Declines in the Black and White Populations in the Context of the Growth in the Multiracial Population

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Key Takeaways

- The 2020 Census showed that while the Black population decreased by 84,400 between 2010 and 2020 and the White population fell by 3,000, there was substantial growth among other racial/Hispanic groups.
- The declines in the Black and White populations need to be viewed in the context of revisions to the 2020 Census questionnaire and real demographic shifts, which together resulted in a doubling of the multiracial population.
- A segment of the increase in the multiracial population was an artifact of a change in the census questionnaire, which especially affected Black and White respondents who may have been counted as a single race in the previous decade but were identified as multiracial in 2020.
- Most of the increase in the overall multiracial population, however, reflected a real demographic shift in the number of respondents identifying as being of two or more races. The multiracial population identifying as Black and White more than doubled in size, from 22,900 in 2010 to 46,800 in 2020, and the multiracial population identifying as White and Asian increased nearly two-fold to 76,900.
- When the increase in the overall multiracial population—Black in combination with other races and White in combination with other races—is considered, the 84,400 decline in the Black population is attenuated to a decrease of just 9,300, while a decrease of 3,000 in the White single-race population reverses direction to an increase of over 100,000.

Introduction

The decline of the Black and White populations[1] in New York City attracted media attention[2] following the release of the 2020 Census, with some reports suggesting that these groups were increasingly deciding to settle outside of NYC due to myriad push and pull factors. The city's 5 percent decline in the Black population and the 0.05 percent decline in the White population between 2010 and 2020 stand in stark contrast to the large increase in other ethno-racial groups in the city. The Asian and Hispanic populations, for example, surged during this period aided by international migration from Asia and Latin America. While demographic forces, including declining fertility within the Black population and large outflows from the city, may be partly responsible for the drop in the Black and White populations, these declines also need to be viewed in the context of revisions to the 2020 Census questionnaire and alongside real demographic shifts in self-identification, which taken together have resulted in a doubling of the multiracial population.

For the first time in 2020, Black and White respondents were allowed to identify both their race and origin, which resulted in unanticipated and, perhaps, unintended ways for respondents to be classified as multiracial when their race and origin were coded into separate categories. Thus, some Black or White respondents who may have been counted as a single race in the previous decade were identified as multiracial in 2020. While these changes to collection and processing of race responses were partly responsible for the multiracial population increase, a real and substantial demographic shift also occurred last decade, which was accurately reflected in the growth in the multiracial population.

This monograph contextualizes declines in the city's Black and White populations in light of both the revisions to the 2020 questionnaire and changes in how New Yorkers self-identify. The latter is not about understanding multiracial identity, but to showcase how growth in multiple-race responses, which along with questionnaire changes, have contributed to a decline in Black and White single-race counts. For broader context, this monograph first starts with how Hispanic groups and single-race groups are defined in the decennial census, before moving on to a discussion of how multiracial groups are classified. It then examines the impact of the increase in the multiracial population on the counts of the single-race Black and White populations.

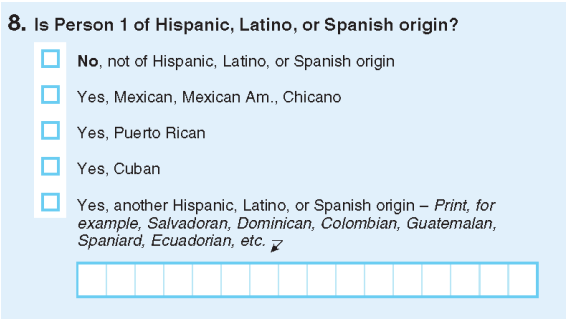
Defining and Classifying Race and Hispanic Origin in the Census

The U.S. Office of Management and Budget (OMB) sets the standards for the collection and tabulation of race and ethnicity responses on the decennial census, which are garnered from a two-question format

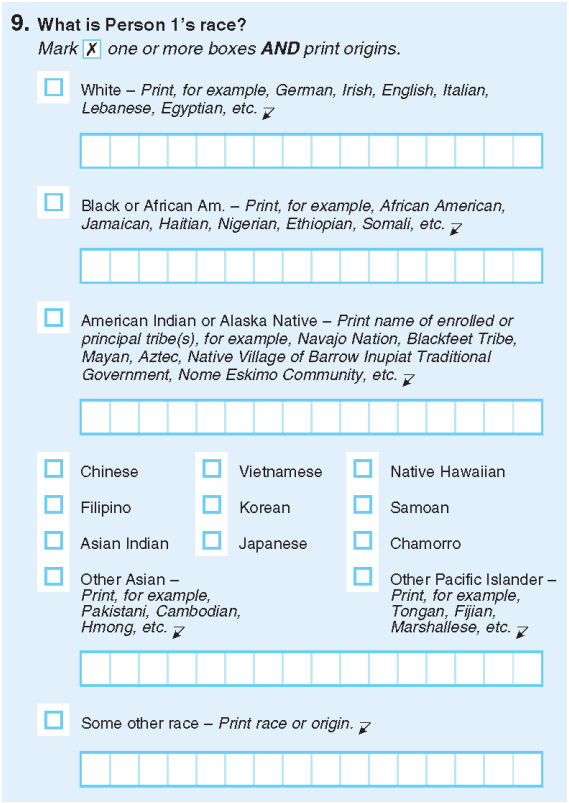
[1]The major ethno-racial groups discussed in this monograph are mutually exclusive and include the categories "White non-Hispanic, alone," "Black or African American non-Hispanic, alone," "Asian non-Hispanic, alone," "Some Other race non-Hispanic, alone," and "Two or More races non-Hispanic." For the sake of succinctness, these groups are referred to as "White," "Black," "Asian," "Some other race/SOR," and "two or more/multiracial."

