



Presentation on Municipal Solid Waste (MSW) Interstate Flow in the Northeast in 2022

August 1, 2025

Prepared by the [NEWMOA Solid Waste Metrics Workgroup](#)

State environmental agencies in the Northeast have a responsibility to regulate the operation of municipal solid waste (MSW) transfer and disposal facilities. To fulfill this responsibility, they gather data from the MSW facilities that they regulate on their waste imports, and most collect data on waste shipped out-of-state (exports). This information helps them assess disposal capacity and waste diversion activities. Starting in 2000, NEWMOA's members began to share data and prepare reports to characterize the regional flow of MSW for disposal to validate their information and inform state MSW policy and program development. For the purposes of this analysis, MSW includes non-hazardous waste generated by residential and commercial sources and does not include construction and demolition debris or non-hazardous industrial by-products. This data presentation covers MSW that is disposed of in landfills or waste-to-energy (WTE) facilities and does not include MSW that is diverted from disposal for composting, anaerobic digestion, reuse, or recycling.

Most MSW collection and disposal facilities in the northeast are owned and/or operated by private haulers and waste management companies. A small number are owned by municipal or county level government. When a disposal facility is publicly-owned, it can limit the geographic area from which it accepts MSW, and in certain situations can mandate that the MSW generated within that area be managed at that facility (these restrictions are known as "flow control"). With the exception of MSW generated in flow control areas, MSW functions as a commodity with disposal markets that can vary year-to-year depending on tipping fees, transportation costs, and contract arrangements. State government agencies do not direct where disposal of MSW occurs.¹

The figures displayed below present available state and northeast MSW disposal information for calendar year 2022 along with comparisons to previous years. NEWMOA performed this analysis annually from 1999 to 2006. In 2006, NEWMOA decided to collect and analyze the data every other year. The figures below compare 2022 data with 2010, 2012, 2014, 2016, 2018, and 2020 data.

Solid Waste Metrics Workgroup

State solid waste program directors appoint representatives to serve on NEWMOA's [Solid Waste Metrics Workgroup](#). The purpose of this Workgroup is to oversee NEWMOA's MSW data collection and analysis and the development of this presentation. By working together, the Workgroup members have improved the accuracy of their state data.

¹ Except in Rhode Island (RI) where the Rhode Island Resource Recovery Corporation (RIRRC) is enabled by law to control MSW generated in RI. (Reference: RI Law, TITLE 23, Health and Safety, CHAPTER 23-19, Rhode Island Resource Recovery Corporation, SECTION 23-19-13, § 23-19-13).

Data Analysis Methodology

NEWMOA followed the data quality assurance procedures in its EPA-approved Quality Management Plan to prepare this presentation. NEWMOA's Workgroup members start developing this presentation by sharing summaries of the MSW data they collect from facilities. Prior to sending NEWMOA their state's data, the Workgroup members conduct their own quality assurance review of it. The NEWMOA staff reviews the data and prepares draft figures using Microsoft Excel. If the staff has a question or concern about the data, they contact the appropriate Workgroup member to address the issue. The Workgroup members review a draft of the data, figures, and text and provide comments and corrections. After the NEWMOA staff makes the recommended corrections, a revised draft is shared with the NEWMOA Board of Directors and the Solid Waste and Sustainable Materials Management Steering Committee for their review and approval prior to publication online.

Data Caveats & Notes

This presentation focuses on the flow of MSW in the Northeast U.S., including Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. These are the states that are members of NEWMOA. Waste imports from and exports to non-NEWMOA states and/or Canadian provinces are aggregated into the "non-NEWMOA" or "Other" category in the figures.

Workgroup members resolve discrepancies that arise once NEWMOA staff have compiled the MSW data. A typical discrepancy involves a situation where the waste data from transfer facilities in one state disagree with the data from disposal facilities in another state. For all years, and unless otherwise noted below for 2020 and 2022², the graphs are based on information from the disposal facilities, since the Workgroup considers their data to be more accurate. For data caveats for years prior to 2020, see prior published reports.

² Data Notes:

- a) Connecticut: a WTE did not report the state of origin for MSW received from out-of-state in 2020. Half the amount was attributed to MA and the other half to RI.
- b) Massachusetts: to account for pass-through (MA to a TS in RI and back to MA for disposal) imports from RI were reduced by 22,872 tons in 2020 and 4,029 tons in 2022 (and added to in-state disposal of in-state generated MSW). The amount disposed from VT is data supplied by VT
- c) New Hampshire: the WTE in NH did not report the state of origin for MSW received from out-of-state. VT DEC reports VT facilities sending 5,295 tons to the NH WTE in 2020 and 4,114 tons in 2022 – for both years, the rest was attributed to coming from MA. To account for pass-through of MA-generated MSW through VT transfer stations in 2022, exports to NH from MA were increased by 2,750 tons. The amount disposed from VT is data supplied by VT
- d) New York: to account for pass-through from NY, imports from CT were reduced by 5,833 tons in 2020 and 3,961 tons in 2022 (and those amounts were added to in-state disposal of in-state generated MSW). In 2022, imports from RI were reduced by 12,964 tons to account for pass-through from MA (and that amount was added to the amount imported from MA). To account for pass-through of MA-generated MSW through VT transfer stations in 2022, exports to NY from MA were increased by 25,661 tons. The amount disposed from VT is data supplied by VT.
- e) Rhode Island: to account for pass-through from MA in 2022, exports to MA were reduced by 4,029 tons (and added to MA in-state disposal)
- f) For exports to states and provinces outside the northeast: 2022 data reported by the exporting state was used for MSW disposal in AL, MI and OH because those states do not report MSW-only data. Imports to OH and PA from NJ were reduced to account for pass-through from NY (320,380 tons and 93,954 tons, respectively in 2020 and 149,714 tons and 5,172 tons, respectively in 2022); imports to OH and PA from NY were increased by the pass-through quantity. To account for pass-through from MA in 2022, CT exports to OH were reduced by 17,884 tons (and added to exports from MA to OH). To account for pass-through of MA-generated MSW through RI transfer stations in 2022, exports from RI to AL were reduced by 12,964 tons (and added to exports from MA to AL).

Therefore, the numbers in this report might vary from those published by individual states for two primary reasons:

- If MSW is hauled directly from the pick-up route to an out-of-state disposal facility or transfer station, the MSW does not pass through a regulated facility in the state of origin (called the generating state) and, therefore, that state does not receive a report on it.
- If waste is transported to an out-of-state transfer station and then to a disposal facility in a third state (referred to as “pass through” in the footnote below); the disposal facility records the MSW as imported from the transfer station state rather than the generating state.

By closely examining the states’ MSW data, the Workgroup adjusts for these situations, and the figures reflect these types of corrections.

Observations

Since NEWMOA began publishing these presentations in 2000, the Workgroup has found that all of the Northeast states export MSW to facilities in other NEWMOA states for disposal, and with the exception of Rhode Island and Vermont, disposal facilities in all of the NEWMOA states import MSW from other northeast states. Historically, Connecticut, Massachusetts, New Jersey, New York, Rhode Island, and Vermont all exported more MSW than they imported, and by a wide margin for some of these states. In the past, Maine and New Hampshire have imported significantly more MSW than they exported. However, starting in 2014, the quantity of MSW imports to Maine decreased significantly compared to prior years due primarily to the closure of a waste-to-energy facility. Since 2014, New Hampshire is the only NEWMOA-state that imports more MSW for disposal than it exports.

The amount of MSW requiring disposal is affected by economic activity and trends and the availability of reuse, recycling, and organics diversion (including composting and anaerobic digestion) markets and infrastructure. Key observations about 2020 and 2022 MSW data and flow in the Northeast include:

- The COVID-19 pandemic began in early 2020, significantly reducing economic activity and the quantities of MSW generated from the commercial/industrial sectors. Therefore, the general trend observed across states, with the exceptions noted below, was a reduction in the amount of MSW requiring disposal between the 2018 and 2020 data. The reductions were more significant in states with larger commercial/industrial sectors. As economic activity began picking up in 2022, the quantity of MSW requiring disposal increased from 2020 to 2022, but generally remained below 2018 quantities.
 - Connecticut: there was a reduction in the MSW disposal data between 2020 and 2022. A waste-to-energy facility that processed over 600,000 tons of MSW each year closed in 2022. This likely significantly increased the quantity of MSW exported by transfer stations, some of which might not have been reported to the Department of Energy and Environmental Protection (DEEP). Since NEWMOA relies on exporting state transfer station data for the quantities sent to Alabama, Michigan, and Ohio, if the MSW was shipped to one of those states, likely Ohio, it would not be included. The reported exports for 2022 are likely an under-count.
 - Maine: there was an increase in MSW disposal between 2018 and 2020, primarily because a waste management and recycling facility did not open as anticipated, leaving many communities without recycling services. When recycling was discontinued, disposal increased.
 - Rhode Island: there was a further reduction in the MSW disposal data between 2020 and 2022. The Department of Environmental Management (DEM) did not collect MSW disposal data in 2022. NEWMOA contacted the main landfill and transfer stations in RI to obtain data, but might have missed a transfer station that exported MSW. Another factor

might be the increased focus on promoting recycling as the main landfill is approaching its capacity.

- A total of approximately 29.9 million tons of MSW was generated in the region and disposed of in 2022, an approximately 5 percent increase from the 28.6 million tons in 2020, but still a 4 percent decrease from the 31.2 million tons disposed in 2018³:
 - Region-wide, 67 percent remained in the state of origin for disposal in 2022, ranging from a high of 94 percent for Maine to a low of 53 percent for New Jersey
 - Region-wide, 5 percent was exported from the state of origin to another state within the region for disposal in 2022, ranging from a high of 23 percent for Rhode Island to a low of almost zero for New Jersey
 - Region-wide, 28 percent was exported to disposal facilities outside of the region, ranging from a high of 47 percent for New Jersey to a low of zero for New Hampshire and Vermont
- Region-wide, 0.67 tons per person per year of MSW was generated and disposed of in 2022; with the rate ranging from 0.56 tons per person per year for New Hampshire to 0.74 tons per person per year for New Jersey.⁴ With the exception of Maine, as discussed above, in each state, 2022 per capita MSW disposal was lower than in 2018
- Figure 4 shows a relatively steady state in the amount of MSW generated and disposed of within the same state. Half of the states, CT, MA, NY, and RI, have seen reductions since 2018, while the other half, ME, NH, NJ, and VT had increases.
- Figure 5 reveals the large year-to-year changes in waste shipment patterns that can occur. Imports from other NEWMOA states in 2020 were lower than 2018 quantities, with the exception of the significant increase in imports to disposal facilities in New York and a small increase in Connecticut. These trends continued between 2020 and 2022, except that imports to New York significantly decreased and were closer to the 2018 quantity.
- Figure 6 also shows large year-to-year changes in exports to other NEWMOA states. In 2022, waste facilities in all of the states, except Massachusetts, exported less MSW for disposal to facilities in other NEWMOA states than they did in 2020. Exports from facilities in Massachusetts for disposal in other NEWMOA states have increased significantly since 2014 and exceeded 800,000 tons in 2022. Exports from facilities in Connecticut for disposal in other NEWMOA states decreased by almost 90 percent from 2020 to 2022.
- Figure 7 shows a significant increase in the quantity of MSW exported for disposal from many of the Northeast states to states and provinces outside of the region between 2020 and 2022. Exports from Connecticut and Massachusetts to non-NEWMOA states have increased significantly since 2016 and 2018, respectively. Exports from facilities in New Jersey to states outside the region have significantly increased since 2012, while exports from New York have significantly decreased since 2010.
 - Alabama: Exports from MA, NJ, and RI began with the 2020 data. Exports from MA and NJ significantly increased in 2022 to 227,000 and 112,000 tons, respectively, while exports from RI decreased slightly to 44,000 tons.
 - Michigan: Exports from MA began with the 2020 data and increased in 2022 to 176,000 tons.
 - Ohio: CT, MA, NJ and NY all send MSW to OH for disposal with amount varying significantly year to year. However, the quantities sent by facilities in CT and NY in 2022, 316,000 and 945,000 tons, respectively, represent a significant increase from prior years.
 - Pennsylvania: Facilities in NJ and NY routinely send similar quantities of MSW to PA for disposal each year. Facilities in CT also send MSW to PA for disposal with the quantity increasing significantly since 2016 to 172,000 tons in 2022. Facilities in MA began exporting to PA with the 2022 data (83,000 tons).

