

To: Harris County Precinct Two Commissioner Adrian Garcia  
From: Katie Short, Director; Amber Weed, Chief of Staff and Policy  
Director; Amy Rose, Senior Analyst; Ramin Naderi, Analyst  
CC: Mike Lykes, Kris Banks, and Michelle Galindo with Precinct Two;  
Barbie Robinson, Gwen Sims, and Will Hudson with Harris County  
Public Health  
Date: October 12, 2021  
Re: **Monthly Memo on COVID-19 Vaccine Distribution, October 2021**

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## EXECUTIVE SUMMARY

In January 2021, Precinct Two requested the Analyst's Office produce a monthly memo regarding the distribution of COVID-19 vaccinations in Harris County. This is the tenth memo of a standing monthly memo the Analyst's Office produces as the vaccine distribution continues to evolve at the federal, state, and local levels.

This memo provides an overview of the COVID-19 pandemic and vaccine distribution in Harris County. Key findings from the data in this memo include:<sup>i</sup>

- As of September 26, 2021, **52.2% (2,471,866) of individuals in Harris County were fully vaccinated.**
- As of September 26, 2021, **9.0% (426,538) of individuals in Harris County were partially vaccinated.**
- Between August 30, 2021 and September 26, 2021, **the number of individuals in Harris County vaccinated with at least one dose increased by 4.7% (from 2,768,701 to 2,898,404).**
- Between August 30, 2021 and September 26, 2021, **the number of individuals in Harris County fully vaccinated increased by 8.8% (from 2,270,241 to 2,471,866).**
- **Zip codes 77336 and 77090 have the fewest number of individuals per 100,000 residents fully vaccinated (32,994 and 34,554 respectively).**
- **Zip codes 77019 and 77027 have the greatest number of individuals per 100,000 residents fully vaccinated (82,195 and 97,732, respectively).<sup>ii</sup>**
- **The median of the median incomes of the fifteen Harris County zip codes with the fewest number of individuals per 100,000 residents fully vaccinated is \$43,282.**

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<sup>i</sup> IMPORTANT NOTE: Not all data sums to totals reported. This is due to poor and inconsistent data reporting by providers, and because patients have not been required to disclose all demographic data. DSHS reports it is actively conducting county and provider-level analyses to identify if certain providers or areas are underreporting more than others for targeted data entry funding and training.

<sup>ii</sup> Zip code analysis excludes zip codes that report a greater number of residents vaccinated than the zip code's total population. This discrepancy is due to poor and limited data.

- The median of the median incomes of the fifteen Harris County zip codes with **the greatest number of individuals per 100,000 residents fully vaccinated is \$94,801.**
- The number of individuals fully vaccinated in Harris County varies by age group.
  - **76.2% (146,439) of individuals ages 75 and over are fully vaccinated.**
  - **77.4% (441,977) of individuals ages 60-74 are fully vaccinated;**
  - **72.5% (609,921) of individuals ages 45-59 are fully vaccinated;**
  - **61.6% (646,505) of individuals ages 30-44 are fully vaccinated; and**
  - **50.8% (626,729) of individuals ages 12-29 are fully vaccinated.**
- The number of individuals fully vaccinated in Harris County varies by race and ethnicity.
  - **32.0% (283,474) of individuals who identify as Black are fully vaccinated;**
  - **43.9% (893,434) of individuals who identify as Hispanic are fully vaccinated;**
  - **49.4% (646,406) of individuals who identify as White are fully vaccinated;**
  - **57.6% (200,485) of individuals who identify as Asian American/Pacific Islander are fully vaccinated; and**
  - **72.4% (6,107) of individuals who identify as American Indian/Alaskan Native are fully vaccinated.**
- The demographic in Harris County with the highest percentage of individuals vaccinated are individuals who identify as Hispanic aged 65-74 (74%). The demographic with the lowest percentage of individuals vaccinated are individuals who identify as Black aged 12-29 (24%).
- Between January 1, 2020 and September 26, 2021:
  - **All providers in Harris County administered a cumulative 5,804,035 COVID-19 PCR tests;<sup>iii</sup>**
  - **There were 553,657 positive COVID-19 cases confirmed by a PCR test in Harris County; and**
  - **There were 5,706 confirmed COVID-19-related deaths in Harris County.**

The Analyst's Office acknowledges Harris County Public Health and the Harris County Office of Management and Budget for their significant contributions to this memo.

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<sup>iii</sup> PCR refers to the polymerase chain reaction or nucleic acid amplification tests commonly used to test for COVID-19.

## INTRODUCTION

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In January 2021, Precinct Two requested the Harris County Commissioners Court's Analyst's Office (the "Analyst's Office") produce a monthly memo regarding the distribution and administration of COVID-19 vaccinations in Harris County. This is the tenth memo of a standing monthly memo the Analyst's Office produces as the vaccine distribution continues to evolve at the federal, state, and local levels.

This memo includes data and analysis regarding COVID-19 testing, cases, deaths, and vaccine administration in Harris County. Precinct-level age, race, and ethnicity data are provided where available.

## METHODOLOGY

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Data utilized in this memo are from Harris County Public Health (HCPH); the Centers for Disease Control and Prevention (CDC); and Harris County's Applied Technologies Location Analysis and Statistics (ATLAS) System. Data reflect COVID-19 vaccine doses administered in Harris County by all providers from the beginning of the vaccine rollout, December 14, 2020, through September 26, 2021, and all testing, confirmed cases, and COVID-19-related death data from January 1, 2020 through September 26, 2021.

All references to "fully vaccinated" refer to the administration of either a two-dose or one-dose vaccine. "Fully vaccinated" excludes any third shots (or "booster" shots) administered.

### **Data Collected from Harris County Public Health (HCPH)**

The majority of data in this memo was sent to the Analyst's Office from HCPH, which analyzes vaccine data received by the Texas Department of State Health Services (DSHS) ImmTrac2 system. As the Local Health Authority for the County, HCPH also analyzes and receives testing, confirmed cases, and COVID-19-related death data from local health providers (including the City of Houston) and other sources. Income data provided by HCPH reflects American Community Survey, 2014-2018 Five-Year Estimates. HCPH data and/or analysts aided in the development of all tables and figures.

DSHS advised the following via email regarding the data available on ImmTrac2:

- Providers in Texas have up to 24-hours to report doses administered in ImmTrac2, and the dashboard is updated by 4:00 pm with data reported as of 11:59 pm the previous night. This means there could be as much as a 48-hour lag between when a dose is administered and when it appears on ImmTrac2.

Prior to the fifth version of this memo, which was circulated on June 3, 2021, this memo included updates and projections on vaccine allocations to the State of Texas or Harris County using DSHS data. However, as of May 10, 2021, DSHS announced it is no longer distributing weekly allocations of vaccine doses to providers due to a "sufficient

supply of vaccine.”<sup>iv</sup> Due to this changed strategy of allocating vaccines, this memo no longer provides updates and projections on vaccine allocations to the State of Texas or Harris County.

In late summer 2021, discussion of the need for a “booster” or third shot for select recipients of the two-dose vaccines started to evolve nationally, and individuals started to receive third doses. Currently, DSHS reportedly does not track administered third shots in the State of Texas.

#### **Data Collected from Centers for Disease Control and Prevention (CDC)**

The Analyst’s Office collected information on social vulnerability from the Centers for Disease Control and Prevention (CDC). Social vulnerability refers to a community’s capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as toxic chemical spills.<sup>v</sup> The Social Vulnerability Index (SVI) was created by the CDC and depicts the social vulnerability of communities, at the census tract level, within a given county. SVI groups fifteen census-derived factors into four themes that summarize the extent to which the area is socially vulnerable to disaster. The factors include economic data as well as data regarding education, family characteristics, housing, language ability, ethnicity, and vehicle access. Overall Social Vulnerability Index combines all the variables to provide a comprehensive assessment. SVI data aided with the development of Table 1.

#### **Data Collected from Applied Technologies Location Analysis and Statistics (ATLAS)**

The Analyst’s Office collected commissioner precinct zip code data from Harris County’s Applied Technologies Location Analysis and Statistics (ATLAS) System.

#### **Data Collected from Harris County Office of Management and Budget**

The Analyst’s Office collected commissioner precinct race and ethnicity data from the Harris County Office of Management and Budget.

NOTE: All analyses in this memo, except **Figure 3**, reflect *individuals fully vaccinated*, rather than *individuals with at least one dose*.

Prior to this memo, population statistics for Harris County came from the 2019 American Community Survey (ACS) 1 Year Estimates. All data in this memo uses population estimates from the recently released 2020 Census, except **Table 2** and **Figure 4**, which use 2019 ACS estimates.

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<sup>iv</sup> Department of State Health Services (DSHS) COVID-19 Vaccine Allocations. Retrieved May 27, 2021, from <https://www.dshs.state.tx.us/coronavirus/immunize/vaccineallocations.aspx>

<sup>v</sup> Centers for Disease Control (CDC) Social Vulnerability Index, a tool to identify socially vulnerable communities.

## BACKGROUND

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The spread of the novel coronavirus, the cause of COVID-19, began in the United States in early 2020. Since then, local health entities have tracked the testing, the number of confirmed positive cases, and deaths related to COVID-19.

In December 2020, two-dose vaccines from two producers, Moderna and Pfizer-BioNTech, were authorized for emergency use by the US Food and Drug Administration (FDA). In February 2021, the FDA authorized Johnson & Johnson's (J&J) one-dose vaccine for emergency use. On August 23, 2021, the FDA granted full approval to the Pfizer-BioNTech vaccine for those 16 and older, with continued availability for those 12-15 years of age under emergency use authorization. The Pfizer-BioNTech vaccine is currently the only vaccine approved by the FDA not under emergency use authorization.<sup>vi</sup>

From December 2020 to March 28, 2021, vaccines were made available for individuals in DSHS's Phase 1A (front-line healthcare workers and residents of long-term care facilities) and 1B (individuals ages 65+ and individuals ages 16+ with "at least one chronic medical condition that puts them at increased risk for severe illness from the virus that causes COVID-19").<sup>vii</sup> <sup>viii</sup> On March 29, 2021, Texas expanded vaccine eligibility to all individuals age 16 and older. Beginning May 12, 2021, Texas expanded vaccine eligibility to all individuals age 12 and older. Currently, all vaccines are authorized for individuals age 18 and older; the Pfizer vaccine is authorized for individuals age 12 and older.<sup>ix</sup>

On August 12, 2021, the FDA amended the emergency use authorizations for the Moderna and Pfizer-BioNTech vaccines to allow for an additional third dose, a "booster," to be administered to immunocompromised individuals.<sup>x</sup> On September 22, 2021, the FDA amended the emergency use authorization for the Pfizer-BioNTech vaccine to allow for a single "booster" dose to be administered at least six months after completion of the two-dose Pfizer series to those individuals who are 65 years or older; individuals 18-64 at high risk of severe COVID-19; and individuals 18-64 whose frequent institutional or occupational exposure puts them at high risk of serious complications of COVID-19.<sup>xi</sup> To date, the Texas Department of State Health Services has not commenced tracking the administration of third doses or "boosters" separate from second doses—the data are not available for analysis. Given this, this memo does not report out the administration of third doses.

