

Resilience Returns



Presentation 2022
Outlook and Issues

Geography Is Destiny

Texas-The Secret is in the Dirt

- Cattle
- Cotton
- Crude

Greater Houston Area

- 9 Counties
- 10,000 square miles
- 6.8 million people
- 4 Economic Pillars
 - Oil & Gas
 - Texas Medical Center
 - Port of Houston
 - NASA
- International Capital of the Energy Business
 - A true cluster





**“You might give serious thought to thanking
your lucky stars, you live in Texas.”
– Jim Goode, Restaurateur**

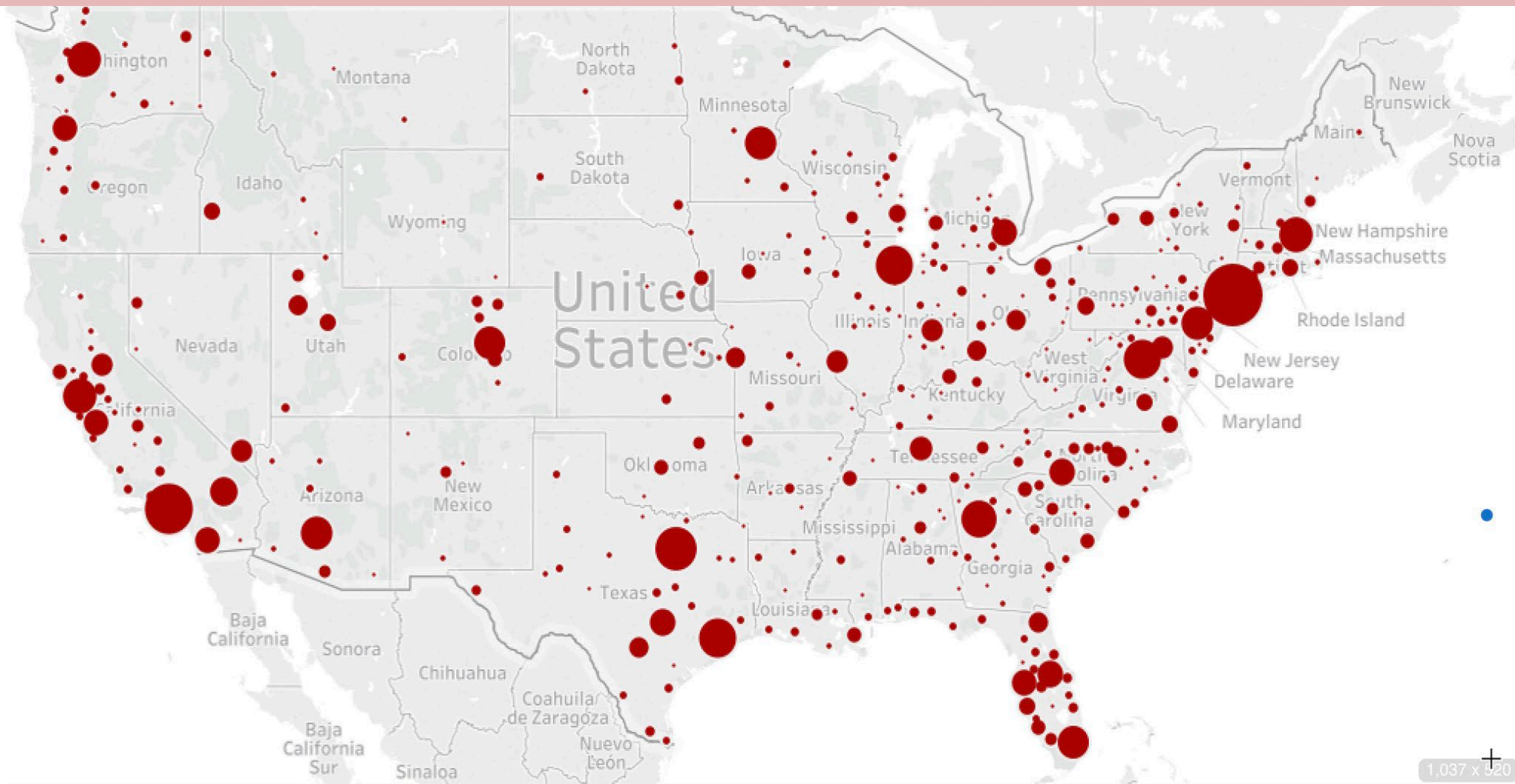
Being Declared Essential

WAS

Essential



- The potential to be mandated to shut down was the biggest threat in history
- Industry has survived all types of sickness and hurricanes
- Masterful work by associations