³ The drop between 2018 and 2020 was 8 percent

⁴ Per capita estimates were calculated using 2020 U.S. Census population data

- South Carolina: Facilities in NY routinely send similar quantities of MSW for disposal in SC each year, approximately 225,000 tons. Facilities in MA began exporting to SC with the 2020 data and sent 103,000 tons in 2022.
- Virginia: Facilities in CT, MA, NJ, and NY export MSW to VA for disposal. The quantity from NY is similar year to year at approximately 940,000 tons. The quantities from CT, MA, and NJ have all increased significantly since 2018 to 74,000, 103,000 and 694,000 tons, respectively in 2022.

About NEWMOA

The Northeast Waste Management Officials' Association ([NEWMOA](http://www.newmoa.org)) is a non-profit, non-partisan, interstate association whose membership is composed of the state environment agency programs that address pollution prevention, toxics use reduction, sustainability, materials management, hazardous waste, solid waste, emergency response, waste site cleanup, underground storage tanks, and related environmental challenges in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont.

NEWMOA provides a strategic forum for effectively solving environmental problems through collaborative regional initiatives that advance pollution prevention and sustainability, promote safer alternatives to toxic materials in products, identify and assess emerging contaminants, promote reuse and recycling of wastes and diversion of organics, support proper management of hazardous and solid wastes, and facilitate clean-up of contaminant releases to the environment.

For more information, visit www.newmoa.org.

Acknowledgements

NEWMOA gratefully acknowledges the dedication and hard work of the following Solid Waste Metrics Workgroup members:

- Brenna Giannetti, Connecticut Department of Energy and Environmental Protection
- Brian Beneski, Maine Department of Environmental Protection
- Thomas Adameczyk, Massachusetts Department of Environmental Protection
- Michael Nork, New Hampshire Department of Environmental Services
- Kyle McHenry, New Jersey Department of Environmental Protection
- Emma Heitmuller, New York State Department of Environmental Conservation
- Kasandra McKenzie, Rhode Island Department of Environmental Management
- Alyssa Eiklor, Vermont Department of Environmental Conservation

Jennifer Griffith, NEWMOA Project Manager led this project and compiled the spreadsheet and prepared the presentation.

Disclaimer

The views expressed in this presentation do not necessarily reflect those of each of the NEWMOA-member states.

**Figure 1: 2022 MSW Imports & Exports for Disposal
(Tons)**

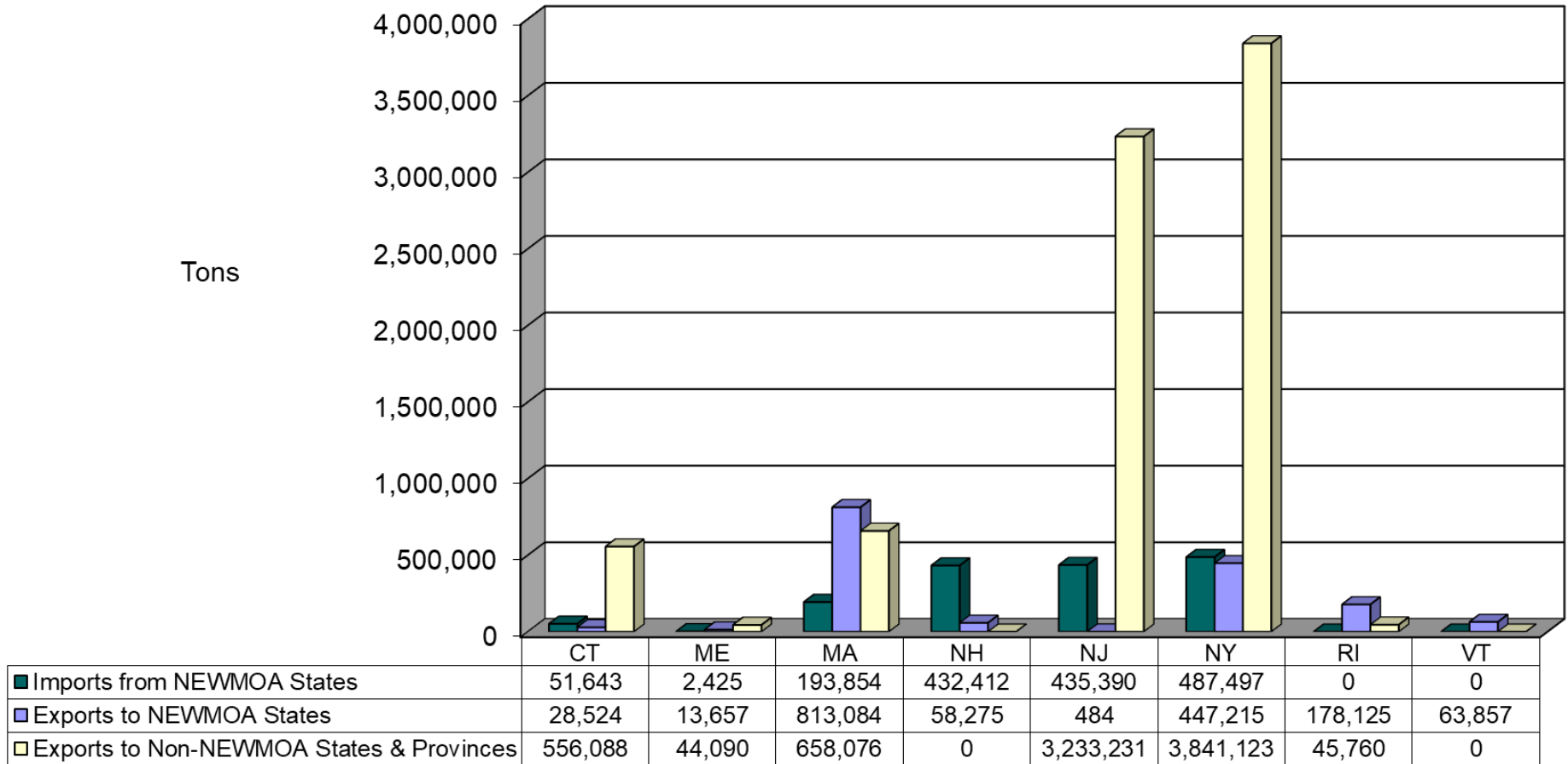


Figure 2: 2022 MSW Generated by State & Disposed (Tons)

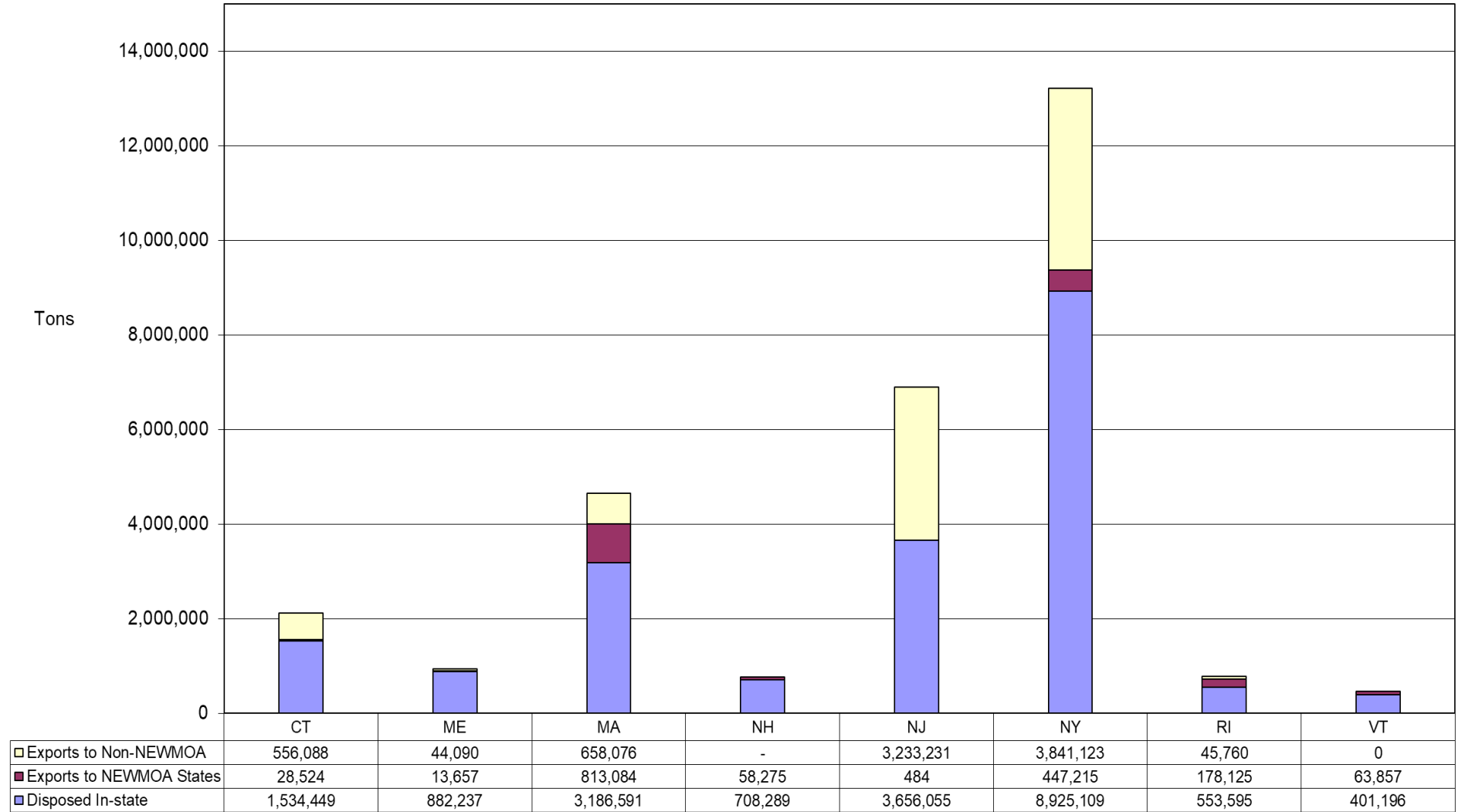


Figure 3: 2022 Total Quantity of MSW Disposed of In-State (Tons)

