

Economic Impact and Tax Revenue Forecasting During COVID-19



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Overview



- National and local data begin to reflect impact of COVID-19, but more to come – lag factor between events and data.
- GDP down almost 5% in Q1 – easily could be multiples of that in Q2 & Q3
- Massive jump in claims for unemployment - many have either not applied or been unable to get through.
- Real-time indicators (oil & industrial production) drop precipitously. U.S. Retail Sales for April down 21.6% from April 2019.
- Issues on the Horizon
 - Timing and level of ongoing govt. support– business & individual
 - Capacity vs willingness to spend
 - Pattern of recovery/rehiring
 - Secondary outbreak?

Overview

Real GDP: Percent Change from Preceding Quarter

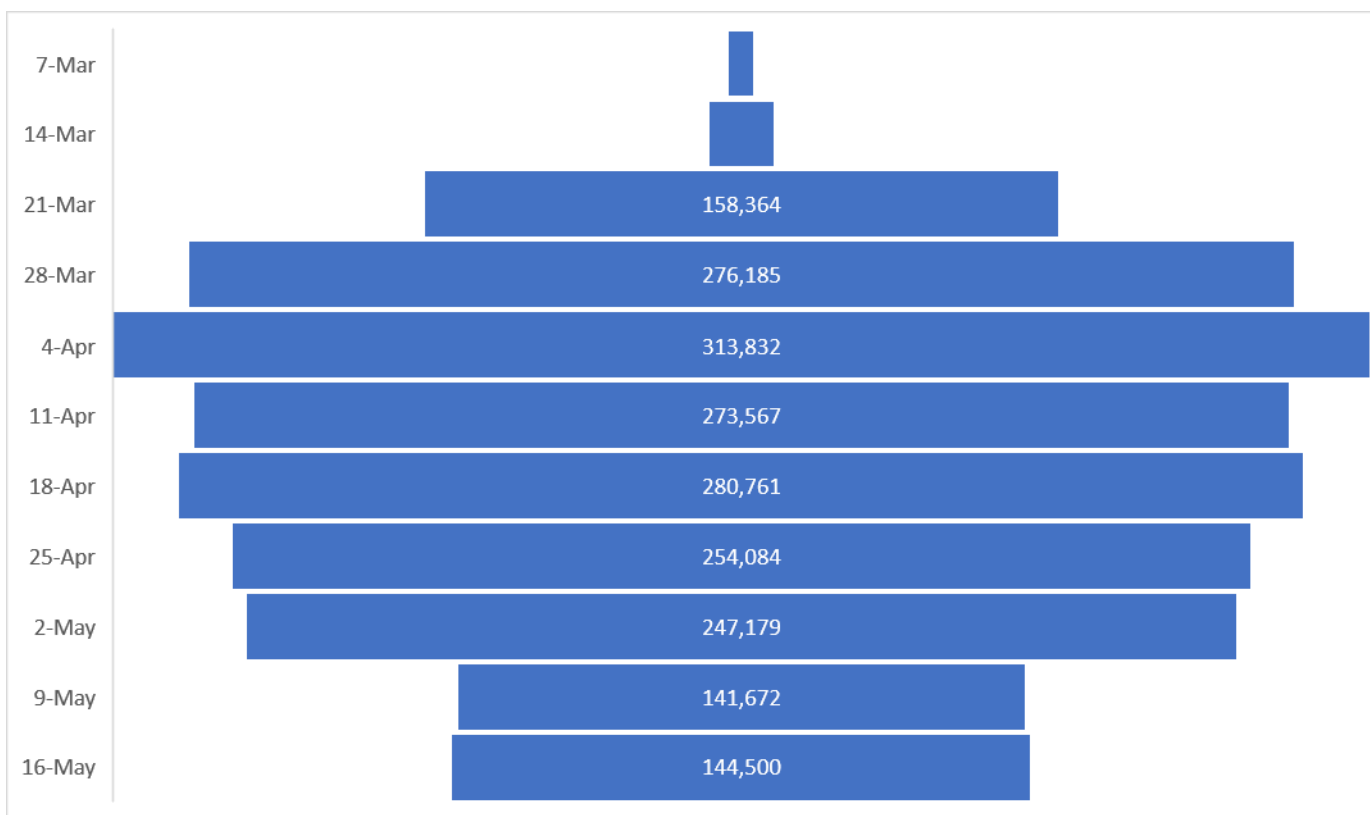