HOUSTON MSA MARKET OUTLOOK | 2022

	2018	2019	2020	2021	2022	2023	2024	2025	CAGR (16-20)	CAGR (20-25)
Single Family	7,000	7,371	8,558	9,430	10,424	10,989	11,575	12,247	8.6%	7.4%
% Change		5%	16%	10%	11%	5%	5%	6%		
Multifamily	1,984	2,254	2,488	2,634	3,025	3,254	3,427	3,620	7.6%	7.8%
% Change		14%	10%	6%	15%	8%	5%	6%		
Improvements*	4,453	4,577	5,898	6,343	7,096	7,596	8,071	8,498	10.3%	7.6%
% Change		3%	29%	8%	12%	7%	6%	5%		
Total Residential	13,437	14,201	16,944	18,408	20,546	21,839	23,073	24,364	9.0%	7.5%
% Change		6%	19%	9%	12%	6%	6%	6%		
Lodging	659	720	654	452	416	448	494	534	3.2%	-4.0%
% Change		9%	-9%	-31%	-8%	8%	10%	8%		
Office	1,677	1,968	2,026	1,965	1,962	2,061	2,185	2,312	8.8%	2.7%
% Change		17%	3%	-3%	0%	5%	6%	6%		
Commercial	1,814	1,812	1,899	2,025	2,139	2,196	2,277	2,419	3.2%	5.0%
% Change		0%	5%	7%	6%	3%	4%	6%		
Health Care	916	997	1,043	1,075	1,132	1,189	1,239	1,312	5.0%	4.7%
% Change		9%	5%	3%	5%	5%	4%	6%		
Educational	2,147	2,393	2,372	2,251	2,293	2,390	2,527	2,673	5.0%	2.4%
% Change		11%	-1%	-5%	2%	4%	6%	6%		
Religious	75	84	79	70	66	69	72	77	0.0%	-0.6%
% Change		11%	-6%	-12%	-5%	3%	5%	6%		
Public Safety	195	258	415	278	262	275	293	314	24.2%	-5.4%
% Change		33%	61%	-33%	-6%	5%	7%	7%		
Amusement and Recreation	600	679	651	624	630	669	722	765	6.7%	3.3%
% Change		7%	13%	-4%	-4%	1%	6%	8%		
Transportation	1,081	1,177	1,275	1,217	1,244	1,344	1,504	1,672	9.1%	5.6%
% Change		9%	8%	-5%	2%	8%	12%	11%		
Communication	537	496	523	506	524	560	604	648	2.6%	4.4%
% Change		-8%	5%	-3%	4%	7%	8%	7%		
Manufacturing	1,549	1,807	1,635	1,770	1,978	2,079	2,155	2,172	-0.9%	5.8%
% Change		17%	-10%	8%	12%	5%	4%	1%		
Total Nonresidential Buildings	11,250	12,389	12,572	12,233	12,647	13,279	14,073	14,896	5.0%	3.5%
% Change		10%	1%	-3%	3%	5%	6%	6%		
Power	3,733	4,508	4,524	4,362	4,541	4,577	4,628	4,795	0.7%	1.2%
% Change		21%	0%	-4%	4%	1%	1%	4%		
Highway and Street	3,017	3,255	3,386	3,382	3,607	4,127	4,633	5,080	1.1%	8.5%
% Change		8%	4%	0%	7%	14%	12%	10%		
Sewage and Waste Disposal	800	889	965	1,032	1,103	1,207	1,342	1,498	2.1%	9.2%
% Change		11%	9%	7%	7%	9%	11%	12%		
Water Supply	551	585	689	711	761	846	941	1,047	6.1%	8.7%
% Change		6%	18%	3%	7%	11%	11%	11%		
Conservation and Development	301	342	351	310	328	367	405	445	3.6%	4.9%
% Change		14%	2%	-12%	6%	12%	10%	10%		
Total Nonbuilding Structures	8,402	9,579	9,914	9,797	10,340	11,123	11,949	12,864	1.4%	5.3%
% Change		14%	3%	-1%	6%	8%	7%	8%		
Total Put in Place	33,090	36,169	39,430	40,438	43,533	46,242	49,095	52,125	5.6%	5.7%
% Change		9%	9%	3%	8%	6%	6%	6%		