To incentivize unvaccinated residents to seek vaccination, Harris County and the City of Houston launched separate cash card incentive programs for individuals to receive

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<sup>vi</sup> *FDA Approves First COVID-19 Vaccine*. (August 23, 2021). US Food and Drug Administration. Retrieved August 30, 2021 from <https://www.fda.gov/news-events/press-announcements/fda-approves-first-covid-19-vaccine>

<sup>vii</sup> Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1 Definition

<sup>viii</sup> Department of State Health Services (DSHS) COVID-19 Vaccine Allocation Phase 1B Definition

<sup>ix</sup> *COVID-19 Vaccine Information*. (n.d.). Texas Department of State Health Services. Retrieved May 27, 2021, from <https://dshs.texas.gov/covidvaccine/>

<sup>x</sup> *FDA Authorizes Additional Vaccine Dose for Certain Immunocompromised Individuals*. (August 12, 2021). US Food and Drug Administration. Retrieved August 30, 2021 from <https://www.fda.gov/news-events/press-announcements/coronavirus-covid-19-update-fda-authorizes-additional-vaccine-dose-certain-immunocompromised>

<sup>xi</sup> Commissioner, O. of the. (2021, September 22). *FDA Authorizes Booster Dose of Pfizer-BioNTech COVID-19 Vaccine for Certain Populations*. FDA; FDA. <https://www.fda.gov/news-events/press-announcements/fda-authorizes-booster-dose-pfizer-biontech-covid-19-vaccine-certain-populations>

their first dose of vaccination in summer 2021. The Harris County program was launched on August 17, 2021, and offered \$100 cash cards to residents who received their first dose of the COVID-19 vaccine from August 17 to September 30, at any authorized provider in the County.<sup>xii</sup> Similarly, the City of Houston launched a cash card incentive program on August 26, 2021, stating that the first 20,000 individuals to get fully vaccinated at an eligible health department site would receive \$150 in the form of cash cards; \$100 cash card for their first dose, and an additional \$50 cash card for their second dose.<sup>xiii</sup>

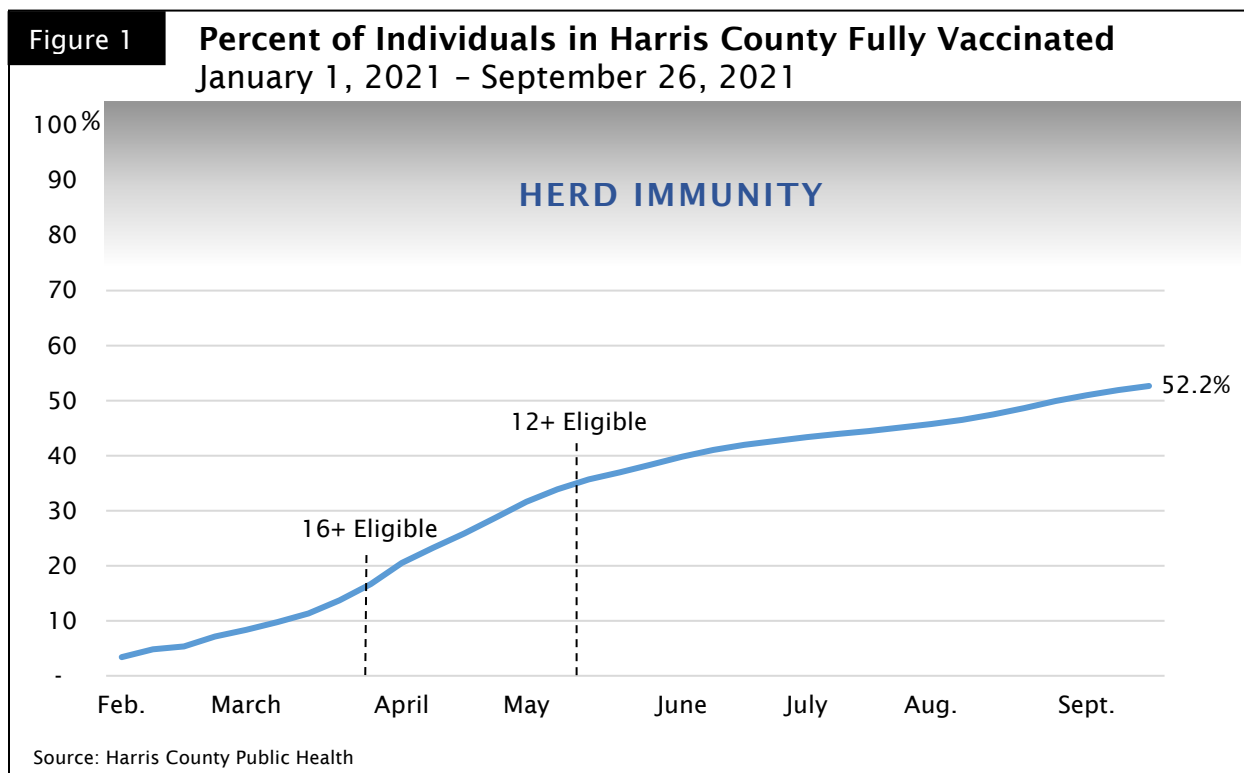
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<sup>xii</sup> *Ready Harris*. (n.d.). Retrieved September 8, 2021, from <https://www.readyharris.org/COVID-19-Incentive-Program>

<sup>xiii</sup> *Houston Health Department to provide up to \$150 in gift cards for COVID-19 vaccinations*. (n.d.). Retrieved September 8, 2021, from <https://www.houstontx.gov/health/NewsReleases/houston-health-department-to-provide-up-to-150-in-gift-cards-for-covid-19-vaccinations.html>

## INDIVIDUALS IN HARRIS COUNTY FULLY VACCINATED

**Figure 1** presents the percentage of Harris County individuals fully vaccinated between January 1, 2021 and September 26, 2021.<sup>xiv</sup> This figure includes individuals vaccinated by Harris County Public Health (HCPH) and all other providers. HCPH reports countywide data regarding individuals fully vaccinated by week—the data presented below extends through the week of September 20 – September 26, 2021.



On March 29, 2021, as shown in **Figure 1**, Texas expanded vaccine eligibility to all individuals age 16 and older. Beginning May 12, 2021, Texas expanded vaccine eligibility to all individuals age 12 and older.

As of September 26, 2021, 52.2% (2,471,866) of all individuals in Harris County were fully vaccinated, meaning an individual has received both doses of either the Moderna or Pfizer vaccines or a single dose of the Johnson & Johnson vaccine.<sup>xv</sup> This reflects an 8.8% (from 2,270,241 to 2,471,866) increase from August 30, 2021 (the prior memo).

A total of 9.0% (426,538) of all individuals in Harris County were partially vaccinated as of September 26, 2021.<sup>xvi</sup>

<sup>xiv</sup> Individuals who are partially vaccinated and individuals fully vaccinated are mutually exclusive, meaning individuals partially vaccinated only includes individuals who have received one vaccine dose of a two-dose shot (Pfizer or Moderna) and individuals fully vaccinated include individuals who have received either the Johnson & Johnson vaccine or two vaccine doses of Pfizer or Moderna.

<sup>xv</sup> Figure assumes Harris County's total population of 4,713,325, per American Community Survey 2019, 1 Year Estimates.

<sup>xvi</sup> Figure assumes Harris County's total population of 4,713,325, per American Community Survey 2019, 1 Year Estimates.



## NUMBER OF INDIVIDUALS PER 100,000 RESIDENTS FULLY VACCINATED BY ZIP CODE

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**Table 1** presents the number of individuals per 100,000 residents fully vaccinated by zip code. The table also includes the median income, Social Vulnerability Index (SVI) score, and commissioner precinct for each zip code. Commissioner precinct boundaries do not align with zip code boundaries; some zip codes are in multiple precincts. Precincts are listed in order of the greatest to least percentage of zip code land mass within the precinct.

Social vulnerability describes a community's ability to prevent human suffering and financial loss in the event of a disaster (such as a hurricane or disease outbreak).<sup>xvii</sup> SVI rankings are based on percentiles ranging from 0 to 1 (with higher values indicating greater vulnerability). SVI data is often presented using quartile classification. This analysis utilizes CDC's SVI classifications as follows: 0-0.25 (lowest vulnerability); 0.25-0.5 (moderate low); 0.50-0.75 (moderate high); and 0.75-1 (highest vulnerability).

**Table 1** ranks zip codes within Harris County to show relative vulnerability in comparison to the rest of Harris County. The median of the median incomes of the fifteen Harris County zip codes with the **fewest number of individuals per 100,000 residents fully vaccinated is \$43,282**. The median of the median incomes of the fifteen Harris County zip codes with the **greatest number of individuals per 100,000 residents fully vaccinated is \$94,801**.<sup>xviii xix</sup>

This analysis excludes zip codes 77024, 77010, 77056, 77507, 77030, 77523, 77498, and 77046 because they report higher vaccinated populations than the reported zip code population. HCPH suggests that this is likely due to the low population relative to other zip codes, which means measured parameters are sensitive to bad data such as data entry errors, individuals using business addresses in lieu of a home residence, and other factors. For a full list of zip codes, see Appendix D.

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<sup>xvii</sup> Centers for Disease Control (CDC) SVI 2016 Documentation.

