



NEW YORK METROPOLITAN TRANSPORTATION COUNCIL
2050 SOCIOECONOMIC & DEMOGRAPHIC FORECAST UPDATE:
DEVELOPMENT & ENHANCEMENTS



TECHNICAL MEMORANDUM 4:

**2055 SED FORECASTS
EXECUTIVE SUMMARY &
PUBLIC COMMENTS**

FINAL OCTOBER 2020

Disclaimer

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Executive Summary

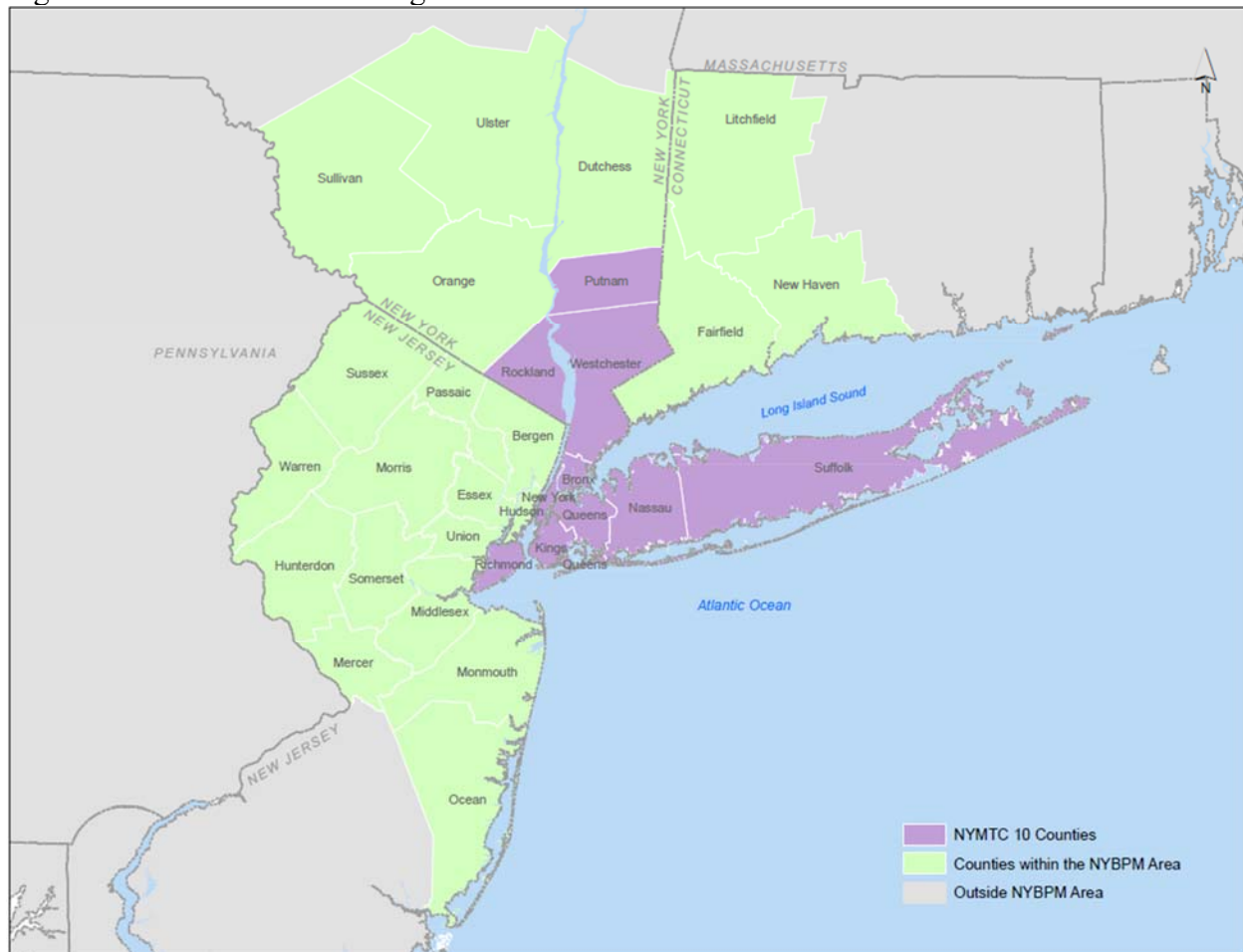
Project Summary

The New York Metropolitan Transportation Council (NYMTC) is a regional council of governments (COG) that is the metropolitan planning organization (MPO) for New York City, Long Island and the lower Hudson Valley. NYMTC provides a collaborative planning forum to address transportation-related issues, develop regional plans and make decisions on the use of federal transportation funds.

Socioeconomic and demographic (SED) forecasts are produced in response to requirements of the Metropolitan Transportation Planning Regulations (23CFR 450.324(e)). They are crucial components in the development of regional transportation plans, transportation conformity analysis, congestion management process, and decision-making on the use of these funds.

NYMTC's forecasts are updated every four years and produced in five-year intervals for counties within the following sub-regions: New York City; Long Island; Mid-Hudson; New Jersey (14 counties); and Connecticut (3 counties).

Figure 1. NYMTC NYBPM Region



Source: NYMTC

NYMTC charged WSP and Urbanomics, in collaboration with the New York City Department of City Planning (NYCDCP), to update the existing 2050 employment, population, household, and labor force forecast models, as well as the Traffic Analysis Zone (TAZ) distribution model (2012 base year), to a 2017 base year using the same data sources as in the original 2050 SED forecast models, and then extend the forecast period from 2050 to 2055. The models to be updated were created by the Louis Berger Group (LBG) in 2014 and 2015 for the original 2050 Forecasting effort and were described in detail in their accompanying technical memoranda.

Coordination Efforts in the NYMTC Planning Area

The SED forecasts are developed under the guidance of the NYMTC Forecasting Working Group (FWG). The FWG is comprised of multiple state and agency stakeholders who review work products related to the development of SED forecasts for the 31-county planning area. The FWG consists of representatives of New York City, each of the Long Island and Mid-Hudson counties, as well as North Jersey Transportation Planning Agency (NJTPA) and Connecticut Councils of Governments (COG), the Metropolitan Transportation Authority (MTA), New York State Department of Transportation (NYSDOT), Port Authority of New York and New Jersey (PANYNJ), Federal Transportation Authority (FTA), Federal Highway Administration (FHWA), as well as other agency and academic members.

The FWG met in person and virtually seven times from the kickoff meeting on March 22, 2019 to August 19, 2020 to provide guidance and insights, and to review progress and work products. After more than one dozen iterations of the forecast updates, the FWG agreed to 2055 SED forecasts presented herein for public review.

Throughout the process, in addition to the FWG meetings, the project team held meetings and calls with NYMTC stakeholders to gain insights into general population and employment trends, as well as detailed information on developments in the pipeline to inform the distribution of forecasts to the Traffic Analysis Zone level. The project team included two staff members from New York City Department of City Planning (NYCDCP) to ensure close coordination with that agency so that the 2055 SED forecasts align with NYCDCP's own population forecasts. The project team coordinated with NJTPA and western Connecticut councils of government to ensure that the 2055 SED forecasts reflect the input and knowledge of these neighboring MPOs.

COVID-19 Impacts to Forecasts

The NYMTC region has been struck by the COVID-19 pandemic. Because development of the 2055 SED NYMTC forecasts began over a year ago, its ability to reflect immediate or longer-term effects of the COVID-19 pandemic and economic shock is constrained.

To determine how to address this ongoing unprecedented national emergency in the forecasts, on May 13, 2020, the FWG met virtually via webinar to discuss the potential impacts of the pandemic. The presentation that began the meeting quantified the availability of the affected data inputs to the model (e.g., unemployment and deaths), professional opinions on the extent and length of the economic disruption from economists around the country, as well as information on how other MPOs are dealing with the crisis. The forecast process had already incorporated assumptions of multiple economic cycles into its long term outlook, and, in light of the occurrence of a significant

downturn in 2020, some adjustments have been made to reflect short-term economic conditions. However, because of the lack of sufficient basis data and the ongoing nature of the economic crisis, it is anticipated the forecast will diverge from economic conditions in the early years of the forecasting period. In addition, population figures are baselined on data derived from the 2010 census, which entails substantial uncertainty (recent population estimates may diverge from the population enumerated in 2020).

The primary purpose of this forecast is its long term outlook, which is less susceptible to short term volatility. While the highly unusual nature of the pandemic and economic crisis may result in as-yet unforeseen changes, there is a stronger basis for the long-term projections and the use of 20-30 year change increments for analytic purposes.

The FWG worked throughout the summer to reconcile the employment and population forecasts, before agreeing to the employment and population forecasts on August 21, 2020. As new data emerges about the full scope of the impact of the pandemic and economic shock on regional employment and population trends, that information will be incorporated into the next vintage of forecasts.

This executive summary highlights the agreed-upon 2055 SED forecasts.

Forecast Results

By 2055, the region is anticipated to add 3.2 Million residents and 1.8 Million jobs (+15.3%), reaching a high of 13.85 Million jobs and 25.8 Million residents.

Employment

Methodological Overview

The 2055 SED employment forecasts total jobs (both payroll¹ and proprietor) by place of work as modeled by the update of the 2015 Employment Model and adjusted to reflect the insights of the FWG.

Working collaboratively, with input and professional judgement from the Forecasting Working Group, the project team updated the county level forecasts of the 2050 SED adopted forecasts to project to 2055. Adjustments were made within the model to bring the forecasts closer to the regional target and to reflect changes in regional land use, including significant development in New York City and northern New Jersey. Adjustments to the model were in keeping with the established methodology. Projections from 2050 to 2055 were made using a simple least squares linear trend of the forecast based on the years 2045-2050.

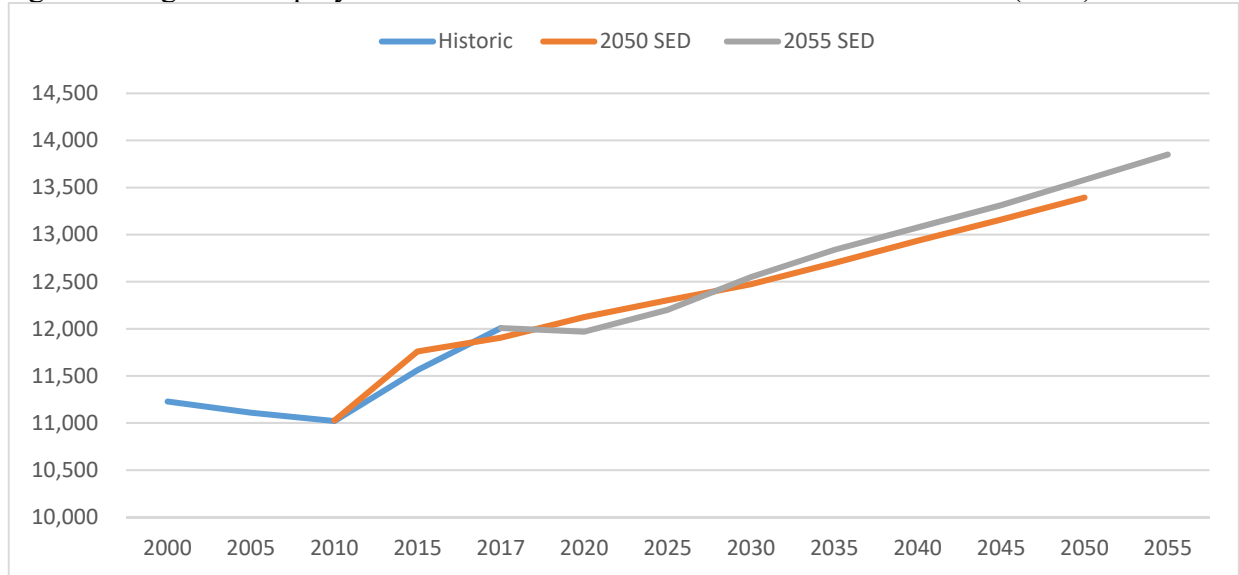
¹ Please note: payroll employment drawn from the Quarterly Census of Employment and Wages includes all jobs, both full and part time.