U.S. Bureau of Economic Analysis

Seasonally adjusted at annual rates

Overview

Texas Weekly Unemployment Insurance Claims



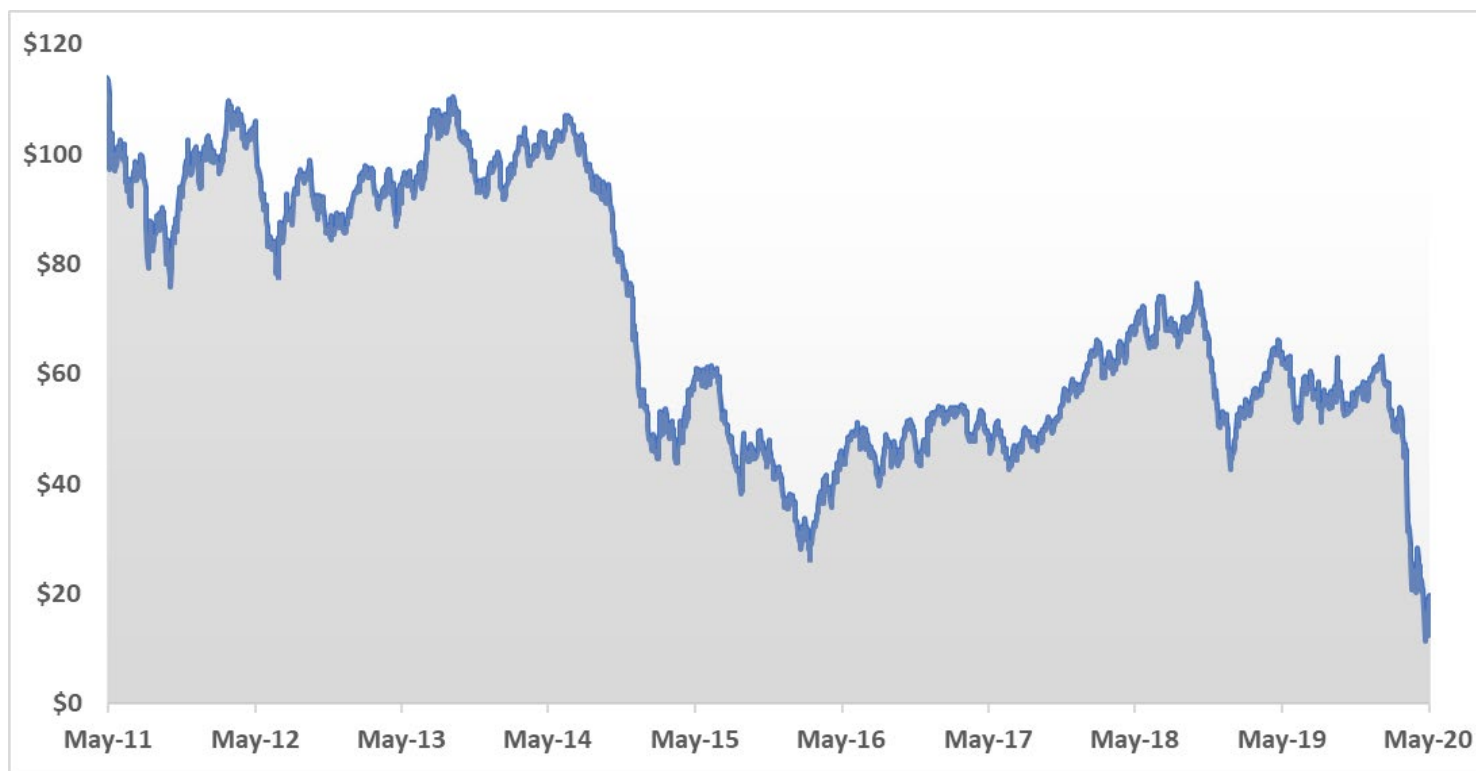
Overview

Texas Weekly Unemployment Insurance Claims by Industry

Industry	14-Mar	21-Mar	28-Mar	4-Apr	11-Apr	18-Apr	25-Apr
Accommodation and Food Services	2,556	64,909	60,621	44,415	30,556	28,860	19,232
Administrative & Waste Management & Remediation Services	2,044	11,065	21,976	22,934	18,354	18,177	14,440
Agriculture, Forestry, Fishing and Hunting	44	74	138	196	218	302	299
Arts, Entertainment, and Recreation	214	6,783	7,838	6,853	4,825	4,358	2,687
Construction	2,619	6,909	12,956	12,707	9,971	9,881	7,755
Educational Services	259	4,073	6,404	6,591	5,536	5,701	4,437
Finance and Insurance	402	1,114	1,824	2,699	2,069	2,177	1,712
Health Care and Social Assistance	905	13,939	36,901	36,581	24,546	21,327	14,162
Information	296	3,638	3,507	3,094	2,352	2,051	1,577
Management of Companies and Enterprises	138	708	1,448	1,364	1,062	920	648
Manufacturing	966	3,822	16,610	13,742	11,006	11,707	8,607
Mining	986	2,995	4,306	5,481	5,500	6,720	6,221
Other Services	472	8,279	18,520	17,736	11,411	9,390	5,527
Professional, Scientific, and Technical Services	1,078	5,059	9,669	11,545	9,384	8,496	6,755
Public Administration	124	437	669	836	822	833	1,040
Real Estate Rental and Leasing	355	2,405	4,757	5,122	4,099	3,958	2,706
Retail Trade	909	8,381	27,087	49,236	36,820	29,981	19,715
Transportation and Warehousing	1,986	3,526	5,560	7,247	6,729	7,584	6,554
Utilities	41	64	109	129	113	125	95
Wholesale Trade	604	2,499	6,852	10,620	7,540	7,214	6,408
Unknown	775	5,032	10,855	18,586	23,748	20,217	18,236
Grand Total	17,773	155,711	258,607	277,714	216,661	199,979	148,813