<sup>xviii</sup> Note: This analysis excludes zip codes with vaccination rates higher than the reported zip code population. HCPH suggests that this is likely due to the low population relative to other zip codes, which means measured parameters are sensitive to bad data such as data entry errors, individuals using business addresses in lieu of a home residence, and other factors. For a full list of zip codes, see Appendix D.

<sup>xix</sup> Analysis excludes zip codes with small percentage of land mass in Harris County and zip code 77507, which has no income data available.



Table 1

### Number of Individuals Per 100,000 Residents Fully Vaccinated by Zip Code, Median Income, SVI, and Commissioner Precinct December 14, 2020 – September 26, 2021

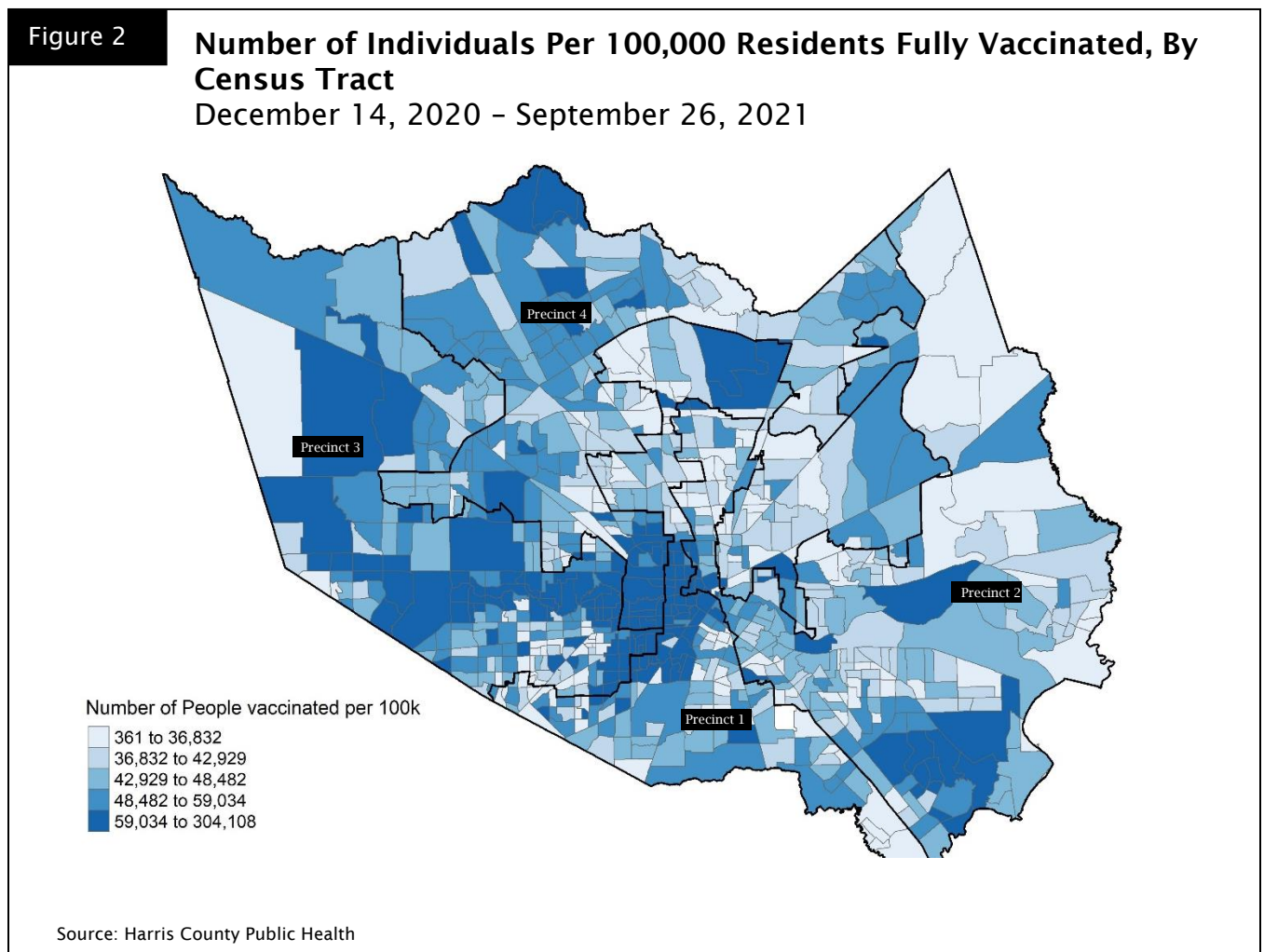
Zip Codes With Fewest Number of Individuals Per 100,000 Residents Fully Vaccinated				
Zip Code	Number Per 100k	Median Income	SVI	Commissioner Precinct(s)
77336	32,994	\$68,596	0.30	2,4
77090	34,554	\$39,808	0.70	1,4
77532	37,390	\$67,824	0.37	2
77562	38,527	\$59,792	0.63	2
77050	40,190	\$48,500	0.71	1,2
77520	40,541	\$50,461	0.82	2
77060	40,699	\$31,006	0.94	1,2,4
77067	40,761	\$43,282	0.79	4,1
77530	41,001	\$61,149	0.59	2,1
77004	41,307	\$51,309	0.53	1
77091	42,364	\$36,098	0.92	1,4
77078	42,519	\$40,298	0.89	1,2
77013	42,636	\$38,665	0.98	2,1
77039	42,738	\$36,769	0.73	2,1
77036	42,782	\$30,952	0.93	3,1
Zip Codes With Greatest Number of Individuals Per 100,000 Residents Fully Vaccinated				
Zip Code	Number Per 100k	Median Income	SVI	Commissioner Precinct(s)
77094	61,371	\$178,354	NA	3
77054	61,385	\$50,827	0.26	1
77083	62,629	\$54,425	0.53	3
77032	63,896	\$32,473	0.99	1,2
77025	64,584	\$76,772	0.32	1,3
77006	68,403	\$85,956	0.09	1
77002	68,952	\$71,369	0.42	1,2
77005	70,322	\$192,380	0.03	3,1
77008	70,769	\$108,644	0.08	4,1
77059	71,258	\$139,163	0.05	2
77007	72,210	\$125,653	0.01	4,1,2
77401	75,997	\$193,950	0.03	3
77098	80,065	\$91,138	0.07	4,1,3
77019	82,195	\$116,207	0.09	4,1
77027	97,732	\$98,463	0.01	4,3

Highest Vulnerability
  Moderate High Vulnerability
  Moderate Low Vulnerability
  Lowest Vulnerability

Source: American Community Survey (ACS) 2018 5-year estimates downloaded from Harris County's Applied Technologies Location Analysis and Statistics (ATLAS), Centers for Disease Control (CDC), and Harris County Public Health (HCPH)

## NUMBER OF INDIVIDUALS PER 100,000 RESIDENTS FULLY VACCINATED BY CENSUS TRACT

**Figure 2** presents the number of individuals per 100,000 Harris County residents fully vaccinated by census tract.

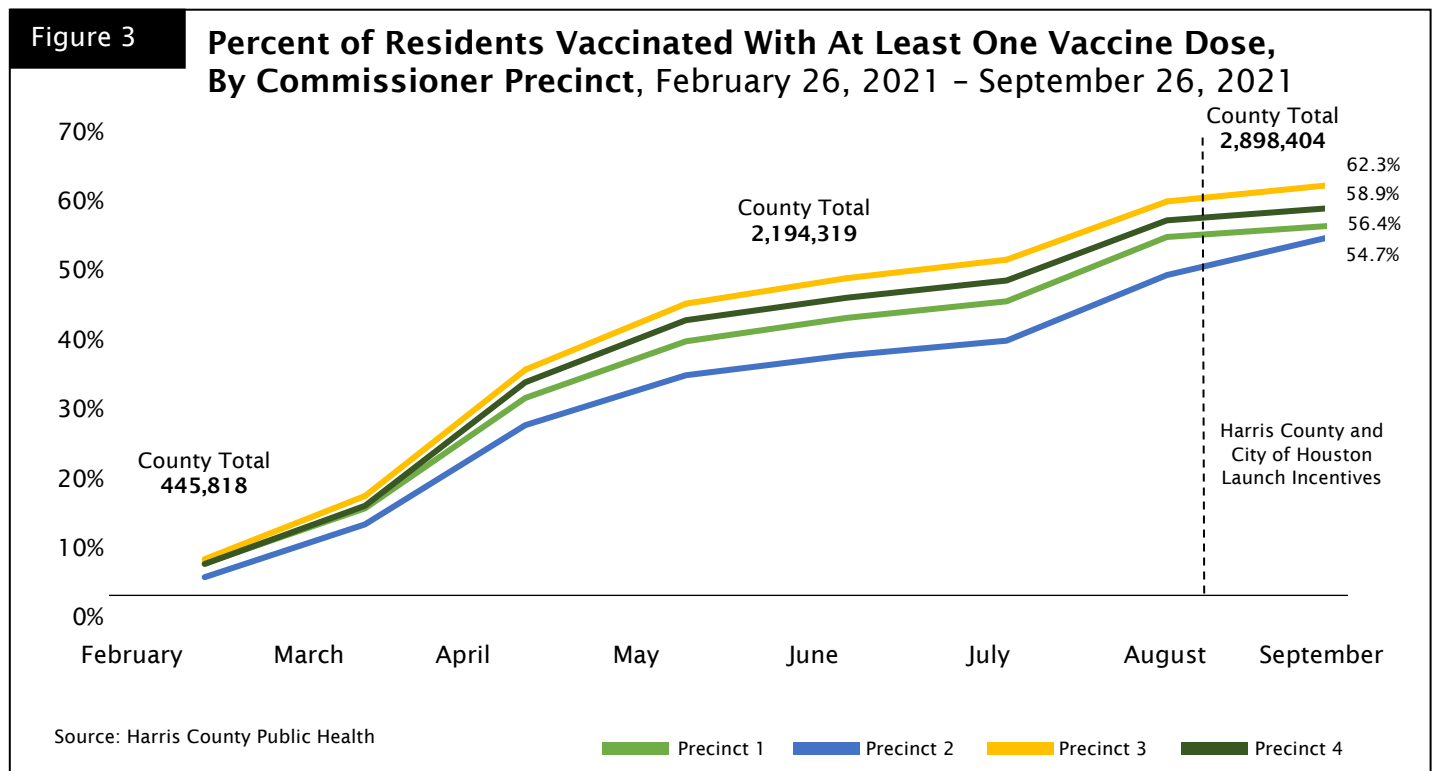


As of September 26, 2021, 52.2% (2,471,866) of Harris County residents were fully vaccinated.<sup>xx</sup>

<sup>xx</sup> Figure assumes Harris County population of 4,731,145 according to the 2020 Census.