[2]For example, Blow, C. M. (2021, Aug 22) Opinion | Chocolate Chip Cities. *The New York Times.*; Gonen, Y.; Michel, C., & Welch, W. (2021, Aug 12). New York City's Population Booms—But Not for Everyone, Everywhere. *The City.*; and Sundaram, A. (2023, Feb 3). The African American exodus from New York City. *Gothamist.*

(Figure 1).[3], [4] This section offers an overview of how OMB's definitions of Hispanic origin and race were captured on the 2020 Census questionnaire.



(a) Hispanic Origin



(b) Race

Figure 1: Race and Hispanic Origin Questions on the 2020 Census Questionnaire

Hispanic Origin

OMB defines Hispanic/Latino origin as anyone with "a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race" (Figure 2). This definition encompasses people who are from a Spanish-speaking country of Central or South America, and the Caribbean (such as Mexico, Guatemala, El Salvador, Colombia, Ecuador, Puerto Rico, the Dominican Republic, or Cuba), as well as Spain.[5]

[3] Office of Management and Budget. Race and ethnic standards for federal statistics and administrative reporting. Statistical Policy Directive 15. 1977.

[4] Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. 1997.

[5] U.S. Census Bureau. (2021). 2020 Census National Redistricting Data (Public Law 94-171) Technical Documentation

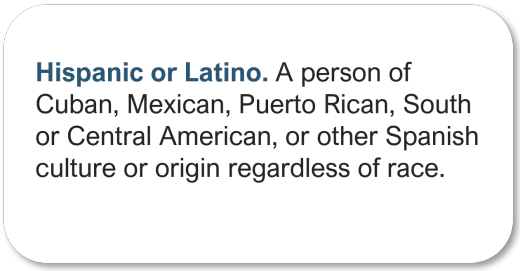


Figure 2: Definition of Hispanic Origin

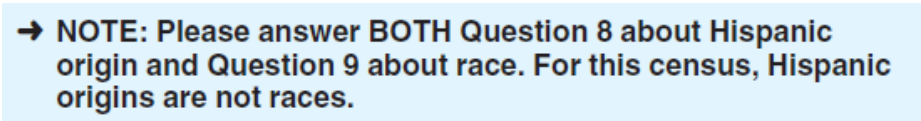
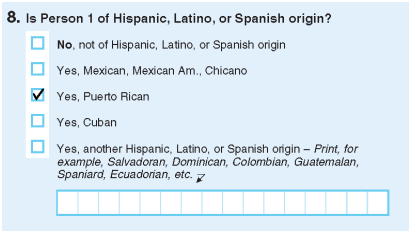
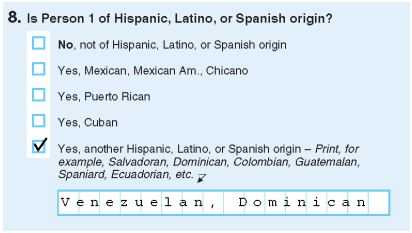


Figure 3: Census Questionnaire Instructional Note

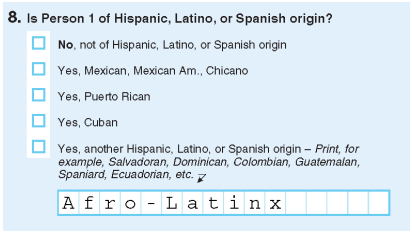
To inform respondents that Hispanic ethnicity and race are separate concepts on the census, an instructional note prefaces the ethnicity and race questions (Figure 3). Hispanic ethnicity was determined using question 8 (Figure 4). Respondents were tabulated as Hispanic if they marked a check box next to a "yes" category (Figure 4a) or wrote in a valid response in the write-in area of the "Yes, another Hispanic, Latino, or Spanish origin" category (Figure 4b, Figure 4c).



(a) Acceptable Selection



(b) Acceptable Write-in Using Examples



(c) Acceptable Write-in

Figure 4: Mutually Exclusive Hispanic Ethnicity

A mutually exclusive race/Hispanic origin category can be constructed using a combination of question 8 on Hispanic origin and question 9 on race (Figure 1). In this schema, respondents who responded "yes" to any category on question 8 were categorized as Hispanic, irrespective of what they answered on the race question that followed. Those who checked the response, "No, not of Hispanic, Latino, or Spanish origin" were considered non-Hispanic. In this document only race responses of non-Hispanic respondents are examined.

Example groups represent the largest Hispanic groups in the U.S. (Figure 4b). Acceptable write-in responses are not limited to the examples listed in the questions (Figure 4c).

How OMB Defines Race

OMB delineates race groups by geographic origin. More specifically, race groups have "origins in any of the original peoples" of specified regions.[6] The five race groups delineated include Native Hawaiian or Other Pacific Islander (having origins in the Pacific Islands), American Indian or Alaska Native (the continents of North and South America), Asian (Asia), Black (Black racial groups of Africa), and White (Europe, Middle East, and North Africa) (Figure 5). The Census Bureau further notes that these standards "generally reflect a social definition of race recognized in this country and not an attempt to define race biologically, anthropologically, or genetically." [7] While OMB considers these race categories to be "comprehensive in coverage," it permits a sixth Some Other Race (SOR) category for respondents who do not identify with the five race groups (Figure 6). Prior to the 2010 Census, however, the burgeoning SOR category was at risk of being eliminated by the Census Bureau. Given concerns that forcing respondents to identify racially with OMB's categories would undermine the quality of the data,[8] the Census Bureau retained the SOR category on the census questionnaire.[9] Respondents can also identify with multiple groups (Figure 7).

