

ONE COMPLETE HOUSTON:

UNDERSTANDING OUR
EQUITY OPPORTUNITIES AND
CHALLENGES KEY FINDINGS
REPORT



Houston
Complete
Communities



RICE UNIVERSITY
Kinder Institute for
Urban Research



PLANNING &
DEVELOPMENT
DEPARTMENT



Funded by Shell USA, Inc.

A LETTER FROM OUR MAYOR

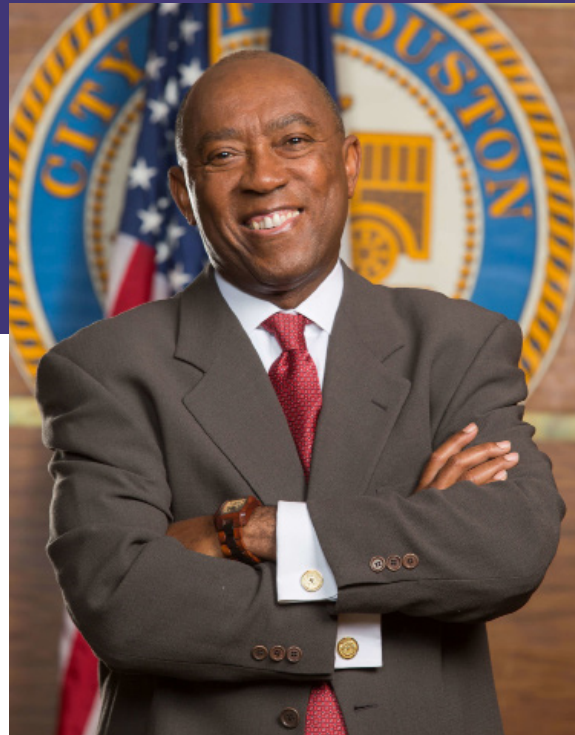
MAYOR SYLVESTER TURNER,
CITY OF HOUSTON

When the people of Houston first elected me as mayor in 2015, I said that I did not want to be the mayor of two cities. Houston cannot continue to be divided as a city of haves and have nots. Through my Complete Communities initiative, we are addressing issues we are demonstrating our commitment to bridge the deep disparities that exist in our city – the division of wealth, unequal accessibility of opportunity, and the inconsistent availability of necessities that are exacerbated by racial, ethnic, gender and ability biases. Houston is celebrated for our multiculturalism and opportunity for all, but the track to opportunity and success does not look the same for everyone. Start lines do not look the same for everyone. Finish lines do not end in the same place for everyone. Hurdles are higher for some, not forgetting those who struggle to make it onto the track at all.

If you have not examined the important differences between equity and equality, I encourage you to use this report as a guide. This analysis provides crucial insight to Houstonians new to the equity conversation, community leaders, and decision makers working close to the pervasive and complex causes and compounding effects of inequities.

I'm incredibly proud of all the work this administration has done to foster equity in projects across all sectors of the city. But despite our successes, this report is intended as a hard look in the mirror, a tool for accountability, and a deep dive into data that can guide the City's efforts to achieve even greater equity in the future.

Our Equity Score is assessed on a scale of 1-100, and the score reflects the disparity between the highest



and lowest scores. Don't take the number at face value or compare it to a report card in the traditional sense – there is no passing or failing. I urge you to take some time to understand the methodology before drawing conclusions.

Equity is a lens we must use to assess and adjust city policies and procedures so that all residents, especially those who have been historically marginalized, can thrive. We take the feedback we received through community surveys and the data in report seriously. We will use this tool to direct our focus on increasing equitable outcomes and we encourage you to use it in the same way. It is imperative that we come together and address systemic problems in the community to build a movement that makes Houston a leader in opportunity and equity.

I give my most sincere thanks to our partners at the Rice University's Kinder Institute for Urban Research and Shell Corporation for their research and funding support for this initiative. I applaud staff from the Planning and Development Department, Mayor's Office of Resilience and Sustainability, and Complete Communities for their collaborative work that ties to the vision and framework for a resilient community outlined in the Resilient Houston strategy.



A LETTER FROM SHELL USA, INC.

Houston has long been celebrated as one of the most diverse cities in the United States. For Shell USA, Inc., we believe that Houston's diverse population opens up a workforce that adds the value of diverse perspectives to our objective to supply the energy that people need to power their lives. At Shell in the US, working to promote diversity is not merely a human resources initiative. Diversity, equity, and inclusion are at the very core of how we do business.

Produced through collaboration between the City of Houston and the Kinder Institute for Urban Research, and funded by Shell USA, Inc., this Equity Indicators Report is the first of its kind for the City of Houston. It is important to us to support this initiative, including transparency of the report's findings, because we believe that action, from all sectors, must be taken by which we can measure progress toward a more equitable society.

We believe to uphold a city as diverse as Houston, differences should also become strengths, so that together we are all helping move Houston forward in efforts to close the opportunity gap. At Shell USA, Inc., we strive to support individuals and communities by providing jobs, bringing local businesses into our supply chain, promoting entrepreneurship, investing in education, and offering skills training in communities where we operate.

We also endeavor to support historically disadvantaged communities as the energy system changes, by listening and engaging with them to identify opportunities for them to shape their own energy future. To make progress, we believe everybody must experience the economic, social, and environmental benefits of a changing energy system.

Shell USA, Inc. has proudly called Texas home for decades. The heart of our US operations is based in Houston, including our US corporate offices and most of Shell USA, Inc.'s core businesses. We strive to be one of the most diverse, equitable, and inclusive companies in the world – and we believe creating opportunities for a diverse range of people is a community effort, and that working together to create opportunities will strengthen our communities, which in turn strengthens our company.

Houston is one of our largest homebases, and Shell USA, Inc. is invested in its societal health. Our goal is to thrive in this City and uplift others to thrive with us.

We understand everybody is on a journey, and this report's findings serve as indicators for the work happening in the greater Houston area today and what comes next for the future.

The companies in which Shell plc directly and indirectly owns investments are separate legal entities. In this letter, "Shell" is used for convenience where references are made to Shell plc and its subsidiaries in general and no useful purpose is served by identifying the particular entity or entities. The report was funded by Shell USA, Inc. The report was authored by the Kinder Institute for Urban Research under its full editorial control. The views, data and analysis represented in this report may not represent the views of Shell plc, Shell USA, Inc. and Shell subsidiaries

HOUSTON'S UNIQUE OPPORTUNITY TO ADVANCE RACIAL EQUITY OUTCOMES

Houston is considered by many to be the land of opportunity and in many ways it is. Unfortunately, that opportunity flows differently to some Houstonians based on their zip code and their race and ethnicity group. An Equity Indicators Tool was developed to compare data on 63 topical areas that measures whether opportunities are equally available to all Houstonians. The data coalesces into a score, called an Equity Indicator.

HOUSTON'S
OVERALL
EQUITY SCORE IS
44.1 OUT OF 100
DELINEATING A
DIRE NEED FOR
IMPROVEMENTS.

Compared to other cities that have used the Equity Indicators methodology, our score is higher than Dallas's 2021 score of 38 and Tulsa's 2022 score of 42.63. Houston follows behind St. Louis's 2018 score of 45.57 and Pittsburgh's 2018 score of 55.

As diversity increases in Houston, does equity keep pace? Do the services, opportunities, infrastructure and leadership match the diversity of the fourth largest city in the

United States? To answer this question and ultimately develop policies and initiatives to increase equity for all 2.3 million residents, the City of Houston embarked on an exercise to objectively analyze its own equity, equality, justice and resilience assets.

This report is the first of its kind for the city and marks a commencement to collective action. To that end, the findings of this report establish a baseline of indicators, something against which we can measure progress toward a more equitable city in the future.

Houstonians have a choice to make about their city and its future. Will we live into our unique opportunity to advance outcomes for people of all races and ethnicities or continue the status quo?