## PERCENT OF RESIDENTS VACCINATED WITH AT LEAST ONE DOSE BY COMMISSIONER PRECINCT

**Figure 3** demonstrates the growth in the percent of residents vaccinated *with at least one dose* per commissioner precinct from February 26, 2021 through September 26, 2021, for all four Harris County commissioner precincts.



Between February 26, 2021 and September 26, 2021, 61.3% (2,898,404) of individuals in Harris County were vaccinated with at least one vaccine dose.<sup>xxi</sup> There was an increase of 4.7% (from 2,768,701 to 2,898,404) between August 30, 2021 (the prior memo) and September 26, 2021, of individuals vaccinated with at least one dose.

As of September 26, 2021:<sup>xxii</sup>

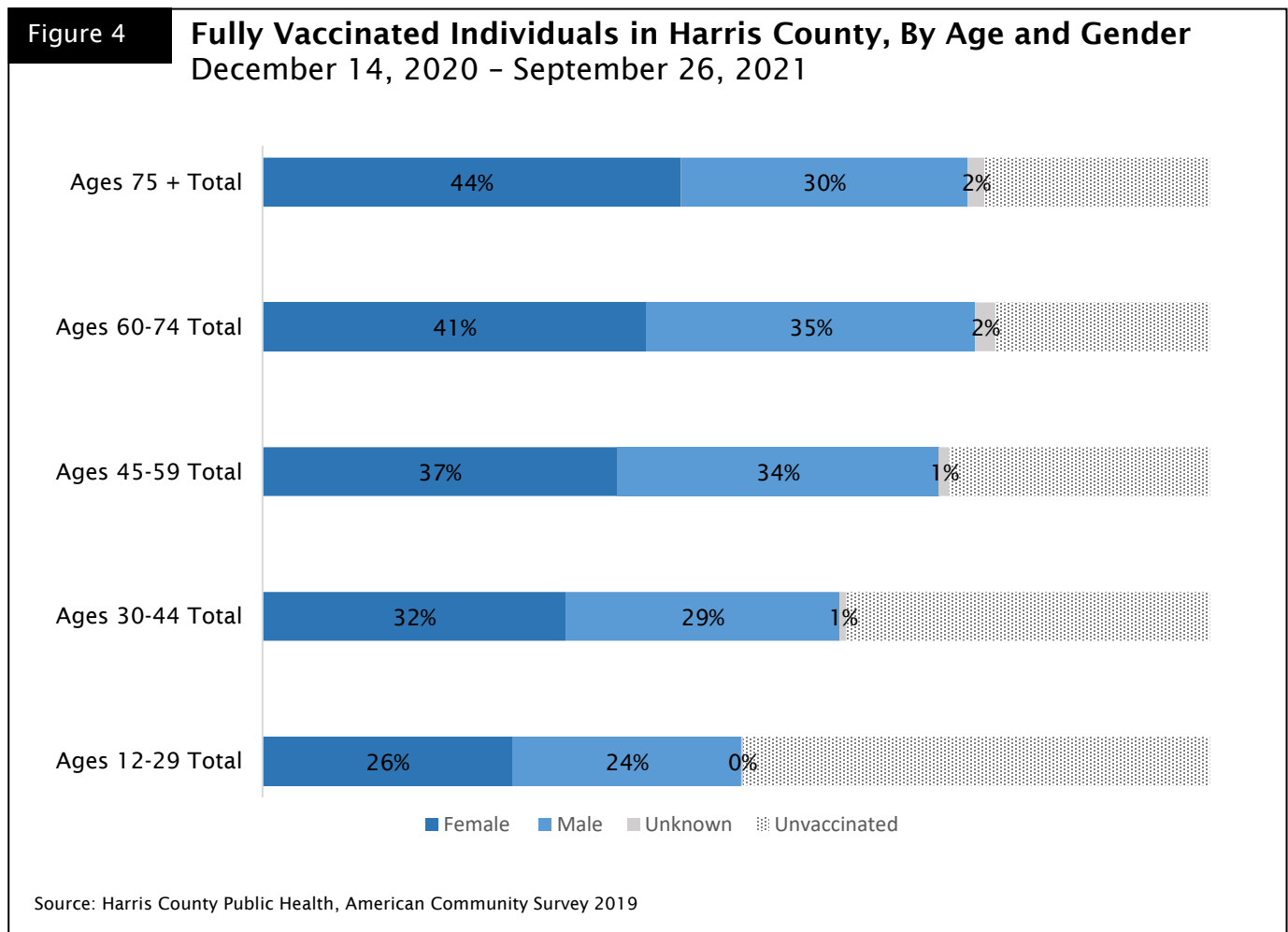
- **56.4% (664,639) of Precinct One residents** were vaccinated with at least one vaccine dose—a 5.4% increase over the prior memo;
- **54.7% (578,968) of Precinct Two residents** were vaccinated with at least one vaccine dose—a 5.6% increase over the prior memo;
- **62.3% (789,864) of Precinct Three residents** were vaccinated with at least one vaccine dose—a 4.0% increase over the prior memo; and
- **58.9% (722,364) of Precinct Four residents** were vaccinated with at least one vaccine dose—a 4.4% increase over the prior memo.

<sup>xxi</sup> Figure assumes Harris County's total population of 4,731,145, per the 2020 Census.

<sup>xxii</sup> Precinct totals do not sum to County total because 142,569 individuals have addresses that cannot be geo-coded into a Precinct.

## FULLY VACCINATED INDIVIDUALS BY AGE AND GENDER

**Figure 4** and **Table 2**, which follows, reflect all individuals fully vaccinated by all providers in Harris County by the individual's age and gender. Each bar for each age group represents the age group's total population within Harris County's population and reflects the percentage of individuals in each age group vaccinated by gender.



Of the individuals who are fully vaccinated by a Harris County provider, 52% (1,292,725) are female; 46% (1,143,282) are male; and 1% (35,564) are recorded as unknown gender.<sup>xxiii</sup> As shown in **Figure 4**, individuals age 75 or older have the smallest percent of their age group who remain unvaccinated (24%), while individuals age 12-29 include the largest percent of their age group who remain unvaccinated (50%).

<sup>xxiii</sup> Age and gender totals do not sum to the total number of fully vaccinated individuals due to some records having incomplete or incorrect data.

## FULLY VACCINATED INDIVIDUALS BY AGE GROUP

**Table 2** reflects all individuals fully vaccinated by all providers in Harris County by the individual's age group and includes the percentage of Harris County's total age group population vaccinated. For context, Table 2 also includes the percentage of Harris County's total population by age group.

Table 2

Fully Vaccinated Individuals in Harris County by Age Group December 14, 2020 – September 26, 2021			
Age Group	Number of Individuals Vaccinated	Percentage of Age Group Vaccinated <sup>xxiv</sup>	Percentage of Total County Population <sup>xxv</sup>
75+	146,439	76.2%	5.0%
60-74	441,977	77.4%	14.8%
45-59	609,921	72.5%	21.8%
30-44	646,505	61.6%	27.2%
12-29	626,729	50.8%	31.1%

Source: Harris County Public Health, American Community Survey 2019

### Data in Table 2

- 76.2% (146,439) of individuals ages 75 and over are fully vaccinated.
- 77.4% (441,977) of individuals ages 60-74 are fully vaccinated;
- 72.5% (609,921) of individuals ages 45-59 are fully vaccinated;
- 61.6% (646,505) of individuals ages 30-44 are fully vaccinated; and
- 50.8% (626,729) of individuals ages 12-29 are fully vaccinated.

<sup>xxiv</sup> Reflects the number of individuals in the age group who are fully vaccinated. Previous versions of this memo reflected the total age group fully vaccinated as a percentage of all individuals vaccinated.

<sup>xxv</sup> Age group populations from American Community Survey 2019 data. Age group 12-29 is estimated by the Analyst's Office due to data limitations.

