

Exhibit A

SUPREME COURT OF THE STATE OF NEW YORK
COUNTY OF NEW YORK

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Michael Williams, José Ramírez-Garofalo, Aixa Torres, and
Melissa Carty,

Petitioners,

Index No. 164002/2025

-against-

**Corrected Report of William
S. Cooper**

Board of Elections of the State of New York; Kristen Zebrowski Stavisky, in her official capacity as Co-Executive Director of the Board of Elections of the State of New York; Raymond J. Riley, III, in his official capacity as Co-Executive Director of the Board of Elections of the State of New York; Peter S. Kosinski, in his official capacity as Co-Chair and Commissioner of the Board of Elections of the State of New York; Henry T. Berger, in his official capacity as Co-Chair and Commissioner of the Board of Elections of the State of New York; Anthony J. Casale, in his official capacity as Commissioner of the Board of Elections of the State of New York; Essma Bagnuola, in her official capacity as Commissioner of the Board of Elections of the State of New York; Kathy Hochul, in her official capacity as Governor of New York; Andrea Stewart-Cousins, in her official capacity as Senate Majority Leader and President *Pro Tempore* of the New York State Senate; Carl E. Heastie, in his official capacity as Speaker of the New York State Assembly; and Letitia James, in her official capacity as Attorney General of New York,

Respondents,

-and-

Representative Nicole Malliotakis, Edward L. Lai, Joel Medina, Solomon B. Reeves, Angela Sisto, and Faith Togba

Intervenor-Respondents,

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I. INTRODUCTION

1. My name is William S. Cooper. I have a B.A. in Economics from Davidson College. As a private consultant, I currently serve as a demographic and redistricting expert in the above-captioned case. I am being compensated at a rate of \$170 per hour. No part of my compensation is dependent upon the conclusions that I reach or the opinions that I offer.

A. Redistricting Experience

2. I have testified at trial as an expert witness on redistricting and demographics in federal courts in about 60 voting rights cases since the late 1980s.

3. Eight of the 60 lawsuits requiring my trial testimony resulted in changes to statewide legislative boundaries.¹

4. Approximately 27 of the cases in which I provided trial testimony led to changes in local election district plans. At least two dozen other local-level Section 2 redistricting lawsuits in 14 states² where I served as a consultant for the plaintiffs resolved favorably before trial.

5. I have testified in Section 2 redistricting lawsuits in federal court in New York on four occasions. In 2003, I testified in federal court in Albany County, NY (*Arbor Hill Concerned Citizens v. County of Albany*, 289 F. Supp. 2d 269 (N.D.N.Y. 2003)). In 2012 and again in 2015, I testified in *Pope v. Albany County*.³ In 2020, I testified in federal court in Westchester County

¹ *Rural West Tennessee African-American Affairs Council, Inc. v. McWherter*, No. 92-cv-2407 (W.D. Tenn.); *Old Person v. Brown*, No. 96-cv-0004 (D. Mont.); *Bone Shirt v. Hazeltine*, No. 01-cv-3032 (D.S.D.); *Alabama Legislative Black Caucus v. Alabama*, No. 12-cv-691 (M.D. Ala.); *Thomas v. Reeves*, No. 18-cv-441 (S.D. Miss.); *Caster v. Merrill*, No. 21-1356-AMM (N.D. Ala.); *Pendergrass v. Raffensperger*, No. 21-05337-SCJ (N.D. Ga.); and *Alpha Phi Alpha Fraternity v. Raffensperger*, No. 21-05339-SCJ (N.D. Ga.). In *Bone Shirt v. Hazeltine*, the court adopted the remedial plan I developed.

² Those states are Alabama, Florida, Georgia, Louisiana, Maryland, Mississippi, Montana, North Carolina, Pennsylvania, South Carolina, South Dakota, Tennessee, Virginia, and Washington.

³ *Pope v. County of Albany*, No. 1:11-cv-00736 (N.D.N.Y. 2012); *Pope v. County of Albany*, No. 1:11-cv-0736 (N.D.N.Y. 2015).

(*NAACP Spring Valley Branch v. East Ramapo Central School District et al.*, No. 7:17-cv-08943-CS-CJM (S.D.N.Y. 2020)). The plaintiffs prevailed in the Albany County cases and in the East Ramapo School District lawsuit.

6. Since the release of the 2020 Census, I have testified at trial as an expert witness in redistricting and demographics in ten state-level cases challenging district boundaries under Section 2 of the Voting Rights Act: *Caster v. Merrill*, No. 21-cv-1356-AMM (N.D. Ala.) (*Allen v. Milligan*); *Pendergrass v. Raffensperger*, No. 21-cv-05337-SCJ (N.D. Ga.); *Alpha Phi Alpha Fraternity v. Raffensperger*, No. 21-05339-SCJ (N.D. Ga.); *Nairne v. Landry* No. 3:22-cv-00178-SDD-SDJ (M.D. La.); *Christian Ministerial Alliance v. Hutchinson*, No. 4:19-cv-402-JM (E.D. Ark.); *Robinson v. Landry*, No. 3:22-cv-00211-SDD-SDJ (M.D. La.); *Mississippi State Conference of the NAACP v. State Board of Election Commissions*, No. 3:22-cv-734-DPJ-HSO-LHS (S.D. Miss.); *White v. State Board of Election Commissions*, No. 4:22-cv-62-MPM-JMV (N.D. Miss.).

