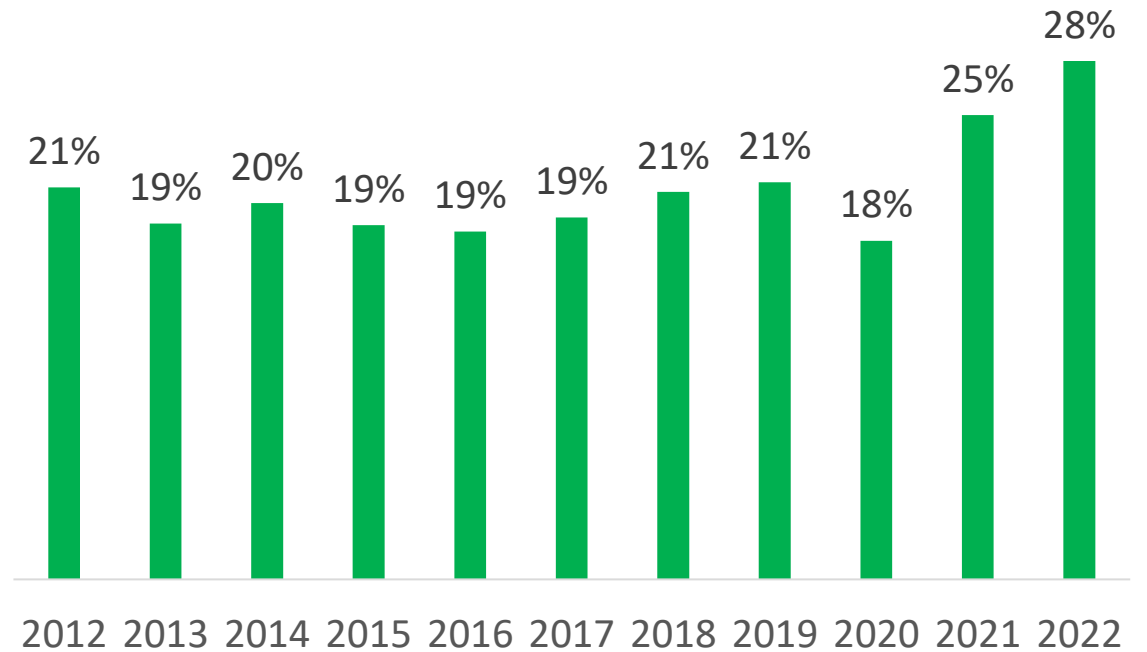
TRERC 2023 Outlook

TRERC 2023 Outlook Key Issues (*revised by DO*)

- China' *opening*

- Russia's war against Ukraine

- Monetary policy – interest rates

- Fiscal and regulatory policy - *more fiscal and regulatory certainty (Divided Congress)*; Elevated inflation and more moderate employment growth

TRERC 2023 Outlook Housing (*revised by DO*)

- **Housing:**
- 2023 annual mortgage rates higher than in 2022
- Existing single-family rent and price growth will moderate, potentially to turn negative YoY
    - Recent change was unsustainable – driven by lower interest rates
    - Going from 2.65 January 2021 30-fixed rate to 7 percent lowers purchasing power by 40 percent
    - Short term supply constraints *and long-term underinvestment* means substantial housing backlog
- Existing-home sales will likely be lower in 2023 than they were in 2022

Source: TRERC

Industrial

•Deliveries pull back from 2022's record highs, vacancies remain low.

•Tighter credit and slower consumer demand shelves spec building plans.

•Reshoring, foreign direct investment moves to establish footprints in the U.S., and regional population growth will drive continued manufacturing projects in Texas.

Source: TRERC

Office

•Market further segments: newer buildings maintain occupancy, older buildings lower rent to attract tenants.

- Newest Class A buildings and properties built in the last decade will enjoy high occupation rates.

- Vacancies will increase in older buildings, even those that would have been considered Class A before the pandemic. Many Class B buildings could see a freefall in occupancy.

- Many older properties will drop in value as a result of market forces. Refinancing deadlines will see creditors and debtors renegotiate deals.

- Major rental rate drops are in line for many second-tier buildings to attract some tenant interest and generate at least some cash flow.

Source: TRERC

TRERC 2023 Outlook Retail (*revised by DO*)

Retail

•Occupancy and rents stabilize in brick-and-mortar retail.

•The booming online sales growth of the pandemic will fall to the prior fast double-digit growth.

•Brick-and-mortar retail may not see recovery if households pull back from actual or expected income losses.

•Restaurants and "experience" submarkets with walkable synergies will do better than some big-box mega centers.

•Expect to see more life in the best traditional indoor malls as people restore long-neglected social habits.

Source: TRERC

Texas Commercial Market Performance Metrics

www.recenter.tamu.edu

Source: Pew Research Center

How can TRERC best help your commercial work?

doney@tamu.edu

Daniel Oney

- Dr. Daniel Oney
- Research Director
- Commercial market analysis, public finance, labor analytics
- Daniel joined the Texas Real Estate Research Center in 2022. He specializes in building forecasting and decision models to help public and private leaders make better economic and fiscal choices. Before joining the Center, Daniel was managing director in Newmark's Global Corporate Services division where he supported clients with site selection, labor analysis, and development strategy. Daniel was economic research manager for the City of Dallas and senior economist for the Virginia General Assembly. He holds MPA and Ph.D. degrees from the University of Texas at Dallas
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TRERC

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