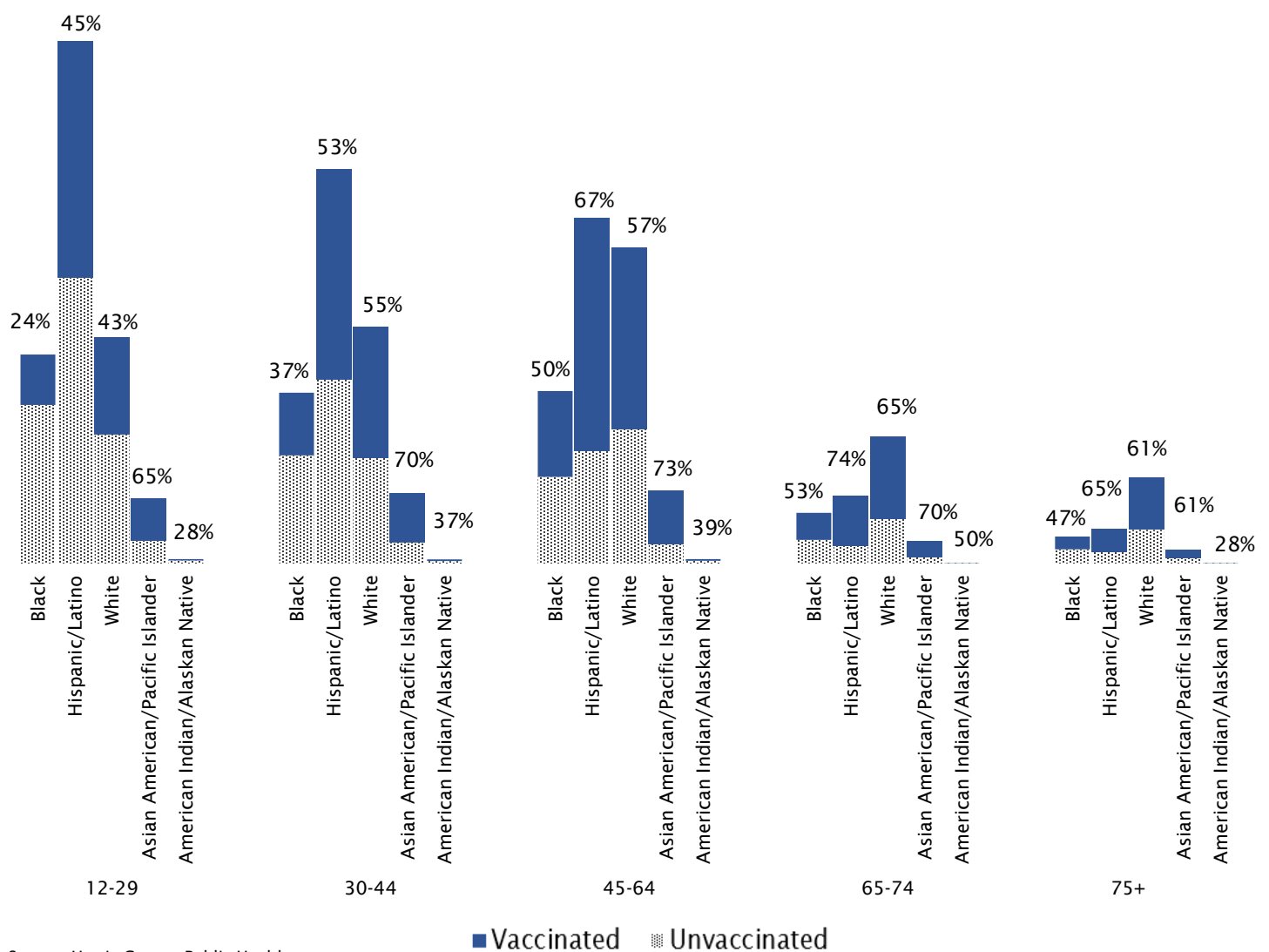
## FULLY VACCINATED INDIVIDUALS BY RACE/ETHNICITY AND AGE GROUP

**Figure 5** reflects all individuals fully vaccinated by all providers in Harris County by the individual's race and age group. Each bar represents the percentage of individuals vaccinated for the given age range by race/ethnicity. The height of the bars reflect the given race/ethnicity group's proportion of the total population for the given age group.

**Figure 5**

### Fully Vaccinated Individuals in Harris County, By Race/Ethnicity and Age Group

December 14, 2020 - September 26, 2021



Source: Harris County Public Health

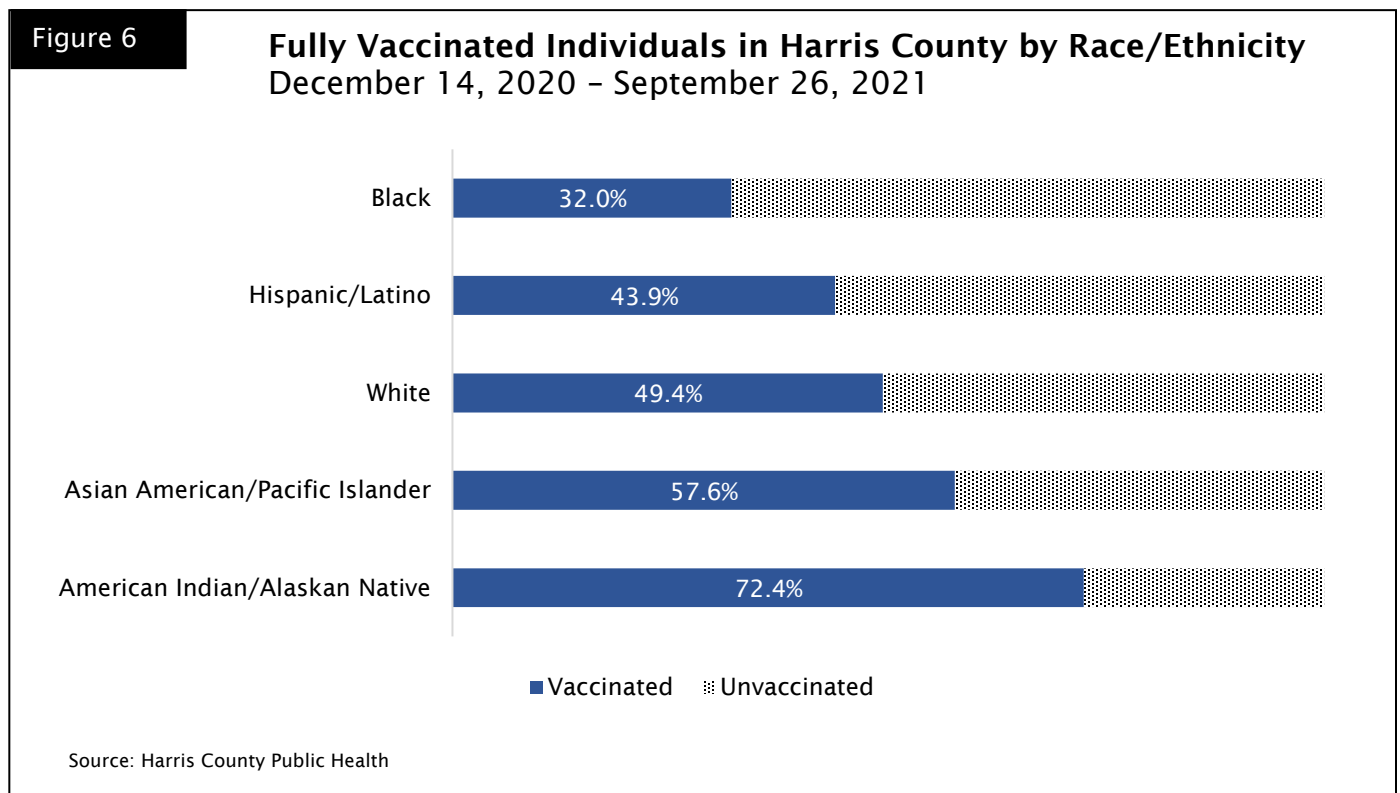
As shown in **Figure 5**, for individuals fully vaccinated in Harris County, the demographic with the highest percentage of individuals vaccinated are individuals who identify as Hispanic aged 65-74 (74%). The demographic with the lowest percentage of individuals vaccinated are individuals who identify as Black aged 12-29 (24%).



## PERCENTAGE OF FULLY VACCINATED INDIVIDUALS BY RACE AND ETHNICITY

**Figure 6** and **Table 3** reflect the percentage of individuals in Harris County who are fully vaccinated by all providers in Harris County by race and ethnicity.<sup>xxvi</sup>

Each bar for each race or ethnicity group represents the race or ethnicity group's total population within Harris County's population and reflects the percentage of individuals in each race and ethnicity group vaccinated.



As shown in **Figure 6**, individuals who identify as Black in Harris County have the smallest vaccinated population at 32%, followed by individuals who identify as Hispanic or Latino at 43.9%.

<sup>xxvi</sup> Note: Prior to February 4, 2021, providers were not required to report race and ethnicity when reporting doses to the Texas Department of State Health Services (DSHS) because vaccine recipients are allowed to decline disclosing their race and ethnicity to a provider.

## FULLY VACCINATED INDIVIDUALS BY RACE AND ETHNICITY

**Table 3** reflects the race and ethnicity of individuals in Harris County who are fully vaccinated by all providers in Harris County.<sup>xxvii</sup> For context, Table 3 also includes the percentage of Harris County's total population by race and ethnicity.

Previous versions of this table in past memos reflected the total number of individuals by race and ethnicity fully vaccinated as a percentage of all individuals vaccinated—this version of the report shows the percentage vaccinated within a given race or ethnicity.

Table 3

Fully Vaccinated Individuals in Harris County by Race/Ethnicity December 14, 2020 – September 26, 2021			
Race/Ethnicity	Number of Individuals Vaccinated	Percentage of Race/Ethnicity Group Vaccinated <sup>xxviii</sup>	Percentage of Total Population
White	646,406	49.4%	27.7%
Hispanic/Latino	893,434	43.9%	43.0%
Other/Unknown	266,863	NA	0.5%
Black	283,474	32.0%	18.7%
Asian American/ Pacific Islander	200,485	57.6%	7.4%
Multi-racial	175,097	NA	2.6%
American Indian/ Alaskan Native	6,107	72.4%	0.2%

Source: Harris County Public Health

As shown in **Table 3**,

- 32.0% (283,474) of individuals who identify as Black are fully vaccinated;
- 43.9% (893,434) of individuals who identify as Hispanic are fully vaccinated;
- 49.4% (646,406) of individuals who identify as White are fully vaccinated;
- 57.6% (200,485) of individuals who identify as Asian American/Pacific Islander are fully vaccinated; and
- 72.4% (6,107) of individuals who identify as American Indian/Alaskan Native are fully vaccinated.

<sup>xxvii</sup> Note: Prior to February 4, 2021, providers were not required to report race/ethnicity when reporting doses to Texas Department of State Health Services (DSHS) because vaccine recipients are allowed to decline disclosing their race/ethnicity to a provider.

<sup>xxviii</sup> Note: The percentage of Harris County's total race and ethnicity group population that is vaccinated for Other/Unknown and Multi-racial is unavailable because there are more vaccinated individuals identifying as Multi-racial and Other/Unknown than the total population estimate of both groups in Harris County's 2020 Census data.

## INDIVIDUALS FULLY VACCINATED BY RACE AND ETHNICITY AND COMMISSIONER PRECINCT

**Table 4** reflects the race and ethnicity of individuals in Harris County who are fully vaccinated by providers in Harris County by Commissioner Precinct. For context, Table 4 also includes the percentage of each Commissioner Precinct's total population by race and ethnicity.

