Upstate NY (Westchester northwards) has a 2020 census population of 8,475,365. This corresponds to 62.93 times the "ideal" Assembly district size (134,675, or 1/150 of the state's population). This means 87 of the 150 Assembly districts should be Downstate-only, and 63 should be Upstate-only. The proposed redistricting map below makes no attempt to assign borders for the 87 districts in New York City and Long Island. Instead, it just includes districts 88-150, numbered starting Westchester and ending in Erie County.

Whatever the need may be, to divide large counties among multiple Assembly districts in order to keep them nearly equal in size, this need is not present for smaller Upstate counties. This map is a mathematical proof of this, showing a possible redistricting of upstate Assembly districts based on 2020 census numbers, that keeps every county, city, and town with a population under 134,675 undivided, all without skirting any of the other Constitutional criteria the IRC must follow. There are, however, 4 Upstate cities (Yonkers, Syracuse, Rochester, and Buffalo), 1 Upstate town (Ramapo), and 13 Upstate counties (Westchester, Rockland, Orange, Dutchess, Rensselaer, Albany, Saratoga, Schenectady, Ulster, Oneida, Onondaga, Monroe, and Erie) that exceed the ideal district population of 134,675. These must all be divided among 2 or more Assembly districts, in order not to exceed by more than 10% the ideal district size.

In this districting map, the biggest positive deviations from the ideal Assembly district population are +9.8% for district "96" (the town of Ramapo, even after carving out an estimated population for the village of Pomona lying therein); and +4.4% for the district labeled "127" (Oswego County plus the town of Lysander in Onondaga County). The biggest negative deviations are -13,7% for district "91" in SE Westchester, and -13.3% for "district 120"(Jefferson County). The imbalance between "127" and "120" could be "corrected" by moving several northern towns in Oswego County from "127" to "120". Despite better adherence to equal-sized districts, It is doubtful that this change would give residents of district 127 a "fairer" amount of power in the Assembly. (The Assembly's Minority Leader is from this district). Furthermore, splitting Oswego County between two Assembly districts would burden its County Board of Election with keeping track of 2 Assembly races, instead of just 1.

Besides a few additional (smaller) population inequalities, there are a few remaining features of this redistricting map that are a bit concerning, but less so than features in alternative maps.

1) In order to keep most towns (all but Ramapo) completely undivided, several large villages straddling two towns end up being divided between Assembly districts—for example, the villages of N. Syracuse (Cicero/Clay), E. Rochester (Pittsford/Perinton), and Depew (Cheektowaga.Lancaster). Ramapo is so large that it merits its own Assembly district, 96. Keeping the Village of Pomona undivided in district 95 reduces the excess population of 96.

2) The unusual geography of the town of Irondequoit makes Assembly district "133" technically non-contiguous. This is due to Irondequoit being split by an arm of the City of Rochester extending along Culver Rd to Durand-Eastman Park along Lake Ontario. This problem is solved by defining Assembly District 133 as extending into Lake Ontario in such a way as to connect the two portions of Irondequoit. This has been a standard way of dealing with this town's non-contiguity in Assembly and/or Senate districts, for many years.

3) The 4 cities north of NYC that are larger than the ideal Assembly district size are left here with incompletely specified maps. Yonkers, Rochester, and Syracuse each have 1 district contained entirely within them, and Buffalo has 2. But each of these four cities then has leftover population that is attached to one or more Assembly districts in neighboring towns. Drawing district lines for these pieces was not yet possible, since I did not have ready access to block-by-block census data. But the general location of dividing lines is hinted at on the map below by colored cross-hatching.

4) Buffalo actually has a nearly ideal population for 2 Assembly districts. However, in this map a portion of it containing 20,000 residents is combined with district 149 just to the north. The latter district, and Amherst by itself (district 148), as well as the 2 districts contained entirely within Buffalo (145,146) are all nearly equal in size, but about 4% (5000-5500 persons) short of ideal. I could not add population into these districts from the surrounding towns in Erie County, without splitting one or more of these surrounding towns between Assembly districts.

5) Syracuse (district 125) has 16,000 extra residents, envisioned to be taken out of its western, northern, and/or eastern neighborhoods to combine with district 126. The exact choice of these neighborhoods is left "to be determined".

6) Yonkers and Rochester each have been divided with two "leftover pieces", to allow more equal numbers in surrounding districts. For Yonkers, the 2 extra pieces totaling 73,933 are split between districts 88 and 89 to the east. For Rochester, the 2 extra pieces totaling 77,000 are split between districts numbered 134 and 136 to the south.