Overview of Employment Trends

Regional Model Results

Employment in the region as a whole is expected to grow at an average annual rate of 0.46% per year. Figure 2 shows the regional 2050 and 2055 SED forecasts, while Figure 3 shows the comparative compounded annual average rates of change (CAGR).

Figure 2. Regional Employment Forecasts: 2050 SED and 2055 SED Forecast (000s)

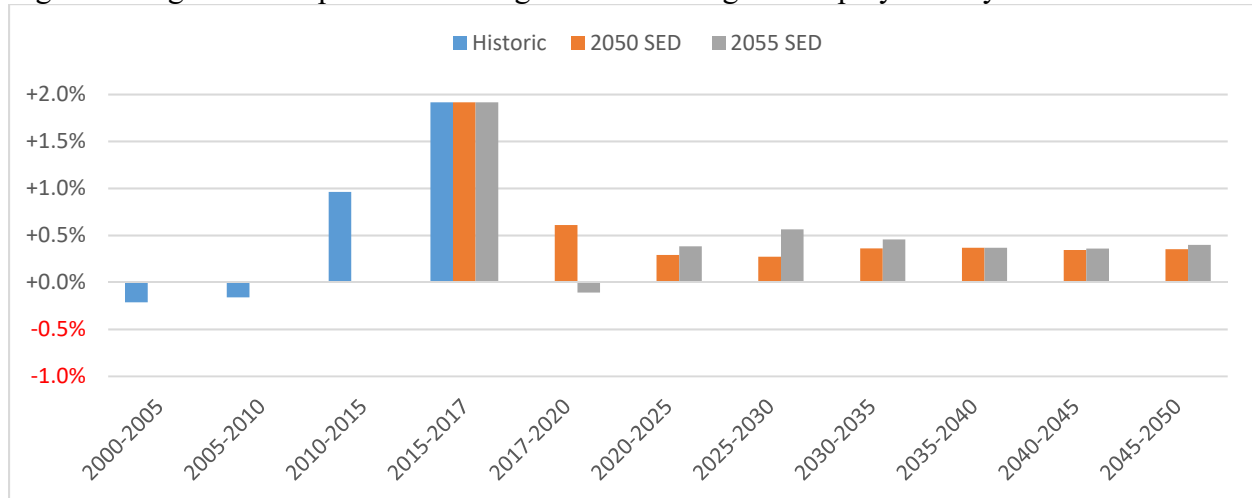


Source: Bureau of Labor Statistics' Current Employment Statistics (CES) and Quarterly Census of Employment and Wages (QCEW); American Community Survey (ACS); NYMTC 2050 SED, NYMTC 2055 SED Forecasts

Note: Total employment includes payroll employment, self-employment, and unpaid family work, both full and part time.

Figure 3 illustrates the slowed growth from 2017 to 2025 in the 2055 SED Forecast due to COVID-19. This period is followed by faster rates of growth from 2025 to 2030 in the rebound period. By 2035, growth rates level out and to almost straight-line growth through 2055.

Figure 3. Regional Compounded Average Annual Change in Employment by Model: 2000-2055



Source: Bureau of Labor Statistics' Current Employment Statistics (CES) and Quarterly Census of Employment and Wages (QCEW); American Community Survey (ACS); NYMTC 2050 SED, NYMTC 2055 SED Forecasts

Note: Total employment includes payroll employment, self-employment, and unpaid family work.

Figure 4 presents the Employment forecasts in table form and Figure 5 presents the sub-regional rates of change.

Figure 4. Employment Model County Outputs: 2055 SED Forecast

	2010	2015	2017	2020	2025	2030	2035	2040	2045	2050	2055
FORECAST REGION	11,020,530	11,561,224	12,008,481	11,969,756	12,201,027	12,548,980	12,838,591	13,076,480	13,313,412	13,581,633	13,849,854
Bronx County	380,497	401,055	413,186	417,798	431,985	447,381	462,173	474,822	487,684	508,232	528,779
Kings County	822,989	902,713	940,561	942,296	973,658	1,013,634	1,049,302	1,084,437	1,116,162	1,149,201	1,182,241
New York County	2,488,607	2,654,265	2,832,457	2,860,002	2,890,278	2,942,140	2,983,210	3,010,676	3,038,684	3,066,962	3,095,241
Queens County	708,868	753,622	787,733	784,163	803,143	841,130	869,613	911,686	945,622	998,497	1,051,371
Richmond County	126,268	138,472	140,688	140,516	143,819	150,820	155,973	159,926	164,282	168,871	173,460
New York City Total	4,527,230	4,850,126	5,114,624	5,144,775	5,242,883	5,395,105	5,520,271	5,641,547	5,752,434	5,891,763	6,031,092
Nassau County	590,583	613,419	631,261	625,398	639,641	664,509	684,065	697,286	710,328	723,942	737,555
Suffolk County	636,565	671,508	692,427	680,943	691,838	706,072	718,637	725,741	733,667	742,046	750,425
Long Island Total	1,227,148	1,284,927	1,323,689	1,306,341	1,331,479	1,370,581	1,402,702	1,423,027	1,443,995	1,465,988	1,487,980
Dutchess County	121,287	125,663	127,640	126,192	128,259	129,967	131,855	133,305	134,659	135,806	136,952
Orange County	150,881	154,794	158,577	159,516	163,101	165,848	169,014	171,609	174,299	176,988	179,676
Putnam County	28,439	29,425	29,905	29,199	29,752	30,534	31,202	31,442	31,728	32,020	32,311
Rockland County	116,538	122,345	129,310	130,745	134,817	138,803	142,832	145,832	148,717	151,766	154,816
Sullivan County	29,577	28,673	29,047	27,451	28,222	29,970	31,229	31,312	31,497	31,731	31,965
Ulster County	70,732	71,652	73,270	73,239	74,377	77,212	79,198	80,283	81,335	82,405	83,475
Westchester County	444,936	466,908	485,847	478,943	486,943	496,332	505,026	513,648	524,016	529,678	535,340
Mid-Hudson Total	962,390	999,460	1,033,596	1,025,285	1,045,470	1,068,666	1,090,356	1,107,431	1,126,252	1,140,394	1,154,536
Bergen County	454,800	468,646	477,393	475,519	485,787	497,309	508,204	516,909	526,133	535,860	545,586
Essex County	410,788	398,558	409,911	407,505	414,227	429,799	440,946	449,357	458,421	468,066	477,710
Hudson County	289,015	302,863	316,525	320,259	330,392	346,722	359,953	370,661	381,301	392,536	403,771
Hunterdon County	56,262	60,787	60,082	57,901	58,826	60,925	62,436	62,760	63,289	64,252	65,215
Mercer County	247,294	251,046	246,405	242,188	249,047	259,787	268,587	272,404	276,978	282,546	288,114
Middlesex County	399,260	416,340	430,707	428,045	436,507	443,968	451,930	459,435	467,388	475,944	484,500
Monmouth County	287,779	290,824	297,250	293,588	296,850	304,569	310,060	314,137	319,168	324,865	330,563
Morris County	300,861	317,920	326,478	320,580	324,585	334,041	340,772	343,665	347,357	351,695	356,032
Ocean County	181,039	187,196	197,721	199,375	203,539	207,255	211,194	215,347	219,813	223,724	227,635
Passaic County	200,590	197,746	200,824	198,411	200,116	208,313	213,264	216,512	220,260	224,460	228,659
Somerset County	182,781	199,496	206,485	202,940	207,708	211,435	215,683	219,364	223,406	227,760	232,114
Sussex County	48,187	48,045	49,204	47,820	48,337	50,085	51,217	51,411	52,238	53,232	54,226
Union County	250,208	253,923	263,441	260,462	267,191	274,939	282,177	286,989	291,794	296,786	301,779
Warren County	40,045	39,397	39,586	38,021	38,605	40,423	41,624	42,371	43,070	43,644	44,218
New Jersey Total	3,348,908	3,432,786	3,522,011	3,492,615	3,561,715	3,669,570	3,758,047	3,821,323	3,890,618	3,965,369	4,040,120
Fairfield County	481,896	503,675	515,458	509,186	518,839	532,499	544,156	552,517	561,190	570,436	579,683
Litchfield County	68,609	73,635	73,473	73,061	74,076	75,147	76,190	76,746	77,331	77,936	78,540
New Haven County	404,350	416,614	425,629	418,493	426,564	437,411	446,870	453,889	461,593	469,748	477,903
Connecticut Total	954,854	993,924	1,014,561	1,000,740	1,019,479	1,045,057	1,067,216	1,083,152	1,100,113	1,118,120	1,136,126

Source: Bureau of Labor Statistics' Current Employment Statistics (CES) and Quarterly Census of Employment and Wages (QCEW); American Community Survey (ACS); NYMTC 2055 SED Forecasts

Note: Total employment includes payroll employment, self-employment, and unpaid family work, both full and part time.