Table 4

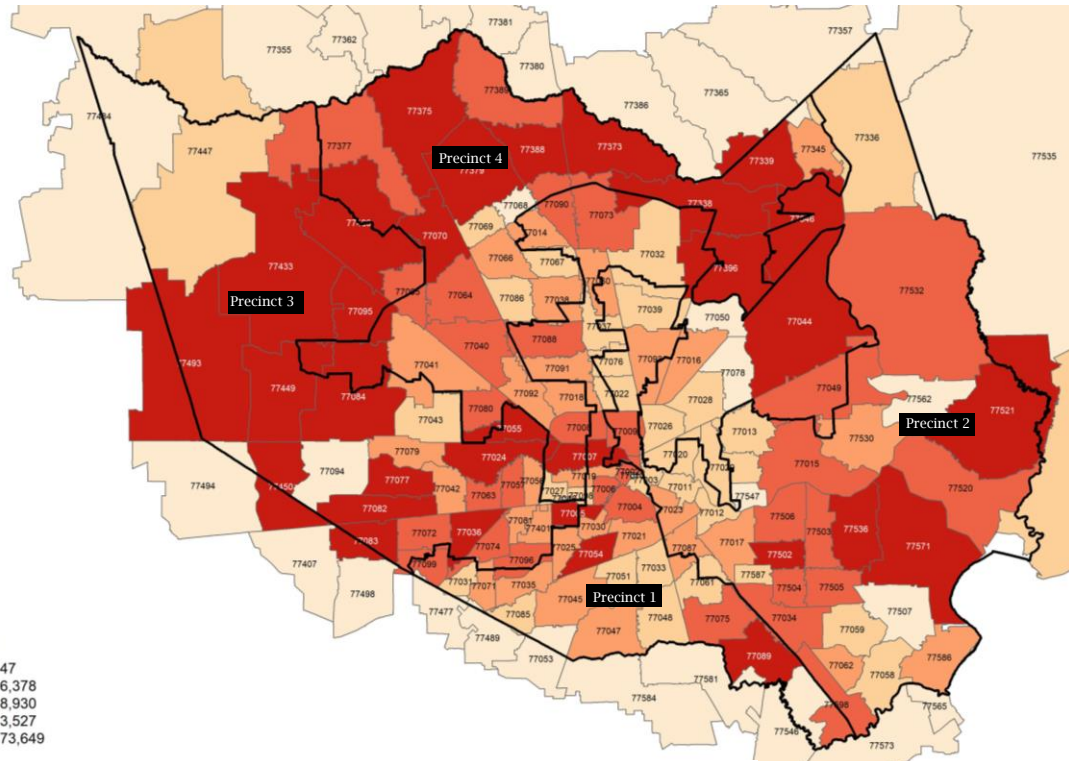
Fully Vaccinated Individuals in Harris County by Race/Ethnicity, By Commissioner Precinct December 14, 2020 – September 26, 2021			
Race/Ethnicity	Number of Individuals Vaccinated	Percentage of Precinct's Vaccinated Population	Percentage of Total Precinct Population
<b>Precinct 1</b>			
White	96,656	17.2%	16.3%
Hispanic/Latino	204,638	36.4%	41.5%
Other/Unknown	55,677	9.9%	0.4%
Black	119,300	21.2%	33.4%
Asian Am./Pacific Islander	38,108	6.8%	6.1%
Multi-racial	47,081	8.4%	0.4%
Am. Indian/Alaskan Native	1,232	0.2%	0.1%
<b>Precinct 2</b>			
White	119,346	24.3%	25.7%
Hispanic/Latino	256,100	52.1%	59.9%
Other/Unknown	40,771	8.3%	0.4%
Black	27,990	5.7%	9.2%
Asian Am./Pacific Islander	19,594	4.0%	2.6%
Multi-racial	27,219	5.5%	0.4%
Am. Indian/Alaskan Native	902	0.2%	0.2%
<b>Precinct 3</b>			
White	202,849	30%	32.8%
Hispanic/Latino	210,073	31%	35.6%
Other/Unknown	66,297	10%	0.6%
Black	61,641	9%	15.7%
Asian Am./Pacific Islander	82,370	12%	12.1%
Multi-racial	56,164	8%	0.6%
Am. Indian/Alaskan Native	1,822	0%	0.2%
<b>Precinct 4</b>			
White	204,777	33.0%	35.0%
Hispanic/Latino	193,557	31.2%	37.6%
Other/Unknown	60,019	9.7%	0.5%
Black	59,545	9.6%	15.9%
Asian Am./Pacific Islander	53,413	8.6%	7.8%
Multi-racial	48,187	7.8%	0.5%
Am. Indian/Alaskan Native	1,593	0.3%	0.2%

## COVID-19 TESTS BY ZIP CODE

**Figure 7** reflects the total number of COVID-19 polymerase chain reaction (PCR) tests administered to Harris County residents by all providers in Harris County by zip code, and **Table 5** reflects the number of COVID-19 PCR tests administered by the commissioner precinct.<sup>xxx</sup>

**Figure 7**

### COVID-19 Tests Administered by Recipient Zip Code January 1, 2020 – September 26, 2021



Source: Harris County Public Health

Between January 1, 2020 and September 26, 2021, providers in Harris County **administered 5,804,035 COVID-19 tests**. For a full list of tests administered by recipient zip code, see Appendix A.<sup>xxx</sup>

**Table 5**

### COVID-19 Tests Administered, by Commissioner Precinct and for Harris County, January 1, 2020 – September 26, 2021

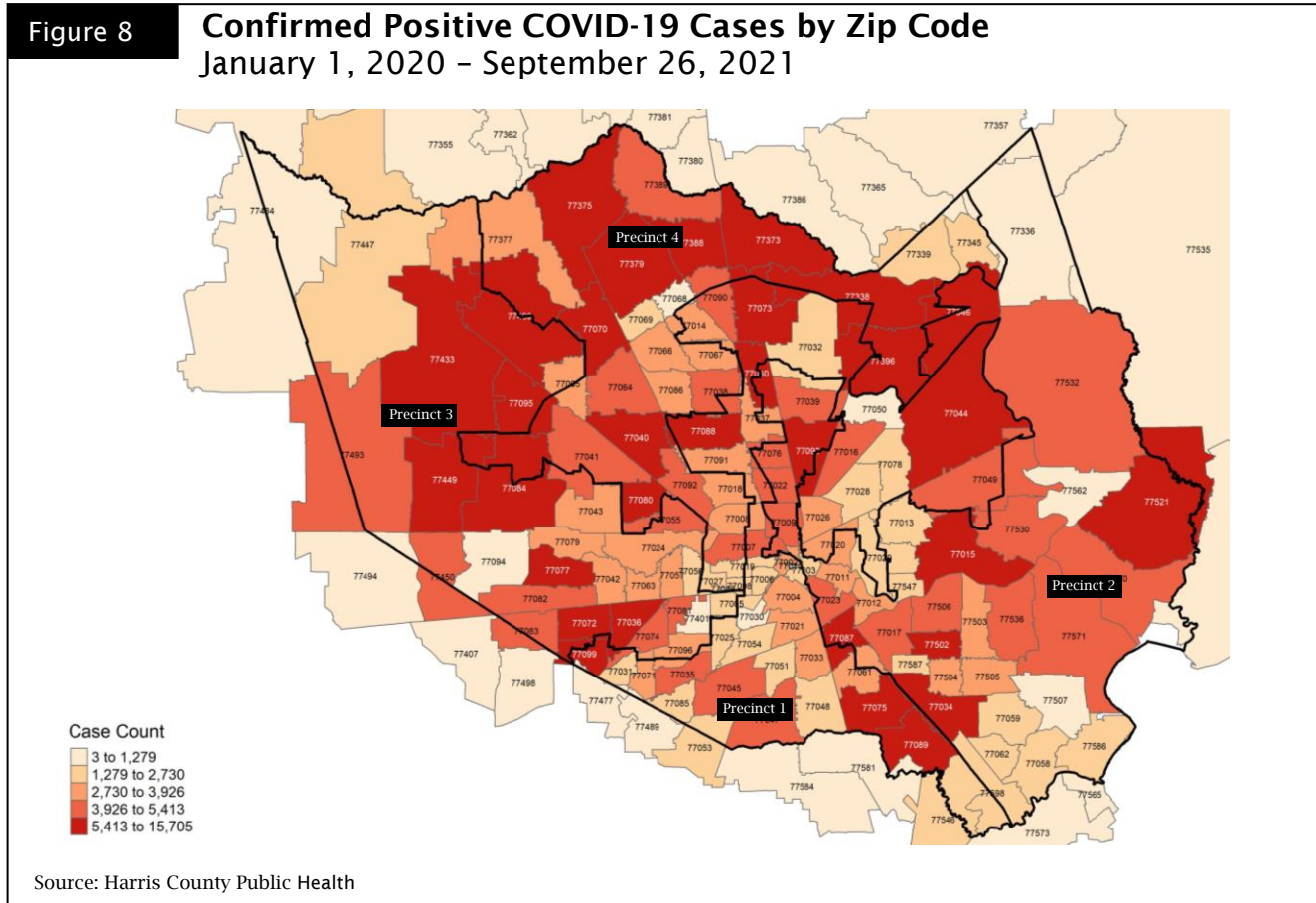
Precinct 1	Precinct 2	Precinct 3	Precinct 4	Total Tests
1,295,829	1,278,295	1,460,115	1,435,203	5,804,035

<sup>xxx</sup> PCR refers to the polymerase chain reaction tests commonly used to test for COVID-19.

<sup>xxx</sup> Precinct totals do not sum to Total Tests because 334,593 tests administered have addresses that cannot be geo-coded into a Precinct.

## CONFIRMED POSITIVE COVID-19 CASES BY ZIP CODE

**Figure 8** reflects the total number of COVID-19 positive cases confirmed by a PCR test in Harris County, reported by zip code and **Table 6** reflects the number of positive COVID-19 cases by commissioner precinct.<sup>xxxi</sup>



Between January 1, 2020 and September 26, 2021, there were **553,657 confirmed positive cases of COVID-19** in Harris County. For a full list of positive cases by zip code, see Appendix B.<sup>xxxii</sup>

**Table 6**

**Confirmed Positive Cases by Commissioner Precinct and for Harris County, January 1, 2020 – September 26, 2021**

Precinct 1		Precinct 2		Precinct 3		Precinct 4		County	
Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of Precinct Population	Number of Cases	% of County Population
145,817	12.4%	137,421	13.0%	129,338	10.2%	130,266	10.6%	553,657	11.7%

<sup>xxxi</sup> PCR refers to the polymerase chain reaction tests commonly used to test for COVID-19.