Definitions of 2020 Census Race Groups

The 2020 race question instructed all respondents to "Mark one or more boxes AND print origins (Figure 1b). Respondents were given the option to select White, Black, American Indian or Alaska Native, detailed Asian subgroups, detailed Native Hawaiian-Pacific Islander subgroup, and SOR. New in 2020, Black and White respondents could for the first time report their origins alongside their race. It is important to keep in mind, however, that OMB's definitions specify which subgroups conform to each racial category. The significance of category definitions is explored when we discuss how respondents are classified as multiracial in Section .

To guide respondents, the Census Bureau gives example groups that fall under each category. But, like the Hispanic ethnicity question, the examples given are not exhaustive. Section presents different ways responses are tabulated to three of OMB's major race groups.

[6] Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. 1997

[7] U.S. Census Bureau. (2021). 2020 Census National Redistricting Data (Public Law 94-171) Technical Documentation

[8] Swarns, R.L. (2004, Nov 23). National Briefing | Washington: 'Other Race' Stays on The Books. *The New York Times.*

[9] PL109-108

White. A person having origins in any of the original peoples of Europe, the Middle East, or North Africa. It includes people who indicate their race as "White" or report responses such as German, Irish, English, Italian, Lebanese, and Egyptian. The category also includes groups such as Polish, French, Iranian, Slavic, Cajun, Chaldean, etc.

Black or African American. A person having origins in any of the Black racial groups of Africa. It includes people who indicate their race as "Black or African American" or report responses such as African American, Jamaican, Haitian, Nigerian, Ethiopian, or Somali. The category also includes groups such as Ghanaian, South African, Barbadian, Kenyan, Liberian, Bahamian, etc.

American Indian or Alaska Native. A person having origins in any of the original peoples of North and South America (including Central America) and who maintains tribal affiliation or community attachment. This category includes people who indicate their race as "American Indian or Alaska Native," or report responses such as Navajo Nation, Blackfeet Tribe, Mayan, Aztec, Native Village of Barrow Inupiat Traditional Government, or Nome Eskimo Community.

Asian. A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, India, China, the Philippine Islands, Japan, Korea, or Vietnam. It includes people who indicate their race as Asian Indian, Chinese, Filipino, Korean, Japanese, Vietnamese, and Other Asian, or provide other detailed Asian responses such as Pakistani, Cambodian, Hmong, Thai, Bengali, Mien, etc.

Native Hawaiian or Other Pacific Islander. A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. It includes people who indicate their race as Native Hawaiian, Chamorro, Samoan, and Other Pacific Islander or provide other detailed Other Pacific Islander responses such as Palauan, Tahitian, Chuukese, Pohnpeian, Saipanese, Yapese, etc.

Figure 5: OMB's Five Race Groups

Some Other Race. Includes all other responses not included in the above categories described above. Respondents reporting entries such as multiracial, mixed, interracial, or a Hispanic, Latino, or Spanish group (for example, Mexican, Puerto Rican, Cuban, or Spanish) in response to the race question are included in this category.

Figure 6: Some Other Race

Two or More Races. People may choose to provide two or more races either by checking two or more race response checkboxes, by providing multiple responses, or by some combination of checkboxes and other responses.