7. Since the release of the 2020 Census, election plans that I developed as a private consultant to local governments have been adopted in San Juan County, Utah, and in three Mississippi jurisdictions: Bolivar County, Washington County, and the City of Grenada.⁴ In 2025, I served as a consultant to the Holbrook United School District 3 (“HUSD 3”) in Navajo County, Arizona. A new redistricting plan (developed by the Navajo Nation with my technical input) was adopted by the HUSD 3 School Board.

8. In 2025, I testified at trial as an expert on demographics and redistricting in a racial gerrymandering lawsuit: *McClure v. Jefferson County Commission*, No. 2:23-cv-00443-MHH

⁴ Also, in 2021, I reviewed a redistricting plan I developed for the City of Wenatchee, Washington that became the first plan (in 2017) to be adopted under the Washington State Voting Rights Act. I determined that the 2017 Plan complied with one-person, one-vote requirements under the 2020 Census. There was no need to alter the pre-2020 Census boundaries, which included a Latino-majority district.

(N.D. Ala.). I also testified for a second time in *Allen v. Milligan*. The plaintiffs prevailed at the trial court level, with final judgment pending appeal.

9. Recently, I served as a consultant to a broad-based coalition of voters in Baltimore County, Maryland as the County Council transitioned from seven districts to nine for future elections.

10. Since the release of the 2020 Census, I have testified at trial as an expert witness in redistricting and demographics in two local-level cases challenging district boundaries under Section 2 of the Voting Rights Act. *NAACP v. Baltimore County*, No. 21-cv-03232-LKG (D. Md.), and *Caroline County Branch of the NAACP v. Town of Federalsburg*, No. 23-00484-SAG (D. Md.). The plaintiffs prevailed in both cases.

11. Since the release of the 2020 Census, two school districts have adopted remedial plans that I developed on behalf of the plaintiffs: the East Ramapo School District in Rockland County, NY (*supra*), and, in 2024, the Sunnyside School District in Yakima County, WA (*Empowering Latina Leadership and Action (ELLA) v. Sunnyside School District*), under the Washington Voting Rights Act.

12. For additional historical information on my testimony as an expert witness and experience preparing and assessing proposed redistricting maps, see a summary of my redistricting work attached as **Exhibit A**.

B. Sources and Methodology

13. For this report, I used the *Maptitude for Redistricting* software program to develop and analyze plans. I relied on population data and geographic shapefiles from the U.S. Census Bureau, as well as data and geographic shapefiles available from the City of New York Planning Department.

14. I reviewed a comprehensive demographic analysis published by the New York City Districting Committee in 2023. I have attached that superlative document (*How Communities of Interest Are Evolving in New York City Today*)⁵ as **Exhibit B** for reference.

15. I also reviewed the May 2022 *Report of the Special Master in Harkenrider v. Hochul*.⁶

16. I reviewed a May 2025 report by the New York City Planning Department, containing an analysis of 2010 to 2020 population trends by borough, as well as 2024 population estimates. I have attached that document (*New York City's Population Estimates and Trends*)⁷ for reference as **Exhibit C**.

17. Throughout this report, I make reference to non-Hispanic Any Part Black (“NH AP Black”) as a racial classification. “AP Black” signifies all persons who self-identified in the 2020 Census as single-race Black or of more than one race and some part Black. The “any part” terminology has been accepted by federal courts in voting cases since the early 2000s.⁸

18. The Hispanic (“Latino”) population may be of any race.

19. I report population counts for the Asian population that is non-Hispanic single-race Asian (“SR Asian”) in order to avoid double counting persons who are some part Asian and some part Black.

⁵ NYC Districting Commission, *How Communities of Interest are Evolving in New York City Today: Communities of Interest 2023 Report* (Jan. 20, 2023), <https://www.nyc.gov/assets/districting/downloads/pdf/Communities-of-Interest-Report.pdf>.

⁶ Jonathan Cervas, *Report of the Special Master, Harkenrider v. Hochul*, No. E2022-0116CV (N.Y. Sup. Ct., Steuben Cnty.) (May 20, 2022), <https://jonathancervas.com/2022/NY/CERVAS-SM-NY-2022.pdf>.

⁷ NYC Dep’t of City Planning, Population Division, *New York City’s Population Estimates and Trends* (May 2025), https://www.nyc.gov/assets/planning/downloads/pdf/our-work/reports/new-york-city-population-estimates-and-trends_may-2025.pdf.

⁸ See U.S. Department of Justice, *Guidance under Section 2 of the Voting Rights Act, 52 U.S.C. 10301, for redistricting and methods of electing government bodies* 12 (Sept. 1, 2021), <https://www.justice.gov/archives/opa/press-release/file/1429486/dl>.

C. Purpose of Report

20. The attorneys for the Petitioners in this matter asked me to examine districts in the 2024 Congressional Plan (“2024 Plan”) encompassing Staten Island, Lower Manhattan, and Brooklyn.

21. The Petitioners contend that Staten Island’s Black and Latino voters do not have an opportunity to elect a candidate of choice under the 2024 Plan. Under the 2024 Plan, Staten Island is joined with part of Brooklyn to form CD 11.

22. The Petitioners’ attorneys requested that I develop an illustrative plan that would join Staten Island with Manhattan in a reconfigured CD 11. Staten Island and Lower Manhattan are contiguous by water, with free 24-hour transportation via the Staten Island Ferry connecting one to the other.