POPULATION AND EMPLOYMENT FORECAST

The Perryman Group forecasts Houston's population to reach 10.7 million and employment to grow to 5.0 million by '45.

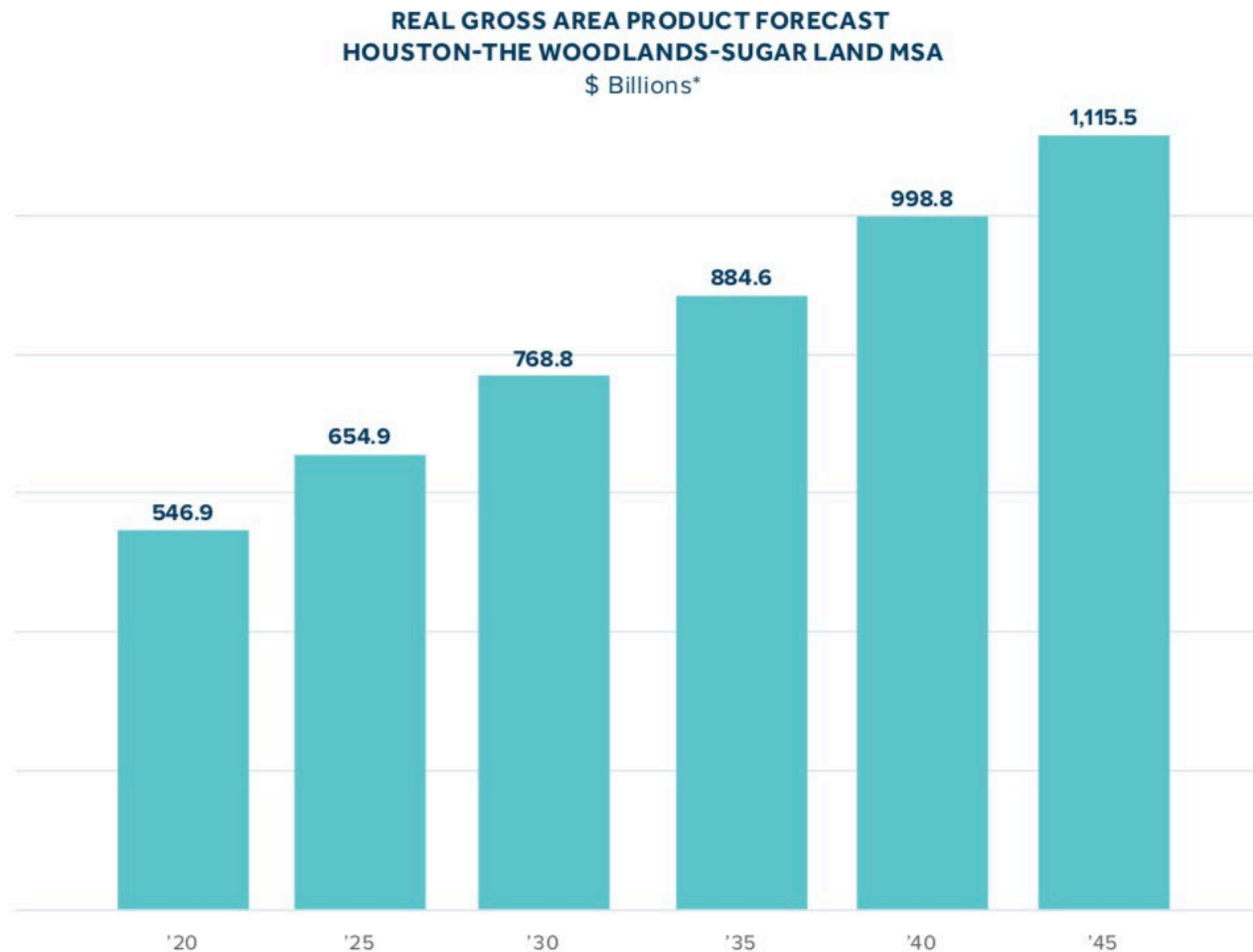


Source: The Perryman Group

- From '20 to '45, The Perryman Group sees population growth averaging 1.6 percent annually in the Houston region. Over the same period, the Texas-based economic forecasting firm expects wage and salary employment to rise at the same rate of 1.6 percent annually.
- The Houston-The Woodlands-Sugar Land Metro Area will add 3.4 million residents between '20 and '45. Perryman also forecasts that Houston will add an additional 1.6 million jobs and account for one-fourth of Texas job growth during that time frame.

GROSS AREA PRODUCT FORECAST

The Perryman Group forecasts sustained economic growth for the Houston metro over the next quarter century.