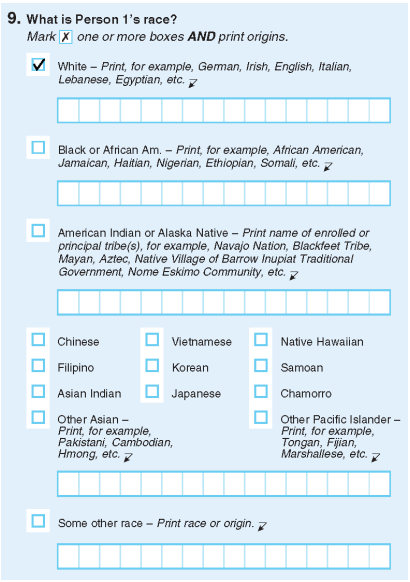
Figure 7: Two or More Races

Coding Scenarios

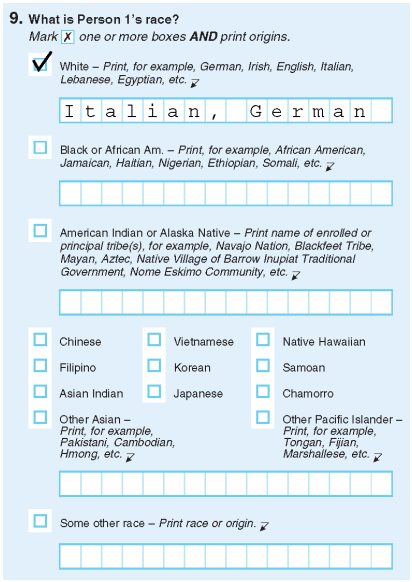
White

Black

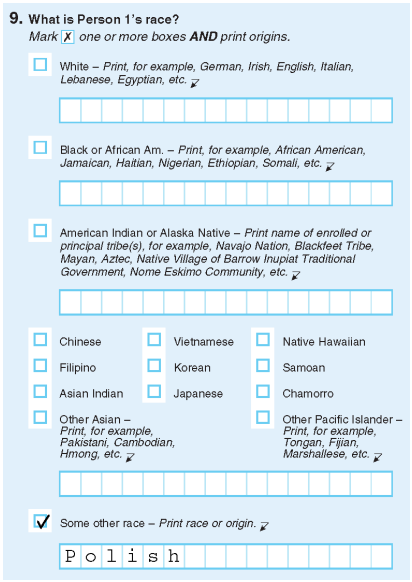
Asian



(a) Acceptable Selection



(b) Acceptable Write-in



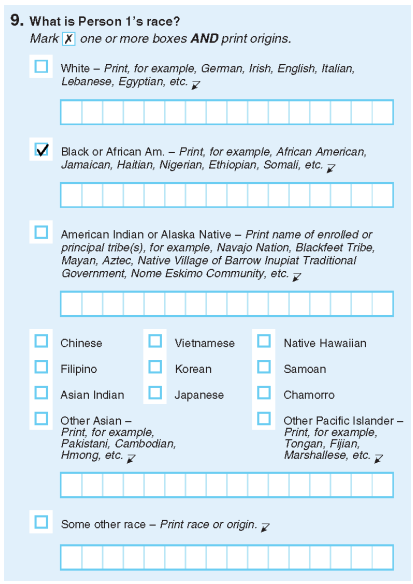
(c) Reclassified Write-in

Figure 8: White

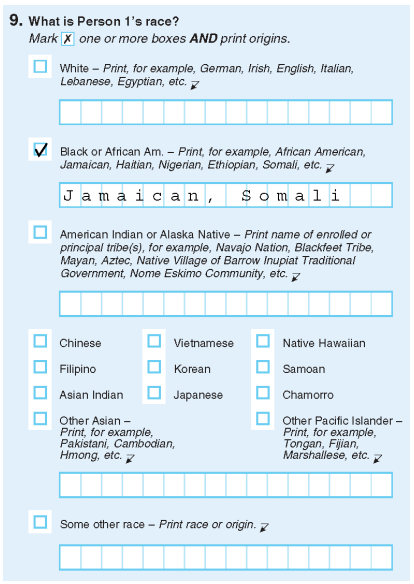
The Census Bureau tabulates race responses using a combination of marked checkboxes and write-in responses. Marked boxes without write-in responses are autocoded to that category. For instance, respondents who marked White, Black, or Asian checkboxes without writing in an origin were tabulated as those groups.

Click on each tab to view scenarios by race.

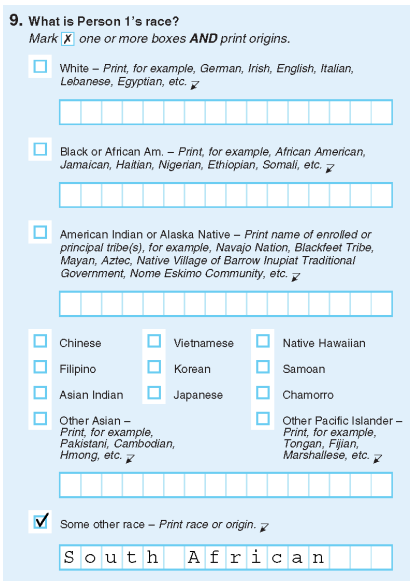
Write-in responses are independently coded and then assigned to a race category regardless of where they were written in the race question. This means that to comply with OMB's racial guidelines, some responses in the Census Bureau's final tabulation may differ from how respondents self-identified on the questionnaire. For example, when origins do not meet the definition of a category—as in the case of Polish, South African, and Taiwanese written under the SOR category in the examples above—they are reclassified to their proper category. Regardless of how a write-in response is classified or reclassified, checkboxes are always honored, meaning that reclassified write-in responses can lead to possibly unintended identification as two or more races (Section).