23. In response, I have developed an illustrative map (the “Illustrative Map”) that would reconfigure CD 11 and adjacent CD 10 under the 2024 congressional plan. The Illustrative Map retains Staten Island in CD 11 and shifts the boundaries of CD 11 to include most, but not all, of the portion of Lower Manhattan currently encompassed in CD 10. The entire section of Brooklyn contained within CD 11 under the 2024 Plan moves to CD 10 under the Illustrative Map.

24. Under the Illustrative Map, the Financial District is split between CD 11 and CD 10. And, as in the 2024 Plan, Chinatown remains entirely within CD 10, keeping it together with Sunset Park—a predominantly Chinese-American neighborhood in Brooklyn. Under the Illustrative Map, Bensonhurst and Bath Beach—two other predominantly Chinese-American neighborhoods in Brooklyn—are located in CD 10 along with Chinatown and Sunset Park.

25. As I explain *infra*, the Illustrative Map is just one of many possible plan variations that could join Staten Island with Lower Manhattan—which Petitioners contend would allow CD-11’s Black and Latino voters an opportunity to elect a candidate of choice.

D. Traditional Redistricting Principles

26. In drafting the Illustrative Map, I followed traditional redistricting principles. The items below describe the traditional redistricting principles that I considered:

- a. *Meet one person, one vote requirements.* New York congressional plans must be within one person of the ideal district size. Based on the 2020 Census, the ideal size for each of the 26 congressional districts is 776,971 persons.
- b. *Maintain reasonably shaped districts that are contiguous and compact.* There are various methods to quantitatively measure compactness. I relied on three of the numerous compactness measures that have been accepted by federal and state courts: Reock (area-based) and Polsby-Popper (perimeter-based), and a composite compactness score generated by the web-based Dave's Redistricting Application.⁹ For all three measures, higher scores indicate a more compact district.
- c. *Consider communities of interest such as neighborhoods, geographic features, transportation corridors, and socioeconomic commonalities.* Communities of interest are groups of individuals who have similar legislative concerns. In drafting the Illustrative Map, I attempted to keep neighborhoods together as defined by New York City's Neighborhood Tabulation Areas ("NTAs"). NTAs are proxies for neighborhoods drawn to follow aggregations of census tract boundaries to facilitate demographic analysis by public agencies and private entities. I have attached as **Exhibit E** a set of maps prepared by the New York City Department of Planning, depicting NTAs in the five boroughs.¹⁰

27. Core retention of a previous districting plan (or "least change") is always a background consideration as well. But it should never preempt traditional redistricting principles. Otherwise, problematic or flawed redistricting plans could become locked in and self-perpetuating. Nonetheless, I considered core retention for the Illustrative Map.

⁹ Dave's Redistricting, <https://davesredistricting.org/maps#home>.

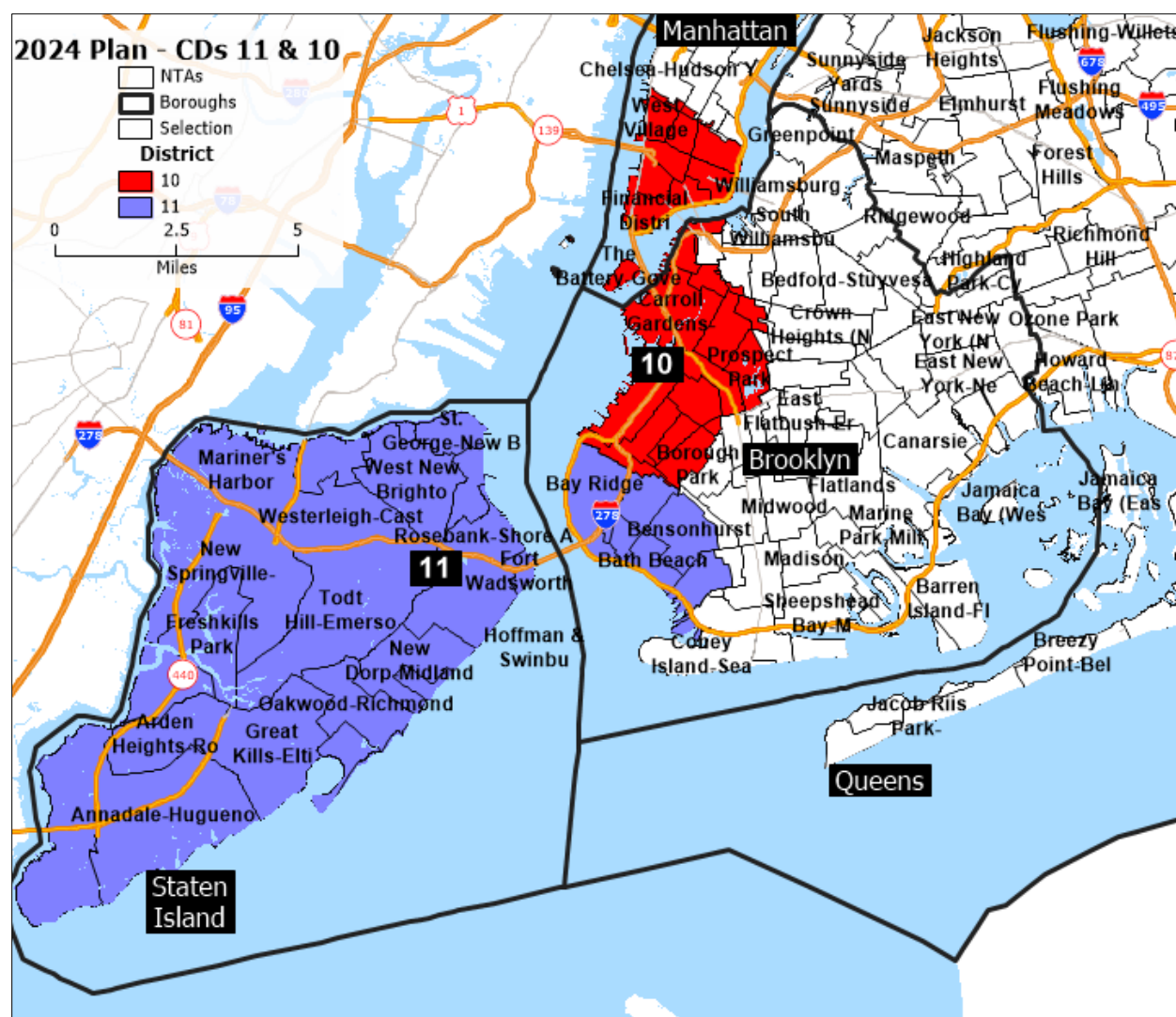
¹⁰ NYC Dep't of City Planning, New York City Neighborhood Tabulation Areas, <https://www.nyc.gov/assets/planning/download/pdf/data-maps/nyc-population/census2010/ntas.pdf>.