Sub-regional Employment Detail

Figure 5. Projected Total Employment and CAGR by Sub-region (2000-2055)

Employment Levels	2000	2005	2010	2015	2017	2020	2025	2030	2035	2040	2045	2050	2055
New York City	4,559,706	4,398,674	4,527,230	4,850,126	5,114,624	5,144,775	5,242,883	5,395,105	5,520,271	5,641,547	5,752,434	5,891,763	6,031,092
Long Island	1,201,512	1,223,160	1,227,148	1,284,927	1,323,689	1,306,341	1,331,479	1,370,581	1,402,702	1,423,027	1,443,995	1,465,988	1,487,980
Mid-Hudson	977,923	1,013,155	962,390	999,460	1,033,596	1,025,285	1,045,470	1,068,666	1,090,356	1,107,431	1,126,252	1,140,394	1,154,536
New Jersey	3,458,913	3,477,018	3,348,908	3,432,786	3,522,011	3,492,615	3,561,715	3,669,570	3,758,047	3,821,323	3,890,618	3,965,369	4,040,120
Connecticut	1,030,405	997,322	954,854	993,924	1,014,561	1,000,740	1,019,479	1,045,057	1,067,216	1,083,152	1,100,113	1,118,120	1,136,126
31-County Totals	11,228,459	11,109,330	11,020,530	11,561,224	12,008,481	11,969,756	12,201,027	12,548,980	12,838,591	13,076,480	13,313,412	13,581,633	13,849,854
Avg. Annual Growth Rate		2000-2005	2005-2010	2010-2015	2015-2017	2017-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055
New York City		-0.72%	+0.58%	+1.39%	+2.69%	+0.20%	+0.38%	+0.57%	+0.46%	+0.44%	+0.39%	+0.48%	+0.47%
Long Island		+0.36%	+0.07%	+0.92%	+1.50%	-0.44%	+0.38%	+0.58%	+0.46%	+0.29%	+0.29%	+0.30%	+0.30%
Mid-Hudson		+0.71%	-1.02%	+0.76%	+1.69%	-0.27%	+0.39%	+0.44%	+0.40%	+0.31%	+0.34%	+0.25%	+0.25%
New Jersey		+0.10%	-0.75%	+0.50%	+1.29%	-0.28%	+0.39%	+0.60%	+0.48%	+0.33%	+0.36%	+0.38%	+0.37%
Connecticut		-0.65%	-0.87%	+0.81%	+1.03%	-0.46%	+0.37%	+0.50%	+0.42%	+0.30%	+0.31%	+0.33%	+0.32%
31-County Totals		-0.21%	-0.16%	+0.96%	+1.92%	-0.11%	+0.38%	+0.56%	+0.46%	+0.37%	+0.36%	+0.40%	+0.39%

Source: Bureau of Labor Statistics' Current Employment Statistics (CES) and Quarterly Census of Employment and Wages (QCEW); American Community Survey (ACS); NYMTC 2055 SED Forecasts

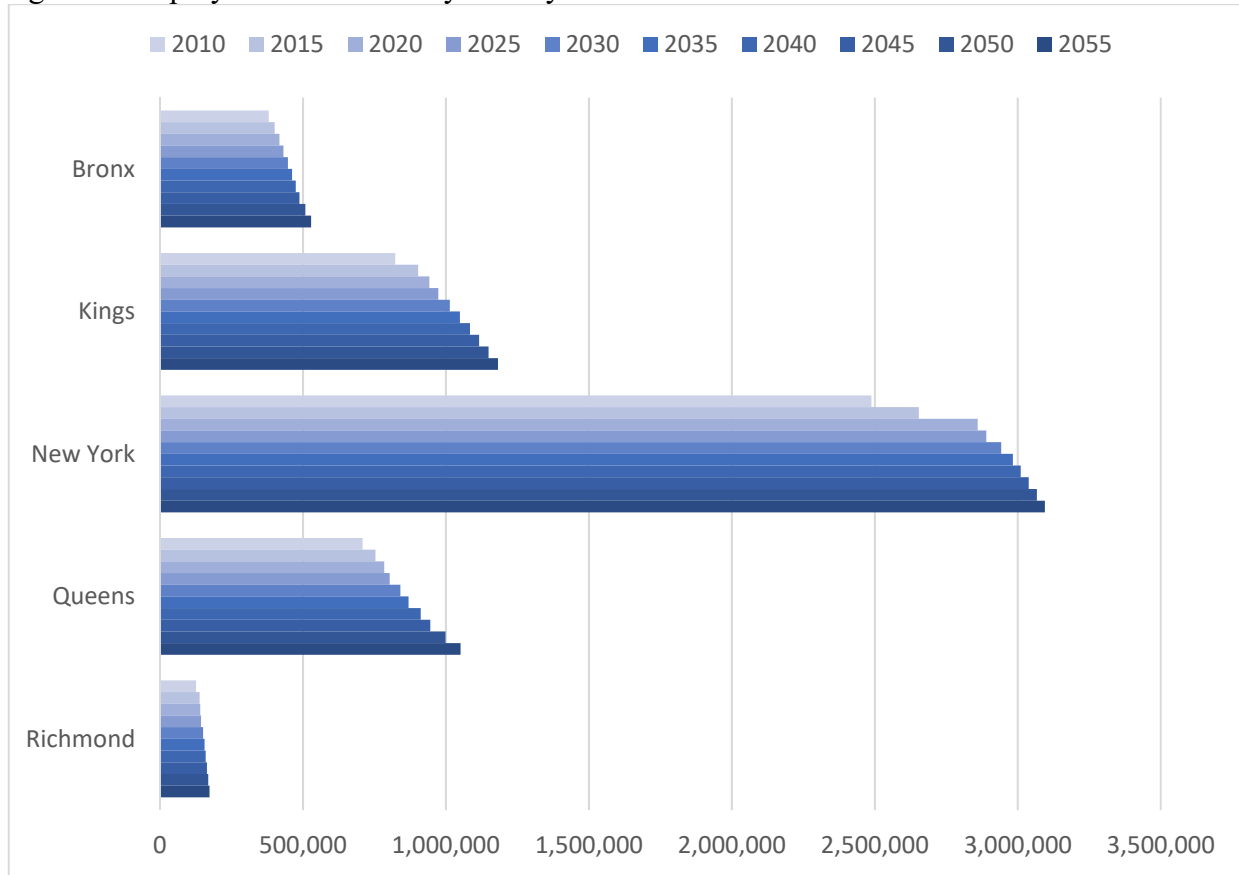
The distribution of employment throughout the region is forecasted to change little from 2017 to 2055, with the sub-regions outside of New York City decreasing in share by fractions of a percent over the thirty-year period. New York City will maintain the largest share of employment with 42.6 percent in 2017 increasing to 43.5 percent by 2055.

New York City

In New York City, (see Figure 6), the 2055 SED Forecast projects stronger growth over each 5-year forecast period than the 2050 SED Forecast due significantly to the growth seen since 2010. Growth rates in the 2055 SED Forecast are strongest in the 2025-2030 and 2030-2035 recovery years and moderate somewhat in later years.

Of the 916,000 jobs projected to be added in New York City from 2017 to 2055, the largest number will be located in Queens (264,000), followed by Manhattan (263,000) and Brooklyn (242,000), reflecting recent growth in these boroughs' employment hubs. Though its growth is anticipated to slow, Manhattan will retain the largest share of total employment in the region.

Figure 6. Employment Forecasts by County: NYC

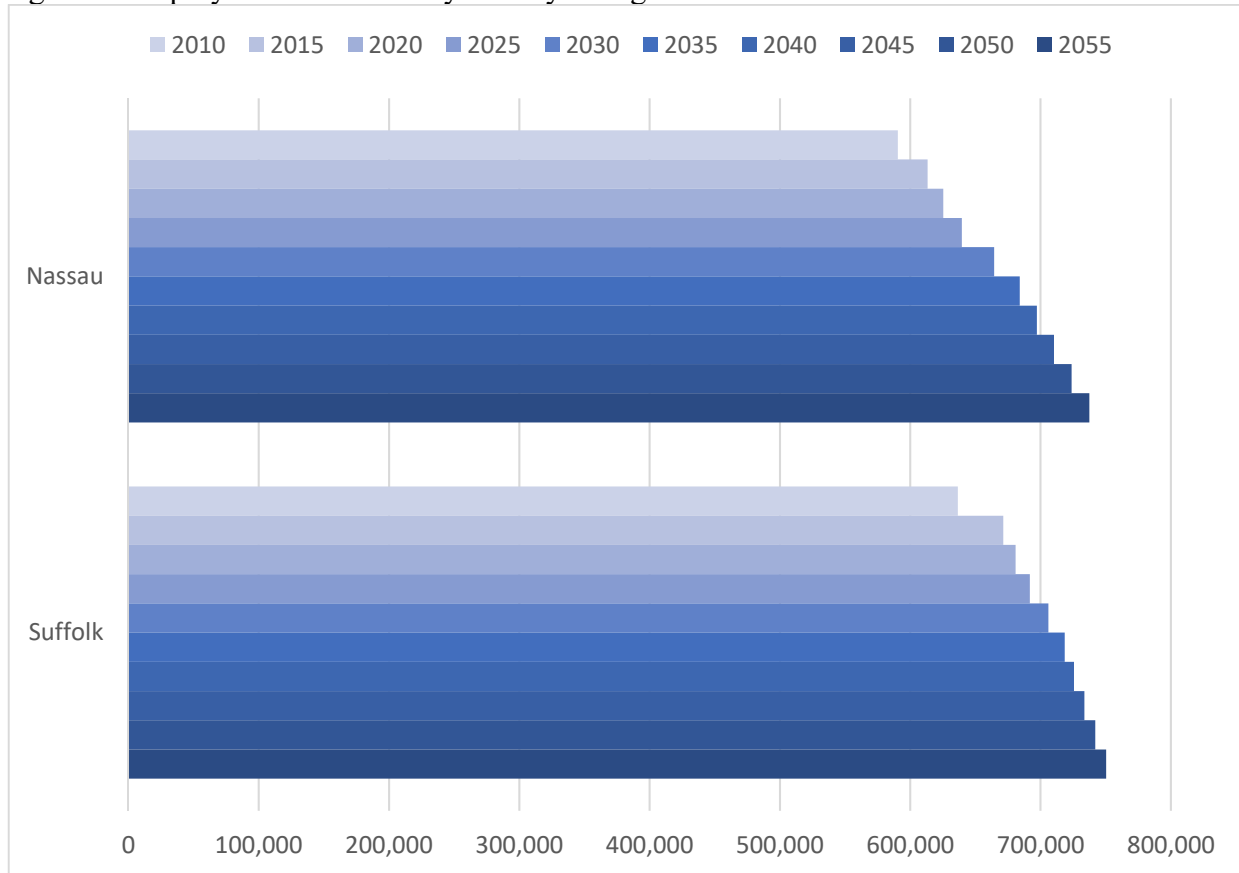


Source: NYMTC 2055 SED Forecasts

Long Island

In the long term, both Nassau and Suffolk counties are anticipated to experience steadily rising job growth through 2055. Nassau County jobs will increase by 106,000 from 2017-2055 supported by major transportation investments such as the Third Rail and East Side Access. The 2055 SED Forecast for Suffolk County shows employment increasing by 58,000 between 2017 and 2055. (See Figure 7.)