THE EQUITY INDICATOR TOOL IN PRACTICE

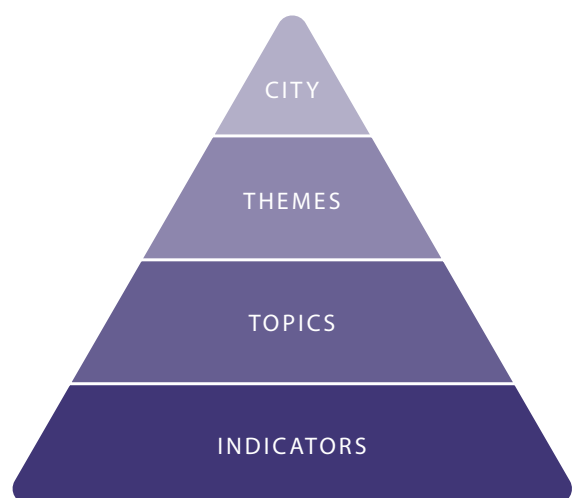
There are four levels in the CUNY methodology. Each rolls up to the level above. The indicators are at the base. These are the sets of data that get to the specific disparity experienced. The indicators roll up into topics. Topics are the content that describes the category or stories we are trying to tell. The topics roll up into themes. Themes are the broad categories, the overall concept or big picture of an area. The themes roll up to provide the city with an overall Equity score.

Within this framework and model, there is an equal number of indicators per topic, and an equal number of topics per each theme, so that each indicator and topic has equal weight within the framework.

The closer the score is to one, the more disparity exists between race and ethnicity groups on that particular indicator. For instance, a score of 15 indicates that there is a great difference between how people of different races can access an opportunity. Conversely, a score of 75 indicates that opportunities seem to flow evenly, regardless of race or ethnicity. Having the indicators measured this way allows for comparison across indicators and across time.

The findings in this report explicate the data detailed in the Equity Indicators Report Executive Summary and One-Pager.

The Houston Equity Indicators tool is comprised of seven broad themes: Economic Opportunity, Health, Public Safety, Housing, Infrastructure, Environmental & Climate Risks, and Access & Inclusion. Each of the seven themes has four topics. Within each topic are three indicators. Ratios within the structured levels are calculated and the ratio is converted to an Equity Score using an algorithm. The equity scores are on a 100-point scale where 100 represents the highest possible score and one represents the lowest possible score.



POPULATIONS ADVERSELY AFFECTED BY INEQUITY

The Houston Equity Indicators tool measures disparities between racial and ethnic groups in Houston. While these are not the only groups experiencing inequities, we acknowledge these disparities have compounding effects, such as socioeconomics, gender, sexual orientation, and disabilities that exacerbate such gaps. Given Houston’s diversity of cultural groups, the sub-population groups used for each indicator are chosen based on which two groups displays the greatest disparity for that indicator (or for those whom demonstrate the widest gap within an outcome).

The table below shows the City of Houston’s demographics by race/ethnicity. The population of each group increased to varying extents between 2010 and 2020. The largest increases are seen among Hispanics (44%), followed by Whites (23.7%) and Blacks (22.1%). Other ethnic groups, such as Asians, “Non-Hispanic Some Other Race” and “Non-Hispanic Two or More Races,” have also grown over the ten-year period.

CITY OF HOUSTON: 2010-2020

POPULATION BY ETHNICITY	CENSUS 2010	CENSUS 2020	PERCENT CHANGE 2010-2020	PERCENT OF POPULATION
Hispanic	919,668	1,013,423	10.2 %	44 %
Non-hispanic white	537,901	545,989	1.5%	23.7%
Non-Hispanic Black or African American	485,956	509,479	4.8%	22.1
Non-Hispanic American Indian and Alaska Native	3,528	3,669	4.0%	0.2%
Non-Hispanic Asian	124,859	165,189	32.3%	7.2%
Non-Hispanic Native Hawaiian and Other Pacific Islander	711	960	35.0%	0.0%
Non-Hispanic Some Other Race	4,128	11,884	187.9%	0.5%
Non-Hispanic Two or More Races	22,700	53,987	137.8%	2.3%
City of Houston	2,099,451	2,304,580	9.8%	100%

Source: U.S. Census Bureau; Census 2010 - 2020

Across all 63 indicators, the following racial/ethnic groups are used for comparison in outcomes: Hispanic, White, Black, and Asian. Although most of the indicators comparing outcomes by race/ethnicity use individual-level data, other indicators use geographical areas such as census tracts and zip codes. In the latter scenario, the comparisons are often made between majority-Non-Hispanic-

White census tracts/zip codes and majority-people-of-color census tracts/zip codes (or areas without a specific majority non-Hispanic-White sub-population). Based on the availability of mappable data, 33 of these indicators are included in the City of Houston's Equity Map Atlas.

THEMES RANKED FROM HIGHEST TO LOWEST

77.8	INFRASTRUCTURE
56.1	ENVIRONMENTAL & CLIMATE RISKS
47.8	ACCESS & INCLUSION
41.3	HOUSING
34.6	ECONOMIC OPPORTUNITY
27.3	HEALTH
24.0	PUBLIC SAFETY

INFRASTRUCTURE

THEME EQUITY SCORE 2022 **77.8**

THEME EQUITY SCORE 2021 **82.1**

THEME EQUITY SCORE CHANGE **-4.3**

TOPIC	TOPIC EQUITY SCORE	EQUITY INDICATOR	EQUITY INDICATOR SCORE
Transportation	85.3	Access to a Vehicle	83
		Public Transportation Access	95
		Commute Time	78
Connectivity & Mobility	63.0	Street Quality	70
		Sidewalk Availability	67
		Traffic Fatalities	52
Green & Resilient Infrastructure	85.0	Drainage System Adequacy	98
		Green Stormwater Infrastructure	80
		LEED Certified Buildings	77

Public infrastructure includes any structure that facilitates human activity: roads, water and sewer systems, public buildings such as libraries, flood control projects that are both “hard” (structures) and “soft” (natural and non-structural). Public infrastructure investments can generate enormous community benefits—jobs, business opportunities, access to public transportation, and quality affordable housing.¹

Cities in the United States have a long history of inequitable distribution and maintenance of public infrastructure. Many people of color—especially in the South—simply did not receive their fair share of

public infrastructure. Nevertheless, the equity score on infrastructure for Houston is quite good compared to other scores. Traffic deaths in particular have been going in the wrong direction, especially given the city’s commitment to a “Vision Zero” reduction in pedestrian deaths.

¹Infrastructure Equity. (n.d.). PolicyLink. <https://www.policylink.org/our-work/community/infrastructure>

ENVIRONMENTAL & CLIMATE RISKS

THEME EQUITY SCORE 2022 **56.1**

THEME EQUITY SCORE 2021 **56.3**

THEME EQUITY SCORE CHANGE **-0.2**

TOPIC	TOPIC EQUITY SCORE	EQUITY INDICATOR	EQUITY INDICATOR SCORE
Pollution	56.0	EPA Penalties	1
		Hazard Waste Proximity	73
		Air Pollution	94
Disaster Risks	46.3	Housing in FEMA Floodplain	63
		Highly Impacted Households	32
		Flood Insurance Policies	44
Temperature Resilience	66.0	Temperature-Related EMS Transports	30
		Heat Islands	92
		Tree Canopy	76

Climate change is perhaps the greatest threat to humankind, not only in Houston but across the world. But like other environmental hazards, the burden of climate change does not fall equally on everyone. Some neighborhoods could be more affected than others by the risks posed by increased flooding and intense heat. Some neighborhoods may be protected by tree canopies and other resources that “soften” climate-related circumstances such as heat, while others may not.

Similarly, disaster and pollution concerns may not be equitably distributed as well. It has been well documented that neighborhoods of color in

Houston stand in much closer proximity than other neighborhoods to polluting facilities such as cement batch plants, landfills, and railroad yards.

The equity indicators in this section show, in large part, a more equitable distribution of hazards and risks that we see in other sections. This is not to say the situation is good; only that the risks are more spread across the landscape in this topic than in others.

ACCESS & INCLUSION

THEME EQUITY SCORE 2022 **47.8**

THEME EQUITY SCORE 2021 **47.4**

THEME EQUITY SCORE CHANGE **0.4**

TOPIC	TOPIC EQUITY SCORE	EQUITY INDICATOR	EQUITY INDICATOR SCORE
Representation	24.0	City Leadership Diversity	27
		Diversity in Police Force	37
		Diversity in HFD/EMS	8
Community Amenities	73.0	Internet Access	33
		Access to Parks	90
		Art Grants	96
Quality of Life Assets	46.3	Early Childhood Learning	61
		Residents Without Bank Accounts	1
		Access to Healthy Food Providers	77

As important as housing, infrastructure, and other basic services are, equity also involves a real sense of inclusion and a sense of belonging. Access and inclusion can take many forms. It can mean something as simple as having a bank account or seeing a police officer or firefighter serving the community who has a similar lived experiences. It can mean having easy access to parks and early learning opportunities for children. This sense of belonging is sometimes hard to quantify, but it is vital for the well-being of individuals which in turn strengthens neighborhoods in Houston.