7) Monroe County, which has enough population for 5.6 Assembly districts, ends up containing 5 districts of its own (133-137), but its remaining population (5 towns) is split among 3 others (131,132, and 138), creating an 8-way split.

District #	Counties/Towns/Cities in Proposed NY Assembly District	2020 Population	Deviation from Average District (134,675)	% Deviation From Average District
88	Mt. Vernon/Pelham + 50,665 from SE Yonkers (To be defined)	137,635	+2,796	+2.1%
89	Eastchester/New Rochelle + 23,268 from E Yonkers (To be defined)	137,636	+3,261	+2.4%
90	Yonkers—remainder (City Core/SW)	137,636	-552	-0.2%
91	Westchester SE- Rye City, Rye town, Mamaroneck, Scarsdale	116,216	-18,459	-13.7%
92	Westchester E—White Plains,Harrison,North Castle,Pound Ridge, Lewisboro,Bedford	134,841	+166	+0.1%
93	Westchester Central—Greenburgh/Mt Pleasant	139,833	+5,158	+3.8%
94	Westchester N—Ossining,New Castle,Mt Kisco,Yorktown,Somers, N Salem	132,684	-1991	-1.5%
95	Westchester—(Peekskill,Cortlandt) /Rockland (Stony Point, Haverstraw + the portion of Pomona in Ramapo Township)	~122,876	-11,799	-8.8%
96	Rockland—Ramapo (minus the portion of Pomona lying therein)	~147,919	+13,244	+9.8%
97	Rockland—Clarkstown/Orangetown	135,510	+835	+0.6%
98	Orange S (Hamptonburgh,Blooming Grove,Palm Tree,Woodbury, Monroe,Tuxedo,Chester,Warwick,Minisink)	143,943	+9,268	+6.9%
99	Orange W—Walkill,Middletown,Deer Park, Port Jervis,Greenville, Mount Hope,Crawford,Montgomery,Goshen,Wawayanda	143,084	+8,409	+6.2%
100	Orange NE—Highlands,Cornwall, New Windsor, Newburgh (Town),Newburgh (City) + Dutchess (Wappinger only)	142,685	+8,010	+5.9%
101	Putnam + Dutchess SW (Fishkill,Beacon)	135,663	+988	+0.7%
102	Dutchess NW—Clinton,Red Hook,Rhinebeck,Hyde Park, La Grange, Pleasant Valley,Poughkeepsie (town),Poughkeepsie (City)	145,429	+10,754	+8.0%
103	Columbia+ Dutchess E (Milan,Pine Plains,North East, Stanford, Washington,Amenia,Union Vale,Dover,E Fishkill,Beekman,Pawling	145,841	+11,166	+8.3%
104	Ulster—Core (except Wawarsing,Hardenburgh,Shandaken, Denning,Woodstock,Saugerties,Hurley)	133,997	-678	-0.5%
105	Delaware/Sullivan/Ulster (Wawarsing town only)	135,703	+1,028	+0.8%
106	Greene + Ulster N (Hardenburgh,Shandaken,Denning,Woodstock, Saugerties,Hurley)+Albany W (New Scotland,Coeymans,Westerlo, Rensselaerville,Berne,Knox)+Rensselaer SW (Schodack,Nassau, Sand Lake	135,568	+893	+0.7%
107	Albany—Albany City,Bethlehem	134,258	-417	-0.3%
108	Albany—Guilderland,Colonie,Watervliet	132,813	-1,862	-1.4%
109	Rensselaer—Core (all except Schodack,Nassau,Sand Lake)	135,272	+597	+0.4%
110	Schenectady (except Niskayuna)	132,203	-2,472	-1.8%
111	Albany N (Cohoes,Green Island)/Saratoga S (Waterford,Halfmoon, Clifton Park,Malta,Ballston,Charlton)/Schenectady (Niskayuna)	128,466	-6209	-4.6%
112	Saratoga Core N (except Waterford,Halfmoon,Clifton Park,Malta, Ballston,Charlton	130,321	-4,354	-3.2%
113	Warren/Washington	127,039	-7,636	-5.7%
114	Schoharie/Fulton/Montgomery	132,570	-2105	-1.6%
115	Essex/Hamilton/Herkimer/Oneida NE (Forestport,Remsen, Boonville,Steuben,Western,Ava,Floyd,Trenton,Marcy,Deerfield)	134,765	+90	+0.1%
116	Oneida Core—SE (Utica,Whitestown,Westmoreland,New Hartford, Augusta,Kirkland,Marshall,Paris,Sangerfield,Bridgewater)	133,427	-1248	-0.9%
117	Oneida W (Rome,Lee,Verona,Vernon,Florence,Camden,Vienna, Annsville) + all of Madison County	134,576	-99	-0.1%
118	Clinton/Franklin	127,398	-7,277	-5.4%