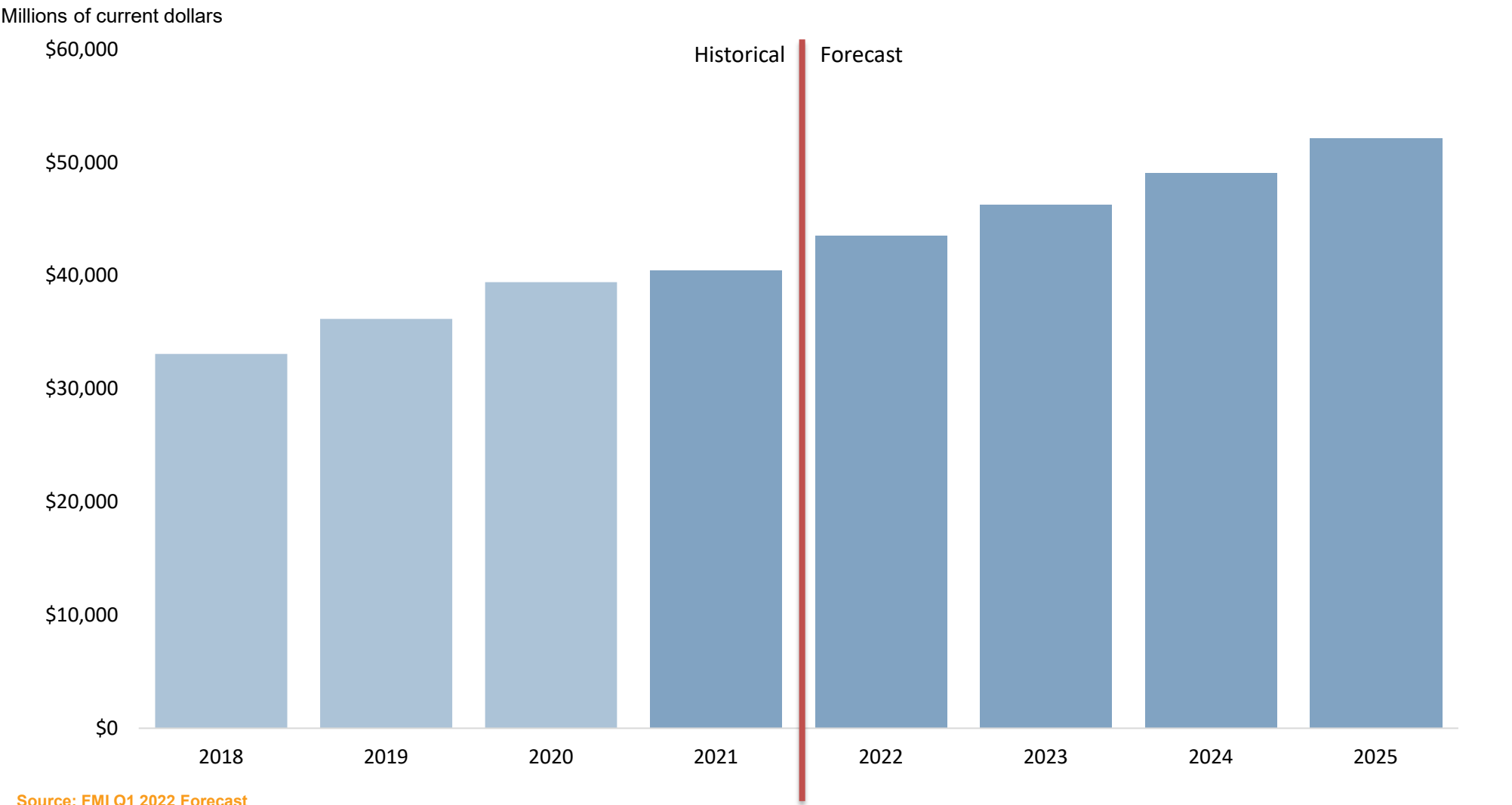


Source: The Perryman Group
*'09 Constant Dollars

- Real (i.e., net of inflation) Gross Area Product (GAP) in the Houston region is expected to grow at an average annual rate of 2.9 percent from '20 to '45 in The Perryman Group's forecast.
- The Houston MSA's real GAP is projected to more than double between '20 and '45.
- Compound annual growth rates of real gross area product from '20 to '45 are highest in manufacturing (3.8 percent), information (3.7 percent) and professional and business services (3.6 percent).

Houston MSA market outlook | 2022

Construction spending put in place (Houston MSA).
Combined segments of: Single Family, Multifamily, Improvements*, Lodging, Office, Commercial, Health Care, Educational, Religious, Public Safety, Amusement and Recreation, Transportation, Communication, Manufacturing, Power, Highway and Street, Sewage and Waste Disposal, Water Supply, Conservation and Development



The Current Global Energy Picture



Energy Facts (EIA)

	2022	2023
Daily Oil Production Million BPD	101.05	102.84
Daily Oil Consumption	100.05	102.02

Other Facts

- Demand Horizon still trending up
- Downward trend for hydrocarbons still premature
- Will remain stable for several years after it peaks

Questions

- What will be the needs for office space? They are now able to increase production with limited Huston Based jobs (DUCs)
- What other type companies will majors buy to remain the leaders and keep Houston the energy capital