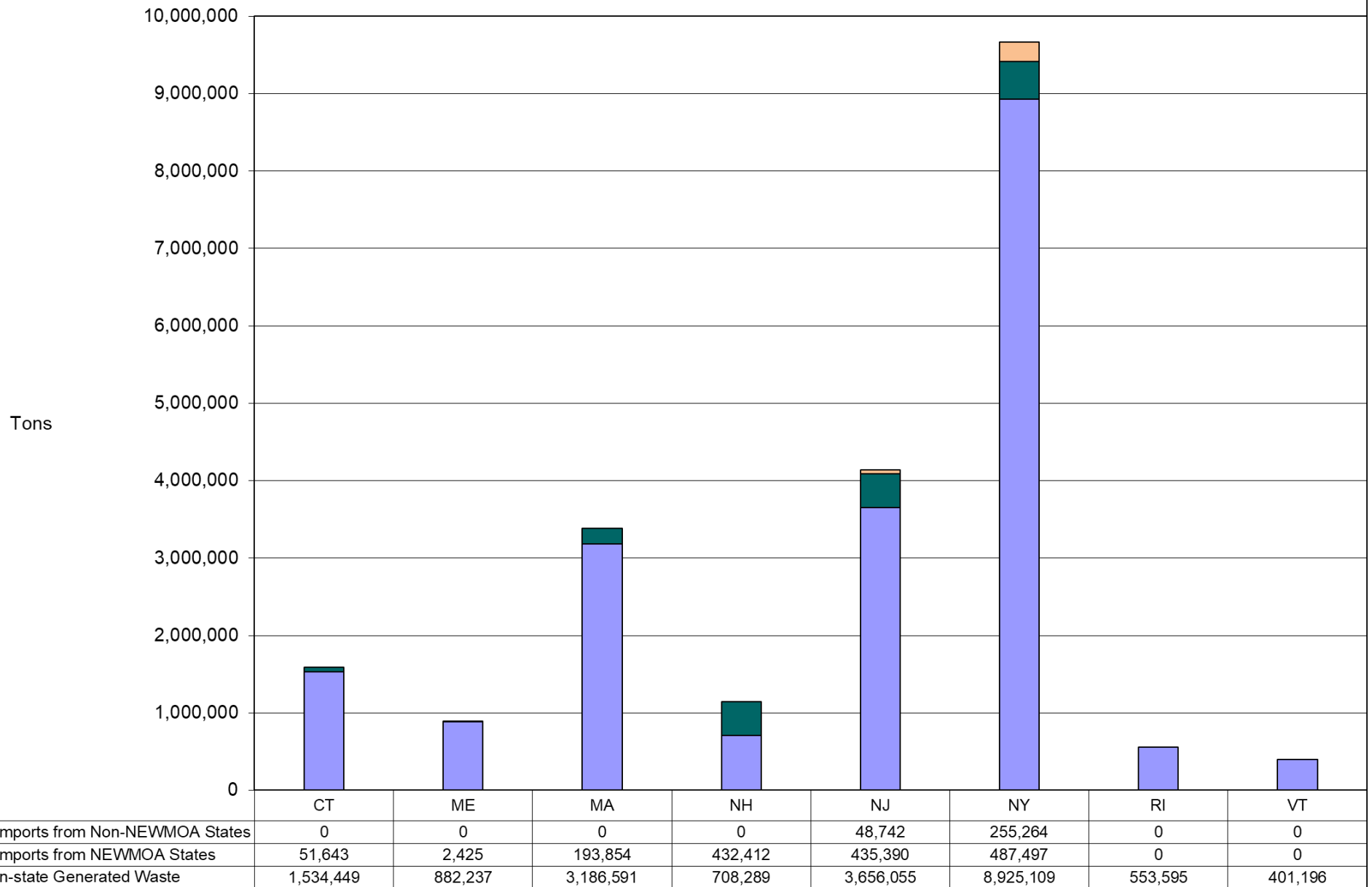
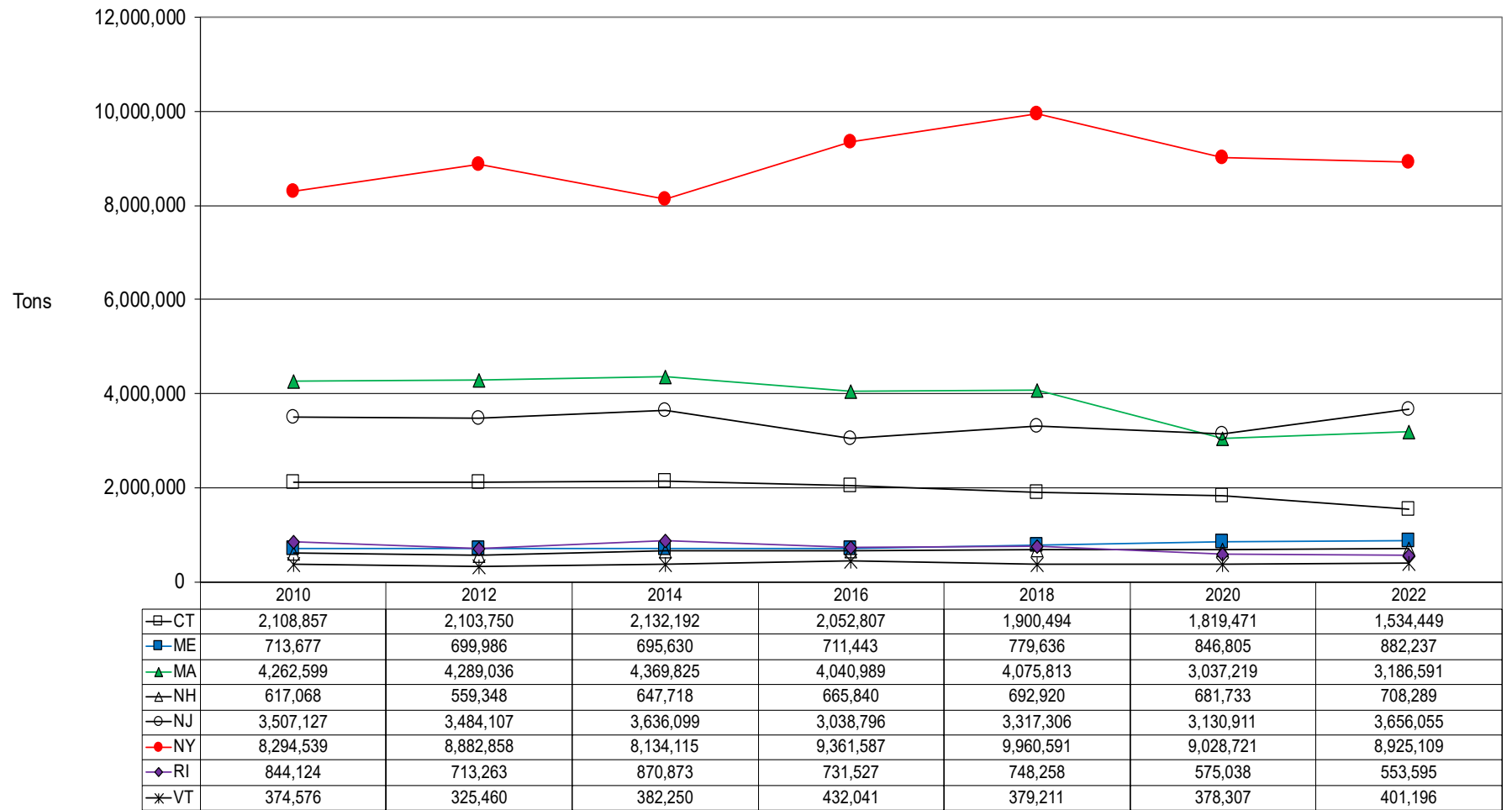


Figure 4: In-State Disposal of MSW Generated In-State: 2010 through 2022 (Tons)



**Figure 5: MSW Imports from NEWMOA States: 2010 through 2022
(Tons)**

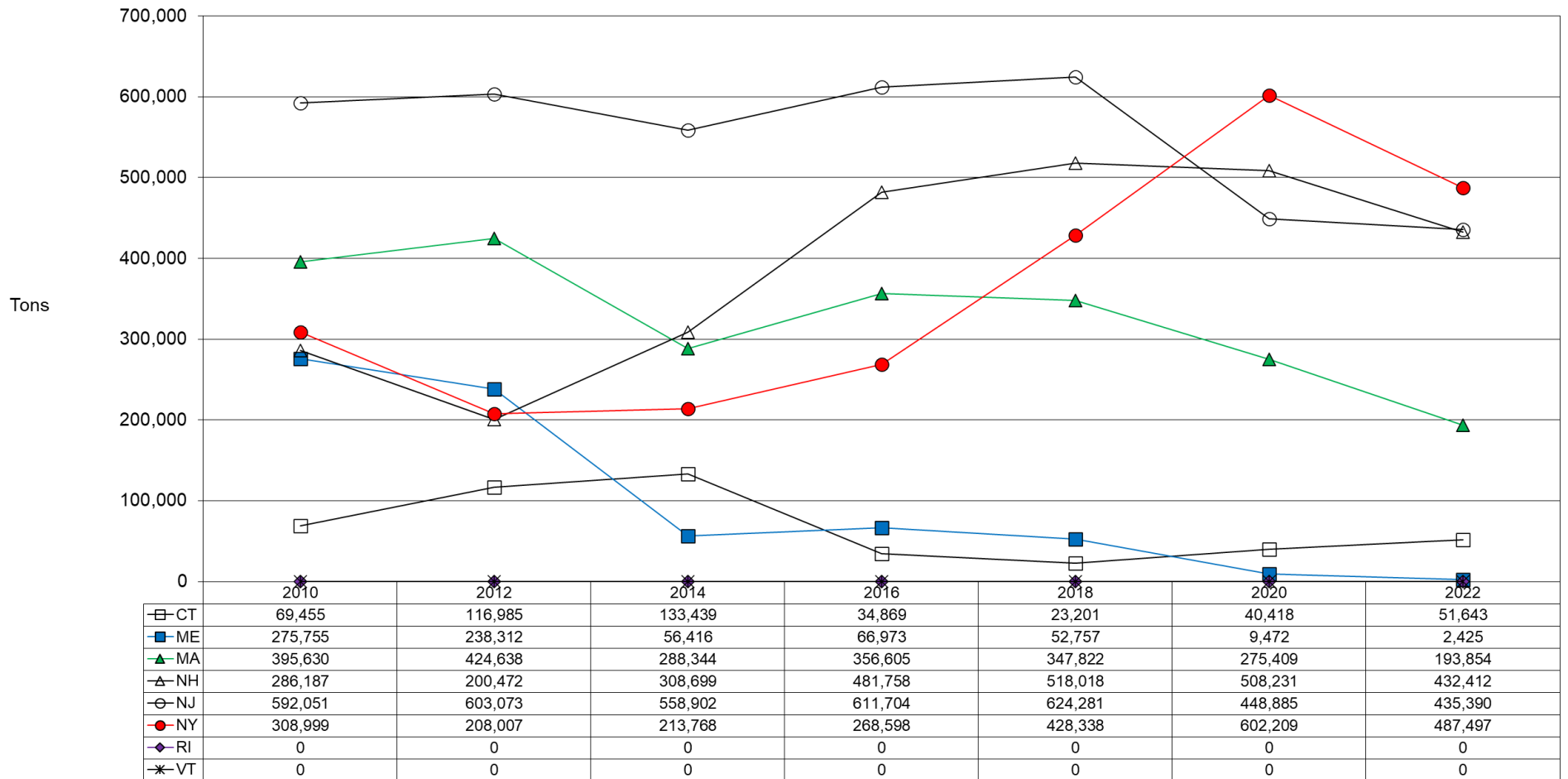


Figure 6: MSW Exports to NEWMOA States: 2010 through 2022 (Tons)