II. 2024 CONGRESSIONAL PLAN

A. Geographic Extent

28. **Figure 1** zooms in on Staten Island, Lower Manhattan and Brooklyn, depicting the two congressional districts at issue—CD 11 (purple) and CD 10 (red). Neighborhoods (NTAs) are depicted with thin black lines. Some of the most populated NTAs are labeled. A higher resolution map of Figure 1 is in **Exhibit F-1**.

Figure 1: 2024 Plan – Focus Area: Staten Island, Lower Manhattan, and Brooklyn



B. Demographics

29. **Figure 2** reports race and ethnicity by citizen voting age population percentage (“CVAP”) in CDs 11 and 10 under the 2024 Plan.

Figure 2: 2024 Plan CVAP By Race and Ethnicity¹¹

District	NH AP Black CVAP	Latino CVAP	NH AP Black + Latino CVAP	NH SR Asian CVAP	NH White CVAP
11	8.42%	16.30%	24.71%	12.42%	62.31%
10	6.39%	16.11%	22.50%	23.38%	53.30%

30. **Figure 3** reports total 2020 population by race and ethnicity for Staten Island, Lower Manhattan, and Brooklyn as defined by CD 11 and CD 10 under the 2024 plan.

Figure 3: 2024 Plan Population Percentages by Race and Ethnicity (All Ages)

3-Borough Focus Area	NH AP Black	Latino	NH AP Black + Latino	NH SR Asian	NH White
Staten Island: CD 11	10.45%	19.56%	30.01%	11.85%	56.07%
Brooklyn CD 11 (Part)	1.97%	16.03%	18.0%	36.22%	43.27%
Lower Manhattan: CD 10	6.3%	15.57%	21.86%	22.53%	51.62%
Brooklyn: CD 10 (Part)	6.6%	22.01%	28.61%	21.03%	46.34%

¹¹ Source: Redistricting Data Hub, New York CVAP Data Disaggregated to the 2020 Block Level (2023), <https://redistrictingdatahub.org/dataset/new-york-cvap-data-disaggregated-to-the-2020-block-level-2023/>.

C. Compactness

31. The 2024 Plan is compact. **Figure 4** reports compactness scores for CDs 10 and 11 under the 2024 Plan based on the two most widely referenced measures—Reock¹² and Polsby-Popper¹³—as reported in **Exhibit F-3**. The table also reports an overall mean average for the two districts and the DRA composite compactness score for the two districts combined.¹⁴

Figure 4: 2024 Plan -- Compactness Scores

	CD 11	CD 10	2-District Average
Reock	.52	.43	.48
Polsby-Popper	.57	.35	.46
DRA 2-District Composite			94

32. **Exhibit F-2** is an additional map of the 2024 Plan, zooming in on CDs 11 and 10 in Brooklyn, with an overlay of neighborhoods (NTAs). **Exhibit F-3** reports compactness scores generated by Maptitude for Redistricting for CD 11 and CD 10. **Exhibit F-4** identifies borough splits by population for CDs 11 and 10 in the 3-borough focus area. **Exhibit F-5** identifies NTA splits by population in Lower Manhattan and Brooklyn for CDs 11 and 10. **Exhibit F-6** identifies

¹² “The Reock test is an area-based measure that compares each district to a circle, which is considered to be the most compact shape possible. For each district, the Reock test computes the ratio of the area of the district to the area of the minimum enclosing circle for the district. The measure is always between 0 and 1, with 1 being the most compact. The Reock test computes one number for each district and the minimum, maximum, mean and standard deviation for the plan.” Maptitude For Redistricting software documentation (authored by the Caliper Corporation).

¹³ The Polsby-Popper test computes the ratio of the district area to the area of a circle with the same perimeter: $4\pi \text{Area} / (\text{Perimeter}^2)$. The measure is always between 0 and 1, with 1 being the most compact. The Polsby-Popper test computes one number for each district and the minimum, maximum, mean and standard deviation for the plan. Maptitude For Redistricting software documentation (authored by the Caliper Corporation).