HOUSING

THEME EQUITY SCORE 2022 **41.3**

THEME EQUITY SCORE 2021 **42.7**

THEME EQUITY SCORE CHANGE **-1.4**

TOPIC	TOPIC EQUITY SCORE	EQUITY INDICATOR	EQUITY INDICATOR SCORE
Home Ownership & Affordability	46.0	Homeownership	39
		Home Loan Denial	38
		Housing Cost Burden	61
Housing Quality	24.7	Overcrowded Housing	34
		Vacant Housing Units	39
		Low Value Stock	1
Housing Risks	53.3	Eviction Filings	36
		Residential Fire Incidents	37
		HFD Response Time	87

Few life circumstances are as important to individuals and families as stable housing. As the recent national crisis in homelessness has revealed, losing a place to call home can have a destabilizing effect on a family, initiating a cycle of financial and emotional turmoil, affecting their current and future prospects for residential stability.² Housing problems have ripple effects on health, education, economic mobility, child welfare, civil rights, criminal justice, and more. Affordable, stable, and quality housing options for all types of households and income levels can support better outcomes.³

In addition, although renting a home in a stable situation is important, home ownership provides families with a sense of emotional and financial stability and, historically, it has contributed to household wealth that can be used for education, retirement, or other activities that help upward mobility.⁴

²Peiffer, E. (2018, July 25). Why We Need to Stop Evictions Before They Happen. Housing Matters: An Urban Institute Initiative. <https://housingmatters.urban.org/feature/why-we-need-stop-evictions-they-happen>

³About Us. (n.d.). Housing Matters. <https://housingmatters.urban.org/about-us>

⁴Why Homeownership Matters: The Triple Bottom Line. (2018, June 4). My Home by Freddie Mac. <https://myhome.freddie.com/blog/homeownership/20180604-national-homeownership-month>

ECONOMIC

THEME EQUITY SCORE 2022 **34.6**

OPPORTUNITY

THEME EQUITY SCORE 2021 **33.3**

THEME EQUITY SCORE CHANGE **1.3**

TOPIC	TOPIC EQUITY SCORE	EQUITY INDICATOR	EQUITY INDICATOR SCORE
Employment	21.0	Employment in High-Paying Sectors	29
		Business Ownership	1
		Unemployment Rate	33
Educational Attainment	47.3	On-Time High School Graduation	82
		Youth Not in School or Working (Opportunity Youth)	28
		College Degrees	32
Income & Poverty	35.3	Median Household Income	38
		Adult Poverty	36
		Child Poverty	32

As racial justice re-emerged as an important issue in the past two years, increased attention has been placed on the limits to economic opportunity among people of color.

For people to have a successful and stable life, they must have access to economic opportunity, which creates pathways for upward mobility in society and improves health outcomes as well.

Economic opportunity is also critical for a family's wealth creation.

Economic opportunity has many facets, including educational attainment, employment status, and business ownership. All play a role in social stability, upward mobility, and wealth creation. The racial equity indicators on economic opportunity range across all these areas, from high school and college graduation rates to how many businesses are owned by persons of color. Overall, Houston has a fairly low equity score on almost all indicators – the exception being high-school graduation rates – with some small improvements over the base comparison year.

HEALTH

THEME EQUITY SCORE 2022 **27.3**

THEME EQUITY SCORE 2021 **30.4**

THEME EQUITY SCORE CHANGE **-3.1**

TOPIC	TOPIC EQUITY SCORE	EQUITY INDICATOR	EQUITY INDICATOR SCORE
Access to Health Care	28.7	Uninsured Adults	25
		Uninsured Children	25
		Preventable Hospitalizations	36
Child & Maternal Health	28.3	Infant Mortality	28
		Maternal Mortality	17
		Low Birth Weight	40
Health Outcomes	25.0	Mental Health Related EMS Transports	1
		Cancer Mortality	40
		Premature Death	34

Good health is central not only to human happiness and well-being, but also to prosperity, wealth, and economic progress. Healthy populations are more productive, save more and live longer.⁵ Health is determined in part by access to health care. Beyond that, conditions in the places where people live, learn, work, and play affect a wide range of health risks and outcomes. These factors are known as the social determinants of health (SDOH) and contribute to health inequities.⁶

There is no biological reason for health to be associated with race or ethnicity. Nevertheless, significant racial and ethnic inequities exist around health, as the indicators in this section reveal. While most scores were low, the equity score for the mental health indicator was particularly low. Reasons for these persistent disparities come from many sources. They are partly due to SDOH, such as pollution, lack of safe housing, violence, and racism. Disparities can also arise due to health care providers' attitudes and implicit biases. This can lead to disease stereotyping and biased treatment guidelines.⁷

⁵Importance of Good Health in Our Life—How can We Achieve Good Health and Well Being? (2019, December 27). The Scientific World. <https://www.scientificworldinfo.com/2019/12/importance-of-good-health-in-our-life.html>

⁶Social Determinants of Health—Healthy People 2030 | health.gov. (n.d.). U.S. Department of Health and Human Services, Office of Disease Prevention and Health Promotion. <https://health.gov/healthypeople/priority-areas/social-determinants-health>

⁷Tong, M., & Artiga, S. (2021). Use of Race in Clinical Diagnosis and Decision Making: Overview and Implications. Kaiser Family Foundation. <https://www.kff.org/racial-equity-and-health-policy/issue-brief/use-of-race-in-clinical-diagnosis-and-decision-making-overview-and-implications>

PUBLIC SAFETY

THEME EQUITY SCORE 2022 **24.0**

THEME EQUITY SCORE 2021 **22.8**

THEME EQUITY SCORE CHANGE **1.2**

TOPIC	TOPIC EQUITY SCORE	EQUITY INDICATOR	EQUITY INDICATOR SCORE
Employment	32.3	Domestic Violence Calls for Service	34
		Robbery Victimization Rates	47
		Homicide Victimization Rates	16
Educational Attainment	6.7	Adult Misdemeanor Arrest	10
		Adult Felony Arrests	1
		Juvenile Misdemeanor Arrests	9
Income & Poverty	33.0	Traffic Stops that Lead to Searches	1
		Officer Use of Force	1
		HPD Response Times	97

Concern about equity in public safety has been mounting ever since the murder of George Floyd, who was reared in Houston, by a Minneapolis police officer in 2020. Public safety includes all police and law enforcement activities, as well as firefighting and emergency medical services. At about \$1.5 billion per year, public safety constitutes more than half of the City of Houston’s general fund budget.

Concern about public safety has revolved around the treatment of different racial and ethnic groups. Public safety indicators reflect this broad concern, ranging from arrests to structure fires to response times. Overall, public safety equity scores were low with slight improvement over last year, but scores for individual indicators vary widely.

EQUITY INDICATORS TO ACKNOWLEDGE

INDICATOR SCORE 90 OR ABOVE SIGNALING LOW DISPARITY

98	DRAINAGE SYSTEM ADEQUACY
97	POLICE RESPONSE TIME
96	ART GRANTS
95	PUBLIC TRANSPORTATION ACCESS
94	AIR POLLUTION
92	HEAT ISLANDS
90	ACCESS TO PARKS & GREEN SPACE



DRAINAGE SYSTEM ADEQUACY

THEME: INFRASTRUCTURE	
High Group	Census Tracts with Majority People-of-Color
Low Group	Census Tracts with Majority NH White
High Group Results (2021) Low Group Results (2021)	56.8% 56.3%
2021 Ratio	1.010
High Group Results (2022) Low Group Results (2022)	56.8% 56.3%
2022 Ratio	1.010

EQUITY SCORE
2022
98

EQUITY SCORE
2021
98

EQUITY SCORE
CHANGE
N/A

INDICATOR DEFINITION

Ratio between the percentage of the city's stormwater drainage system that is rated adequate to meet the level of service for a 2-year and/or 100-year storm event in majority-people-of-color census tracts and majority-Non-Hispanic-White census tracts.

RATIONALE

In a flood-prone region such as Houston, the adequacy of drainage systems is of paramount importance. Many Houston neighborhoods are saddled with outdated drainage systems that limit the community's ability to absorb major rain events. By contrast, an adequate drainage system helps a community manage fallout from all but the most extreme storms. ⁸

ADDITIONAL FINDINGS

Houston Public Works rates the city's stormwater systems for underground pipe and open ditch as adequate if it meets the level of service for a 2-year rainfall event. There are almost 19,000 miles of drainage systems in Houston, and 56.7% is rated adequate. For census tracts where a majority population are people of color, 56.8% of the drainage system was rated adequate. Similar adequacy rates were found in areas where the majority are Non-Hispanic White (56.3%). While the score reflects very high equity, it is important to note that for the city overall, 39.3% of drainage was rated inadequate.