Figure 7. Employment Forecasts by County: Long Island

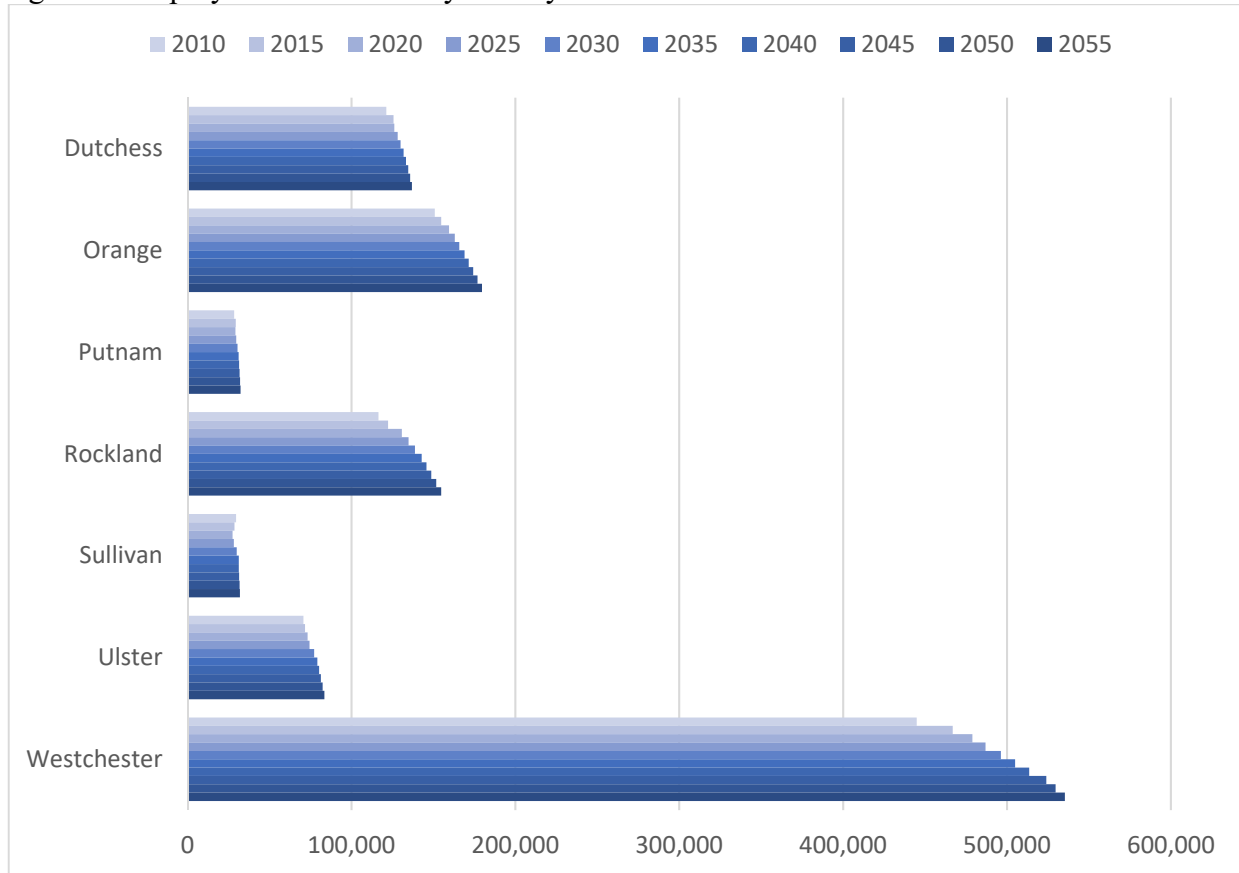


Source: NYMTC 2055 SED Forecasts

Mid-Hudson

Figure 8 illustrates the 2055 SED Forecasts for the Mid-Hudson counties shown in table form in Figure 4. Westchester County, with the largest employment numbers in the sub-region, will also have the greatest growth, adding some 49,000 jobs from 2017 to 2055. Rockland and Orange counties follow, adding 25,000 and 21,000 jobs, respectively, in the forecast period. Ulster and Dutchess counties are expected to add roughly 10,000 jobs each, while Sullivan and Putnam counties gain under 3,000 jobs.

Figure 8. Employment Forecasts by County: Mid-Hudson

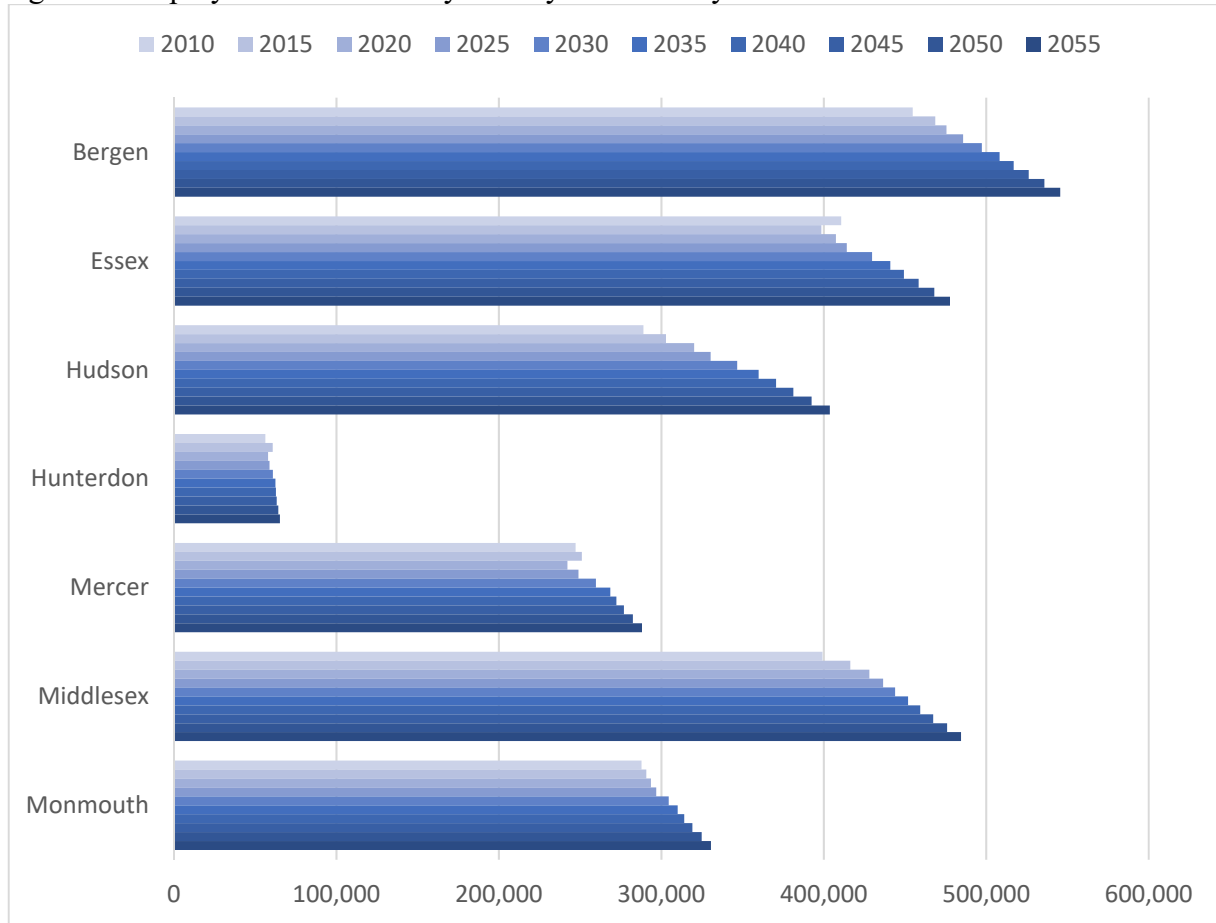


Source: NYMTC 2055 SED Forecasts

New Jersey

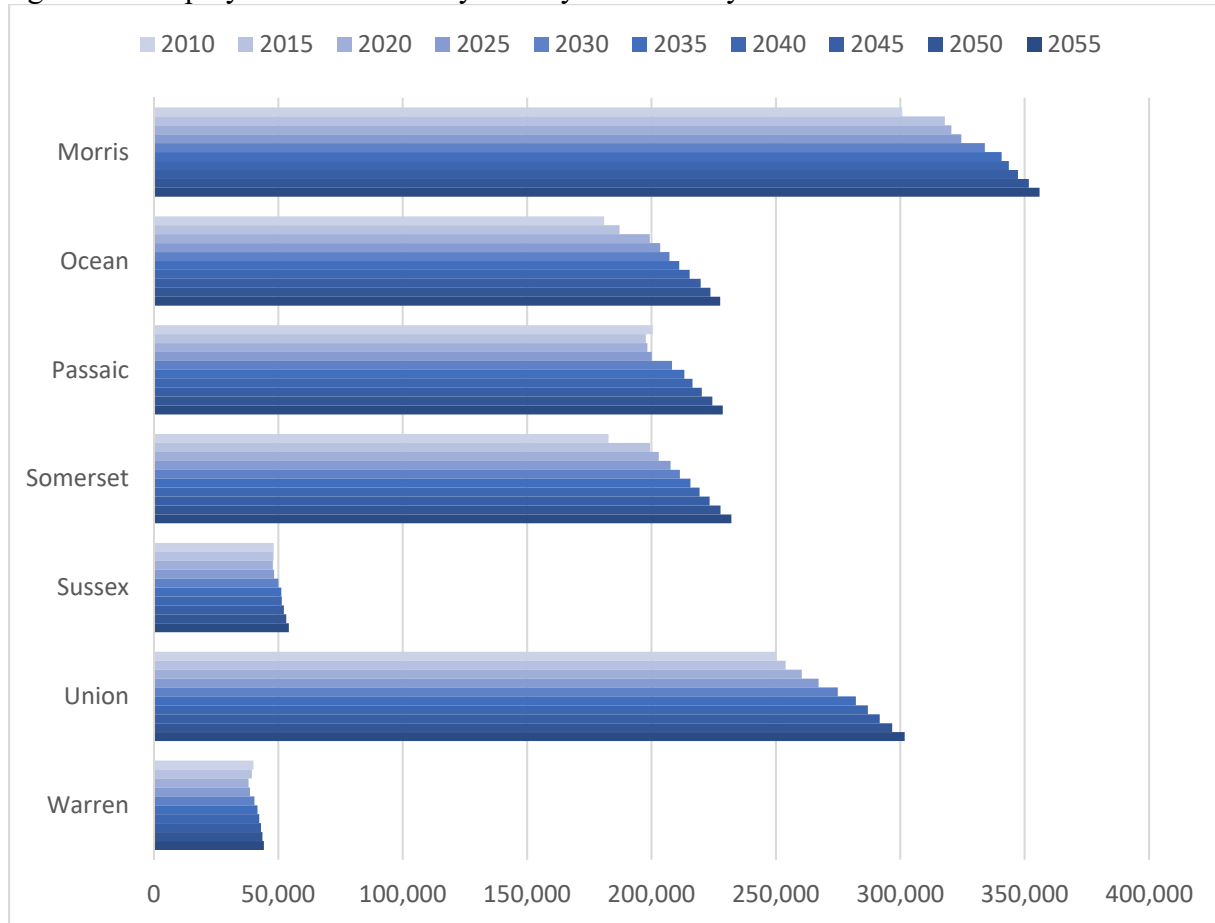
The 2055 SED Forecast projects growth to be strongest over the 5-year recovery period of 2020-2025, and gradually levels off in later years at the sub-region level, as shown in Figures 9 and 10. The compounded annual average growth rate for New Jersey during the forecast period is 0.4 percent, with only Hudson County exceeding that rate, adding some 87,000 jobs for growth rate of 0.6 percent. Bergen and Essex counties are also expected to see strong growth adding some 68,000 jobs each in the forecast period.