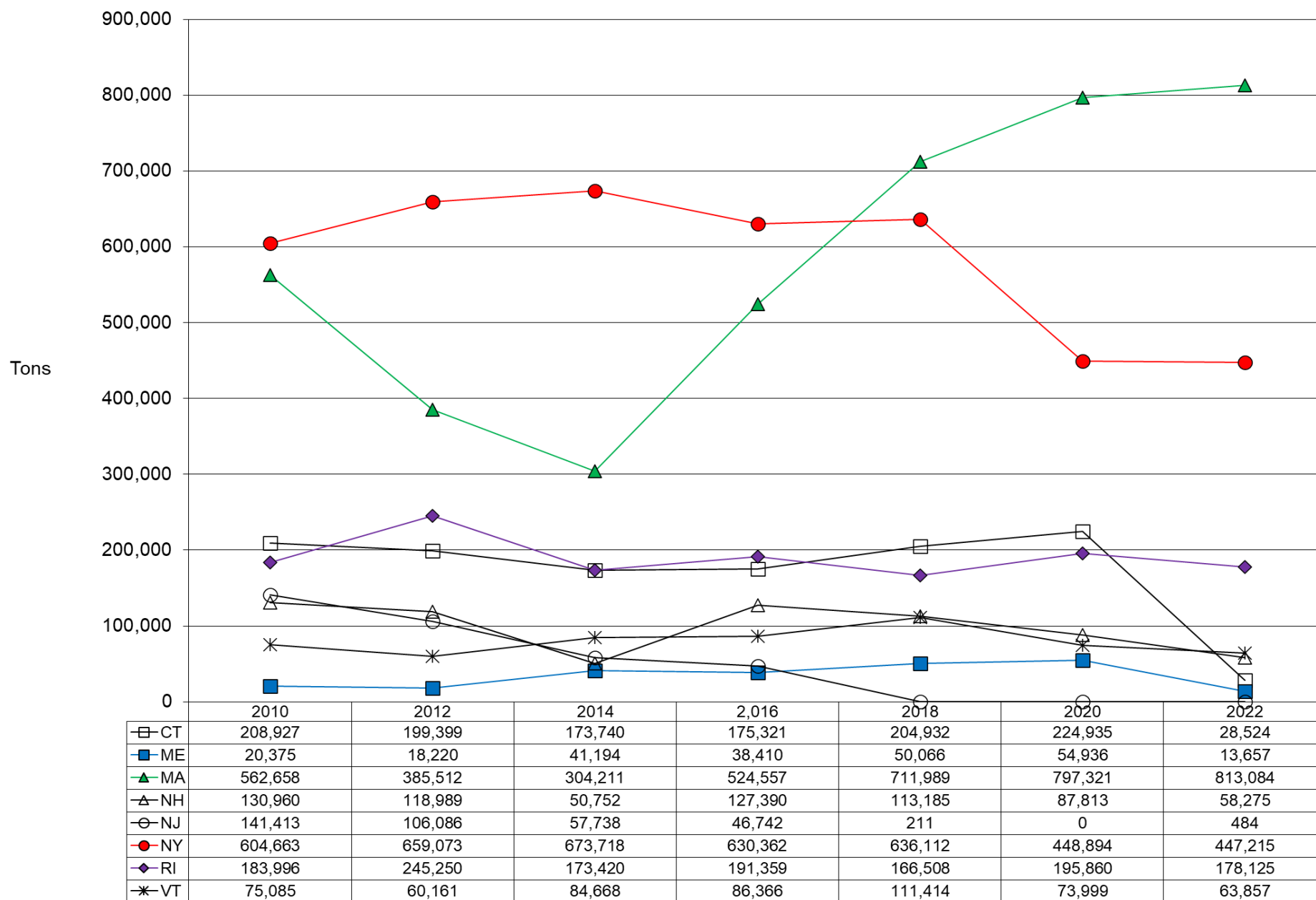
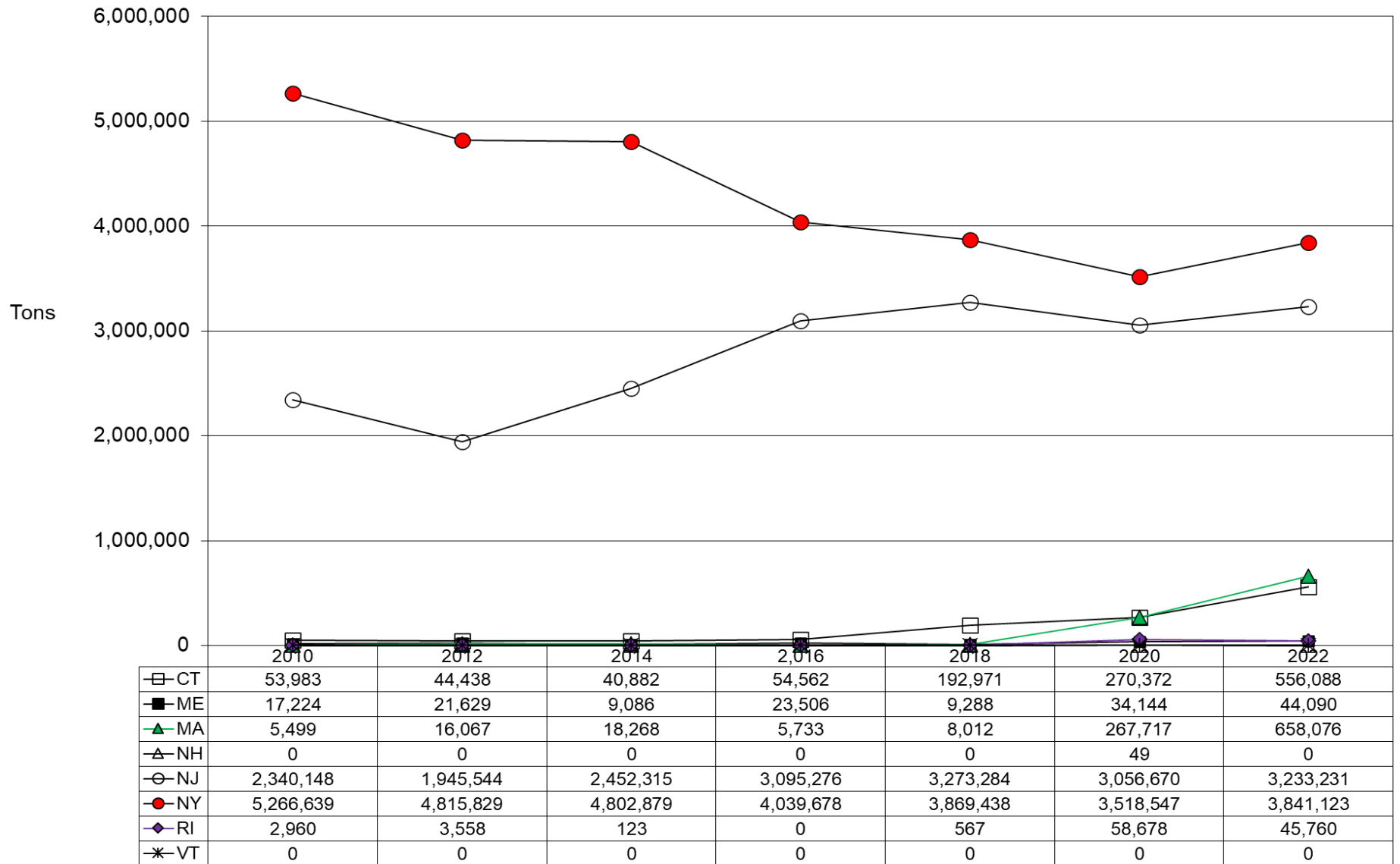
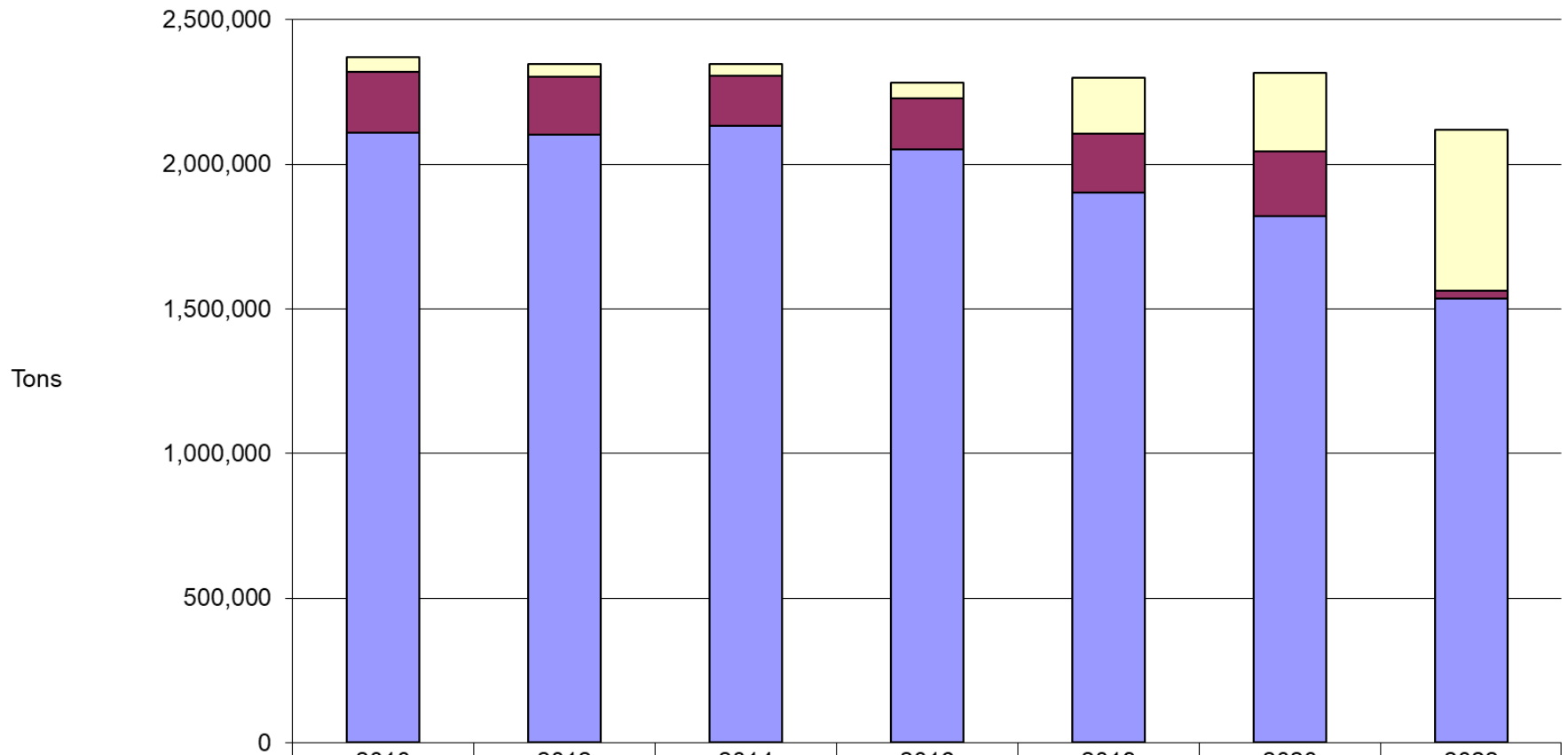


Figure 7: MSW Exports to Non-NEWMOA States & Provinces 2010 through 2022 (Tons)