Data Notes for Green & Resiliency Infrastructure Topic

For drainage system adequacy, a 2-year rainfall event is defined as a rainfall intensity having a 50 percent probability of occurrence in any given year, occurring on average every 2 years over a long period of time⁹

For drainage system adequacy and LEED-certified buildings, data limitations did not allow for the calculations of a change score

⁸Infrastructure Report Card: Stormwater. (n.d.). American Society of Civil Engineers. <https://infrastructurereportcard.org/cat-item/stormwater>

⁹Haddock, C., & Kanwar, S. (2021). 2021 Infrastructure Design Manual. City of Houston, Houston Public Works. <https://www.houstonpermittingcenter.org/resources?keys=design+manual>

Data Source: City of Houston, Houston Public Works, 2016



HOUSTON POLICE DEPARTMENT

RESPONSE TIMES

THEME: LAW ENFORCEMENT	
High Group	Police Districts with Majority POC
Low Group	Police Districts with Majority NH White
High Group Results (2021) Low Group Results (2021)	5.89 5.77
2021 Ratio	1.021
High Group Results (2022) Low Group Results (2022)	5.60 5.51
2022 Ratio	1.015

EQUITY SCORE
2022
97

EQUITY SCORE
2021
96

EQUITY SCORE
CHANGE
1

INDICATOR DEFINITION

Ratio between the average response times for Priority 1 calls in majority-People-of-Color and majority-Non-Hispanic-White police districts.

RATIONALE

Response times are a fundamental metric in law enforcement, revealing the ability of a law enforcement agency to respond to emergency calls or calls involving potential danger to citizens.

ADDITIONAL FINDINGS

The Houston Police Department responded to Priority 1 calls in 5.88 minutes in 2019 to 5.59 minutes in 2020.¹⁰ Priority 1 calls are those involving

an “imminent threat to life.” Concern is often expressed that police respond quickly to residents in some neighborhoods while residents of color in other neighborhoods must wait. Therefore, this indicator helps determine whether some residents seeking emergency assistance of law enforcement must wait longer than others. Using the racial and ethnic composition of the different police districts and the response times in those districts, the average response time was slightly faster in police districts where the majority of residents are Non-Hispanic White. In 2020, the response times for police districts where the majority of resides are those of color, the response time was 5.6 and for police districts where the majority of resident are Non-Hispanic White, the average response time was 5.5. Overall, the response was highly equitable in both years.

Data Notes on Law Enforcement Topic

Responses times for Districts 0, 21, and 23 were excluded from this analysis due to those districts being mostly comprised of facilities and non-residential areas.

¹⁰Responses times for Districts 0, 21, and 23 were excluded 2021 from this analysis due to those districts being mostly comprised of facilities and non-residential areas

Data Source: HPD, 2019 & 2020

THEME: ACCESS AND INCLUSION	
High Group	ZIP Codes with Majority Non-Hispanic White
Low Group	ZIP Codes with Majority People-of-Color
High Group Results (2021) Low Group Results (2021)	75.4% 73.6%
2021 Ratio	1.024
High Group Results (2022) Low Group Results (2022)	75.4% 73.6%
2022 Ratio	1.024

EQUITY SCORE
2022
96

EQUITY SCORE
2021
96

EQUITY SCORE
CHANGE
N/A

INDICATOR DEFINITION

Ratio between the percentage of art grants approved by the City of Houston in majority-people-of-color and majority-Non-Hispanic-White ZIP codes.

RATIONALE

Access to the arts provides people of color with health and wellness benefits, increases the likelihood of higher educational attainment, and even helps their communities stay safe. ¹¹

ADDITIONAL FINDINGS

In 2020, 190 art grant applications were either approved or declined by the City of Houston. Art grant applications can list the top 5 locations where

the applicant delivers its principal activities. A single art grant application can affect different majority population areas. Looking at ZIP codes that had over 50% of their landmass in Houston, art grant applications were made in over 60 ZIP codes. Of those, 16 were in zip codes where the majority population was Non-Hispanic White and 48 were in zip codes where most residents were people of color. Overall, the City of Houston approved 74% of art grant applications. For grants that had at least one location inside an area where the majority of the population are Non-Hispanic White, the rate of approval was 75.4%. For grants that had at least one location inside an area where the majority of the population are Non-Hispanic White, the rate of approval was 73.6%.

Data Notes for Community Amenities Topic

Art grant applications can list the top 5 locations where the applicant delivers its principal activities. A single art grant application can affect different majority population areas. Only art grant applications that received a decision of approved or declined were included in the analysis. Art grants data collection changed in 2020 and cannot be compared to previous years

¹¹City’s Neighborhoods: The Contribution of Culture and the Arts. Culture and Social Wellbeing in New York City—2014-2017. 2021 https://repository.upenn.edu/siap_culture_nyc/1
Data Source: City of Houston, Mayor’s Office of Cultural Affairs and Houston Arts Alliance, 2020



PUBLIC TRANSPORTATION ACCESS

THEME: TRANSPORTATION	
High Group	Census Tracts with Majority Non-Hispanic White
Low Group	Census Tracts with Majority People-of-Color
High Group Results (2021) Low Group Results (2021)	49.6% 49.2%
2021 Ratio	1.008
High Group Results (2022) Low Group Results (2022)	50.4% 49.1%
2022 Ratio	1.027

EQUITY SCORE
2022
95

EQUITY SCORE
2021
99

EQUITY SCORE
CHANGE
-4

INDICATOR DEFINITION

Ratio of the percentage of residents who live within half a mile of high-frequency transit by majority-People-of-Color and majority-Non-Hispanic-White census tracts.

RATIONALE

For most people, public transportation is the only alternative to having access to a vehicle, making it a vital link to opportunity. This became especially clear during the pandemic. Public transit ridership overall declined sharply—but those who rode public transit were low-wage essential workers who kept the economy going. ¹²

ADDITIONAL FINDINGS

Almost half of all Houstonians live within half a mile of a high-frequency transit stop. There was only a small difference in access for areas of town where the majority of the population is White compared to where the majority population is people-of-color. For example, in 2019, 50.4% of census tracts with majority-White population lived within half a mile versus 49.1% of tracts with majority people-of-color. This small difference translates to very high equity score, though it did fall slightly from the previous year.

Data Notes for Transportation Topic

Races/ethnicities were defined as: Asian, Black, Hispanic, and Non-Hispanic White. For Public Transportation Access, data is only for Harris County. High-frequency transit was defined as bus stops with services every 15 minutes, METRORail stops, and METRORapid (bus-rapid transit) .Uptown stops. For Commute Time, no change score is available because of sample year overlap in the Census 5-Year Estimates

¹²COVID and Public Transit in the Houston Region. (2021). Air Alliance Houston, LINK Houston, and Texas Southern University Bull- 2021 ard Center for Environmental and Climate Justice. <https://airalliancehouston.org/wp-content/uploads/2021/10/AAH-Public-Transit-Covid-Report-final.pdf>
Data Source: Metropolitan Transit Authority of Harris County (METRO), 2018 & 2019



AIR POLLUTION

THEME: ENVIRONMENTAL & CLIMATE RISKS	
High Group	Hispanic
Low Group	Asian/Pacific Islander
High Group Results (2021)	88.0
Low Group Results (2021)	85.4
2021 Ratio	1.030
High Group Results (2022)	88.0
Low Group Results (2022)	85.4
2022 Ratio	1.030

EQUITY SCORE
2022
94

EQUITY SCORE
2021
94

EQUITY SCORE
CHANGE
N/A

INDICATOR DEFINITION

Ratio between the air pollution exposure index for cancer risk for Hispanic and Asian residents.

RATIONALE

Exposure to high levels of air pollution can cause adverse health outcomes by increasing the risk of respiratory infections, heart disease and lung cancer.¹³

ADDITIONAL FINDINGS

The average air pollution exposure index for cancer and non-cancer risks for all Houstonians is 80. This

means that Houston residents have higher air toxin exposure than 80% of census tracts nationwide. For air toxins with cancer risk, the index for all Houstonians was 88, again meaning that the risk is higher here than 88% of census tracts in the US. There is very little difference in exposure among racial/ethnic groups. While Hispanic Houstonians had the highest exposure index at 88.0, both Black and White Houstonians had index values of 87.8. Asian or Pacific Islanders had the lowest value of 85.4. This is a case where the equity score is high, but all Houstonians could benefit from cleaner air.