Figure 9. Employment Forecasts by County: New Jersey Pt. 1



Source: NYMTC 2055 SED Forecasts

Figure 10. Employment Forecasts by County: New Jersey Pt. 2

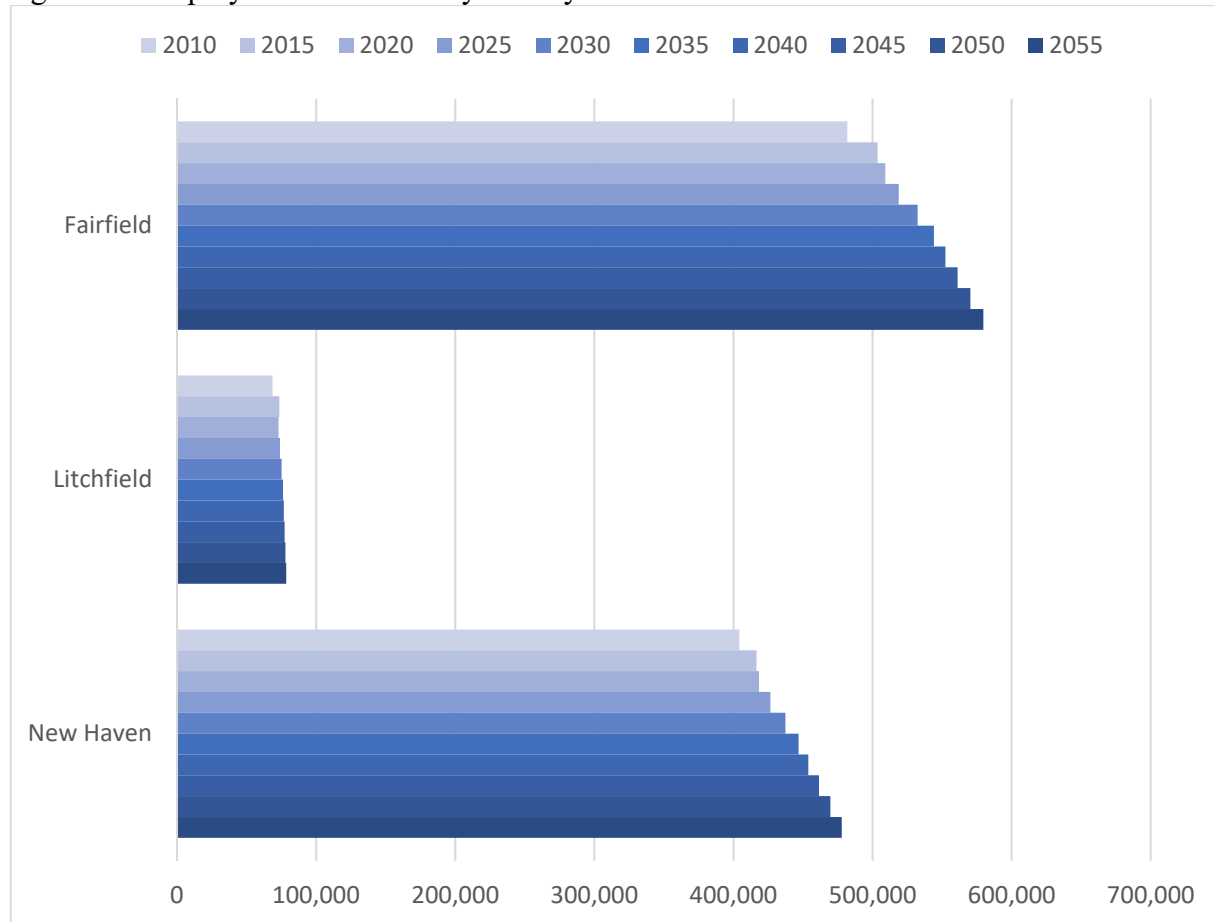


Source: NYMTC 2055 SED Forecasts

Connecticut

As shown in Figure 11, the 2055 SED Forecast projects sub-regional growth of 0.3 percent per year for Connecticut. Growth in Litchfield County is forecast to be slower than that of New Haven and Fairfield counties at only 0.2 percent per year.

Figure 11. Employment Forecasts by County: Connecticut



Source: NYMTC 2055 SED Forecasts

Population

Methodological Overview

The population models for the non-NYC sub-regions and NYC are prepared separately. The non-NYC sub-region models are cohort-component models, the key components of which are births, deaths, and net migration.

NYCDCP prepares the population forecasts for the New York City counties that are incorporated into the NYMTC SED forecasts. A cohort-component model was used to project the population for the NYC counties for the 2055 SED forecasts, where the inputs are births, deaths and net migration. In addition to the demographic model, a NYC land use scenario was used as well. Each of these approaches inform the other and were brought in sync by adjusting the crude migration rates. The NYC forecasts are then entered into the regional Population Model.

Linked within the regional Population Model is a sub-model for Civilian Labor Force, which reconciles the cohort component population model using labor force participation rates with employment inputs including the forecasts and the 31-county Closed Commutation Matrix. The resulting population and labor force forecasts are then input into the employment model so that unemployment and multiple job-holding rates can be identified. The latter are a vital tool in determining the rationality of the population-employment balance. The 2055 SED population is reconciled with the employment forecasts as shown in Figure 12. While the forecasts do reconcile, it is notable that total employment exceeds the available regional labor force from 2020 on, leading to an increased multiple job-holding rate of up to 8.2 percent.

Figure 12. Regional Reconciliation Table

<u>PLACE OF RESIDENCE</u>	2010	2015	2017	2020	2025	2030	2035	2040	2045	2050	2055
Population	22,282,010	22,645,974	22,869,314	22,927,086	23,395,599	23,807,305	24,406,004	24,862,623	25,193,199	25,508,292	25,807,114
Total Labor Force	11,568,295	11,834,620	11,792,890	11,725,928	12,066,479	12,132,133	12,431,924	12,682,100	12,909,152	13,121,698	13,273,319
Unemployment Rate	10.4%	10.4%	8.4%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%	5.5%
Unemployment	1,197,608	1,227,142	994,484	645,330	667,291	671,646	687,500	700,753	712,868	723,641	731,556
Forecast Area Employment by POR	10,370,686	10,607,477	10,798,406	11,080,598	11,399,188	11,460,488	11,744,423	11,981,346	12,196,283	12,398,057	12,541,763
Out-Commuting Rate	1.7%	1.6%	1.7%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%	1.6%
Out-Commuters	186,768	190,474	203,543	193,353	197,089	202,710	207,388	211,231	215,058	219,390	223,723
<u>PLACE OF WORK</u>	2010	2015	2017	2020	2025	2030	2035	2040	2045	2050	2055
Wage & Salary Employment	9,984,474	10,499,370	10,922,607	10,893,675	11,098,608	11,410,648	11,669,135	11,882,344	12,095,336	12,337,210	12,579,084
Self-Employment	1,036,056	1,061,853	1,085,874	1,076,082	1,102,420	1,138,331	1,169,456	1,194,136	1,218,075	1,244,423	1,270,771
Forecast Area Employment by POW	11,020,530	11,561,224	12,008,481	11,969,756	12,201,027	12,548,980	12,838,591	13,076,480	13,313,412	13,581,633	13,849,854
In-Commuting Rate	3.0%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%	2.8%
In-Commuters	312,077	293,579	306,419	306,833	315,565	319,787	326,810	333,137	339,516	346,287	350,301
Gross Labor Supply (Residents)	10,682,764	10,901,056	11,104,825	11,387,431	11,714,753	11,780,275	12,071,234	12,314,484	12,535,799	12,744,344	12,892,064
Gross Labor Demand (Total Jobs)	11,207,298	11,751,698	12,212,023	12,163,110	12,398,116	12,751,689	13,045,979	13,287,710	13,528,469	13,801,023	14,073,577
Count of Non-Primary Jobs	493,966	808,531	1,052,351	736,694	648,213	923,459	926,624	925,086	943,526	1,004,503	1,123,847
Derived Multiple Job-Holding Rate	4.7%	7.2%	9.1%	6.4%	5.5%	7.6%	7.5%	7.3%	7.3%	7.7%	8.4%

Source: NYMTC 2055 SED Forecasts

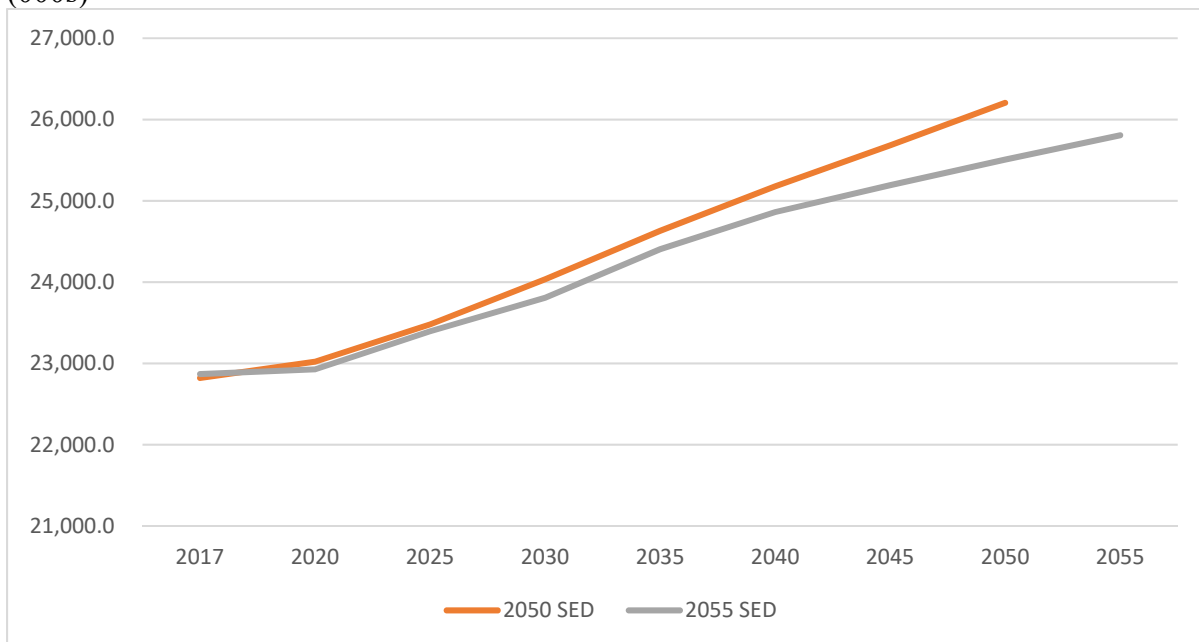
Overview of Population Trends

The 2055 SED Forecast shows population growing at a annual average rate of 0.3 percent for the NYMTC region, reaching a total of 25.8 million by 2055. Reflecting growth constraints and an aging population in a mature region, the forecast rates of growth slow in later years of the projection.

Regional Model Results

Figures 13 and 14 illustrate the regional differences between the 2050 SED Forecast and the 2055 SED Population forecasts.² When comparing the 2055 SED Forecast to the 2050 SED Forecast, population growth between 2020 and 2050 region-wide is projected to be some 700,000 less than previously forecast growth over the same 30-year period as reflects demographic trends including the aging of the population and lower birth rates as well as land use constraints identified by FWG members.