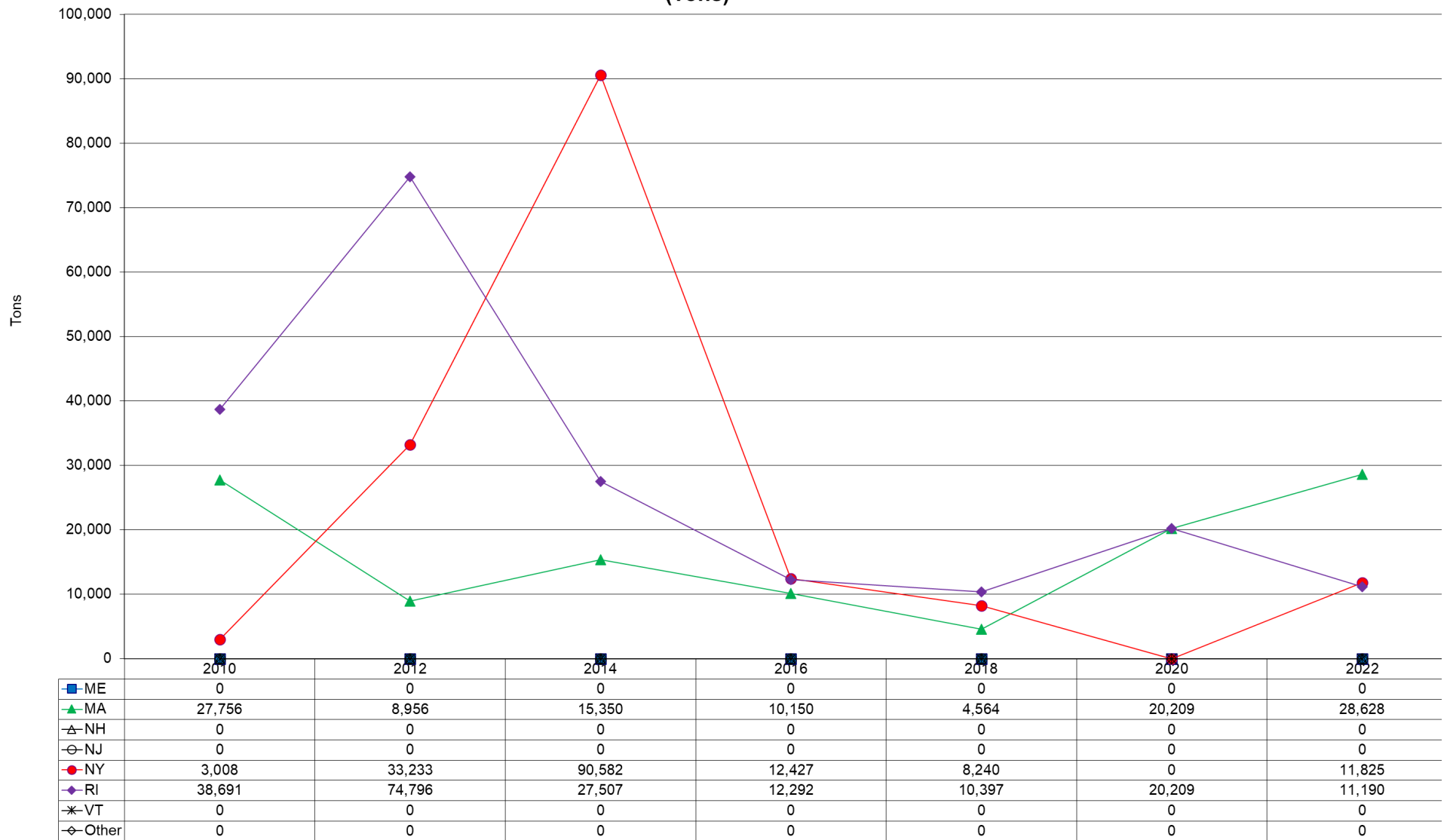


**Figure 8: MSW Generated in Connecticut & Disposed of: 2010 through 2022
(Tons)**

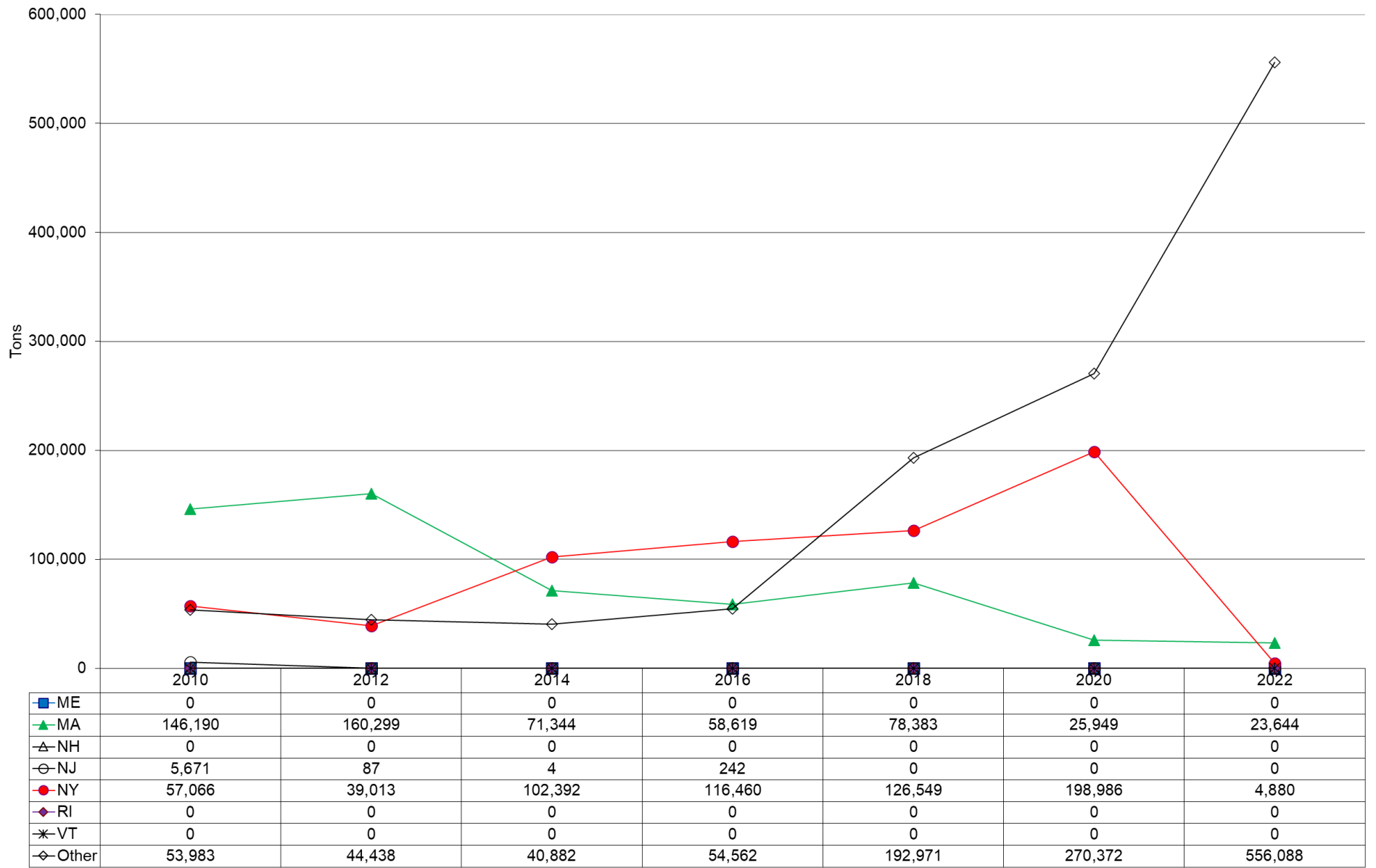


Exported to Non-NEWMOA	53,983	44,438	40,882	54,562	192,971	270,372	556,088
Exported to NEWMOA	208,927	199,399	173,740	175,321	204,932	224,935	28,524
Disposed in State	2,108,857	2,103,750	2,132,192	2,052,807	1,900,494	1,819,471	1,534,449

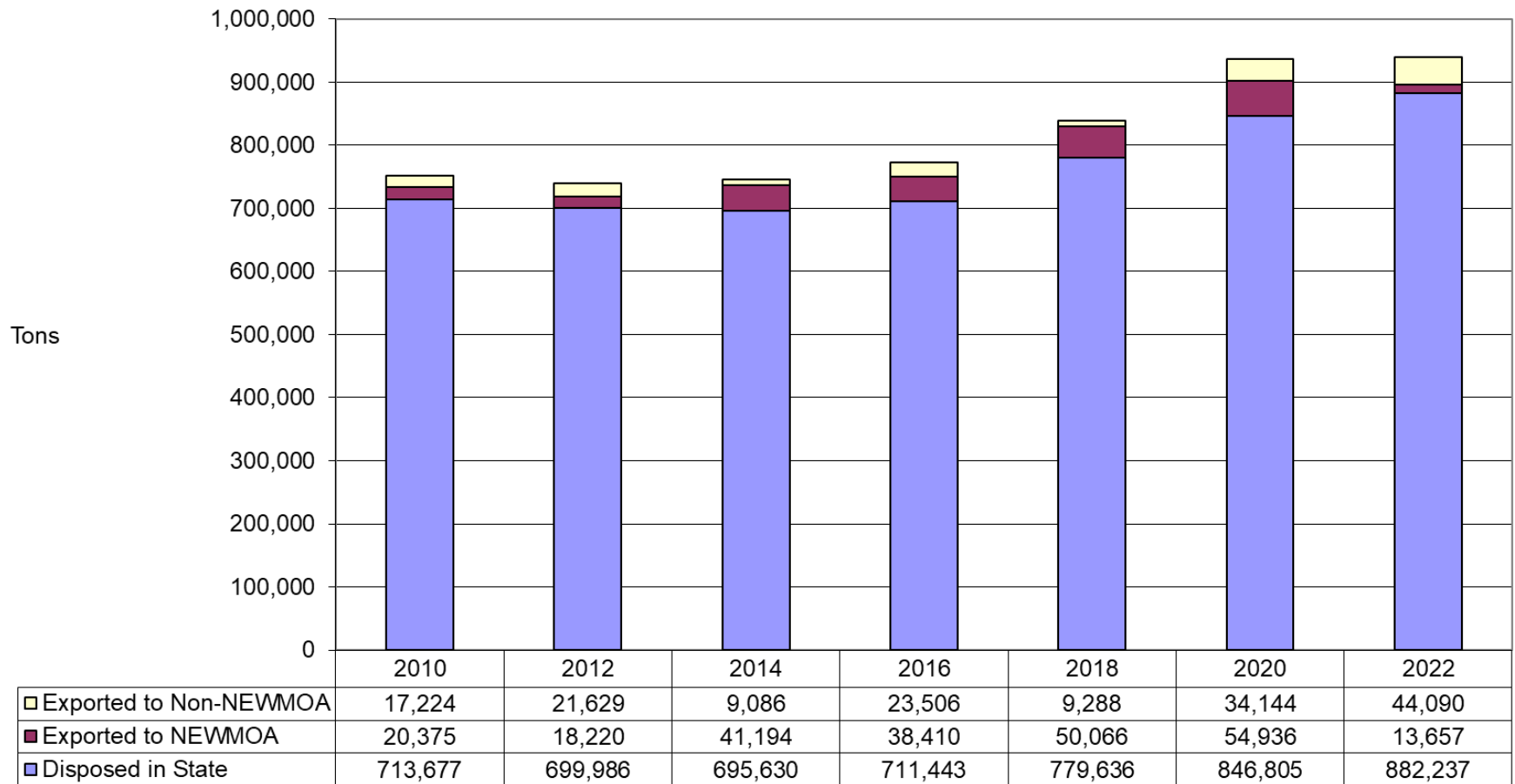
**Figure 9: MSW Imports to Connecticut: 2010 through 2022
(Tons)**