Economic and Industry Facts

Tailwinds

- GDP will grow both Domestically and Globally

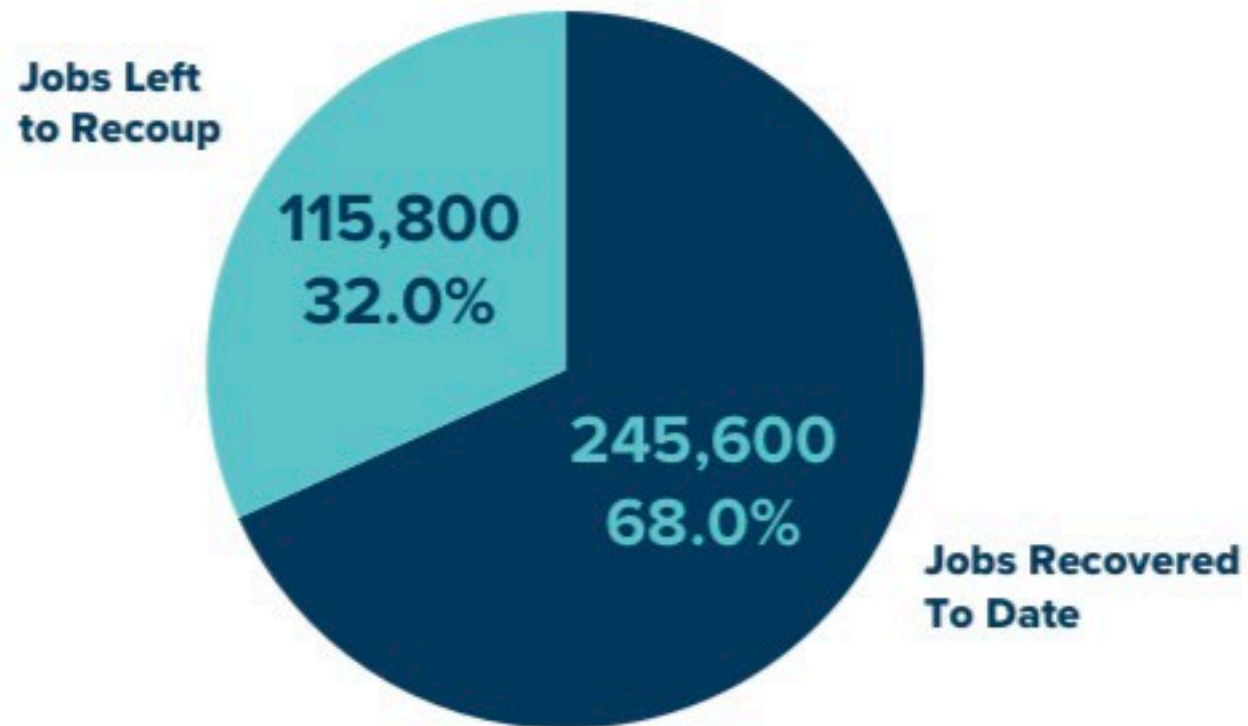
United States	Global
3.5 – 4%	4.9%

- Employment will grow in the US and in Houston
 - GHP projects Houston will add 75, 000 jobs (Chart Follows)
- Contractor Backlogs - Several large contractors have record backlogs