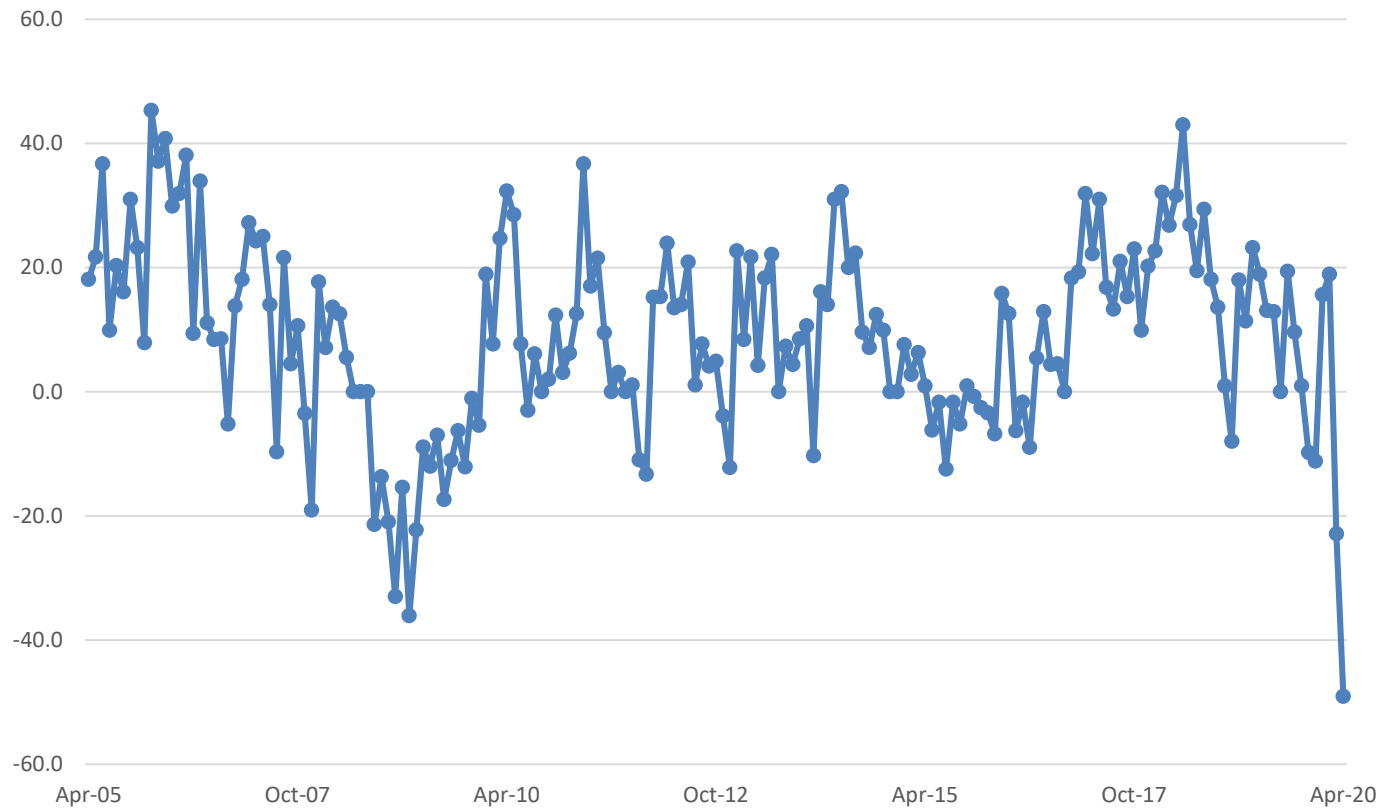
Overview

West Texas Intermediate Daily Price (Dollars per Barrel)



Overview

Fed Texas Industrial Production Index



Overview

Year-Over-Year May (March) Sales Tax Growth

Major Cities

Austin	-4.5%
Dallas	-9.4%
El Paso	-11.0%
Fort Worth	-6.5%
Houston	-10.3%
San Antonio	-10.8%

Edge Cities

Flower Mound	-8.1%
Frisco	-12.0%
Grapevine	-24.4%
Missouri City	7.1%
New Braunfels	1.9%
San Marcos	23.1%