District #	Counties/Towns/Cities in Proposed NY Assembly District	2020 Population	Deviation from Average District (134,675)	% Deviation From Average District
119	St. Lawrence/Lewis	135,087	+412	+0.3%
120	Jefferson	116,721	-17954	-13.3%
121	Otsego/Chenango/Broome E (Sanford,Colesville,Windsor,Fenton, Kirkwood,Conklin)	135,573	+898	+0.7%
122	Broome SW Core (Union,Vestal,Binghamton City,Binghamton Town)	138,037	+3362	+2.5%
123	Cortland/Broome NW (Triangle,Barker,Lisle,Nanticoke,Maine, Chenango,DIckinson)/Onondaga S (Fabius,Tully,Onondaga, Onondaga Nation,Lafayette,Otisco,Spafford,Skaneateles, Marcellus,Elbridge)	133,596	-1079	-0.8%
124	Onondaga County East Towns (Clay,Cicero,Manlius,Pompey)	132,754	-1921	-1.4%
125	Onondaga-Core (Syracuse minus 16,000 from Northern Wards)	133,620	-1055	-0.8%
126	Onondaga-N (Syracuse Northern Wards,Dewitt,Salina,Geddes, Camillus,VanBuren	132,098	-2577	-1.9%
127	Oswego + Onondaga NW (Lysander)	140,599	+5,924	+4.4%
128	Tioga/Chemung	132,603	-2,072	-1.5%
129	Schuyler/Tompkins	123,638	-11,037	-8.2%
130	Yates/Seneca/Cayuga	134,836	+161	+0.1%
131	Ontario/Monroe S (Mendon,Rush,Wheatland)	129,940	-4735	-3.5%
132	Wayne/Monroe NE (Webster)	136,610	+1,935	+1.4%
133	Monroe E suburbs (Irondequoit,Penfield, Perinton)	137,960	+3,285	+2.4%
134	Monroe S suburbs (Brighton,Pittsford,Henrietta)+Roch 20000	134,850	+175	+0.1%
135	Monroe (Most of Rochester, inclu., Core and Northern Precincts)	134,328	-347	-0.3%
136	Monroe SW suburbs (Ogden,Chili,Gates) + Rochester SW 57,000	135,560	+885	+0.7%
137	Monroe—NW Suburbs (Greece,Parma,Clarkson,Sweden,Hamlin)	142,016	+7,341	+5.5%
138	Livingston/Genesee/Monroe (Riga)	125,808	-8,867	-6.6%
139	Steuben/Allegany	140,040	+5,365	+4.0%
140	Orleans/Niagara NE (all except Niagara Falls,Niagara Town, North Tonawanda,Wheatfield,Cambria,Lewiston)	125,614	-9,061	-6.7%
141	Niagara SW Core (Niagara Falls City, Niagara Town, North Tonawanda,Wheatfield,Cambria,Lewiston)	127,395	-7,280	-5.4%
142	Cattaragus/Wyoming/Erie SE (N. Collins,Collins,Concord,Sardinia)	138,003	+3,328	+2.5%
143	Erie S (Lackawanna,Hamburg,Orchard Park,Evans,Eden,Boston, Brant)	142,461	7,786	+5.8%
144	Erie (Cheektowaga/W Seneca)	135,377	+702	+0.5%
145	Erie Core 1 (Buffalo City 1, boundaries to be determined)	129,175	-5,500	-4.1%
146	Erie Core 2 (Buffalo City 2,boundaries to be determined)	129,174	-5,501	-4.1%
147	Erie E (Clarence,Newstead,Lancaster,Alden Marilla,Elma,Aurora,Wales,Colden,Holland)	136,715	+2,040	+1.5%
148	Erie (Amherst only)	129,595	-5,080	-3.8%
149	Erie N (Tonawanda City and Town, Grand Island+Buffalo 20,000)	129,155	-5,520	-4.1%
150	Chautauqua	127,657	-7,018	-5.2%