<sup>xxxii</sup> Precinct totals do not sum to Total Positive Cases because 10,815 confirmed positive cases have addresses that cannot be geo-coded into a Precinct.

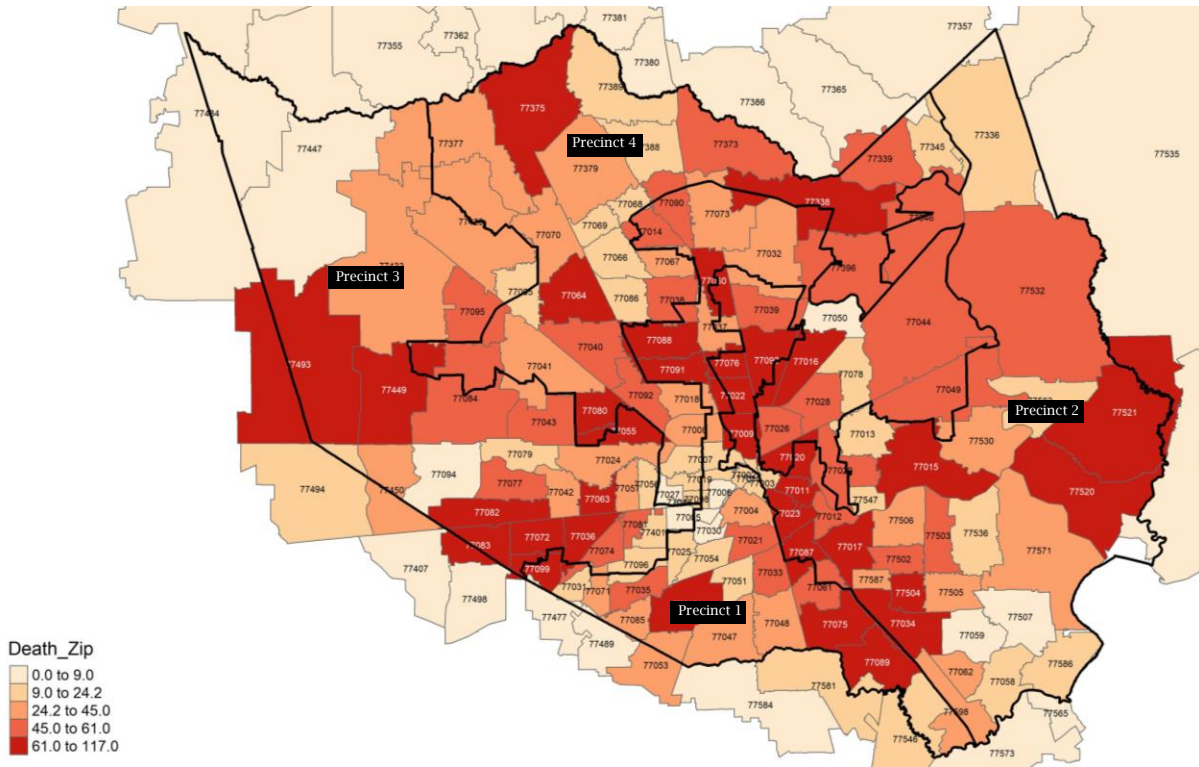


## CONFIRMED COVID-19 RELATED DEATHS BY ZIP CODE

**Figure 9** reflects the total number of confirmed COVID-19-related deaths in Harris County by zip code and **Table 7** reflects the number of COVID-19-related deaths by commissioner precinct.

Figure 9

### COVID-19 Related Deaths by Zip Code January 1, 2020 – September 26, 2021



Source: Harris County Public Health

Between January 1, 2020 and September 26, 2021, there were **5,706 confirmed COVID-19-related deaths** in Harris County. For a full list of deaths by zip code, see Appendix C.<sup>xxxiii</sup>

Table 7

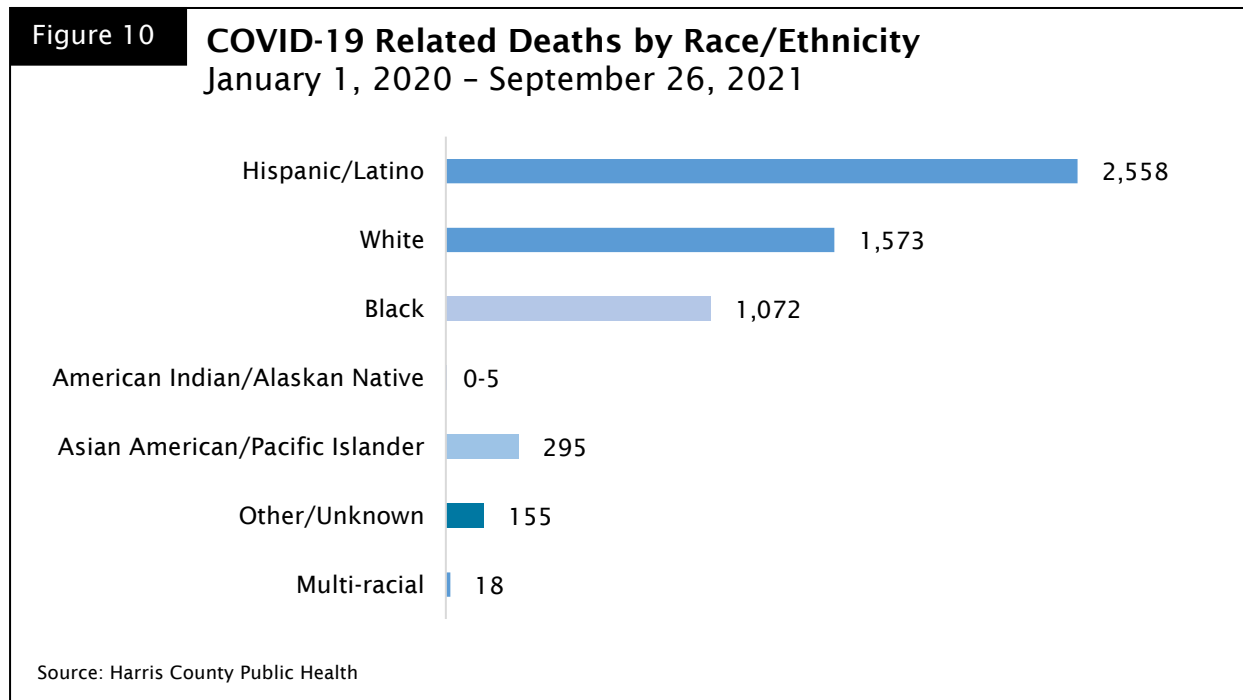
### COVID-19 Related Deaths by Commissioner Precinct and for Harris County, January 1, 2020 – September 26, 2021

Precinct 1		Precinct 2		Precinct 3		Precinct 4		County Total	
Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of Precinct Population	Number of Deaths	% of County Population
1,689	0.14%	1,655	0.16%	1,238	0.10%	1,071	0.09%	5,706	0.12%

<sup>xxxiii</sup> Precinct totals do not sum to Total Deaths because 53 deaths have addresses that cannot be geo-coded into a precinct.

## COVID-19 RELATED DEATHS BY RACE AND ETHNICITY

**Figure 10** reflects the total number of confirmed COVID-19-related deaths in Harris County by race and ethnicity.<sup>xxxiv</sup>



Of the 5,674 individuals in Harris County who died of a COVID-19-related death between January 1, 2020 and September 26, 2021:<sup>xxxv</sup>

- **44.8% (2,558) identified as Hispanic**, and for context, 43.0% of County residents identify as Hispanic;
- **27.6% (1,573) identified as White**, and for context, 27.7% of County residents identify as White;
- **18.8% (1,072) identified as Black**, and for context, 18.7% of County residents identify as Black;
- **0.1% (0-5) identified as American Indian or Alaskan Native**, and for context, 0.2% of County residents identify as American Indian or Alaskan Native;
- **5.2% (295) identified as Asian or Pacific Islander**, and for context, 7.4% of County residents identify as Asian, Pacific Islander, or Native Hawaiian;
- **2.7% (155) were recorded as Other/unknown race and ethnicity**; and
- **0.3% (18) identified as Multi-racial**, and for context, 2.6% of County residents identify as Two or More Races.

<sup>xxxiv</sup> Race and ethnicity totals do not sum to Total Precinct Deaths because 32 deaths do not have race and ethnicity data available.

<sup>xxxv</sup> County-level race and ethnicity data are derived from the 2020 Census population estimates.



## APPENDIX A

Total COVID-19 Tests Administered by Zip Code Ordered by Tests Administered, January 1, 2020 – September 26, 2021							
Zip Code	Tests Administered	Zip Code	Tests Administered	Zip Code	Tests Administered	Zip Code	Tests Administered
77565	253	77051	17,892	77079	36,337	77008	53,353
77362	280	77011	18,128	77041	36,451	77054	53,789
77381	284	77003	18,395	77087	36,476	77536	53,829
77382	347	77069	18,830	77045	36,592	77024	54,184
77380	483	77058	19,514	77047	36,779	77339	54,207
77354	746	77523	20,618	77025	37,453	77055	55,428
77477	931	77026	20,742	77035	37,571	77571	55,472
77355	934	77059	21,556	77042	37,649	77070	55,474
77535	1,204	77587	21,638	77019	38,124	77502	56,107
77507	1,205	77098	23,971	77093	38,441	77036	57,440
77386	1,269	77447	24,153	77530	38,680	77044	57,976
77489	1,270	77067	24,332	77080	38,992	77082	58,731
77010	1,358	77048	25,300	77065	39,010	77388	60,030
77581	1,663	77022	25,441	77504	39,405	77007	61,395
77357	1,728	77020	25,545	77503	39,639	77089	64,773
77498	1,820	77086	25,571	77006	40,057	77338	66,294
77365	2,517	77039	25,637	77034	40,194	77077	66,522
77046	2,554	77027	25,789	77075	40,369	77373	72,293
77584	2,646	77061	25,979	77532	40,476	77083	74,999
77573	2,847	77076	26,050	77074	40,505	77521	81,107
77407	3,000	77043	26,263	77096	41,258	77375	84,734
77494	3,392	77030	26,836	77073	41,559	77450	85,241
77050	3,944	77091	27,147	77057	42,330	77396	96,236
77546	5,279	77062	27,459	77090	42,833	77346	96,976
77094	10,090	77038	28,542	77002	42,843	77095	101,049
77068	10,758	77060	29,076	77505	43,439	77379	103,555
77562	11,227	77023	29,717	77063	44,321	77084	106,991
77547	12,096	77092	29,890	77049	44,792	77429	118,200
77078	13,861	77021	29,894	77520	44,912	77005	119,834
77484	14,030	77016	29,911	77004	45,568	77433	137,988
77031	14,059	77014	30,660	77506	46,183	77449	173,649
77013	14,210	77066	31,124	77099	46,281		
77336	15,141	77071	31,490	77009	46,898		
77037	15,820	77017	33,161	77040	46,992		
77012	16,252	77586	33,421	77377	49,930		
77028	16,309	77018	33,716	77064	50,173		
77032	17,067	77081	34,362	77088	50,759		
77033	17,085	77345	34,514	77072	52,686		
77085	17,837	77056	35,117	77015	52,762		
77029	17,869	77401	35,492	77389	52,998		