- Projects put on hold are being released
- TMC 3 Moves Forward
- Interest rates will remain favorable

Headwinds:

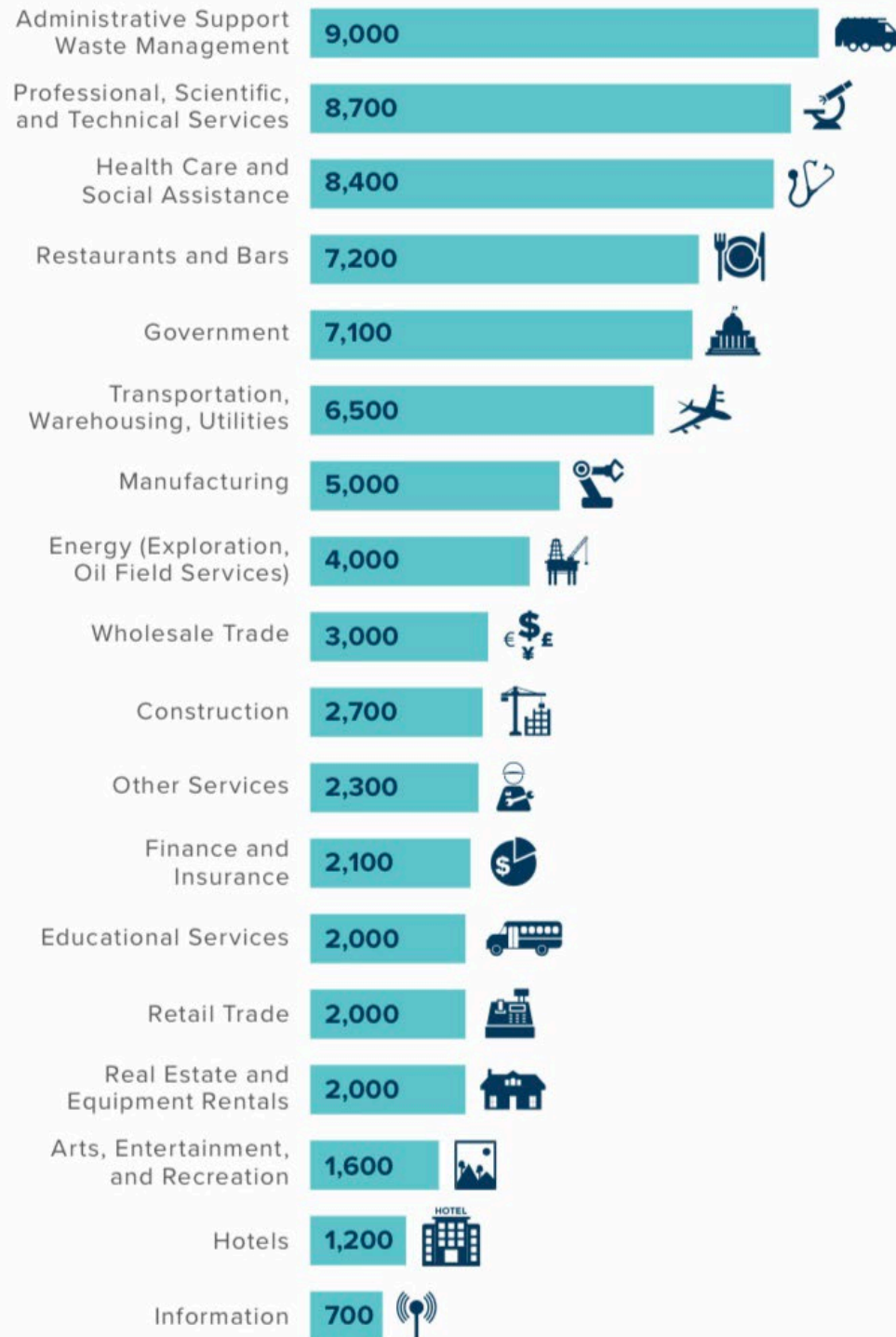
- Vacancy rates in General Purpose Office and Light Industrial
- Supply Chain Uncertainties
- Workforce Challenges
- Virus mutation