¹⁴ The DRA composite compactness score normalizes the Reock and Polsby-Popper scores based on historical data and the values for ideal shapes, and then averages those individual ratings into an overall rating. Dave’s Redistricting, *Ratings: Deep Dive*, Medium (Oct. 9, 2021), <https://medium.com/dra-2020/ratings-deep-dive-c03290659b7>.

VTD¹⁵ splits by population in Lower Manhattan and Brooklyn for CDs 11 and 10. **Exhibit F-7** identifies all neighborhoods (with population details) that are assigned in whole or in part to CDs 10 and 11. There is also a final section with bottom line totals for the split portions of CDs 11 and 10 across the three boroughs in the focus area.

33. The following link shows a map of the 2024 Plan focus area depicting CDs 11 and 10 as displayed using Dave’s Redistricting Application (“DRA”): <https://davesredistricting.org/join/0651dc30-7afe-45df-bcc2-6383fe9fa2ab>.

D. Communities of Interest

34. The 2024 Plan takes into account some communities of interest in that it splits only three NTAs in the three-borough area, and minimizes VTD splits. Notably, the 2024 Plan also preserves a neighborhood community of interest in that it keeps some Chinese-American neighborhoods together in CD 10, though it excludes others (*infra*).

35. **Figure 5** summarizes populated NTA and VTD split counts under the 2024 Plan in CD 10 and CD 11 as shown in **Exhibit F-5** and **Exhibit F-6**.

Figure 5: 2024 Plan – NTA and VTD Populated Splits (excluding 0% and 100% splits)

Census Geography	Splits Between CDs 10 & 11 in the 2024 Plan
Neighborhoods (NTAs)	4
2020 Voting Districts (VTDs)	4
Population in Split VTDs	133,535

III. PRECEDENT FOR A MANHATTAN–STATEN ISLAND DISTRICT

36. Staten Island has a 2020 population of 495,747, but the ideal population size for a congressional district in New York is 776,971. Accordingly, Staten Island alone cannot supply

¹⁵ A VTD is a Census Bureau proxy for precinct boundaries developed in consultation with local and state officials toward the end of each decade.

sufficient population for a congressional district—it must be joined with a neighboring portion of another New York City borough.

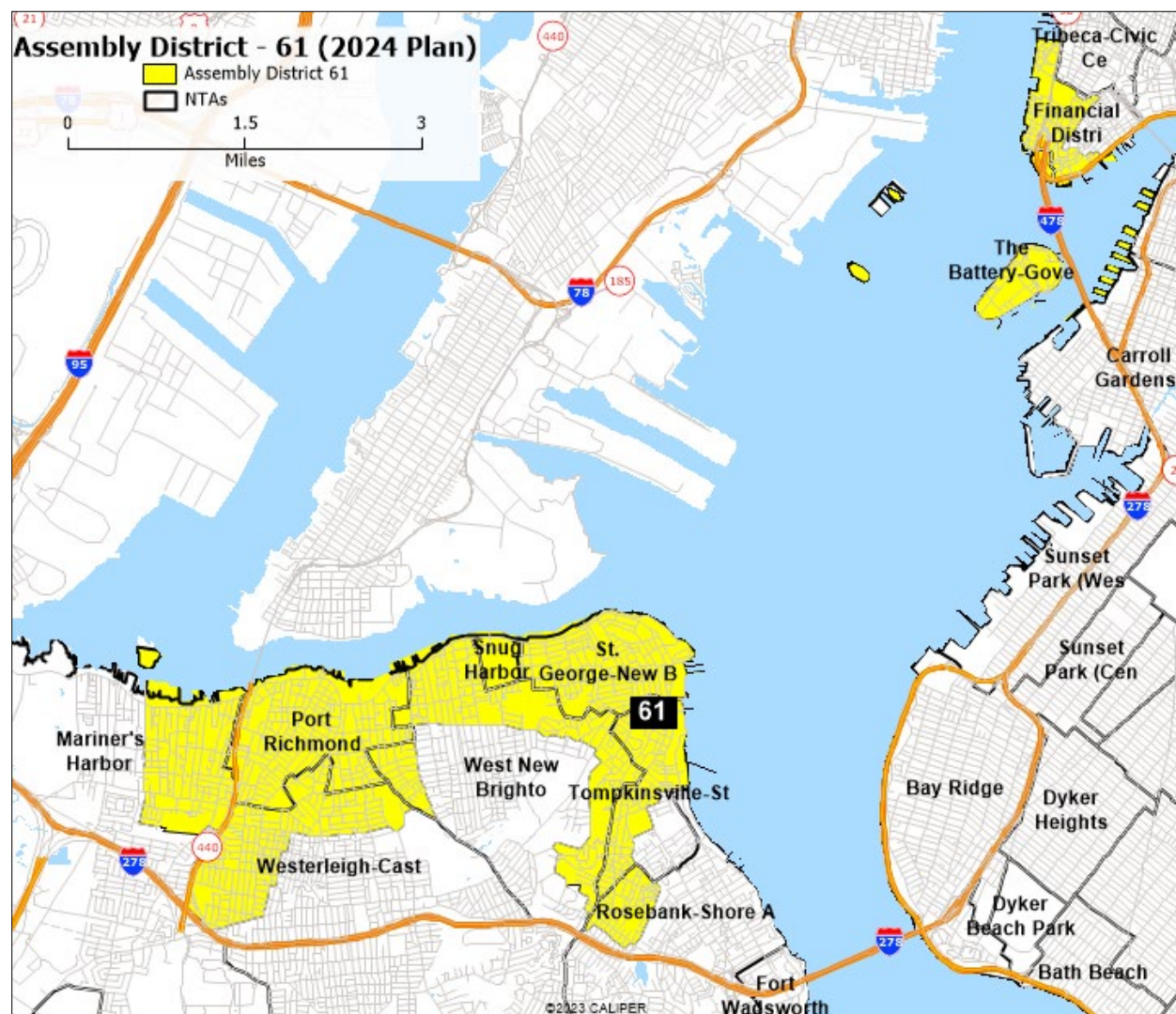
37. While the 2024 Plan joins Staten Island with portions of Brooklyn, it could just as easily joined Staten Island with portions of Manhattan. It would be unremarkable for a congressional district to join those two boroughs, which have been linked by ferry service for over 200 years and by city-operated ferry since 1905. Every day, about 45,000 people take the ferry between Staten Island and Lower Manhattan.¹⁶ The ferry is free to ride and runs 24 hours a day.