(a) Acceptable Selection

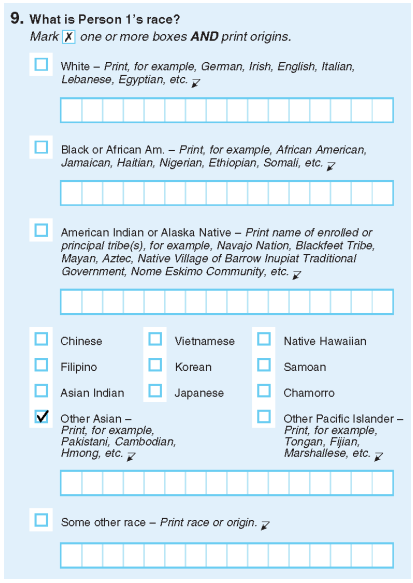


(b) Acceptable Write-in

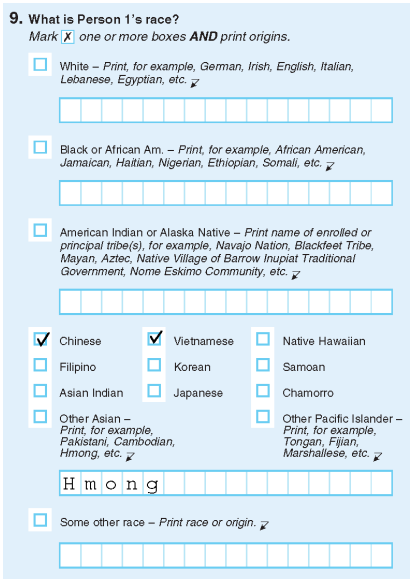


(c) Reclassified Write-in

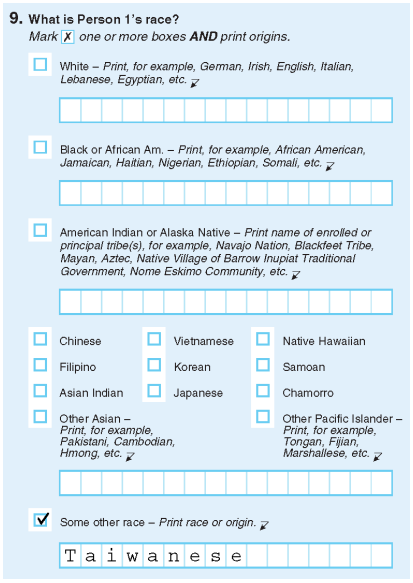
Figure 9: Black



(a) Acceptable Selection



(b) Acceptable Write-in

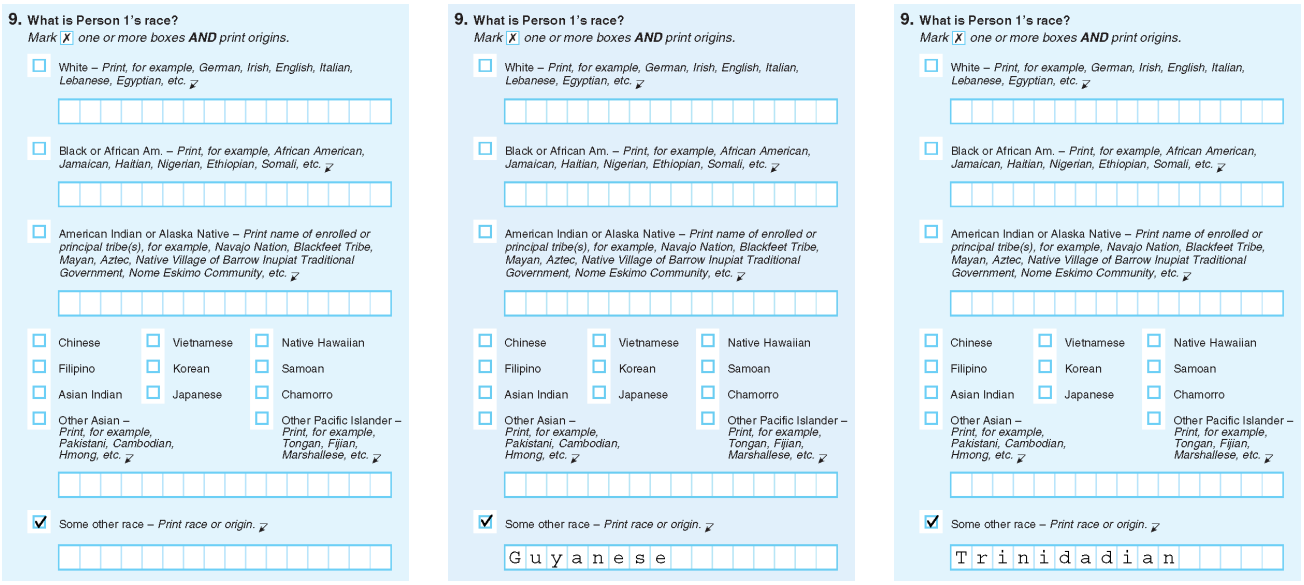


(c) Reclassified Write-in

Figure 10: Asian

Some Other Race

Respondents are classified as SOR alone if they check the SOR category without providing a write-in response (Figure 11a) or marked the box and entered any of the groups found in Table 1. Intended as a residual category, SOR captures a diverse set of identities. It includes nationalities without a dominant racial group (e.g., Guyanese or Brazilian) and ambiguous terms that can apply to multiple groups (e.g., Indian, "mixed," or multiracial). The 2020 Census National Redistricting Data Technical Documentation offers examples of detailed response that are classified as SOR. The bolded groups in Table 1 are those with a presence in New York City. Notably, Guyanese and Brazilian, two large non-Hispanic groups in New York City, are classified as SOR because their origins do not suggest a definitive racial identity. Figure 11 details acceptable and reclassified responses under the SOR category. Guyanese is an acceptable write-in response under the SOR category because OMB does not defined it racially (Figure 11b). Sometimes when respondents do not see their group listed under one of the major racial categories they write it in the SOR category.[10] If OMB has already defined these groups racially the Census Bureau reclassifies the response as in the case of Trinidadian (Figure 11c), which is defined as a Black racial group.[11]



(a) Acceptable Selection (b) Acceptable Write-in (c) Reclassified to the Black Category

Figure 11: Some Other Race

[10] Compton, E., Bentley, M., Ennis, S., & Rastogi, S. (2012). *2010 census race and Hispanic origin alternative questionnaire experiment*. Decennial Statistical Studies Division; Population Division, U.S. Census Bureau.