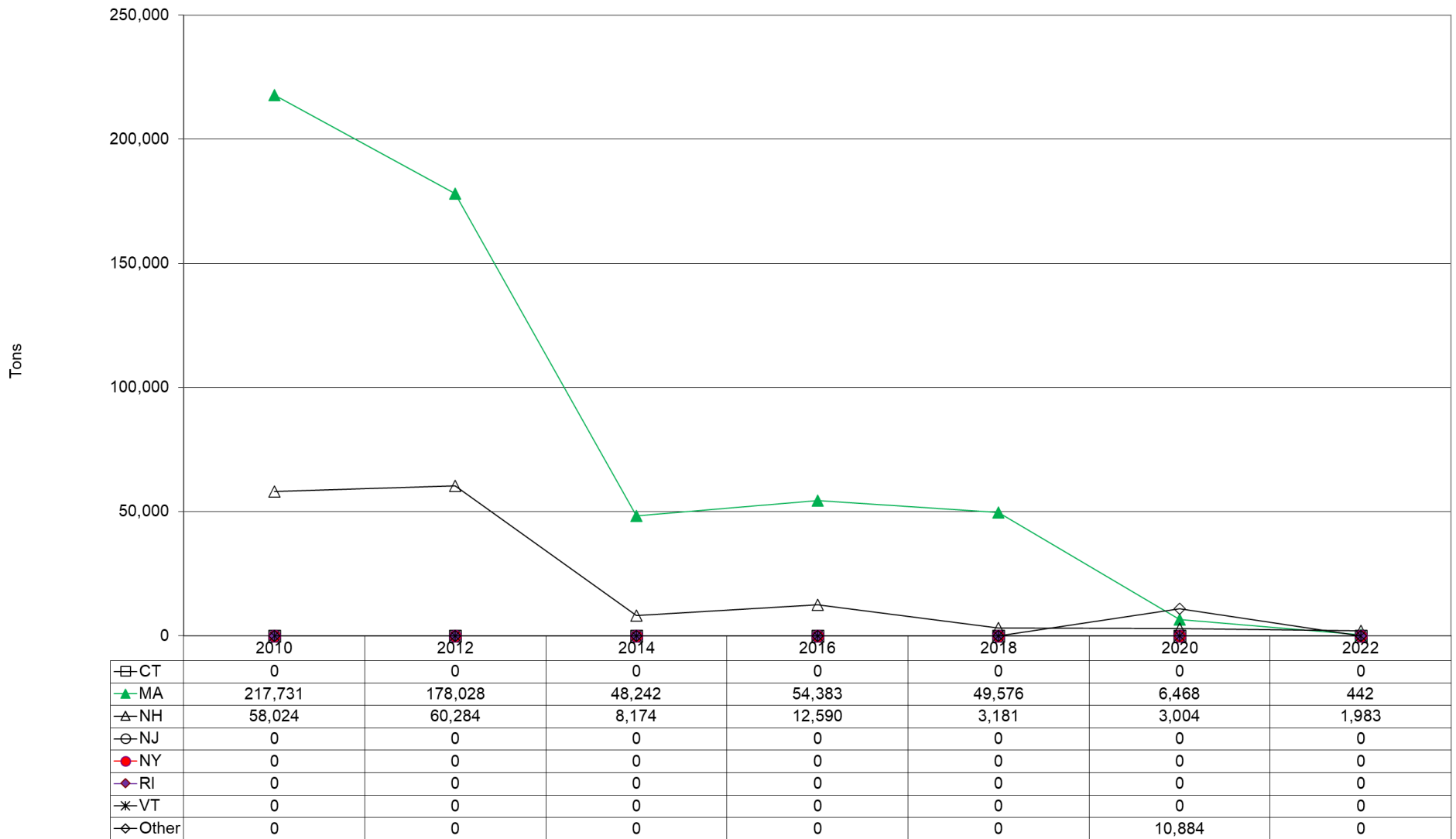
**Figure 10: MSW Exports from Connecticut: 2010 through 2022
(Tons)**



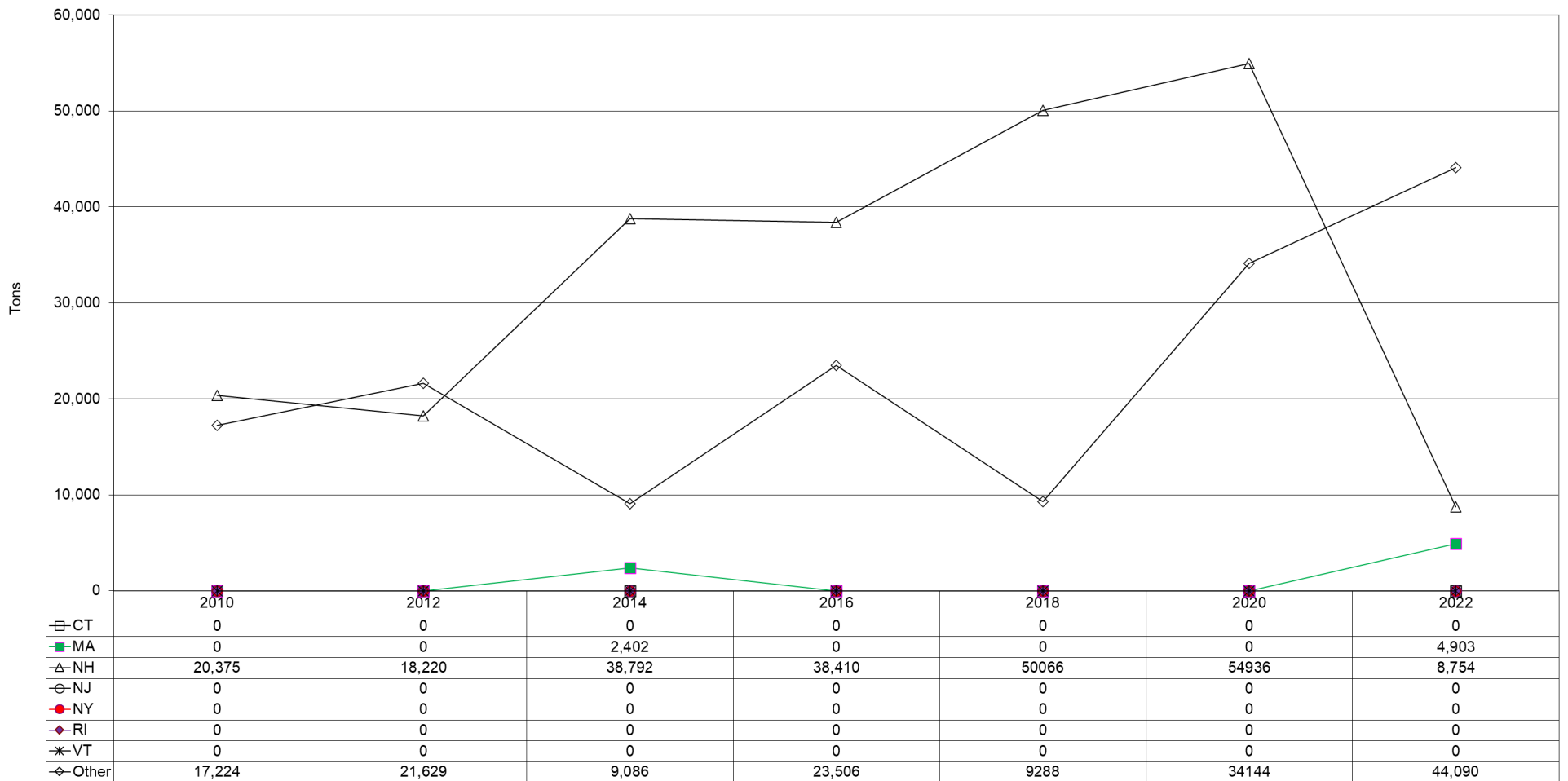
**Figure 11: MSW Generated in Maine & Disposed of: 2010 through 2022
(Tons)**



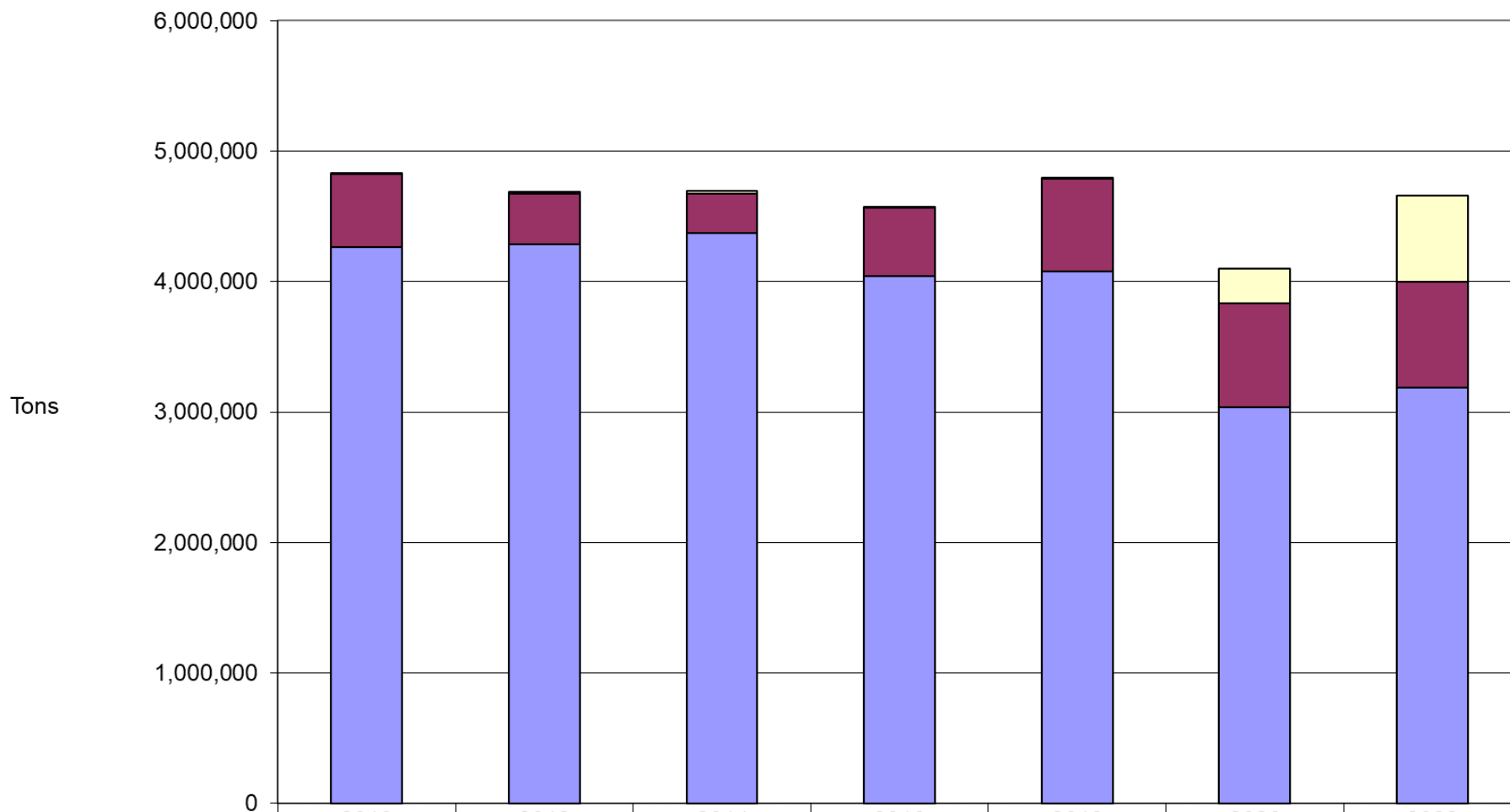
**Figure 12: MSW Imports to Maine: 2010 through 2022
(Tons)**