38. Moreover, past and present legislative configurations show that joining Staten Island with Lower Manhattan is unremarkable.

39. As shown in **Figure 6**, the northern part of Staten Island and part of Lower Manhattan are together in State Assembly District 61 (48.74% B+LCVAP) under the 2024 Assembly Plan. The Staten Island part of Assembly District 61 has a 2020 population of 113,196 (57.93% B+LCVAP). The remainder of the district extends north to the Financial District in Manhattan, picking up 25,622 persons (12.2% B+LCVAP).

¹⁶ New York City Dep't of Transportation, Staten Island Ferry Facts, <https://www.nyc.gov/html/dot/html/ferrybus/ferry-facts.shtml> (last visited Nov. 17, 2025).

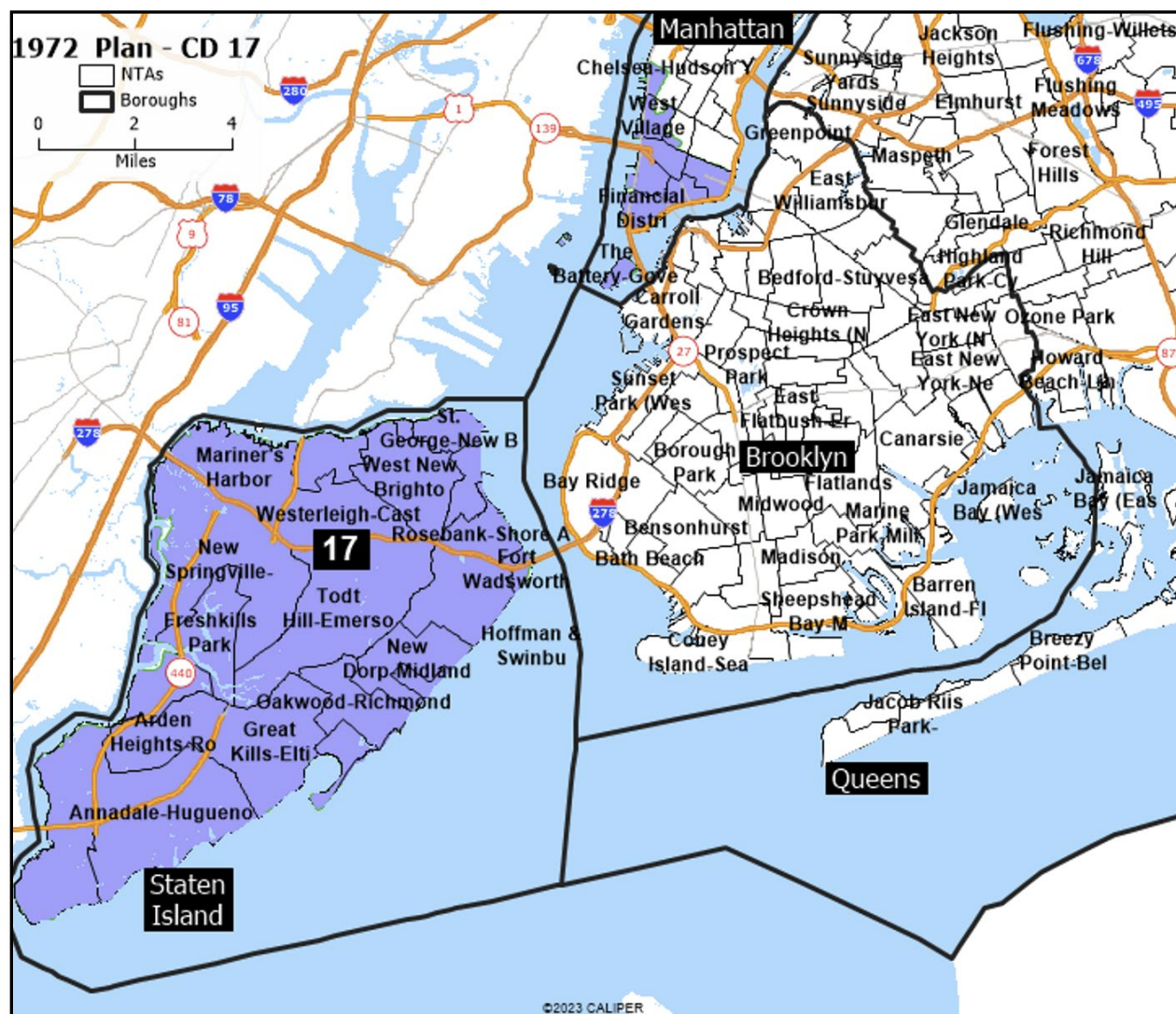
Figure 6: 2024 Assembly District 61 – Staten Island and Lower Manhattan



40. Similarly, a combined Staten Island-Lower Manhattan congressional district has existed within living memory for many voters. **Figure 7** shows that, throughout the 1970s and through 1980, Staten Island was joined with Lower Manhattan to form CD 17.¹⁷

¹⁷ Jeffrey B. Lewis, Brandon DeVine, and Lincoln Pritcher with Kenneth C. Martis, *United States Congressional District Shapefiles*, U. Cal. Los Angeles Dep't of Political Science, <https://cdmaps.polisci.ucla.edu/>.