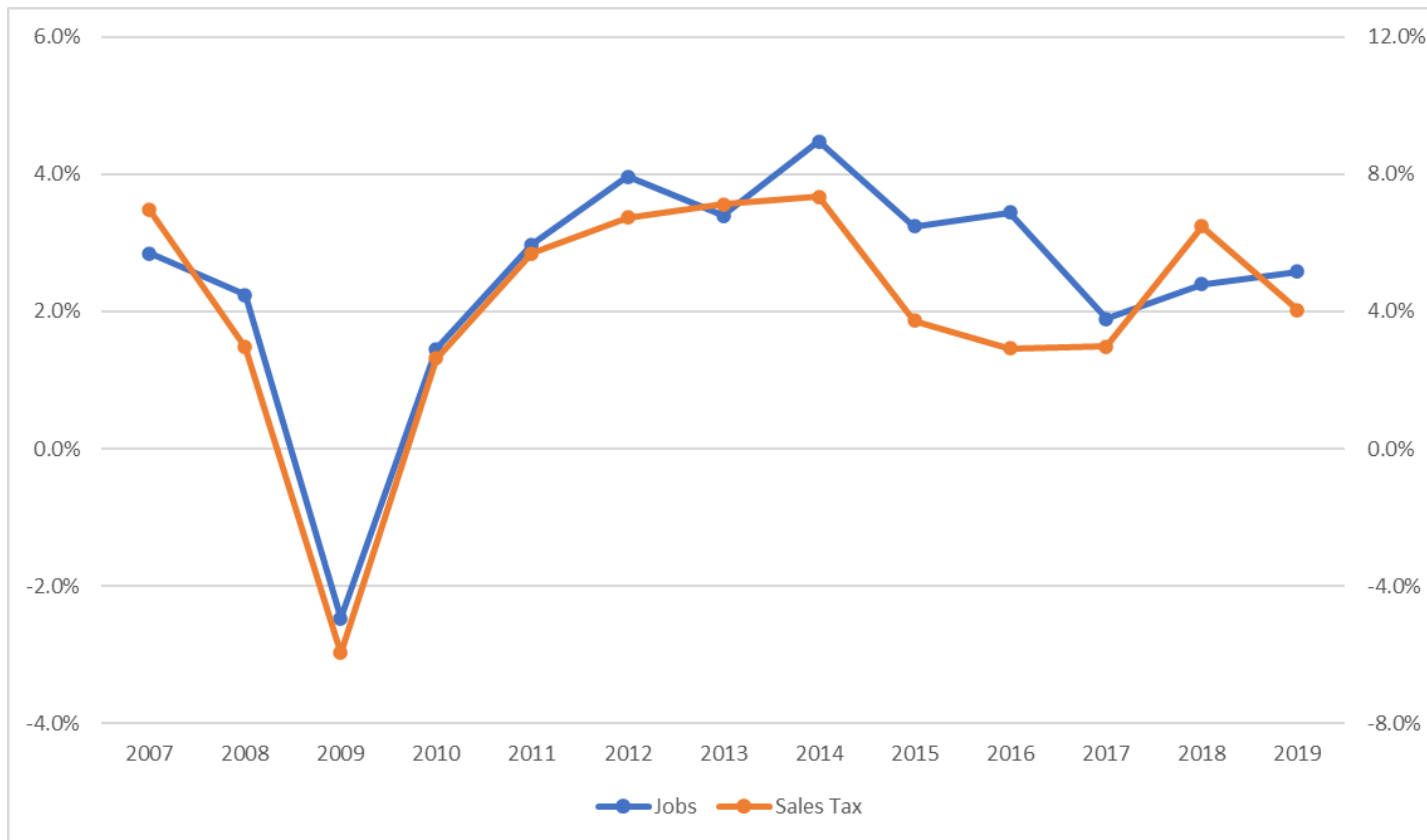
Stand-Alone Cities

Abilene	-2.1%
Beaumont	-7.9%
Longview	-9.5%
Lubbock	-5.5%
McAllen	-8.0%
Midland	-9.5%

- Negative Factors: travel/tourism, employment center, entertainment center, oil & gas, destination commerce (Border)
- Positive Factors: unprecedented stimulus, commuter out-migration, fulfillment/distribution center, isolation (at least at this stage).

Jobs & Sales Taxes

SA MSA Private Employment & City of San Antonio Sales Tax Growth



Mitigating Factors

- Sales tax data only reflect COVID-19 for part of March and April.
- Financial support from Federal sources.
 - High levels of unemployment compensation, the PPP program, and EIDL grants all help support consumer spending.
- Rent/debt service abatement also helps maintain spending.
- Shifting patterns of business activity.
 - Some firms able to pivot to maintain at least some revenue – food to go from restaurants, etc.
- San Antonio feels the impact of communities with a high level of commuter “out-migration”– if you aren’t driving to work in another town, you are more likely to spend near home. New Braunfels sales tax up about 2% in March.