**Figure 13: MSW Exports from Maine: 2010 through 2022
(Tons)**

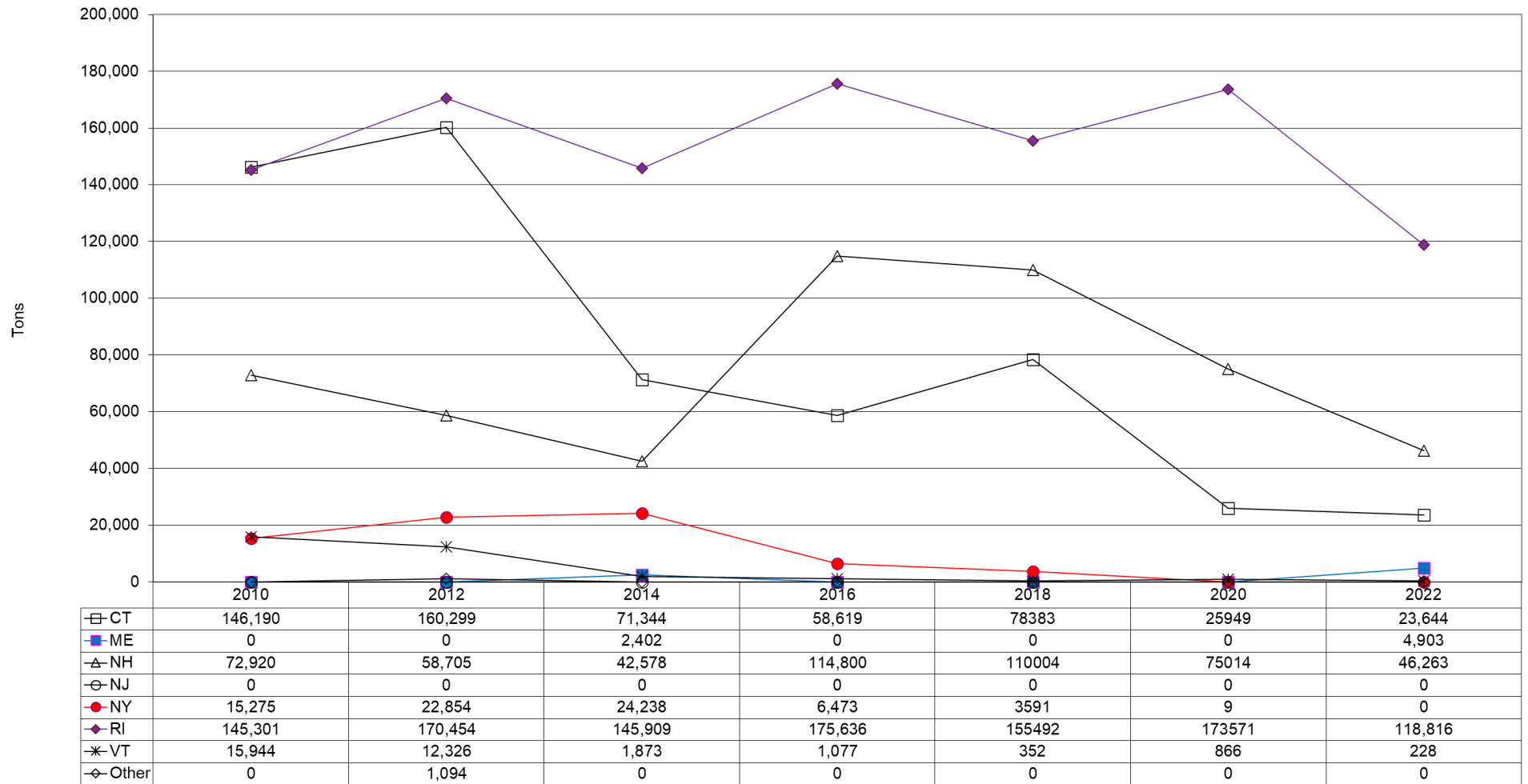


**Figure 14: MSW Generated in Massachusetts & Disposed of: 2010 through 2022
(Tons)**

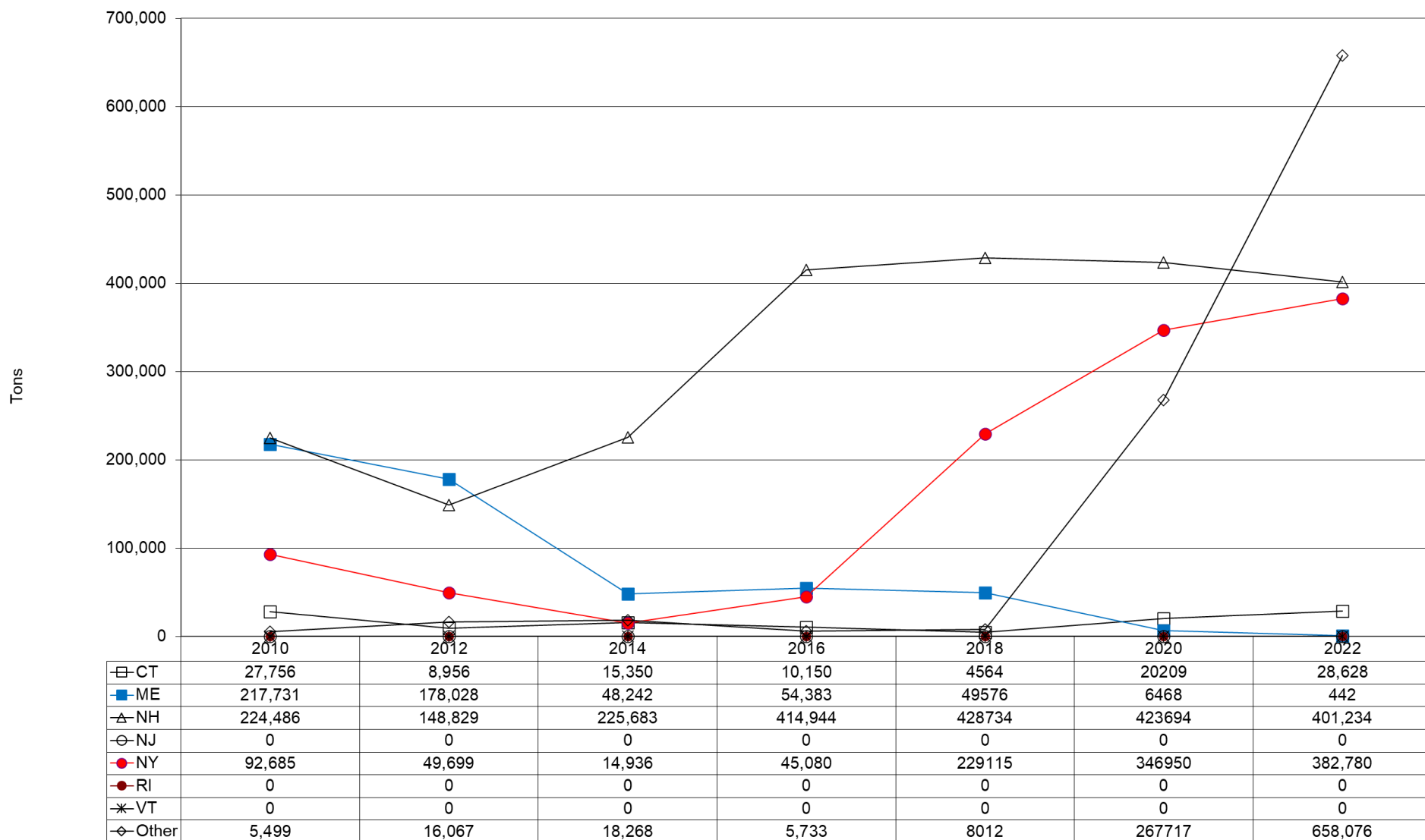


□ Exported to Non-NEWMOA	5,499	16,067	18,268	5,733	8,012	267,717	658,076
■ Exported to NEWMOA	562,658	385,512	304,211	524,557	711,989	797,321	813,084
■ Disposed in State	4,262,599	4,289,036	4,369,825	4,040,989	4,075,813	3,037,219	3,186,591

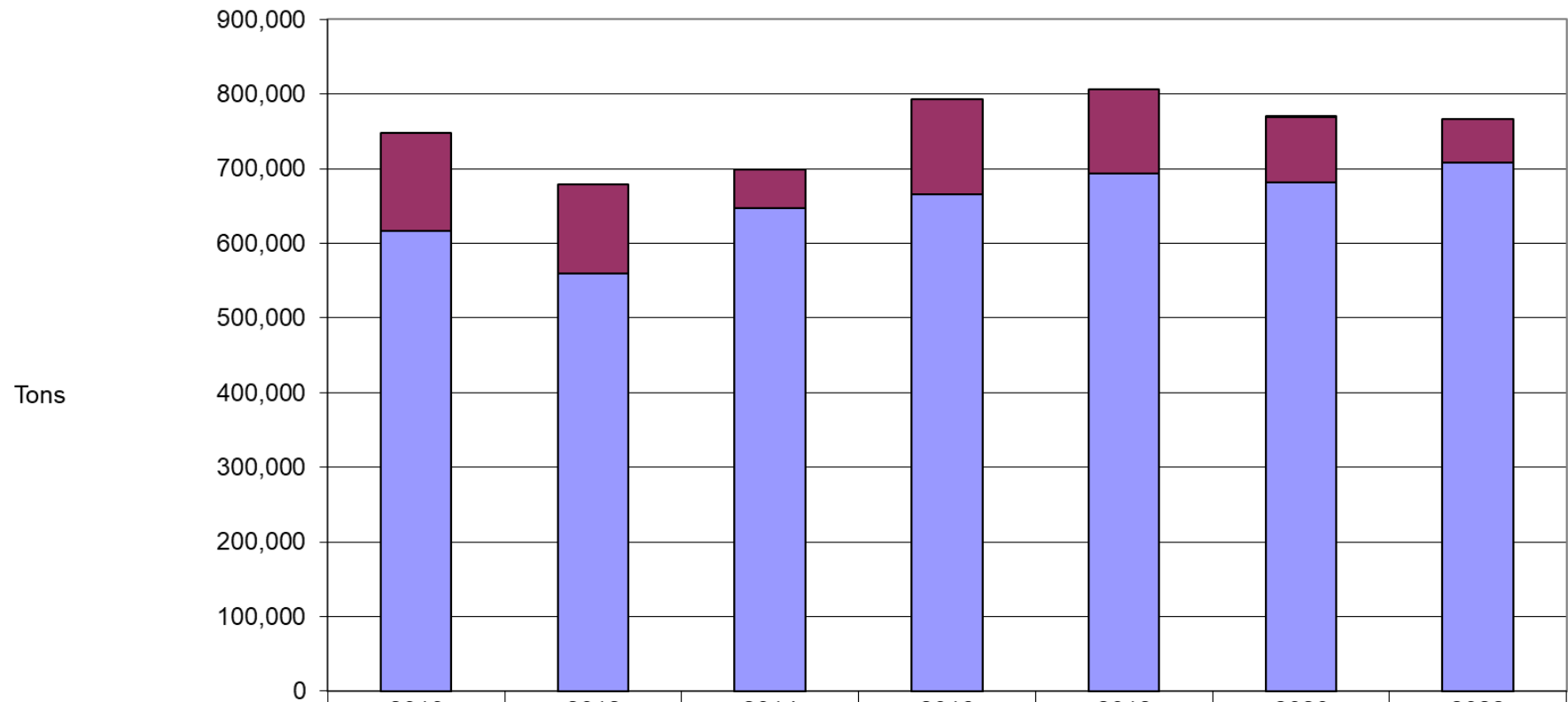
**Figure 15: MSW Imports to Massachusetts: 2010 through 2022
(Tons)**