Figure 7: 1972 Congressional Plan – Staten Island and Lower Manhattan District



41. Against the backdrop of current AD 61 and the earlier configuration of CD 17 from the 1970s, a present-day congressional district joining Staten Island with Manhattan would be plausible and cognizable.

IV. THE ILLUSTRATIVE MAP

A. Geographic Extent

42. The map in **Figure 8** shows the Illustrative Map within the context of the 2024 Plan focus area (see **Figure 1** *supra*) – including Staten Island, Lower Manhattan, and Brooklyn. NTAs are depicted with thin black lines. Some of the most populated NTAs are labeled. A higher resolution version of the Figure 8 map is in **Exhibit H-1**.

43. The Illustrative Map shifts the boundaries of CD 11 to retain all of Staten Island and then adds most, but not all, of the portion of Lower Manhattan currently occupied by CD 10. This includes parts of or the whole of the following Lower Manhattan NTAs into CD 11: Chelsea-Hudson Yards, East Village, Financial District, Gramercy, Greenwich Village, Lower East Side, Midtown South, SoHo, Little Italy, Tribeca, and West Village.

[illegible]

16

45. The following link includes the Illustrative Map depicting CDs 11 and 10, as displayed in Dave's Redistricting Application: <https://davesredistricting.org/join/cfba3f64-290a-4fb0-ad03-4429eb4be12f>.

46. The modifications to the 2024 Plan are straightforward. A block of 495,747 persons in CD 11 (i.e. all of Staten Island's population) is joined with Lower Manhattan. In turn, a block of 281,224 persons in southern Brooklyn is shifted from 2024 CD 11 into the Illustrative Map CD 10. Lastly, a corresponding block of 281,224 persons in Lower Manhattan is shifted back into CD 10 (Chinatown, part of the Financial District and 22 persons in Tribeca).

47. **Exhibit H-2** zooms in on CDs 10 and 11 in Lower Manhattan, with an overlay of neighborhoods (NTAs). **Exhibit H-3** reports compactness scores for CDs 11 and 10 based on Reock¹⁸ and Polsby-Popper¹⁹ measures. **Exhibit H-4** identifies borough splits for CDs 11 and 10 in the 3-borough focus area. **Exhibit H-5** identifies NTA splits by population in Lower Manhattan and Brooklyn for CDs 11 and 10. **Exhibit H-6** identifies VTD²⁰ splits in Lower Manhattan and Brooklyn for CDs 11 and 10. **Exhibit H-7** identifies all neighborhoods (with population details) that are assigned in whole or in part to CDs 10 and 11. There is also a final section with bottom line totals for the split portions of CDs 11 and 10 across the three boroughs in the focus area.

48. The Illustrative Map is neutral as compared to the 2024 Map as to borough splits. At the borough level, compared to the 2024 Plan, the Illustrative Map eliminates a split in Brooklyn—by Brooklyn from removing CD 11, but adds one in Lower Manhattan—CD 10.

¹⁸ See *supra* note 12.

¹⁹ See *supra* note 13.

²⁰ See *supra* note 15.

49. The Illustrative Map reflects a significant retention of the 2024 Plan. Core retention from the prior plan (2024 Plan) to a new plan (the Illustrative Map) is defined as the largest population subset that is kept together in the transition from districts in the prior plan to the new plan. In this instance, the core population retained is simply Staten Island itself (495,747) which comprises most of CD 11 under both the 2024 Plan and the Illustrative Map.

B. Demographics

50. Black and Latino citizen voting age population in CD 11 increases under the Illustrative Map. Figure 9 details CVAP by district under the Illustrative Map for CDs 11 and 10. Under the Illustrative Map, the NH AP Black + Latino CVAP for CD 11 increases from 22.70% to 24.71% as compared to the 2024 Plan.

Corrected Figure 9: Illustrative Map – CVAP by Race and Ethnicity

District	NH AP Black CVAP	Latino CVAP	NH AP Black+ Latino CVAP	NH SR Asian CVAP	NH White CVAP
11	8.42%	16.30%	24.71%	12.42%	62.31%
10	6.39%	16.11%	22.50%	23.38%	53.30%

51. **Figure 10** reports total 2020 population by race and ethnicity for the relevant parts of Staten Island, Lower Manhattan and Brooklyn, broken out by CD 10 and 11 under the Illustrative Map.