Sales Tax Forecasts



Optimistic

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$303,692,000	\$294,586,750	\$301,183,756	\$313,614,757	\$326,558,832	\$340,037,158	\$354,071,787
<i>Annual Growth</i>	-3.0%	2.2%	4.1%	4.1%	4.1%	4.1%

Baseline

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$303,692,000	\$290,644,327	\$287,149,494	\$297,341,925	\$307,896,138	\$318,824,976	\$330,141,735
<i>Annual Growth</i>	-4.2%	-1.2%	3.6%	3.6%	3.6%	3.6%

Pessimistic

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$303,692,000	\$284,265,021	\$276,362,454	\$284,128,239	\$292,112,242	\$300,320,596	\$308,759,605
<i>Annual Growth</i>	-6.4%	-2.8%	2.8%	2.8%	2.8%	2.8%

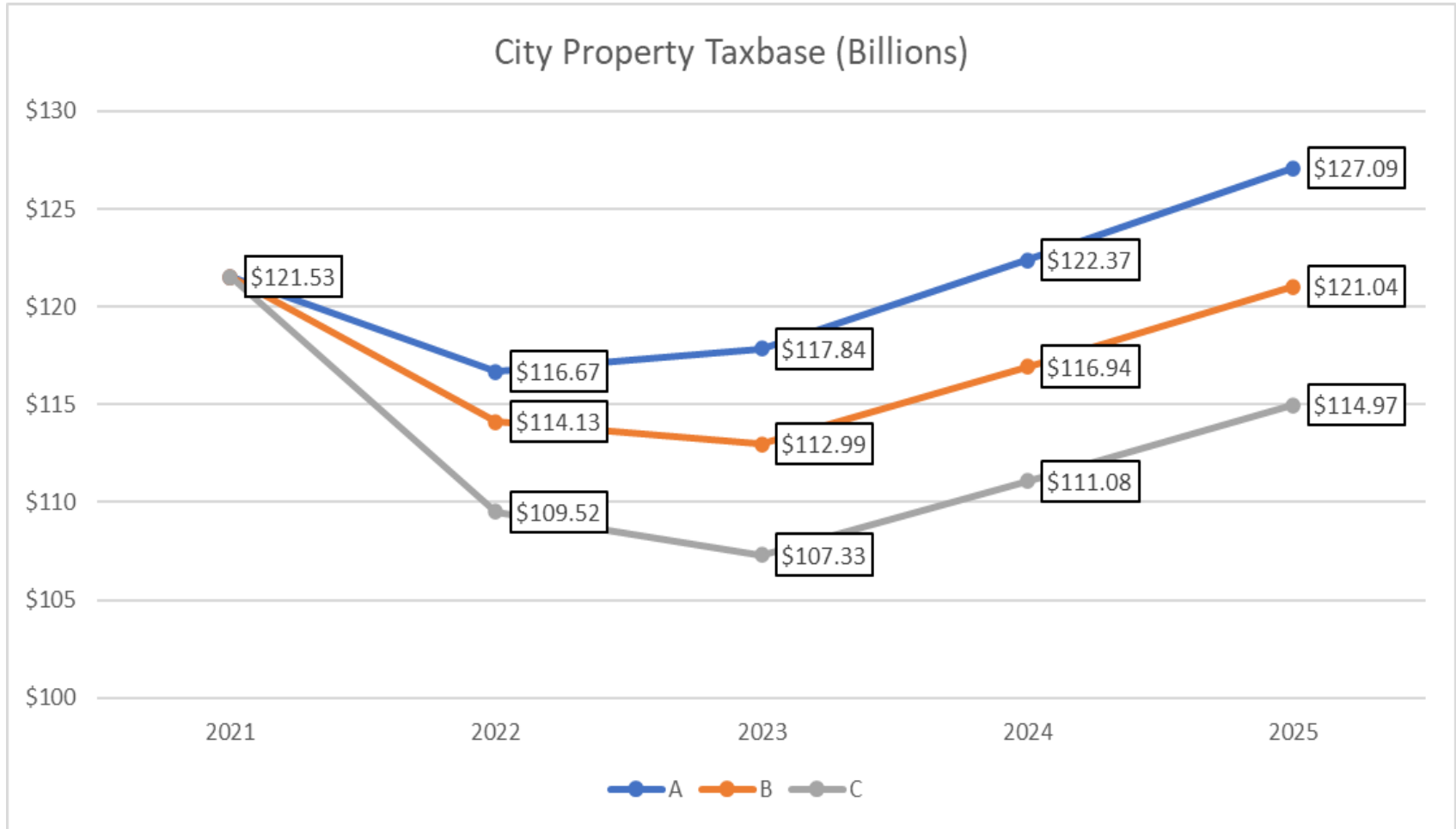
Employment Forecast

San Antonio MSA Year-End Baseline

Annual Change

	Dec-19	Dec-20	Dec-21	Dec-22	Dec-23	Dec-24	Dec-25	2019-20	2020-25
Agriculture, etc.	2,202	2,202	2,202	2,602	3,076	3,636	4,298	0.0%	14.3%
Mining, Quarrying, & Oil and Gas	10,413	9,977	9,894	10,210	11,810	13,179	13,311	-4.2%	5.9%
Construction	56,818	54,991	54,814	56,475	58,341	60,798	64,111	-3.2%	3.1%
Utilities	6,926	6,894	6,894	6,888	6,819	6,643	6,700	-0.5%	-0.6%
Manufacturing	50,468	49,776	49,708	50,648	51,822	52,347	52,772	-1.4%	1.2%
Wholesale Trade	34,356	33,192	33,080	33,584	33,999	34,122	34,904	-3.4%	1.0%
Retail Trade	117,123	105,518	103,427	104,332	103,711	102,866	102,610	-9.9%	-0.6%
Transportation & Warehousing	38,948	38,641	38,641	40,736	42,132	43,765	45,953	-0.8%	3.5%
Information	19,494	18,945	18,891	18,368	17,874	17,309	16,444	-2.8%	-2.8%
Finance and Insurance	67,491	65,666	65,488	66,834	67,370	68,518	69,761	-2.7%	1.2%
Real Estate & Rental	17,863	17,005	16,882	17,139	17,393	17,259	17,259	-4.8%	0.3%