PROGRESS TO DATE, METRO HOUSTON EMPLOYMENT

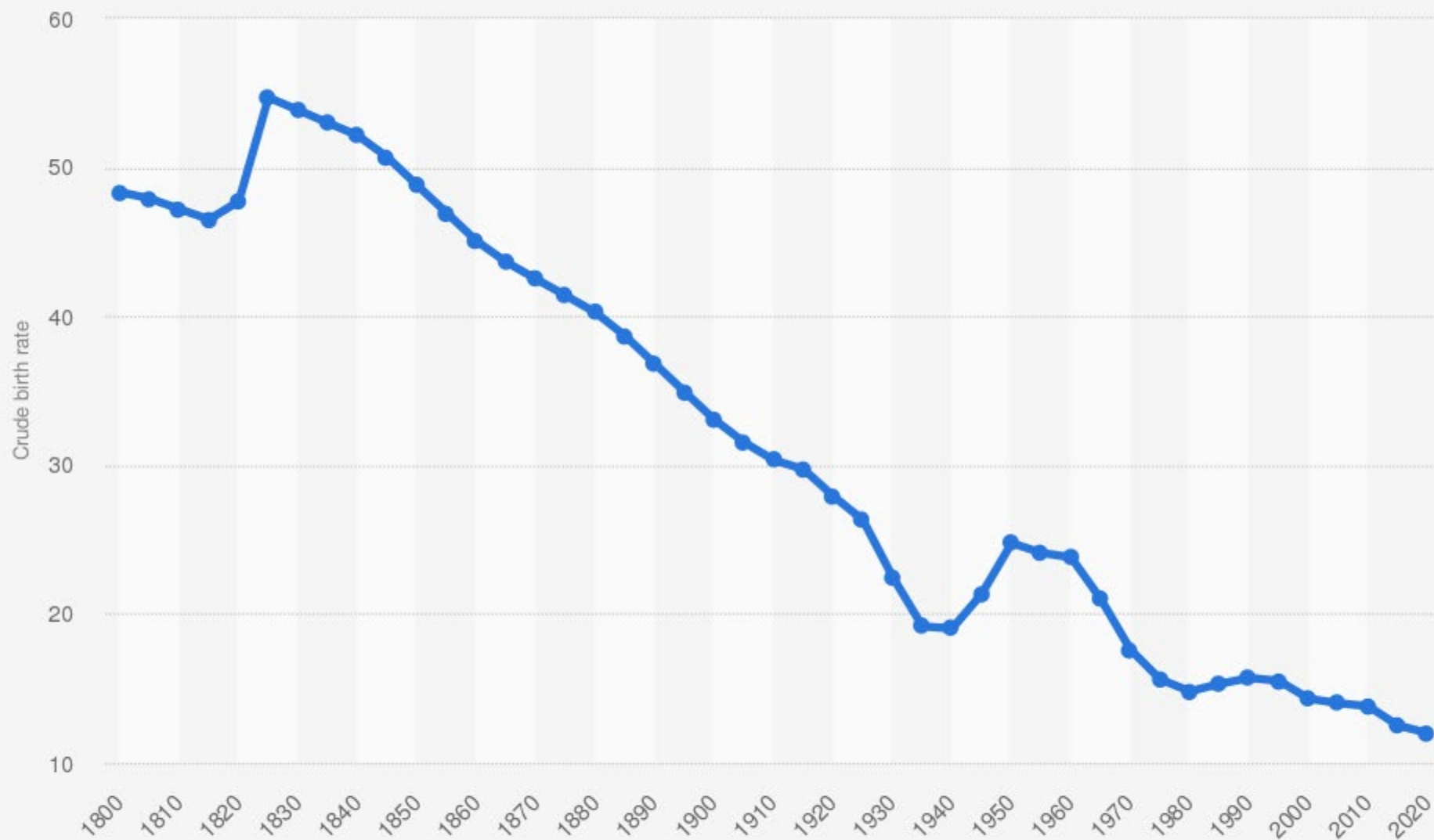


METRO HOUSTON FORECAST, PROJECTED JOB GAINS/LOSSES

December '21 - December '22



Crude birth rate in the United States from 1800 to 2020*



Sources

Various sources; UN DESA; Gapminder
© Statista 2021

Additional Information:

United States; 1800-2019

Workforce

Shortage of
skilled workers
continues /
exacerbates

Efforts to make
construction
work an
attractive career





C-3

The Construction Career Collaborative

Safety Training

Pay Legally

Craft Training

Immigration Reform

- National Effort
- Baker Institute
- The Rational Middle Video Series:
 - 10, 20 minute fact-filled videos to prompt discussion



The March of the Millennials

- 75% by 2025
- Critical for Leadership Succession
- Gen. Z (The Generation Close Behind)
- Digital Natives
Powerful Pairings





Technology's March

- Paperless
- Mobile including full sets of plans
- Drones/Sensors/Cameras/GPS
- Everything gathers data
- 3D Printing
- Driverless Machinery
- Robotics/A.I.
/A.R. / Machine Learning



Offsite Build / Onsite Install

Real Savings

- Time / Cost

Productivity

Taking Many Forms

- Traditional Specialty Contractors Building Additional Facilities

Tech. Based & Funded Start Ups

- ~~Katerra~~ – 3.7 Billion Back log; Prescient – Full-Stack Modular
- Skender - Struggling
- MiTek – Buffet Company

Modular Applications

- Apartments/ Hotels/ Hospitals

“Constructuring” A new term

Final Thoughts:

Speakers Assumptions:

The Houston Market will continue to grow, so leaders need to position their organization to participate in the rewards. **Think longer range, at least in decades as your horizon.**

The VUCA environment will remain, (**Volatility, Uncertainty, Complexity, Ambiguity**). Succeeding will require:

- A Strong Culture Based on Aspirational Values; Modeled by the Leaders: Establishing a Clear Sense of True North for Everyone
- A high Performing Leadership Team (Diverse in Skill Sets and gender, Data Driven, Authentic, Human, Candid, Continuous Learners, Independent Advisers)
- Winning the War for Talent. (Finding From Good to Great: “First Who, then What.” Be Ruthless that New Hires are Culture Compatible.
- Reward performance

Technology will be a competitive factor. Make it an advantage. Owners are demanding our industry perform better.

Stay humble, Live only in Gratitude.