Data Notes for Pollution Topic

Given data availability, none of the indicators in this topic area were able to be compared to the previous year

¹³Health consequences of air pollution on populations. (2019, November 15). World Health Organization. <https://www.who.int/news/item/15-11-2019-what-are-health-consequences-of-air-pollution-on-populations>
Data Source: National Equity Atlas analysis of data from U.S. Environmental Protection Agency (National Air Toxics Assessment) and U.S. Census Bureau, 2019

THEME: TEMPERATURE RESILIENCE	
High Group	Census Tracts with Majority People-of-Color
Low Group	Census Tracts with Majority Non-Hispanic White
High Group Results (2021)	10.4%
Low Group Results (2021)	10.0%
2021 Ratio	1.044
High Group Results (2022)	10.4%
Low Group Results (2022)	10.0%
2022 Ratio	1.044

EQUITY SCORE
2022

92

EQUITY SCORE
2021

92

EQUITY SCORE
CHANGE

N/A

INDICATOR DEFINITION

Ratio of between the percent of majority-people-of-color and majority-Non-Hispanic-White census tracts in the 90th percentile of afternoon temperature.

RATIONALE

Heat islands are urbanized areas that experience higher temperatures than outlying areas or areas that have better tree cover and other mitigating factors. Heat islands put greater pressure on energy demand, increase the detrimental effect of pollution, and can damage human health. ²⁵

ADDITIONAL FINDINGS

In August 2020, the Houston Harris Action Team (H3AT) measured the temperature of 320 square

miles in the Houston area. Data was collected for 222 census tracts that were at least 50% inside Houston boundaries. Of these tracts, 40 had a majority Non-Hispanic White population and 182 had a majority people-of-color population. The maximum afternoon temperature for these census tracts ranged from 94.0° to 100.4°. Census tracts with afternoon heat over 97.6° were in the 90th percentile. In census tracts where the majority of the population are Non-Hispanic White, 10.0% were in 90th percentile of afternoon heat. In census tracts where the majority of the population are people of color, 10.4% were in 90th percentile of afternoon heat. The equity score shows that the city's heat islands pose risks across a wide range of neighborhoods.

Data Notes for Temperature Resilience Topic

Heat Island data was only available for about 50% of the census tracts within Houston. Given data availability, Heat Island and Tree Canopy were not able to be compared to the previous year

²⁵Heat Island Impacts. (n.d.). EPA. <https://www.epa.gov/heatislands/heat-island-impacts>

Data Source: H3at.org, Aug 2020



ACCESS TO PARKS & GREENSPACE

THEME: ACCESS & INCLUSION	
High Group	Census tracts with Majority Non-Hispanic White
Low Group	Census tracts with Majority People-of-Color
High Group Results (2021) Low Group Results (2021)	74.5% 70.8%
2021 Ratio	1.053
High Group Results (2022) Low Group Results (2022)	74.5% 70.8%
2022 Ratio	1.053

EQUITY SCORE
2022
90

EQUITY SCORE
2021
90

EQUITY SCORE
CHANGE
N/A

INDICATOR DEFINITION

Ratio between the percentage of people who live within 0.5 miles of a park or greenspace in majority-Non-Hispanic-White census tracts and majority-People-of-Color census tracts.

RATIONALE

According to the CDC, parks and greenspace are important to maintain both the physical and mental health of individuals. In addition, greenspace helps neighborhoods of color minimize the impact of heat island effects and climate change. ²⁶

ADDITIONAL FINDINGS

Over 70% of Houstonians lived within half a mile of a public park or greenspace. In recent years, having a park within a half mile, which can be accessed in about 10 minutes by walking, has become the standard to measure park access. ²⁷ In areas of town where the majority population was White, almost 75% of residents lived within 0.5 miles of a park, while 70.8% of residents in areas where the majority are people of color did so. Not all parks and greenspaces are created alike, but at least in terms of proximity, Houston residents have similar access.

²⁶Slater, S. J., Christiana, R. W., & Gustat, J. (2020). Recommendations for Keeping Parks and Green Space Accessible for Mental and Physical Health During COVID-19 and Other Pandemics. Preventing Chronic Disease, 17, 200204. TA.0000000000001783

²⁷Parks on the clock: Why we believe in the 10-minute walk. (2016, February 25). Trust for Public Land. <https://www.tpl.org/blog/why-the-10-minute-walk>

Data Source: Houston-Galveston Area Council, 2019

CRITICAL INDICATORS TO ADDRESS

INDICATOR SCORE 1 SIGNALING GREATEST POSSIBLE DISPARITY

1	EPA PENALTIES
1	RESIDENTS WITHOUT BANK ACCOUNTS
1	LOW VALUE STOCK
1	BUSINESS OWNERSHIP
1	MENTAL HEALTH RELATED EMS TRANSPORTS
1	ADULT FELONY ARRESTS
1	TRAFFIC STOPS THAT LEAD TO SEARCHES
1	OFFICER USE OF FORCE
38	*TRAFFIC FATALITIES Indicator had largest drop in score between comparison years



EPA PENALTIES

THEME: POLLUTION	
High Group	ZIP Codes with Majority People-of-Color
Low Group	ZIP Codes with Majority Non-Hispanic White
High Group Results (2021)	49234
Low Group Results (2021)	1621
2021 Ratio	30.367
High Group Results (2022)	49234
Low Group Results (2022)	1621
2022 Ratio	30.367

EQUITY SCORE
2022

1

EQUITY SCORE
2021

1

EQUITY SCORE
CHANGE
N/A

INDICATOR DEFINITION

Ratio between the average amount of EPA penalties in the last five years by the number of active facilities in majority people-of-color ZIP codes to majority Non-Hispanic-White ZIP codes.

RATIONALE

EPA violations suggest the presence of toxic pollutants in a neighborhood, which have an adverse impact on human health. Those who live in neighborhoods of color may suffer significant health problems and shorter lives if they are disproportionately exposed to toxic pollutants. ¹⁴

ADDITIONAL FINDINGS

The EPA regulates over 3,700 active facilities in 71 ZIP codes with over 50% of landmass inside Houston. In the past 5 years, these facilities have been cited for over \$150 million in penalties, for an average of \$41,640 per facility. There were slightly more than 600 facilities in the 16 ZIP codes where the majority of the population is Non-Hispanic White, with an average of \$1,621 in penalties per facility. Of the 55 ZIP codes where the majority of the population are people of color, there were over 3,100 facilities, with an average of \$49,234 in penalties in the last five years. The equity score of 1 reflects the large disparity in this indicator.

Data Notes for Pollution Topic

Given data availability, none of the indicators in this topic area were able to be compared to the previous year

¹³Health consequences of air pollution on populations. (2019, November 15). World Health Organization. <https://www.who.int/news/item/15-11-2019-what-are-health-consequences-of-air-pollution-on-populations>

Data Source: National Equity Atlas analysis of data from U.S. Environmental Protection Agency (National Air Toxics Assessment) and U.S. Census Bureau, 2019

1

RESIDENTS WITHOUT BANK ACCOUNTS

THEME: ACCESS & INCLUSION	
High Group	Hispanic
Low Group	White
High Group Results (2021) Low Group Results (2021)	19.5% 2.0%
2021 Ratio	9.750
High Group Results (2022) Low Group Results (2022)	22.4% 1.2%
2022 Ratio	18.667

EQUITY SCORE
2022

1

EQUITY SCORE
2021

1

EQUITY SCORE
CHANGE

N/A

INDICATOR DEFINITION

Ratio between the percentage of unbanked Hispanic and White households.

RATIONALE

Having a bank account and a banking relationship can also facilitate households' access to responsible, affordable credit, and such access can help households build their credit history. ¹⁵

ADDITIONAL FINDINGS

In 2019, an estimated 10.4% of households in the Houston MSA were considered unbanked by the FDIC. "Unbanked" means the household does not have a bank account. For this dataset, estimates were only available for White and Hispanic households, but the data shows very wide differences. In 2019, 22.4% of Hispanic households were without a bank account, while only 1.2% of White households were unbanked. This dramatic disparity is reflected in the lowest possible equity score.