Professional, Scientific Services	54,684	54,368	54,368	56,418	58,671	61,575	64,653	-0.6%	3.5%
Management of Companies	14,180	14,099	14,099	15,055	16,283	17,742	18,451	-0.6%	5.5%
Administrative, Support Services	70,397	68,579	68,490	69,760	70,067	70,001	68,111	-2.6%	-0.1%
Educational Services	99,149	98,691	98,691	99,344	100,037	100,813	102,326	-0.5%	0.7%
Health Care & Social Assistance	171,188	166,681	166,242	171,003	173,849	176,837	177,686	-2.6%	1.3%
Arts, Entertainment, & Recreation	16,592	14,891	14,585	15,183	15,838	16,457	16,753	-10.3%	2.4%
Accommodation & Food Services	120,527	94,747	89,681	92,033	93,809	95,385	96,129	-21.4%	0.3%
Other Services	29,821	28,814	28,717	29,471	29,950	30,517	31,094	-3.4%	1.5%
Public Administration	44,120	43,826	43,826	44,266	44,796	45,655	46,375	-0.7%	1.1%
Unclassified	474	474	474	474	474	474	474	0.0%	0.0%
TOTAL	1,043,234	987,976	979,094	1,000,825	1,018,124	1,035,899	1,050,175	-5.3%	1.2%

City Property Taxbase Scenarios



Hotel Occupancy Tax Revenues: General Expectations

- Three scenarios were forecast: baseline, pessimistic, and optimistic.
- While it is expected that demand may recover relatively quickly, ADR will take about 6-8 years to get back to pre-COVID levels. It took about 3-4 years for ADR to recover from 9/11 and the Great Recession. The industry expectation is that recovery from the pandemic will take about twice as long.
- Demand will be led out of the recovery by leisure visitors. While convention and other business travel may pick up by the end of this year, it is expected that convention attendance will be less than pre-pandemic levels.
- Revenues are adjusted to account for 8% of rooms being tax exempt.