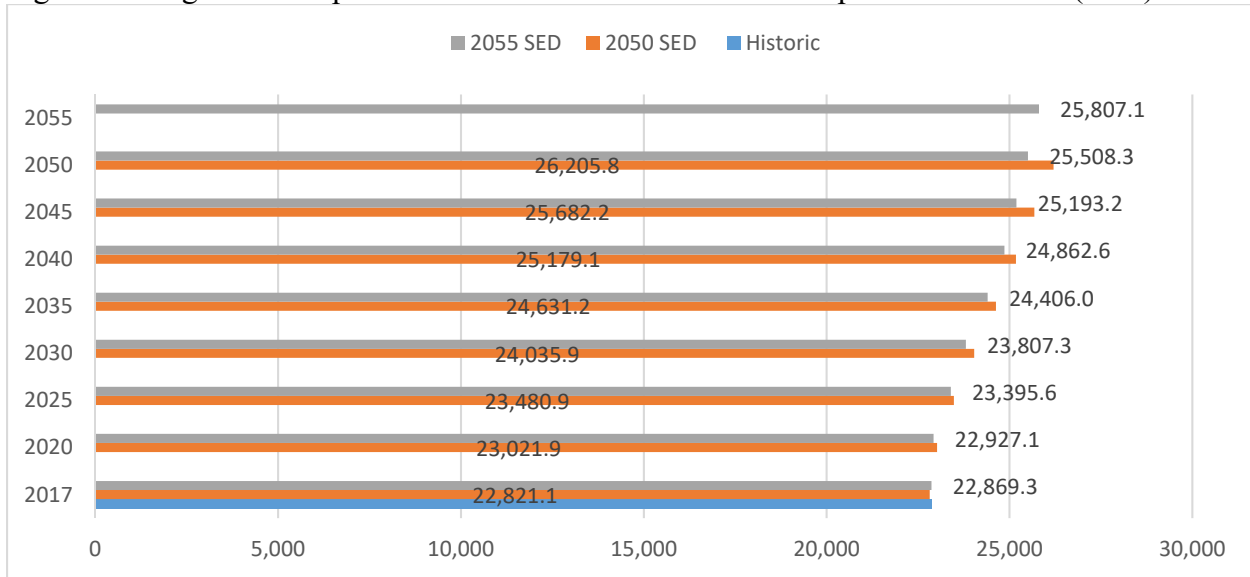
Figure 13. Regional Comparison of 2050 SED and 2055 SED Forecast Population Forecasts (000s)



Source: NYMTC 2050 SED Forecast, NYMTC 2055 SED Forecast

² In Figures 13 and 14 actual 2017 population was included for reference in the 2050 SED forecasts.

Figure 14. Regional Comparison of 2050 SED and 2055 SED Population forecasts (000s)



Source: NYMTC 2050 SED Forecast, NYMTC 2055 SED Forecast

The population forecasts by county are found in Figure 15 on the following page.

Figure 15. Population Model Outputs: 2055 SED Forecast

	2010	2015	2017	2020	2025	2030	2035	2040	2045	2050	2055
FORECAST REGION	22,282,010	22,645,974	22,869,314	22,927,086	23,395,599	23,807,305	24,406,004	24,862,623	25,193,199	25,508,292	25,807,114
Bronx County	1,385,108	1,423,160	1,443,220	1,454,816	1,515,667	1,548,245	1,573,786	1,595,881	1,616,845	1,633,550	1,646,673
Kings County	2,552,911	2,593,655	2,650,441	2,647,112	2,760,391	2,820,822	2,860,506	2,894,388	2,928,160	2,956,932	2,980,001
New York County	1,585,873	1,636,537	1,663,244	1,668,548	1,698,050	1,735,482	1,754,534	1,768,412	1,781,885	1,791,292	1,796,986
Queens County	2,250,002	2,294,943	2,323,062	2,349,324	2,418,636	2,463,405	2,483,716	2,500,457	2,517,076	2,528,763	2,537,200
Richmond County	468,730	477,525	482,793	484,897	491,202	495,047	498,769	502,327	505,464	507,920	510,354
New York City Total	8,242,624	8,425,820	8,562,760	8,604,697	8,883,946	9,063,001	9,171,311	9,261,465	9,349,430	9,418,457	9,471,214
Nassau County	1,339,532	1,354,612	1,363,069	1,354,852	1,363,996	1,383,374	1,440,708	1,479,799	1,493,007	1,520,308	1,547,609
Suffolk County	1,493,350	1,501,373	1,497,595	1,500,734	1,515,084	1,535,434	1,593,636	1,632,768	1,653,573	1,673,844	1,694,114
Long Island Total	2,832,882	2,855,985	2,860,664	2,855,585	2,879,080	2,918,808	3,034,344	3,112,567	3,146,580	3,194,151	3,241,723
Dutchess County	297,488	296,928	295,685	298,978	302,733	306,661	311,939	315,981	317,344	318,345	319,345
Orange County	372,813	375,384	378,174	382,922	396,313	413,156	433,295	452,288	468,310	484,820	501,330
Putnam County	99,710	99,488	99,464	98,919	99,187	101,005	104,221	106,526	107,614	108,090	108,566
Rockland County	311,687	320,688	325,027	321,338	332,006	343,484	360,101	376,095	390,377	405,819	421,262
Sullivan County	77,547	76,330	75,783	79,676	81,833	83,347	86,642	87,146	87,055	86,735	86,415
Ulster County	182,493	181,300	180,129	182,027	183,140	183,767	186,836	186,221	184,029	181,786	179,544
Westchester County	949,113	967,315	975,321	968,823	969,277	975,585	995,611	1,008,590	1,009,785	1,008,044	1,006,303
Mid-Hudson Total	2,290,851	2,317,433	2,329,583	2,332,682	2,364,487	2,407,004	2,478,645	2,532,847	2,564,513	2,593,639	2,622,766
Bergen County	905,116	926,330	937,920	929,861	944,937	965,414	997,118	1,028,379	1,055,613	1,083,869	1,112,125
Essex County	783,969	791,609	800,401	800,276	812,142	822,081	856,747	879,863	900,211	920,335	940,458
Hudson County	634,266	662,619	679,756	675,060	698,570	719,878	760,716	794,388	824,306	856,947	889,588
Hunterdon County	127,351	126,250	125,717	126,922	127,051	127,632	130,230	131,183	132,031	132,858	133,685
Mercer County	367,511	370,212	373,362	387,645	390,091	392,365	405,455	409,910	412,348	415,236	418,123
Middlesex County	809,858	830,300	837,288	837,396	854,613	871,636	896,183	915,202	927,323	939,723	952,123
Monmouth County	630,380	629,185	627,551	630,213	632,219	633,313	645,951	659,385	665,963	669,624	673,285
Morris County	492,276	498,192	498,847	500,829	502,637	505,284	513,852	518,916	524,363	528,760	533,156
Ocean County	576,567	583,450	589,699	597,539	616,017	638,917	663,764	686,473	707,129	727,653	748,176
Passaic County	501,226	507,574	510,563	515,029	524,618	535,109	558,963	574,967	588,041	599,628	611,215
Somerset County	323,444	330,604	333,316	336,521	341,784	346,043	353,811	360,297	363,037	363,486	363,934
Sussex County	149,265	145,930	143,570	146,004	146,474	146,866	149,705	151,604	151,762	152,337	152,911
Union County	536,499	548,744	557,320	554,212	563,662	576,297	595,930	616,885	634,789	652,581	670,373
Warren County	108,692	107,226	107,088	109,717	110,796	111,473	113,886	114,573	115,129	115,320	115,512
New Jersey Total	6,946,420	7,058,225	7,122,398	7,147,224	7,265,611	7,392,309	7,642,310	7,842,026	8,002,046	8,158,355	8,314,664
Fairfield County	916,829	939,983	947,328	944,219	953,407	970,387	1,007,001	1,036,974	1,059,030	1,078,948	1,098,866
Litchfield County	189,927	186,304	184,454	183,699	180,486	177,584	174,954	170,067	163,015	155,294	147,573
New Haven County	862,477	862,224	862,127	858,979	868,582	878,212	897,440	906,677	908,586	909,447	910,307
Connecticut Total	1,969,233	1,988,511	1,993,909	1,986,897	2,002,475	2,026,183	2,079,395	2,113,718	2,130,631	2,143,689	2,156,747

Source: NYMTC 2055 SED forecasts

Sub-regional Population

Figure 16 presents the average annual percent change in sub-regional population as forecast. In the 2055 SED population forecast, New York City is the only sub-region that is expected to demonstrate higher population growth than previously forecasted reflecting the strong population growth in the past several years. All the sub-regions outside of New York City grew slower than anticipated in the prior forecast and have been adjusted to match historic trends. 2017-2030 growth is also affected by a slower forecasted employment within that period – population rates increase slightly by 2030, with most areas seeing declining rates of population growth in later years due to growth constraints.

Figure 16. 2055 SED and 2050 SED Forecast Population Average Annual Percent Change in Forecasted Population

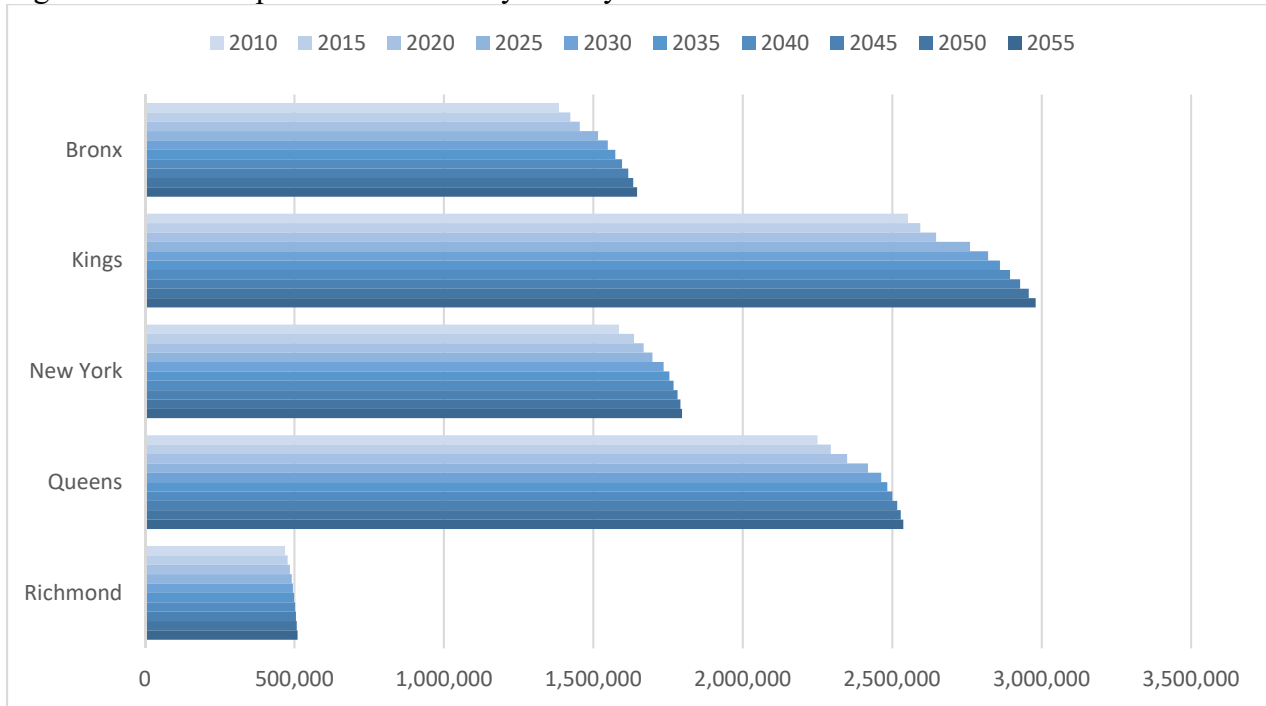
	2017-2020	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045	2045-2050	2050-2055
Region 2050 SED	+0.29%	+0.40%	+0.47%	+0.49%	+0.44%	+0.40%	+0.40%	N/A
Region 2055 SED	+0.08%	+0.41%	+0.35%	+0.50%	+0.37%	+0.26%	+0.25%	+0.23%
NYC 2050 SED	+0.36%	+0.35%	+0.28%	+0.25%	+0.21%	+0.15%	+0.15%	N/A
NYC 2055 SED	+0.16%	+0.64%	+0.40%	+0.24%	+0.20%	+0.19%	+0.15%	+0.11%
LI 2050 SED	+0.09%	+0.37%	+0.60%	+0.62%	+0.57%	+0.50%	+0.49%	N/A
LI 2055 SED	-0.06%	+0.16%	+0.27%	+0.78%	+0.51%	+0.22%	+0.30%	+0.30%
MH 2050 SED	+0.23%	+0.51%	+0.72%	+0.76%	+0.68%	+0.65%	+0.68%	N/A
MH 2055 SED	+0.04%	+0.27%	+0.36%	+0.59%	+0.43%	+0.25%	+0.23%	+0.22%
NJ 2050 SED	+0.32%	+0.42%	+0.52%	+0.60%	+0.55%	+0.52%	+0.54%	N/A
NJ 2055 SED	+0.12%	+0.33%	+0.35%	+0.67%	+0.52%	+0.40%	+0.39%	+0.38%
CT 2050 SED	+0.28%	+0.44%	+0.60%	+0.59%	+0.53%	+0.49%	+0.48%	N/A
CT 2055 SED	-0.12%	+0.16%	+0.24%	+0.52%	+0.33%	+0.16%	+0.12%	+0.12%