[11] U.S. Census Bureau. (2021). 2020 Census National Redistricting Data (Public Law 94-171) Technical Documentation

Table 1: Write-in Responses Categorized as Some Other Race

Aruban	Cabo Verdean
Belizean	Aborigines
Bermudan	Cayman Islander
Brazilian	Comorian
Caribbean	Mauritanian
Creole	Aryan
Guyanese	Indian
Guyanese Indian	Indigenous
North American	Turkic
Surinamese	Ameriasian
Hispanic origins such as Mexican, Cuban, Puerto Rican	Eurasian
Other Caribbean or South American Responses, n.e.c.	Multiracial/Multiethnic/Biracial/Interacial/Multicultural

Two or More Races

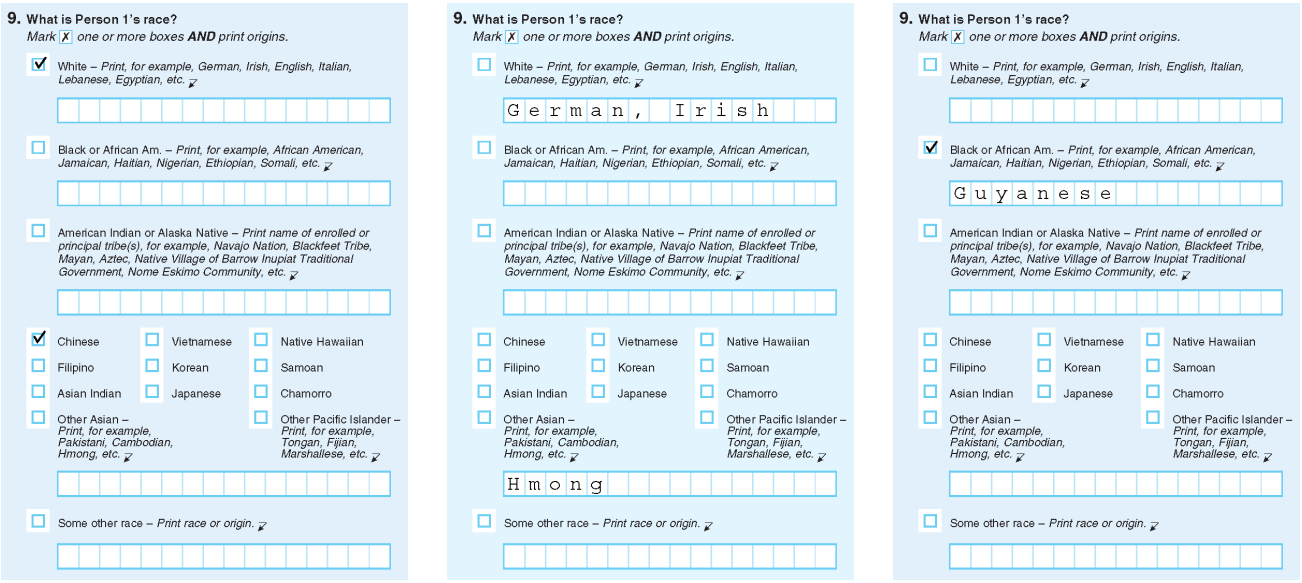
Among the 1997 revisions to the standards for gathering and reporting data on race and ethnicity was a directive to allow for the reporting of more than one race.[12] Following OMB's guidelines, respondents were given the option to check off more than one race on a census questionnaire for the first time in 2000, and those who did were then tabulated into a "two or more" races category. In the 2020 Census "two or more races" referred to the reporting of more than one of the six major race categories with 57 possible combinations (Figure 7). Respondents could check off two or more responses across categories (Figure 12a) or write in an origin not listed as an example group (Figure 12b). In these two examples, both responses would be categorized as White in combination with Asian. A respondent can enter multiple subgroups (e.g., German, Irish), but they are each tallied once for their respective group (Figure 12b).

Changes in the 2020 Census race questionnaire resulted in unanticipated and, perhaps, unintended ways for respondents to be classified as two or more races. This is due to the stipulation that write-in response on origin must match the racial category's definition. When the Census Bureau perceives a dissonance between the racial category the respondent checked and the origin entered in the category's write-in area, it reassigns mismatched write-in responses to the category whose definition it best fits.[13] For example, respondents who identify as Black racially with origins in Guyana are categorized as Black in combination with SOR because Guyanese is not a Black racial group according to OMB (Figure 6). Likewise, Brazilian written under the White category is tabulated as White and SOR because, like the Guyanese, Brazilian does not indicate a definitive race group (see Section).

[12] Office of Management and Budget. Revisions to the standards for the classification of federal data on race and ethnicity. 1997.

[13] 2020 Census National Redistricting Data Technical Documentation

Questionnaire changes primarily affected the city's Black and White respondents, some of whom may have been counted as a single race in the previous decade but were identified as multiracial in 2020 due to writing in an origin that does not map into OMB's racial schema. While the census is based on self-identification, the limitations set by OMB's definitions of race and Hispanic origin create a constant negotiation between responses and their coding and tabulation into reliable and usable data. As a result, respondents could be assigned to categories in the final tabulation that they did not select.



(a) Checked Two Different Categories

(b) Write-in Responses Fall Under Two Different Categories

(c) Write-in Ethnicity Reclassified as a Different Race

Figure 12: Two or More Races

In Figure 12c respondents who wrote Guyanese under the Black category were classified as two or more races—Black and SOR.

Contextualizing Change

Impact of Increase in Multiple-race Responses on Single-race Counts

New York City's population grew by 8 percent between 2010 and 2020 (Table 2). Almost all groups increased during this period. Among the four largest groups, the Asian population grew the fastest (34%), the White population fell modestly, and the Black population declined by 5 percent. In contrast, the SOR alone[14] and two or more races populations more than doubled.