Corrected Figure 10: Populations by Race and Ethnicity in the Illustrative Map (All Ages)

3-Borough Focus Area	NH AP Black	Latino	NH AP Black + Latino	NH SR Asian	NH White
Staten Island: CD 11	10.45%	19.56%	30.01%	11.85%	56.07%
Lower Manhattan: CD 11	6.19%	16.03%	22.21%	16.4%	57.08%
Lower Manhattan: CD 10	6.75%	13.53%	20.29%	49.57%	27.58%
Brooklyn: CD 10 (Part)	4.94%	19.15%	24.08%	26.97%	43.69%

C. Compactness

52. The Illustrative Map is reasonably compact and within the normal range for congressional districts, both within New York and nationwide. **Exhibit D** offers context on the significance of the Illustrative Plan's compactness score vis-à-vis the 2024 Plan. As shown in **Exhibit D**, which I prepared for testimony in the January 2025 trial in *Allen v. Milligan*, New York's 2024 Plan ranked sixth in the nation based on the Dave's Redistricting Application composite compactness score, meaning its statewide congressional district compactness score was higher than all but five states. Under the 2024 Plan, the statewide mean average is .40 on Reock and .35 on Polsby-Popper. *See Exhibit G.*

53. **Figure 11** reports compactness scores for CDs 11 and 10 in the Illustrative Map, as further reported in **Exhibit H-3**. The table below reports an overall mean average for CD 11 and CD 10 under the Illustrative Map for both Reock and Polsby-Popper, as well as the DRA composite compactness score for both districts combined.²¹

²¹ See *supra* note 14.

Corrected Figure 11: The Illustrative Map – Compactness Scores

Illustrative Plan	CD 11	CD 10	2-District Average
Reock	.30	.30	.30
Polsby-Popper	.28	.19	.24
DRA -District Composite			35

54. By the numbers, the Illustrative Map appears less compact than the 2024 Plan in a head-to-head comparison, though in reality it is comprised of two significantly compact sub-parts—Staten Island and Lower Manhattan—that are connected by around-the-clock free ferry service. There is no population of voters between these two sub-parts of the illustrative CD 11—just Upper New York Bay. The lower compactness score is reflective chiefly of this geographic water and shoreline feature, rather than on-the-ground features of the district.

55. Looking more closely at the two components of CD 11 under the Illustrative Map reveals it is in fact significantly compact on land. To start, the Staten Island component of the Illustrative Map scores exactly the same as the Staten Island component of the 2024 Plan by any compactness measure. That is not surprising—nothing about this part of the district has changed, but, as under the 2024 Plan, it must be joined with some other parts of New York City to achieve sufficient population to form a full district.

56. The densely populated Lower Manhattan component of CD 11 under the Illustrative Map is compact as well. It scores .48 on Reock and .33 on Polsby-Popper—a very respectable compactness score relative to New York’s other congressional districts.²² The Manhattan component of CD 10—including Chinatown, part of the Financial District, and 22 persons in

²² This score excludes Governors Island in the East River and CD 11 which is assigned five persons under the 2020 Census.

Tribeca (included to zero out the deviation)—scores .51 on Reock and .40 on Polsby Popper. It, too, therefore is quite compact.

57. By the same token, the densely populated Brooklyn component of CD 10 under the Illustrative Map scores high—.43 on Reock and .38 on Polsby-Popper.

58. Taken together (excluding Staten Island), the mean average scores for the two sets of the Illustrative Map equate to .44 Reock and .35 Polsby Popper, which is slightly better than the mean average across the 26 congressional districts in the 2024 Plan.²³

D. Communities of Interest

59. Like the 2024 Plan, the Illustrative Map preserves a community of interest at the neighborhood level by connecting Chinese-American neighborhoods in Lower Manhattan and Brooklyn in CD 10. In fact, it advances this preservation of communities of interest by joining the existing Chinese-American communities in CD 10 (Chinatown and Sunset Park) with two additional Chinese-American communities (Bensonhurst and Bath Beach).

60. The Illustrative Map takes another step forward by acknowledging the already existing community of interest in Assembly District 61 (which joins portions of northern Staten Island with Lower Manhattan), which features a large share of Black and Latino voters.

61. **Figure 12** summarizes populated NTA and VTD split counts in Lower Manhattan under the Illustrative Map, as shown in **Exhibit H-5** and **Exhibit H-6**. The Illustrative Map splits populated parts of three NTAs—the same number of populated NTA splits as the 2024 Plan.

²³ NY 2024 Congressional, Dave's Redistricting, <https://davesredistricting.org/maps#analytics::948da7ae-d2f9-48d8-a04a-433f5ff88fcd>.

62. The Illustrative Map contains 20 populated VTD splits versus four populated splits in the 2024 Plan. In most instances, the additional split VTDs under the Illustrative Map could be resolved, without creating new VTDs, by merging the splits into already-existing adjacent VTDs.

Figure 12: Illustrative Plan - NTA & VTD Populated Splits (ex. 0% and 100% splits)

Census Geography	Splits Between CDs 10 & 11 in the Illustrative Plan
Neighborhoods (NTAs)	3
2020 Voting Districts (VTDs)	20
Population in split VTDs	20,762

63. More importantly, as revealed in Exhibits F-6 and H-6, the four VTD splits in the 2024 Plan involve a total population of 133,535 versus a total of just 20,762 persons in the 20 populated splits under the Illustrative Map. Thus, the population of voters impacted by the VTD splits (e.g. changes of polling place to the extent they correspond with VTDs) in the Illustrative Plan is likely substantially less than under the 2024 Plan.

I reserve the right to continue to supplement my reports in light of additional facts, testimony and/or materials that may come to light.

Executed on: December 20, 2025


WILLIAM S. COOPER