Data Notes for Quality of Life Assets Topic

For Residents without Bank Accounts, data was only available at the Houston MSA level, which consists of nine counties: Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery and Waller. For Residents without Bank Accounts, data is only collected every two years. Data from 2017 and 2019 were used to create the equity score change. For Residents without Bank Accounts, data was only available for Hispanic and White residents

¹⁵Health What is Economic Inclusion? (2021, December 17). Federal Deposit Insurance Corporation (FDIC). <https://www.fdic.gov/analysis/household-survey/economic-inclusion/index.html>
Data Source: FDIC Survey of Household Use of Banking and Financial Services, 2017 & 2019

1

LOW VALUE STOCK

THEME: HOUSING	
High Group	ZIP Codes with Majority POC
Low Group	ZIP Codes with Majority NH White
High Group Results (2021) Low Group Results (2021)	30.5% 2.8%
2021 Ratio	11.003
High Group Results (2022) Low Group Results (2022)	30.5% 2.8%
2022 Ratio	11.003

EQUITY SCORE
2022

1

EQUITY SCORE
2021

1

EQUITY SCORE
CHANGE
N/A

INDICATOR DEFINITION

Ratio between the percent of occupied housing units valued below \$100,000 in majority-Non-Hispanic-White and majority-people-of-color ZIP codes.

RATIONALE

Much attention recently has been paid to housing that is too expensive for most people, but housing of extremely low value is also a problem. Those who own houses with low values may, for example, face challenges obtaining resources to rebuild or repair after a disaster. As a result, low-value homes might

further decrease in value, to the detriment of both the household and the neighborhood. ¹⁶

ADDITIONAL FINDINGS

Almost one in four owner occupied housing units in Houston is valued below \$100,000. The vast majority of these properties are located in areas where people of color are the majority of the population. Less than 3% of owner-occupied housing units in majority-White ZIP codes are valued below \$100,000. The equity score of 1 reflects the large disparity in the location of low-value housing stock.

Data Notes for Housing Quality Topic

For Overcrowded Housing and Low Value Stock, no change score is available because of sample overlap in the Census 5-Year Estimates

¹⁶Peacock, W. G., Van Zandt, S., Zhang, Y., & Highfield, W. E. (2014). Inequities in Long-Term Housing Recovery After Disasters. *Journal of the American Planning Association*, 80(4), 356–371. <https://doi.org/10.1080/01944363.2014.980440>

Data Source: Census ACS (5-Year Estimates), 2019

1

BUSINESS OWNERSHIP

THEME: EMPLOYMENT	
High Group	Asian
Low Group	Black
High Group Results (2021) Low Group Results (2021)	6.0% 0.6%
2021 Ratio	10.330
High Group Results (2022) Low Group Results (2022)	6.0% 0.6%
2022 Ratio	10.038

EQUITY SCORE
2022

1

EQUITY SCORE
2021

1

EQUITY SCORE
CHANGE

N/A

INDICATOR DEFINITION

Ratio between the percentages of Asian and Black working-age adults who are business owners.

RATIONALE

Business ownership is an important route to wealth creation, especially for people of color. Significant discrepancies suggest narrow opportunity for people of color to accumulate the wealth necessary for upward mobility. ¹⁷

ADDITIONAL FINDINGS

In 2019, over 110,000 firms in the Houston MSA area had paid employees. Of those, 68,651 were owned by Non-Hispanic White residents. Looking at the share of White Houston MSA residents, only 5% were business owners. While Asian Houstonians owned fewer businesses (19,867), a greater percentage of Asian residents were business owners (6%). Black and Hispanic residents owned fewer business and had lower rates of business ownership. Less than 1% of Black Houstonians were business owners in both years of this report, leading to the lowest possible equity score. years of this report, leading to the lowest possible equity score.

Data Notes for Quality of Life Assets Topic

For Residents without Bank Accounts, data was only available at the Houston MSA level, which consists of nine counties: Austin, Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery and Waller. For Residents without Bank Accounts, data is only collected every two years. Data from 2017 and 2019 were used to create the equity score change. For Residents without Bank Accounts, data was only available for Hispanic and White residents

¹⁷The Racial Gap in Business Ownership Explained in Four Charts. (2017, February 6). The Aspen Institute. <https://www.aspeninstitute.org/blog-posts/racial-gap-business-ownership-explained-four-charts>

Data Source: Census Annual Business Survey, 2018 & 2019

1

MENTAL HEALTH RELATED EMS TRANSPORTS

THEME: HEALTH	
High Group	Black
Low Group	Asian
High Group Results (2021)	321.4
Low Group Results (2021)	43.2
2021 Ratio	7.440
High Group Results (2022)	318.0
Low Group Results (2022)	31.9
2022 Ratio	9.969

EQUITY SCORE
2022
1

EQUITY SCORE
2021
11

EQUITY SCORE
CHANGE
-10

INDICATOR DEFINITION

Ratio between the rates of EMS mental health transports per 100,000 Black and Asian residents

RATIONALE

Mental health is often overlooked as an important health indicator. But it is the foundation for emotions, thinking, communication, learning, resilience, and self-esteem. Left untreated, mental health issues can also affect physical health as well, as individuals have more difficulty identifying and coping with physical health. ¹⁸

ADDITIONAL FINDINGS

While mental illness can affect anyone, regardless of age, gender, income, or race/ethnicity, certain

groups often suffer worse mental health outcomes than others. Factors that lead to this include a lack of access to high quality mental health care services, cultural stigma surrounding mental health care, discrimination, and overall lack of awareness about mental health.¹⁹ In Houston, over 3,500 people were transported by an ambulance or medic to a hospital for mental health reasons in 2020. Black Houstonians were transported at much higher rate per 100,000 residents than Asian Houstonians, 318 compared to 31. White Houstonians received mental health transports at a rate of 174 and Hispanic Houstonians were lower at 98. This wide range of outcomes led to the lowest possible equity score.

Data Notes for Health Outcomes Topic

Reasons for mental health transports include anxiety, depression, manic episode, suicidal intentions, suicide attempt, or other mental disorder

¹⁸Mental Illness. (2022, January). National Institute of Mental Health (NIMH). <https://www.nimh.nih.gov/health/statistics/mental-illness>

¹⁹Mental Health Disparities: Diverse Populations. (n.d.). American Psychiatric Association. <https://psychiatry.org:443/psychiatrists/diversity/education/mental-health-facts>

Data Source: HFD/EMS. 2019 & 2020

1

ADULT FELONY ARRESTS

THEME: PUBLIC SAFETY	
High Group	Black
Low Group	Asian
High Group Results (2021) Low Group Results (2021)	26.4 1.9
2021 Ratio	13.576
High Group Results (2022) Low Group Results (2022)	25.1 1.6
2022 Ratio	15.707

EQUITY SCORE
2022

1

EQUITY SCORE
2021

1

EQUITY SCORE
CHANGE

N/A

INDICATOR DEFINITION

Ratio between Black and Asian adult felony arrest rates per 1,000 adult residents.

RATIONALE

A felony is a more serious crime than a misdemeanor and is typically defined as a crime punishable by a term of imprisonment of one year or more. At the individual level, a criminal conviction affects employability and access to housing and public services.

At the community level, disproportionately incarcerating people from poor communities removes economic resources and drives cycles of poverty and justice system involvement. ²⁰

ADDITIONAL FINDINGS

The adult felony arrest rate for Black Houstonians was substantially higher than that of other races or ethnic groups. At 26.4 per 1,000 adults, the Black rate was over 13 times higher than the Asian rate of 1.9. White and Hispanic adult felony arrests were also much lower than the Black rate, at 5.2 and 7.5 respectively. In 2020, there was only a slight decline in adult felony arrests across the city. While the Black arrest rate fell a small amount in this time, it had no impact on the equity score. It remained at 1, the lowest possible score.

²⁰Hinton, E. K., Henderson, L., & Reed, C. (2018, May). An Unjust Burden: The Disparate Treatment of Black Americans in the Criminal Justice System. Vera Institute of Justice. <https://www.vera.org/publications/for-the-record-unjust-burden>

Data Source: HPD, 2019 & 2020

1

TRAFFIC STOPS THAT LEAD TO SEARCHES

THEME: LAW ENFORCEMENT	
High Group	Black
Low Group	Asian
High Group Results (2021)	37.7
Low Group Results (2021)	2.9
2021 Ratio	12.85
High Group Results (2022)	27.2
Low Group Results (2022)	1.7
2022 Ratio	16.16

EQUITY SCORE
2022

1

EQUITY SCORE
2021

1

EQUITY SCORE
CHANGE
N/A

INDICATOR DEFINITION

Ratio between Black and Asian rates of traffic stops that lead to searches per 1,000 adult residents.