[14]Some Other Race subgroup data from the 2020 Census are currently unavailable.

Table 2: New York City's Population by Race and Hispanic Ethnicity, 2010-2020

	2010		2020		Change	
	Number	Percent	Number	Percent	Number	Percent
New York City, Total	8,175,133	100.0	8,804,190	100.0	629,057	7.7
Hispanic	2,336,076	28.6	2,490,350	28.3	154,274	6.6
White NH	2,722,904	33.3	2,719,856	30.9	−3,048	−0.1
Black NH	1,861,295	22.8	1,776,891	20.2	−84,404	−4.5
Asian NH	1,028,119	12.6	1,373,502	15.6	345,383	33.6
Some other race NH	57,841	0.7	121,184	1.4	63,343	109.5
American Indian & Alaska Native NH	17,427	0.2	19,146	0.2	1,719	9.9
Native Hawaiian & Other Pacific Islander NH	2,795	0.0	3,302	0.0	507	18.1
Two or more races	148,676	1.8	299,959	3.4	151,283	101.8

The multiracial population identifying as Black in combination with one or more other races saw more than a doubling of its size, from 70,600 in 2010 to 145,700 in 2020 (Figure 13), Nearly 60 percent of the growth in this population was a result of those who identified as Black and SOR, which grew five-fold, from 10,300 to 55,200 during this period. The multiracial population identifying as White in combination with one or more other races also more than doubled, from 81,500 to 188,000, with the increase in the White and SOR population accounting for just over one-quarter of this increase. It seems that changes to the questionnaire disproportionately affected the Black population and, to a lesser extent, the White population. Taken together these results suggest that some Black, as well as White respondents, who may have been counted as a single race in the previous decade had their origins treated as a separate race, rather than an inclusive component of their identity, and were identified as multiracial.

While the above increases in the multiracial population may have been misleading, other changes reflected a real demographic shift in the number of respondents identifying as being of two or more races. The multiracial population that was Black and White more than doubled in size, from 22,900 in 2010 to 46,800 in 2020, and the multiracial population identifying as White and Asian also saw a near two-fold increase, to 76,900.

In order to show the impact of the large increase in the multiracial population on single race groups, we assign multiple race responses back to their constituent single-race groups, creating a combined

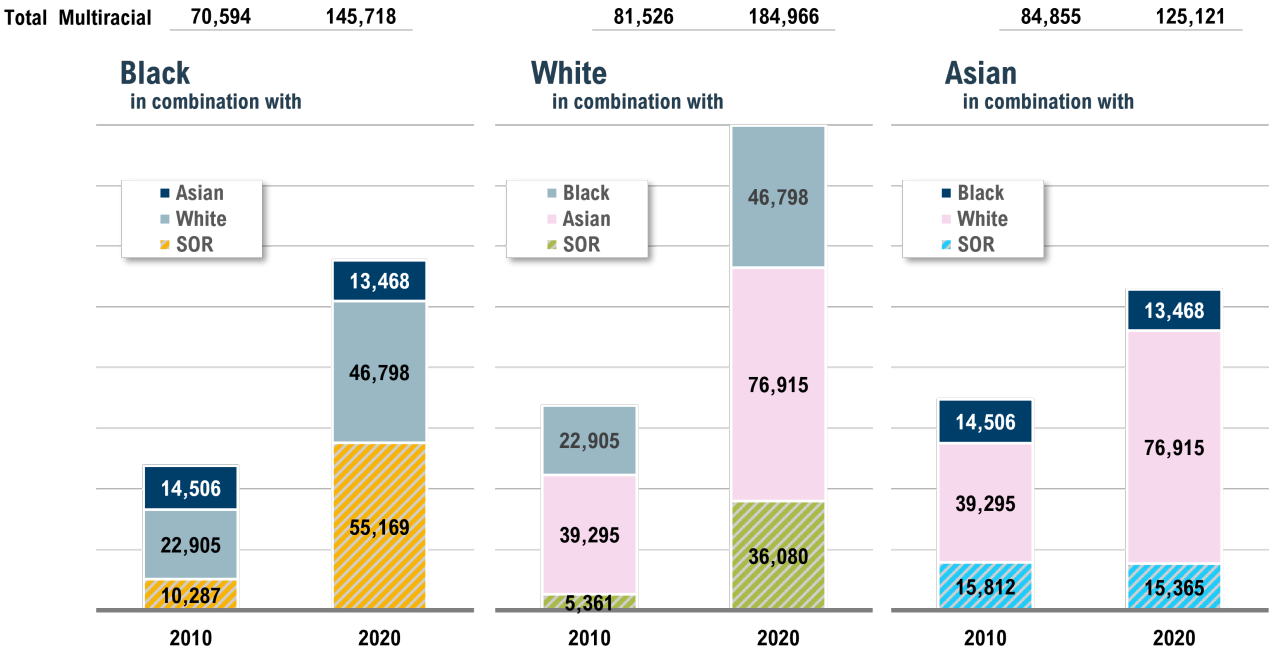


Figure 13: New York City's Multiracial Combinations, 2010-2020

"all-inclusive total" for race groups.[15] So, a multiracial respondent who identified as being both Black and White, was counted as being Black alone and in combination, as well as White alone and in combination. This method of allocating responses to all categories that applied was preferred over a fractional reapportionment that treats identity as a sum of parts. An "all-inclusive" total also reflects the simultaneity of identity rather parsing it into mutually exclusive categories.