Source: NYMTC 2050 SED Forecast, NYMTC 2055 SED Forecast

NYC Population Forecast

The New York City sub-region is projected to reach 9.47 million people by 2055, an increase of 908,500 people between 2017 and 2055. Figure 17 below illustrates NYC's population by county, which shows large increases from 2010-2025 due to significant increases in the number of housing units in the prior decade and expected in the early part of this decade. After this period, all counties in NYC are forecasted to grow, but are projected to increase at a decreasing rate.

Figure 17. NYC Population Forecast by County



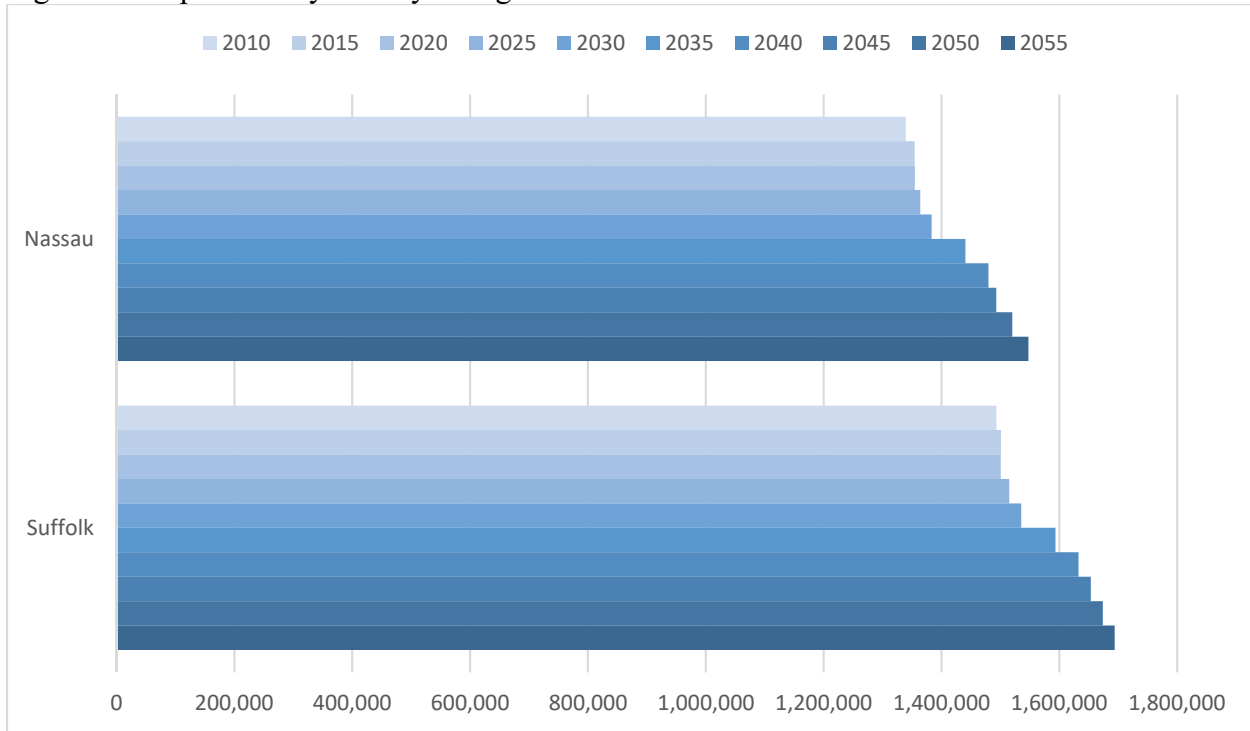
Source: NYMTC 2055 SED forecasts

Long Island Counties

The Long Island sub-regional forecast shows a gain of 381,100 residents between 2017 and the 2055 forecast year. Figure 18 illustrates Long Island's population forecast by county, which shows flat growth in both counties through 2025, before increasing after 2030 supported by infrastructure investment on the Long Island Rail Road including the Expansion Project, Third Track and East Side Access.

It is notable that in all of Long Island, population growth is slower in the 2017 to 2030 period due to an aging population and a slowed economy. Nassau County's population grows at a compounded rate of 0.1 percent per year during that period, before increasing in the last 25 years of the forecast period to a pace of 0.4 percent per annum. Suffolk County's population grows at an overall annual average rate of 0.3 percent, ultimately reaching a 2055 total of 1.7 million residents

Figure 18. Population by County: Long Island

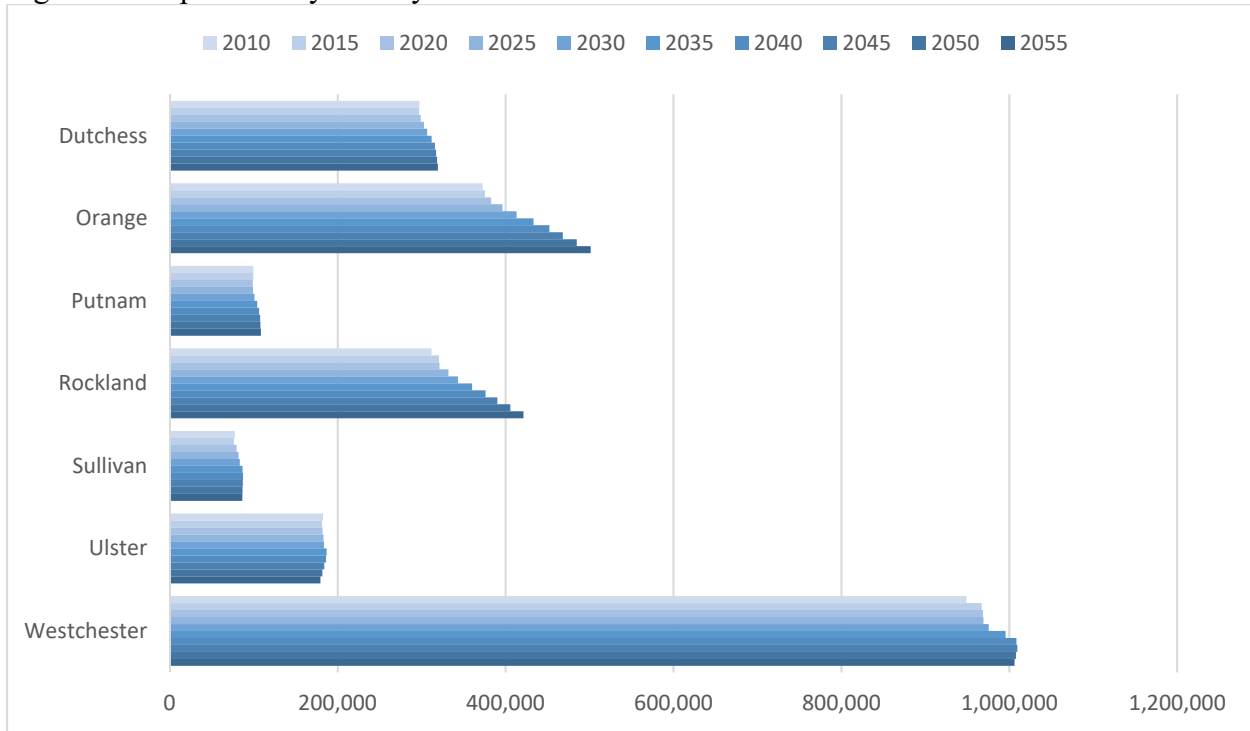


Source: NYMTC 2055 SED Forecast

Mid-Hudson Counties

The Mid-Hudson sub-regional population will grow by 293,183 residents between 2017 and the 2055 forecast year, largely due to anticipated labor-induced migration. As shown in Figure 19, the majority of population growth will occur in Orange and Rockland counties while the remaining counties hold relatively steady over the 38-year forecast period. The 2055 SED Forecast's population projection for 2050 is a reduction of 7.8 percent compared with the 2050 SED Forecast.