Hotel Occupancy Tax Revenues



Optimistic

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$93,478,549	\$60,589,296	\$72,037,524	\$83,752,066	\$90,856,576	\$95,304,841	\$99,974,905

Baseline

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$93,478,549	\$57,843,893	\$63,358,020	\$78,605,413	\$84,897,028	\$89,050,912	\$93,411,785

Pessimistic

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$93,478,549	\$55,098,490	\$57,844,747	\$74,112,847	\$79,293,023	\$83,167,070	\$87,233,941

Airport Revenues: Methodology

- From 2011 to 2019 there is a 97% correlation between total passengers and total airport revenues.
- This relationship forms the basis of the forecast of revenues.
- Total passengers were forecast for each month under three scenarios (assumptions described below).
- The change in passengers was forecast for each year, and the monthly number of passengers was calculated by multiplying the annual number of passengers by the average proportion of passengers in each month to the total in the respective year (see table on following slide).

Airport Revenues: Methodology

- The projections also considered the forecasts published by the International Air Transport Association (IATA) covering the next five years and the International Civil Aviation Organization (ICAO) covering the period through September 2020.
 - Some key insights taken from these studies:
 - Air travel measured by RPKs* may recover slower than overall economy (IATA). (However, this considers a sharp decline in international travel, and only 4% of San Antonio passengers are international.)
 - Domestic air travel as measured by RPKs will recover by 2022 but international travel may not recover until 2023-24 (IATA). (This should benefit San Antonio since it is mostly a domestic travel market.)
 - The forecasts of passengers provided by ICAO (shown in a chart below)

*revenue passenger kilometers (RPK)

Airport Revenues



Optimistic

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$148,265,821	\$102,612,868	\$108,216,119	\$119,707,833	\$125,087,139	\$127,588,881	\$130,140,659

Baseline

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$148,265,821	\$95,186,147	\$96,609,406	\$111,063,193	\$117,320,808	\$119,667,224	\$122,060,569

Pessimistic

FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
\$148,265,821	\$83,713,759	\$74,517,429	\$99,238,657	\$112,540,990	\$117,320,808	\$119,667,224

Establishments Permanently Closed: 2020



Establishments Permanently Closed Due to Pandemic: 2020

<i>Industry</i>	<i>% of</i>				
	<i>Establishments</i>	<i>All Establishments</i>	<i>Small Businesses</i>	<i>Microbusinesses</i>	<i>Nonprofits</i>
Agriculture, Forestry, Fishing and Hunting	0	0.00%	0	0	N/A
Mining, Quarrying, and Oil and Gas Extraction	10	5.93%	10	9	N/A
Construction	73	1.31%	72	69	N/A
Utilities	0	0.00%	0	0	N/A
Manufacturing	12	0.64%	12	11	N/A
Wholesale Trade	76	3.68%	75	70	N/A
Retail Trade	353	5.09%	350	344	N/A
Transportation and Warehousing	12	1.04%	12	11	N/A
Information	20	2.35%	20	19	N/A
Finance and Insurance	149	5.26%	148	145	N/A
Real Estate and Rental and Leasing	70	2.00%	70	69	N/A
Professional, Scientific, and Technical Services	17	0.32%	17	17	N/A
Management of Companies and Enterprises	4	2.25%	N/A	N/A	N/A
Administrative, Support, Waste Mgt. and Remediation Services	99	4.31%	98	94	N/A
Educational Services	17	4.48%	17	17	3
Health Care and Social Assistance	170	1.08%	169	166	7
Arts, Entertainment, and Recreation	37	3.77%	37	35	3
Accommodation and Food Services	557	14.50%	555	512	N/A
Other Services (except Public Administration)	61	1.21%	61	59	2
Total	1,732	2.93%	1,724	1,647	15

Conclusions

- Consumer activity (retail & personal services) and hospitality are the two sectors hit first, and hardest, by COVID-19
- Other sectors also heavily influenced, especially in the near-term
 - Oil
 - Airlines
 - Non-essential Medical
 - Sales
 - Any unique transaction business, eg, Real Estate
- Overall economic impact will hit in coming months/years. Starting point is job loss/gain – other measures of impact best derived from there.
- Local governments could experience impacts in other areas
 - COVID-19 specific costs
 - Fund transfer from other entities
 - Social services

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