## APPENDIX B

### Total COVID-19 Confirmed Positive Cases by Zip Code Ordered by Positive Cases, January 1, 2020 – September 26, 2021

Zip Code	Positive Cases	Zip Code	Positive Cases	Zip Code	Positive Cases	Zip Code	Positive Cases
77362	3	77005	1,751	77079	3,532	77049	5,232
77382	3	77058	1,795	77065	3,611	77055	5,246
77355	3	77345	1,797	77067	3,613	77064	5,375
77565	4	77031	1,902	77066	3,705	77082	5,405
77381	4	77006	1,924	77503	3,713	77060	5,424
77535	9	77056	2,047	77042	3,735	77388	5,445
77354	11	77051	2,185	77020	3,817	77070	5,535
77386	18	77013	2,204	77377	3,822	77080	5,583
77573	22	77019	2,216	77033	3,824	77040	5,600
77357	23	77078	2,256	77091	3,875	77087	5,692
77380	24	77025	2,293	77063	3,884	77077	5,705
77498	45	77586	2,342	77086	3,914	77075	5,716
77010	54	77054	2,345	77057	3,923	77034	5,747
77365	64	77032	2,393	77035	3,927	77338	5,894
77407	68	77587	2,440	77041	4,001	77073	5,938
77507	75	77062	2,443	77039	4,014	77502	5,966
77584	86	77028	2,461	77047	4,067	77099	6,401
77523	117	77339	2,580	77389	4,110	77072	6,697
77581	143	77085	2,654	77023	4,148	77044	6,790
77046	162	77598	2,725	77092	4,149	77375	6,992
77477	259	77029	2,726	77022	4,166	77093	7,021
77484	330	77048	2,727	77038	4,196	77373	7,085
77050	506	77002	2,744	77007	4,253	77088	7,289
77494	568	77037	2,811	77532	4,271	77095	7,398
77094	759	77011	2,812	77016	4,365	77089	7,439
77489	934	77004	2,824	77450	4,393	77521	7,486
77068	1,124	77018	2,860	77536	4,597	77015	7,831
77562	1,154	77043	3,048	77045	4,630	77396	7,897
77401	1,186	77021	3,050	77090	4,637	77036	8,079
77030	1,242	77012	3,118	77083	4,651	77346	8,329
77336	1,246	77096	3,139	77530	4,664	77379	8,499
77098	1,301	77505	3,146	77009	4,702	77429	8,728
77059	1,364	77061	3,189	77571	4,702	77433	10,160
77547	1,420	77026	3,198	77074	4,855	77084	13,465
77003	1,462	77071	3,218	77017	4,935	77449	15,705
77546	1,623	77024	3,242	77076	5,033		
77027	1,648	77504	3,250	77520	5,161		
77447	1,698	77008	3,381	77081	5,191		
77069	1,706	77014	3,522	77506	5,202		

## APPENDIX C

Total Confirmed COVID-19 Related Deaths by Zip Code Ordered by Number of Deaths, January 1, 2020 – September 26, 2021							
Zip Code	COVID Deaths	Zip Code	COVID Deaths	Zip Code	COVID Deaths	Zip Code	COVID Deaths
77362	0-5	77336	12	77018	33	77081	59
77382	0-5	77002	12	77042	33	77040	59
77355	0-5	77546	13	77057	35	77504	61
77565	0-5	77547	14	77047	35	77091	61
77381	0-5	77069	14	77450	35	77023	61
77535	0-5	77389	14	77598	36	77075	62
77354	0-5	77345	15	77530	36	77063	63
77386	0-5	77065	15	77070	36	77060	63
77573	0-5	77056	16	77571	37	77064	64
77357	0-5	77562	18	77506	38	77011	65
77380	0-5	77013	18	77004	40	77034	65
77498	0-5	77079	18	77433	42	77375	65
77010	0-5	77066	18	77028	45	77015	68
77365	0-5	77388	18	77039	45	77080	69
77407	0-5	77003	20	77038	45	77045	70
77507	0-5	77031	20	77044	45	77017	70
77584	0-5	77086	20	77021	46	77020	73
77523	0-5	77058	21	77061	47	77083	73
77046	0-5	77051	23	77092	47	77016	74
77477	0-5	77025	23	77043	48	77076	75
77484	0-5	77096	23	77077	48	77099	76
77094	0-5	77078	24	77090	49	77009	77
77447	0-5	77536	24	77029	51	77521	78
77489	6	77032	25	77373	51	77055	79
77030	6	77587	25	77014	52	77089	81
77059	7	77379	26	77532	52	77093	82
77006	7	77037	28	77503	53	77082	84
77050	8	77377	28	77339	54	77022	85
77027	8	77085	29	77074	54	77087	90
77005	8	77048	29	77012	55	77338	91
77581	9	77505	29	77033	55	77520	96
77401	9	77008	29	77049	55	77088	98
77068	10	77067	29	77035	56	77036	104
77019	10	77073	29	77502	56	77072	106
77054	10	77071	30	77396	56	77449	117
77098	11	77062	31	77084	57		
77586	11	77041	31	77026	58		
77007	11	77429	31	77095	58		
77494	12	77024	32	77346	58		

## APPENDIX D

**Number of Individuals Per 100,000 Residents Fully Vaccinated and Social Vulnerability Index (SVI), Ordered by Residents Vaccinated, December 14, 2020 – September 26, 2021<sup>xxxvi</sup>**

Zip Code	Per 100k Rate	SVI	Zip Code	Per 100k Rate	SVI	Zip Code	Per 100k Rate	SVI	Zip Code	Per 100k Rate	SVI
77336	32,994	0.30	77014	45,352	0.78	77375	51,960	0.45	77003	59,110	0.61
77090	34,554	0.70	77016	45,412	0.89	77429	51,973	0.06	77389	59,645	0.14
77532	37,390	0.37	77338	45,654	0.58	77449	52,387	0.36	77089	60,158	0.47
77562	38,527	0.63	77044	46,144	0.41	77433	52,442	0.11	77079	60,242	0.27
77050	40,190	0.71	77080	46,333	0.83	77388	52,511	0.13	77041	60,305	0.31
77060	40,541	0.82	77034	46,560	0.67	77377	52,600	0.24	77009	60,506	0.62
77520	40,699	0.94	77033	46,623	0.93	77017	52,609	0.66	77094	61,371	NA
77067	40,761	0.79	77088	46,723	0.77	77084	52,788	0.36	77054	61,385	0.26
77530	41,001	0.59	77049	46,779	0.63	77066	53,307	0.59	77083	62,629	0.53
77078	41,307	0.53	77061	46,781	0.70	77069	53,569	0.22	77032	63,896	0.99
77091	42,364	0.92	77504	46,993	0.88	77082	53,682	0.54	77025	64,584	0.32
77078	42,519	0.89	77086	47,311	0.78	77087	54,201	1.00	77006	68,403	0.09
77013	42,636	0.98	77035	47,440	0.74	77095	54,324	0.23	77002	68,952	0.42
77039	42,738	0.73	77022	47,928	0.97	77092	54,393	0.75	77005	70,322	0.03
77036	42,782	0.93	77502	48,387	0.89	77099	54,473	0.80	77008	70,769	0.08
77028	42,933	0.84	77047	48,659	0.55	77045	54,716	0.84	77059	71,258	0.05
77093	43,044	0.97	77038	48,951	0.50	77379	54,797	0.21	77007	72,210	0.01
77026	43,348	0.94	77020	49,050	0.89	77450	54,874	0.18	77401	75,997	0.03
77503	43,551	0.82	77447	49,059	0.45	77055	54,914	0.68	77098	80,065	0.07
77073	43,953	0.50	77068	49,517	0.43	77023	54,917	0.76	77019	82,195	0.09
77076	44,022	0.86	77075	49,749	0.61	77029	55,585	0.88	77027	97,732	0.01
77571	44,063	0.38	77587	49,753	0.91	77064	55,626	0.47			
77396	44,092	0.51	77031	50,019	0.64	77077	55,912	0.29			
77037	44,149	0.69	77015	50,223	0.76	77011	55,995	0.96			
77081	44,165	0.81	77346	50,235	0.12	77085	56,038	0.60			
77506	44,195	0.95	77042	50,363	0.38	77072	56,160	0.87			
77021	44,377	0.74	77586	50,433	0.18	77096	56,412	0.39			
77051	44,879	0.80	77012	50,500	0.99	77071	56,439	0.68			
77048	44,929	0.85	77063	50,673	0.57	77345	57,026	0.05			
77536	45,013	0.44	77065	51,102	0.43	77043	57,082	0.52			
77373	45,060	0.30	77040	51,303	0.55	77339	57,879	0.32			
77074	45,157	0.86	77070	51,501	0.49	77018	58,155	0.48			
77547	45,196	0.66	77058	51,824	0.46	77057	58,892	0.34			
77598	45,343	0.57	77505	51,863	0.24	77062	59,094	0.19			

<sup>xxxvi</sup> Table excludes data for zip codes with unavailable population data.

**The Harris County Commissioners Court's Analyst's Office** provides the Harris County Commissioners Court members with objective, nonpartisan, and timely fiscal and policy analysis related to the efficiency and effectiveness of various County operations.

This memo was prepared by Ramin Naderi, Analyst and Amy Rose, Senior Analyst.

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