Figure 19. Population by County: Mid-Hudson

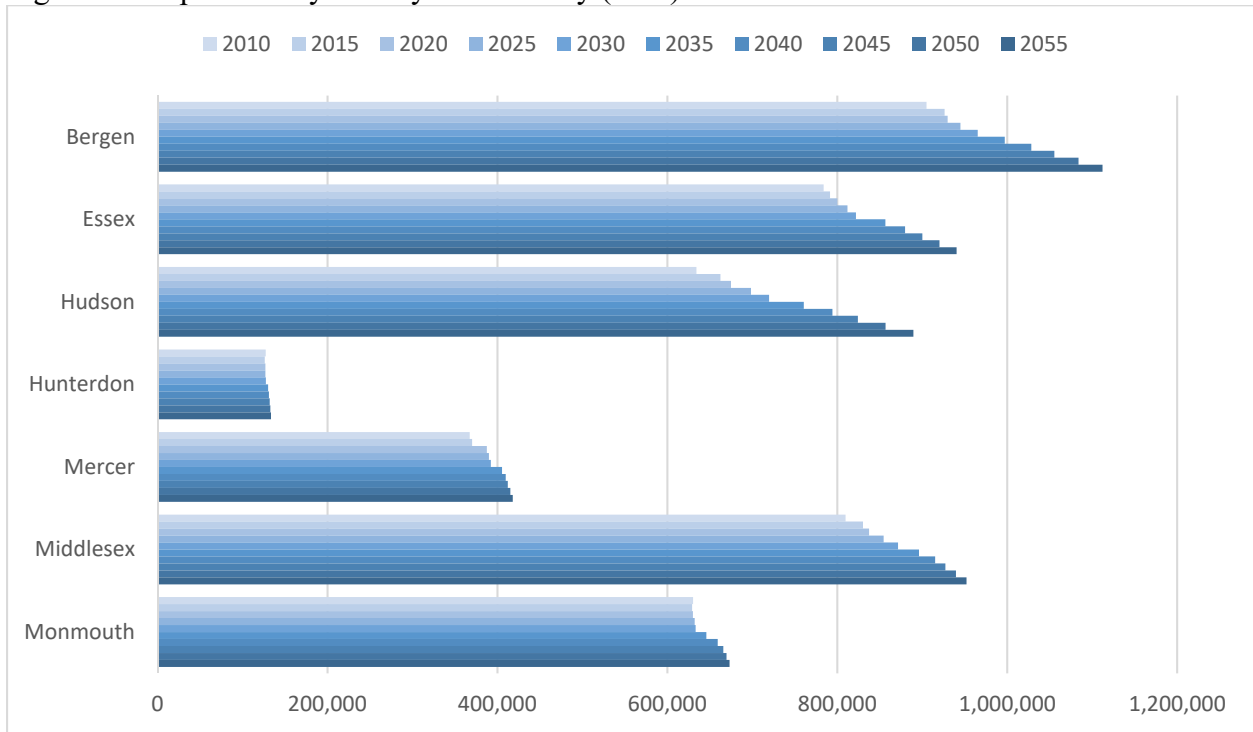


Source: NYMTC 2055 SED Forecast

New Jersey Counties

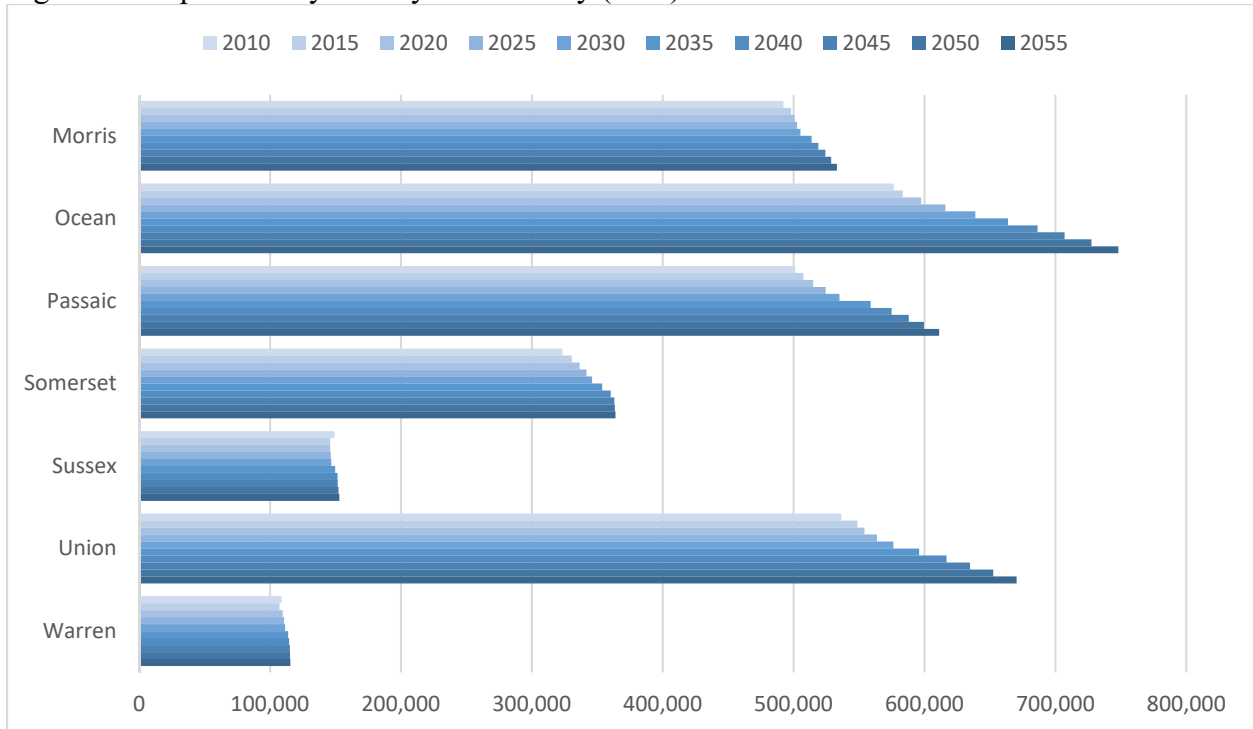
The New Jersey sub-region will see an increase of 1.2 million people between 2017 and 2055, or an annual average increase of 0.4 percent. Based on the cohort-component models with the adjustments to labor-induced migration illustrated in Figures 20 and 21, growth is expected in all counties over the period from 2017 to 2055. Hunterdon, Monmouth, Morris, Somerset, Sussex and Warren counties will experience compounded annual average growth of 0.1 to 0.3 percent while all other counties will expand by 0.4 to 0.7 percent annually.

Figure 20. Population by County: New Jersey (Pt. 1)



Source: NYMTC 2055 SED Forecast

Figure 21. Population by County: New Jersey (Pt. 2)

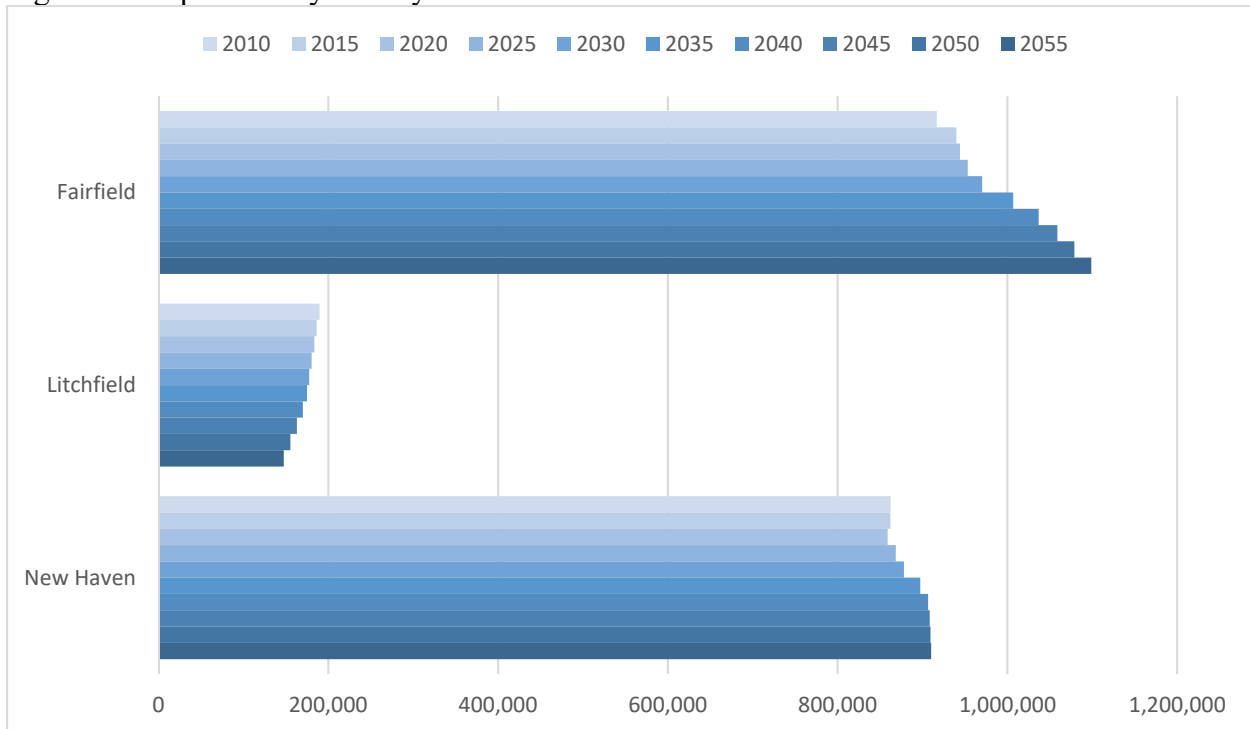


Source: NYMTC 2055 SED Forecast

Connecticut Counties

The Connecticut sub-region will also see population growth in the 2055 SED Forecast with Fairfield and New Haven counties increasing by 151,500 and 48,200 respectively, while Litchfield County loses 36,900 residents in the 2017 to 2055 forecast year period (see Figure 22). While Fairfield County's 2050 projection is roughly 4 percent less than the 2050 SED Forecast, the 2050 projection for Litchfield and New Haven counties are 28 percent and 16 percent lower, respectively.

Figure 22. Population by County: Connecticut



Source: NYMTC 2055 SED Forecast

Conclusion

The agreed-upon NYMTC 2055 SED forecasts show both employment and population growing regionwide from 2017 to the 2055 forecast year. Employment, although lagged in the near term to acknowledge the economic slowdown caused by the pandemic, will exceed that projected by the 2050 SED forecasts. The 2055 SED forecast of population will show growth as well, albeit at a slower rate than shown in the 2050 SED forecasts as reflects trends in birth rates as well as anticipated constraints on development potential.

Appendix A. Public Comments and Responses

Technical Memorandum 4: 2055 SED Forecast Results
Executive Summary

#	Comment Submission Method	Submission Date	First Name	Last Name	City	State	Zip	Email	Stakeholder Comments/Issues	Notes	Response	Date Sent	Medium of response
1	Mail	9/15/20	Jack	McGreevy	Mattituck	NY	11952		Re: <u>Mass Public Transportation - Eastern Suffolk County</u> Notice of Comment Period All things considered: We need a modern safe transportation system for the north east rail corridor; bypassing Manhattan. Connect New Jersey to reconnect to Connecticut, through Brooklyn Nassau and eastern Suffolk County via a bridge or tunnel – across the Long Island. Now is the time – for the common good of the tri-state region; and our country. It is crucial for our safe future. Sincerely, Jack M'Greevy	Received comment via mail and response by mail.	Mr. Jack McGreevy 800 Summit Drive Mattituck, NY 11952 Dear Mr. McGreevy: Thank you for your letter dated September 15, 2020 which provides your comments on the draft 2055 Socio-Economic/Demographic (SED) forecasts that NYMTC has prepared for its next Regional Transportation Plan. With regard to your concerns about the transportation system's connectivity and safety, these are important considerations in NYMTC's current 2018-2045 Regional Transportation Plan. As we develop our next Plan, which will cover the period 2022-2050, we will consider the concerns you've raised in this area along with others	5-Oct-20	mail

Technical Memorandum 4: 2055 SED Forecast Results
Executive Summary

#	Comment Submission Method	Submission Date	First Name	Last Name	City	State	Zip	Email	Stakeholder Comments/Issues	Notes	Response	Date Sent	Medium of response
											that have been gathered through our public outreach process. We appreciate your interest in the regional transportation planning process. Sincerely, Larisa Morozovskaya		
2	Website	9/3/20	Robert	Paaswell	New York	NY	10031	paaswell@utrc2.org	Subject: forecastComments than ks - well done; COVID impacts on NYC, esp. Manhattan core employment may be greater than estimated. MTA impact may depress access to core jobs. Social distancing - a mandate for reopening businesses - may limit persons/100sf of office space. This will have a corresponding ripple effect on secondary employment.		Dear Mr. Paaswell, Thank you for submitting your comments during the public comment period for draft 2055 Population and Employment forecasts. Your comments will be considered as we finalize this product. Sincerely, Larisa Morozovskaya	30-Sep-20	e-mail