RATIONALE

Traffic stops are the most common form of police-citizen interaction, and while the vast majority of traffic stops and searches do not lead to arrests, the racial disparities in interactions can erode community trust. ²¹

ADDITIONAL FINDINGS

Traffic stops that lead to searches dropped 44% in 2020 from 2019, likely because of the COVID-19 pandemic. Even with this change, Black Houstonians still faced much higher rates of searches after a traffic

stop. In 2019, for every 1,000 Black adult residents there were 37.8 traffic stops that led to searches.

This number decreased to 27.2 in 2020. Other race and ethnic groups saw similar declines but had much lower rates to begin with. The rate for Hispanic adult residents fell from 10.8 in 2019 to 7.8 in 2020, while the rate for White adults fell from 7.8 to 5.1 during the same period. Asian adults had the lowest rates for both years at 2.9 in 2019 and 1.7 in 2020. Despite the overall decrease in traffic stops that lead to searches, the racial equity score for Black and Asian adults remained at the lowest possible point for both years, given the high rate for Black Houstonians and the low rate of Asian Houstonians.

Data Notes on Law Enforcement Topic

For Traffic Stops that Lead to Searches, driving age population was defined as 18 years and older, as population data for 15-17 year-olds by race/ethnicity is not available for 2020. For Traffic Stops that Lead to Searches, "Asian" does not include Pacific Islanders because population by age was not available for that group in 2019

²¹Mental Illness. Doyle, L., & Nembhard, S. (2021, April 26). Police Traffic Stops Have Little to Do with Public Safety. Urban Institute: Urban Wire. <https://www.urban.org/urban-wire/police-traffic-stops-have-little-do-public-safety>

Data Source: HPD, 2019 & 2020

1

OFFICER USE OF FORCE

THEME: PUBLIC SAFETY	
High Group	Black
Low Group	Asian
High Group Results (2021)	15.0
Low Group Results (2021)	0.5
2021 Ratio	11.370
High Group Results (2022)	18.3
Low Group Results (2022)	0.2
2022 Ratio	17.494

EQUITY SCORE
2022

1

EQUITY SCORE
2021

1

EQUITY SCORE
CHANGE

N/A

INDICATOR DEFINITION

Ratio between Black and Asian rates of use of force per 1,000 residents

RATIONALE

Use of force can result in serious injuries and fatalities.²² It should be considered an officer's last option to restore safety in a community when other practices are ineffective.²³

ADDITIONAL FINDINGS

Use of force increased by HPD increased 14% in 2020. Black Houstonians were far more likely to experience use of force with a rate of 15.0 per 1,000 residents in 2019. The rate for Black residents increased to 18.3 in 2020.

White residents were second in 2019 with a significantly lower rate of 4.0 that increased slightly to 4.3 in 2020. Hispanics were third in 2019 at a rate of 3.9, but increased to 4.9 in 2020 above White Houstonians in that year. Asians had the lowest rate in both years at 1.3 and 1.0, respectively. Given the increased rate for Black residents and decreased rate for Asian residents, the equity score should have fallen further. However, since the equity score was already at the lowest point possible in 2019, it remained unchanged in 2020.

²²Bozeman, W. P., Stopyra, J. P., Klinger, D. A., Martin, B. P., Graham, D. D., Johnson, J. C., Mahoney-Tesoriero, K., & Vail, S. J. (2018). Injuries associated with police use of force. *Journal of Trauma and Acute Care Surgery*, 84(3), 466-472. <https://doi.org/10.1097/TA.0000000000001783>

²³Overview of Police Use of Force. (2020, March 5). National Institute of Justice. <https://nij.ojp.gov/topics/articles/overview-police-use-force>

Data Source: HPD, 2019 & 2020

THEME: INFRASTRUCTURE	
High Group	ZIP Codes with Majority People-of-Color
Low Group	ZIP Codes with Majority Non-Hispanic White
High Group Results (2021)	9.78
Low Group Results (2021)	9.27
2021 Ratio	1.0542
High Group Results (2022)	12.05
Low Group Results (2022)	7.05
2022 Ratio	1.7091

EQUITY SCORE
2022
52

EQUITY SCORE
2021
90

EQUITY SCORE
CHANGE
-38

INDICATOR DEFINITION

Ratio between traffic fatality rates per 100,000 residents in ZIP codes with majority-people-of-color and majority-Non-Hispanic-White.

RATIONALE

Transportation safety is a high priority not only for individuals but also for society. Collisions result not only in injury or death but are highly disruptive, often leading to traffic congestion that inconveniences motorists and interferes with the movement of goods. ²⁴

ADDITIONAL FINDINGS

In 2019, the traffic fatality rate for Houston was 9.69 per 100,000 residents. In 2020 the rate increased to 11.11. This increase was not felt in all areas of town. In parts of Houston where the majority of residents are White, the traffic fatality rate fell from 9.27 in 2019 to 7.05 in 2020. The opposite was true in areas where the majority of residents are people of color. The traffic fatality rate rose from 9.78 to 12.05 over the same period. This large change led the equity score to fall 38 points.

²⁴Shahum, L. (2022, February 3). Vision Zero Network. Zero Matters: National Goal of Zero Roadway Fatalities. <https://visionzeronetwork.org/zero-matters-national-goal-of-zero-roadway-fatalities>

Data Source: Kinder Institute For Urban Research-Urban Data Platform Team; Texas Department Of Transportation, 2019 & 2020

WHAT'S ON THE HORIZON FOR THE CITY OF HOUSTON?

The journey to ensure all Houstonians have equitable access to resources and opportunities is a long one which takes planning, intention, and, perhaps most importantly, execution. The community must be involved in designing equitable policy interventions. The data and research behind each of the Equity Indicators in this report are merely a reference – a map to point city leaders in the right direction. But to arrive at the destination, the city must ask which roadblocks should be addressed first, and how to overcome them. No single mayoral administration can solve all the issues raised in this report, but each administration must ask how this data should shape its policies and practices.

And most importantly, future data and research will provide the evidence needed to change, adapt, and innovate to address inequities. This will ensure Houston is a city where everyone has the chance to thrive, and race, ethnicity, gender, disability, sexual orientation, and other features may inform our identities but not determine our trajectory.

DATA BY
RACE/ETHNICITY
(2021)

DATA BY
RACE/ETHNICITY
(2022)

ASIAN
BLACK
HISPANIC
WHITE

ASIAN
BLACK
HISPANIC
WHITE

THEME TOPIC

INDICATOR

THEME	TOPIC	INDICATOR	DATA BY RACE/ETHNICITY (2021)				DATA BY RACE/ETHNICITY (2022)			
			ASIAN	BLACK	HISPANIC	WHITE	ASIAN	BLACK	HISPANIC	WHITE
ECONOMIC OPPORTUNITY	Employment	Employment in High-Paying Sectors	48.1%	16.7%	10.9%	48.5%	47.8%	16.9%	13.3%	49.3%
		Business Ownership	6.0%	0.6%	1.0%	4.9%	6.0%	0.6%	0.9%	5.1%
		Unemployment Rate	2.9%	8.8%	4.7%	4.1%	3.1%	9.4%	4.7%	3.7%
ECONOMIC OPPORTUNITY	Educational Attainment	On-Time High School Graduation	92.2%	81.1%	80.2%	80.7%	90.7%	84.2%	83.2%	83.9%
		Youth Not in School or Working	-	-	-	-	-	-	-	-
		College Degrees	66.7%	29.6%	17.5%	65.6%	67.9%	32.2%	20.3%	66.4%
ECONOMIC OPPORTUNITY	Income & Poverty	Median Household Income	67,975	36,888	42,791	85,121	71,218	36,725	45,326	87,208
		Adult Poverty	15.1%	19.4%	19.1%	9.5%	13.4%	22.1%	19.7%	8.1%
		Child Poverty	11.5%	40.6%	37.6%	12.4%	11.2%	36.5%	33%	5.6%
HEALTH	Access to Healthcare	Uninsured Adults	14.0%	25.0%	48.9%	11.2%	15.6%	27.6%	51.0%	11.9%
		Uninsured Children	9.7%	6.2%	19.1%	6.2%	9.2%	9.5%	21.7%	5.0%
		Preventable Hospitalizations	3,127	7,679	4,907	4,360	2,830	7,371	4,782	3,998
HEALTH	Child & Maternal Health	Infant Mortality	2.85	10.03	5.07	4.26	2.71	10.53	4.81	4.46
		Maternal Mortality	8.9	14.1	7.8	7.1	9.1	14.6	8.0	6.9
		Low Birth Weight	-	-	-	-	-	77.4	13.2	23.3
HEALTH	Health Outcomes	Mental Health Related EMS Transports	43.2	321.4	114.2	236.3	31.9	318.0	98.7	174.9
		Cancer Mortality	95.2	179.7	102.6	7.7	84.7	178.8	100.3	152.8
		Premature Death	5,002	13,774	5,902	7,502	4,519	13,603	5,812	7,245
PUBLIC SAFETY	Victimization	Domestic Violence Calls for Service	-	-	-	-	-	-	-	-
		Robbery Victimization Rates	746.7	570.8	543.0	301.0	533.3	601.8	514.1	289.9
		Homicide Victimization Rates	6.0	30.8	8.3	4.6	3.0	46.7	12.3	7.7
PUBLIC SAFETY	Arrests	Adult Misdemeanor Arrest	4.3	34.0	14.9	8.1	2.6	19.6	10.4	5.0
		Adult Felony Arrests	1.9	26.4	7.5	5.2	1.6	25.1	7.8	5.0
		Juvenile Misdemeanor Arrests	0.5	3.2	1.4	0.7	0.3	2.0	0.8	0.5
PUBLIC SAFETY	Law Enforcement	Traffic Stops that Lead to Searches	2.9	37.7	6.9	12.2	1.7	27.2	5.1	7.8
		Officer Use of Force	1.3	15.0	4.0	4.0	1.0	18.3	4.9	4.3
		Police Response Time	-	-	-	-	-	-	-	-
HOUSING	Home Ownership & Affordability	Homeownership	45.5%	28.3%	38.7%	55.9%	44.0%	25.4%	37.1%	56.0%
		Home Loan Denial	7.5%	12.4%	11.4%	5.3%	8.4%	12.3%	11.6%	5.3%
		Housing Cost Burden	-	-	-	-	-	-	-	-
HOUSING	Housing Quality	Overcrowded Housing	-	-	-	-	-	-	-	-
		Vacant Housing Units	-	-	-	-	-	-	-	-
		Low Value Stock	-	-	-	-	-	-	-	-
HOUSING	Housing Risks	Eviction Filings	-	-	-	-	-	-	-	-
		Residential Fire Incidents	-	-	-	-	-	-	-	-
		Fire Response Time	-	-	-	-	-	-	-	-