Figure 14 shows the impact of an all-inclusive total on the overall count of each race group: The decline of 3,000 in the White single-race population contrasts with an increase of 100,400 in the White alone and in combination population; the 84,400 decline in the Black single-race population is attenuated to a decline of just 9,300; and the Asian alone population increase of 345,400 is augmented to 385,600.

Increases in the multiracial population identifying as White and Asian are real—questionnaire changes had a minimal impact on the overall growth of this multiracial population. However, the questionnaire change had a big impact on the increase in the multiracial population identifying as Black in combination with SOR.

[15]The "all inclusive" totals for single non-Hispanic race groups are more than the total population because each response can be included in more than one race category.

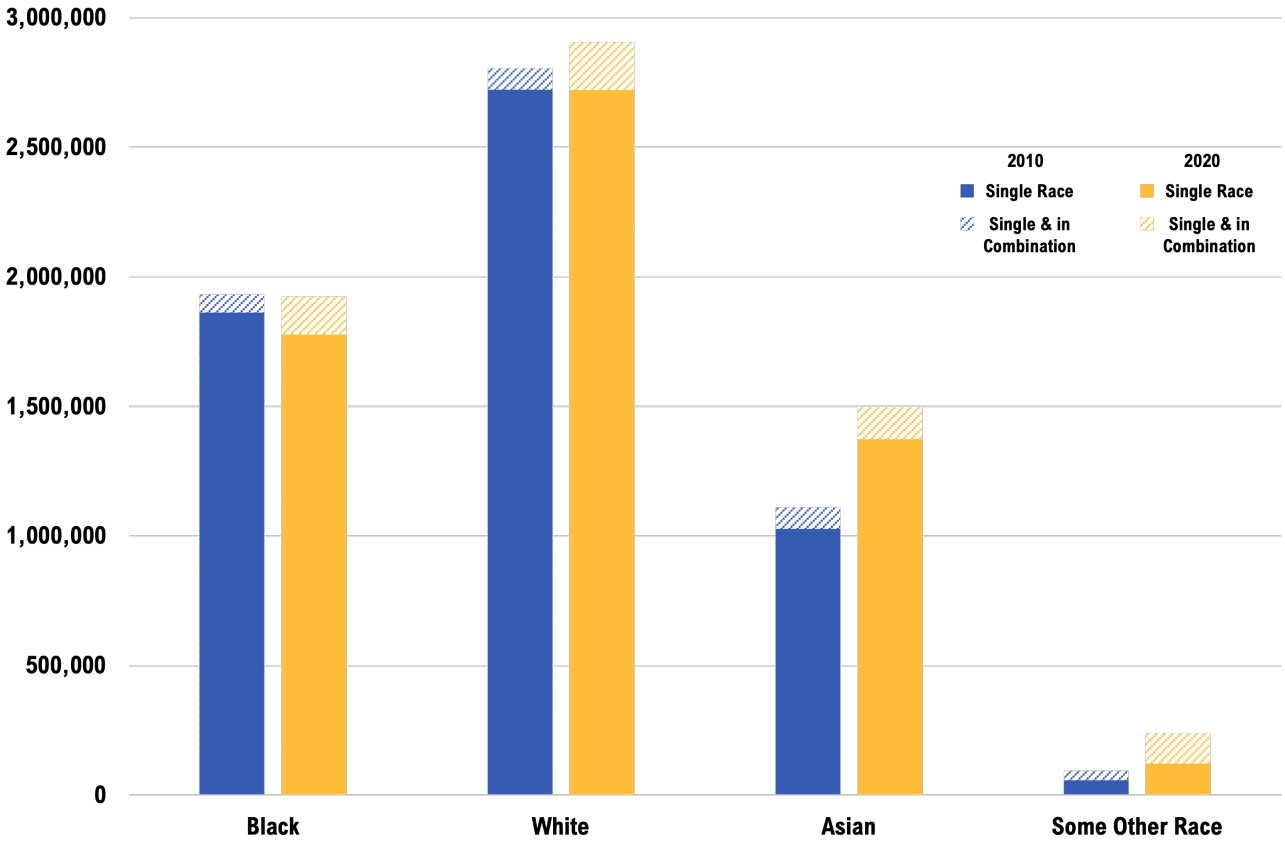


Figure 14: Non-Hispanic Race Alone and In Combination, 2010-2020

Summary

The declines in New York City's Black and White populations in the last decade need to be viewed in the context of its multiracial population, which doubled. Some of the increase in the multiracial population was due to a change in the census questionnaire, which especially affected Black as well as White respondents, who may have been counted as a single race based on the 2010 questionnaire, but were identified as multiracial by the updated 2020 format. Although this component likely comprised a small segment of the total multiracial population, it highlights the methodological challenges that emerge when respondents' ethnic origins do not align with OMB's definition of their race. But the increase in the multiracial population also reflected a real demographic shift in the number of respondents identifying as being of two or more races. The multiracial population identifying as Black and White more than doubled in size, from 22,900 in 2010 to 46,800 in 2020, and the multiracial population identifying as White and Asian saw a near two-fold increase, to 76,900. Furthermore, viewing the population through an "all-inclusive" race lens rather than a mutually exclusive race lens adjusts our understanding of population changes between 2010 and 2020. When the increase in the multiracial population is taken into account, the 84,400 decline in the Black population is attenuated to a decline of just 9,300, while the decline of 3,000 in the White population turns into an increase of over 100,000.

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