DATA BY
RACE/ETHNICITY
(2021)

DATA BY
RACE/ETHNICITY
(2022)

ASIAN
BLACK
HISPANIC
WHITE

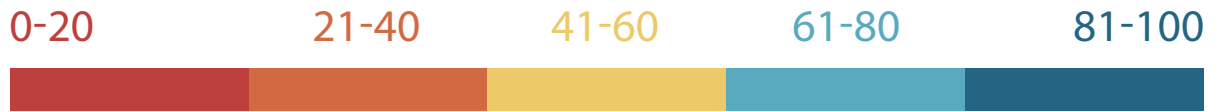
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THEME TOPIC

INDICATOR

THEME	TOPIC	INDICATOR	DATA BY RACE/ETHNICITY (2021)				DATA BY RACE/ETHNICITY (2022)			
			ASIAN	BLACK	HISPANIC	WHITE	ASIAN	BLACK	HISPANIC	WHITE
INFRASTRUCTURE	Transportation	Access to a Vehicle	77.9%	79.2%	75.8%	81.4%	72.5%	78.2%	76.1%	82.9%
		Public Transportation Access	-	-	-	-	-	-	-	-
		Commute Time	-	-	-	-	-	-	-	-
INFRASTRUCTURE	Connectivity & Mobility	Street Quality	-	-	-	-	-	-	-	-
		Sidewalk Availability	-	-	-	-	-	-	-	-
		Traffic Fatalities	-	-	-	-	-	-	-	-
INFRASTRUCTURE	Green & Resilient Infrastructure	Drainage System Adequacy	-	-	-	-	-	-	-	-
		Green Stormwater Infrastructure	-	-	-	-	-	-	-	-
		LEED Certified Buildings	-	-	-	-	-	-	-	-
ENVIRONMENTAL & CLIMATE RISK	Pollution	EPA Penalties	-	-	-	-	-	-	-	-
		Hazard Waste Proximity	-	-	-	-	-	-	-	-
		Air Pollution	-	-	-	-	85.4	87.3	88.0	87.8
ENVIRONMENTAL & CLIMATE RISK	Disaster Risks	Housing in FEMA Floodplain	-	-	-	-	-	-	-	-
		Highly Impacted Households	-	-	-	-	-	-	-	-
		Flood Insurance Policies	-	-	-	-	-	-	-	-
ENVIRONMENTAL & CLIMATE RISK	Temperature Resilience	Temperature-Related EMS Transports	-	22.5	6.9	13.3	-	12.2	3.5	7.5
		Heat Islands	-	-	-	-	-	-	-	-
		Tree Canopy	-	-	-	-	-	-	-	-
ACCESS & INCLUSION	Representation	City Leadership Diversity	0.69	1.00	0.21	0.99	0.87	1.14	0.28	0.98
		Diversity in Police Force	2.64	2.11	1.48	4.09	2.48	2.11	1.56	3.95
		Diversity in HFD/EMS	0.49	1.11	0.96	3.70	0.44	1.13	1.02	3.56
ACCESS & INCLUSION	Community Amenities	Residents Without Internet Access	8.2%	16.5%	19.8%	6.9%	4.4%	15.2%	17.6%	5.6%
		Access to Parks & Green Space	-	-	-	-	-	-	-	-
		Art Grants	-	-	-	-	-	-	-	-
ACCESS & INCLUSION	Quality of Life Assets	Early Childhood Learning	25.8%	26.6%	18.5%	27.8%	34.7%	23.0%	21.1%	31.5%
		Residents Without Bank Accounts	-	-	19.5%	2.0%	-	-	22.4	1.2%
		Access to Healthy Food Providers	-	-	-	-	-	-	-	-

EQUITY SCORE



Largest disparity possible between racial and ethnic groups in Houston.

No disparity between racial and ethnic groups in Houston.

EQUITY SCORE

47.8

EQUITY SCORE

77.8

EQUITY SCORE

34.6

ACCESS & INCLUSION	
Representation	City Leadership Diversity Diversity in Police Force Diversity in HFD/EMS
Community Amenities	Residents Without Internet Access Access to Parks & Green Space Art Grants
Quality of Life Assets	Early Childhood Learning Residents Without Bank Accounts Access to Healthy Food Providers
INFRASTRUCTURE	
Transportation	Access to a Vehicle Public Transportation Access Commute Time
Connectivity & Mobility	Street Quality Sidewalk Availability Traffic Fatalities
Green & Resilient Infrastructure	Drainage System Adequacy Green Stormwater Infrastructure LEED Certified Buildings
ECONOMIC OPPORTUNITY	
Employment	Employment in High-Paying Sectors Business Ownership Unemployment Rate
Educational Attainment	On-Time High School Graduation Youth Not in School or Working College Degrees
Income & Poverty	Median Household Income Adult Poverty Child Poverty

EQUITY SCORE

27.3

EQUITY SCORE

56.1

EQUITY SCORE

24.0

EQUITY SCORE

41.3

HEALTH	
Access to Healthcare	Uninsured Adults Uninsured Children Preventable Hospitalizations
Child & Maternal Health	Infant Mortality Maternal Mortality Low Birth Weight
Health Outcomes	Mental Health Related EMS Transports Cancer Mortality Premature Death
ENVIRONMENTAL & CLIMATE RISK	
Pollution	EPA Penalties Hazard Waste Proximity Air Pollution
Disaster Risks	Housing in FEMA Floodplain Highly Impacted Households Flood Insurance Policies
Temperature Resilience	Temperature-Related EMS Transports Heat Islands Tree Canopy
PUBLIC SAFETY	
Victimization	Domestic Violence Calls for Service Robbery Victimization Rates Homicide Victimization Rates
Arrests	Adult Misdemeanor Arrest Adult Felony Arrests Juvenile Misdemeanor Arrests
Law Enforcement	Traffic Stops that Lead to Searches Officer Use of Force Police Response Time
HOUSING	
Home Ownership & Affordability	Homeownership Home Loan Denial Housing Cost Burden
Housing Quality	Overcrowded Housing Vacant Housing Units Low Value Stock
Housing Risks	Eviction Filings Residential Fire Incidents Fire Response Time

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Partners

Houston Complete Communities

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Houston Office of Resilience & Sustainability

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ONE
COMPLETE
HOUSTON:

UNDERSTANDING OUR
EQUITY OPPORTUNITIES AND
CHALLENGES KEY FINDINGS
REPORT