**Figure 16: MSW Exports from Massachusetts: 2010 through 2022
(Tons)**

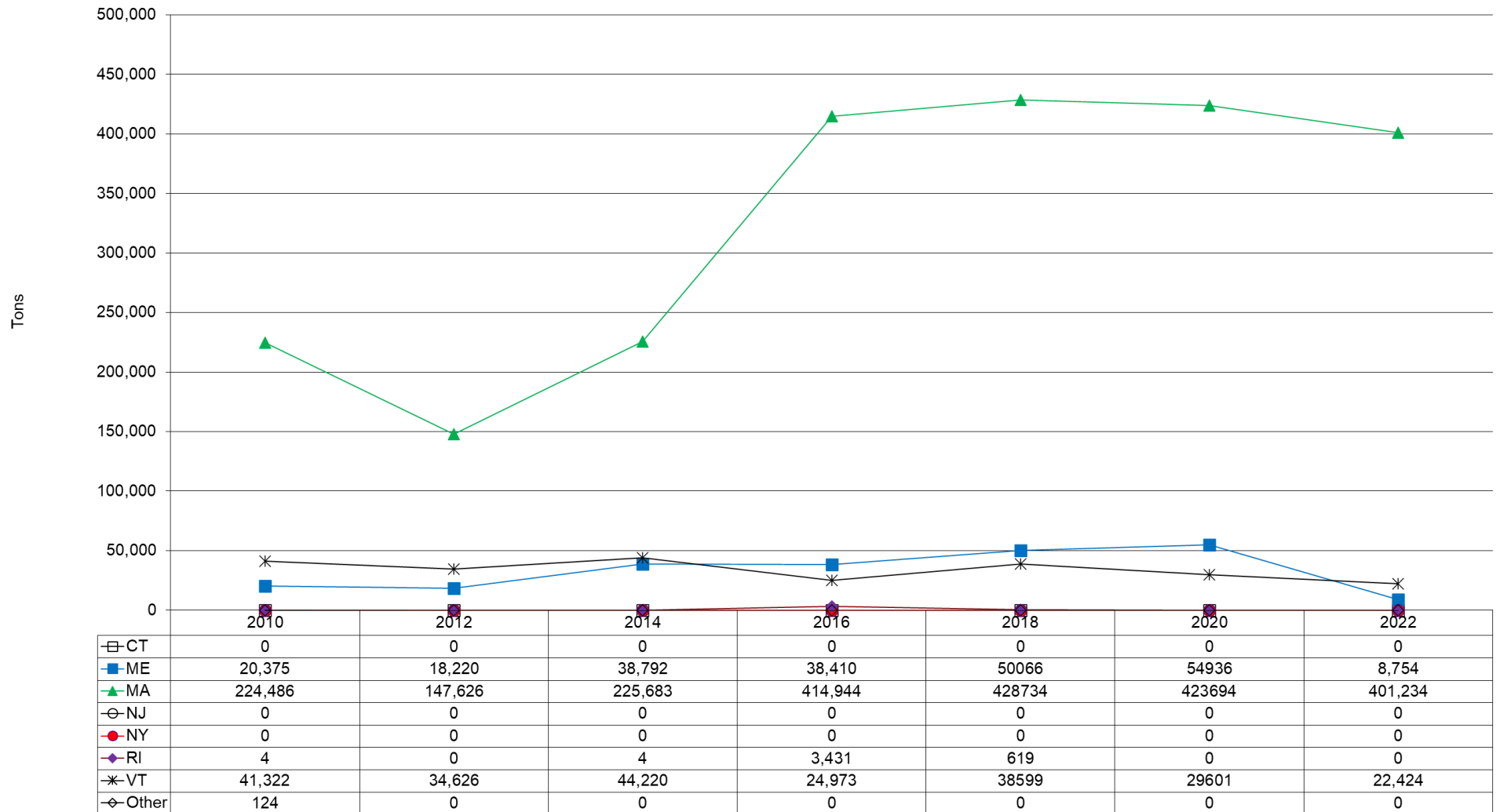


**Figure 17: MSW Generated in New Hampshire & Disposed of: 2010 through 2022
(Tons)**

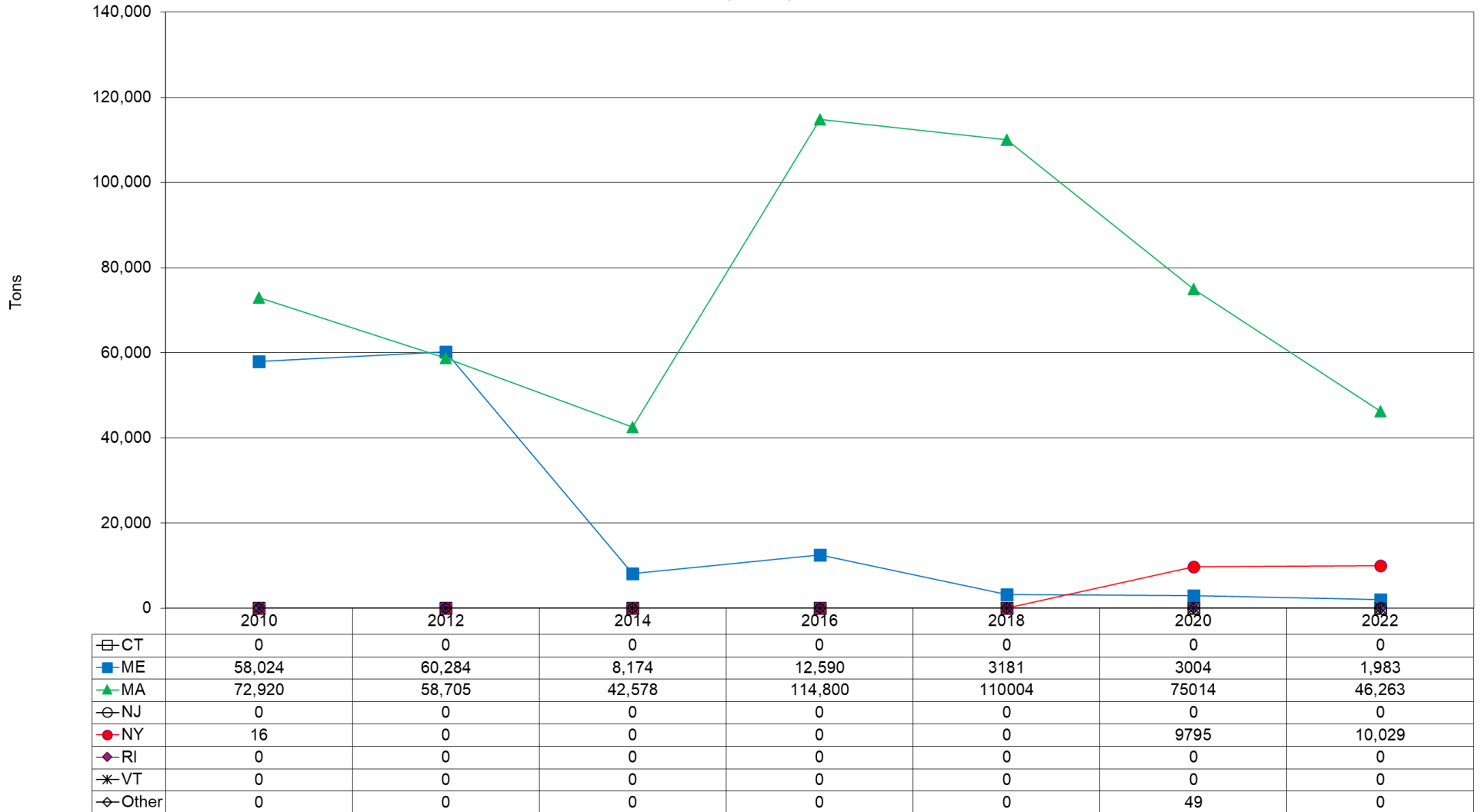


Exported to Non-NEWMOA	0	0	0	0	0	49	0
Exported to NEWMOA	130,960	118,989	50,752	127,390	113,185	87,813	58,275
Disposed in State	617,068	559,348	647,718	665,840	692,920	681,733	708,289

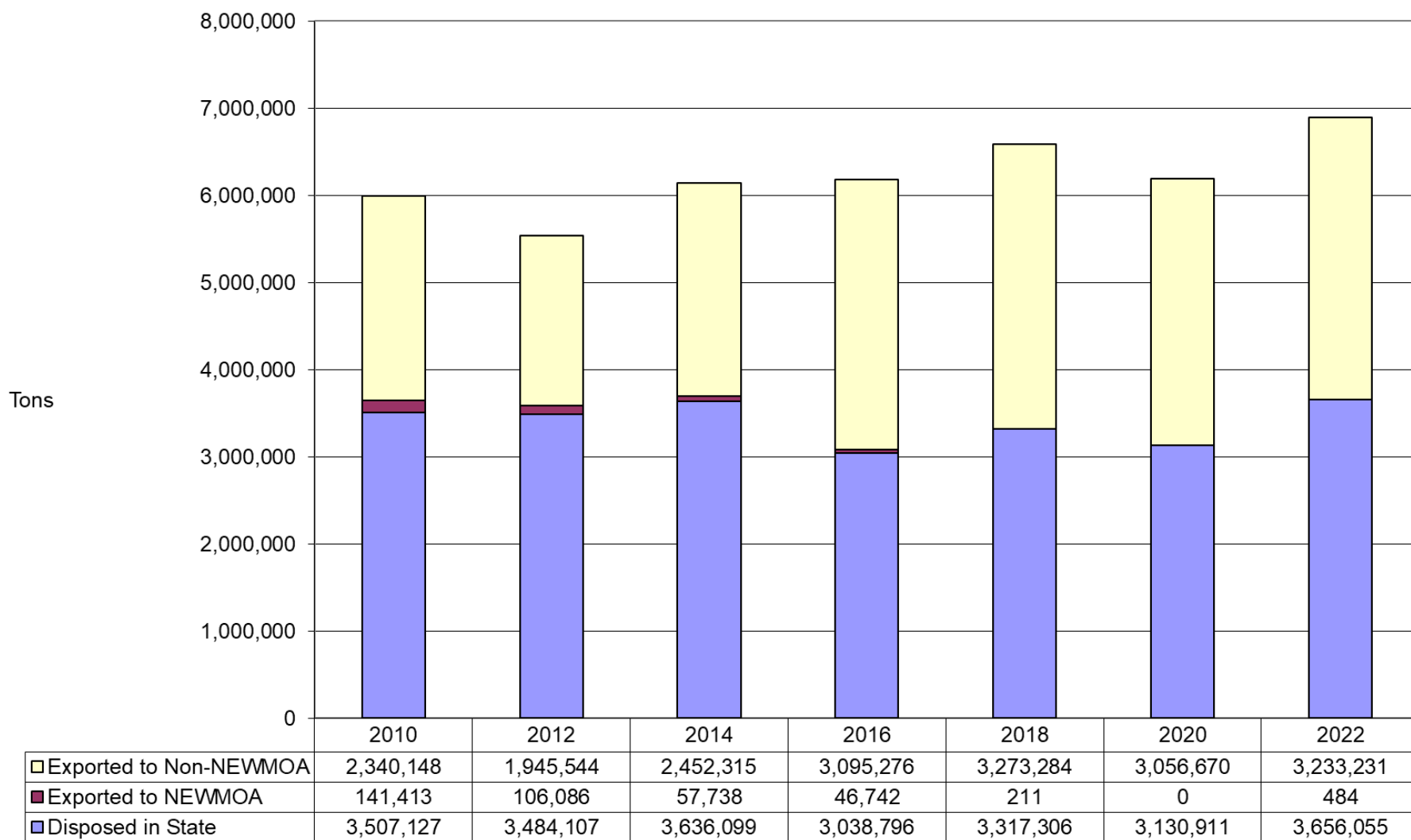
**Figure 18: MSW Imports to New Hampshire: 2010 through 2020
(Tons)**



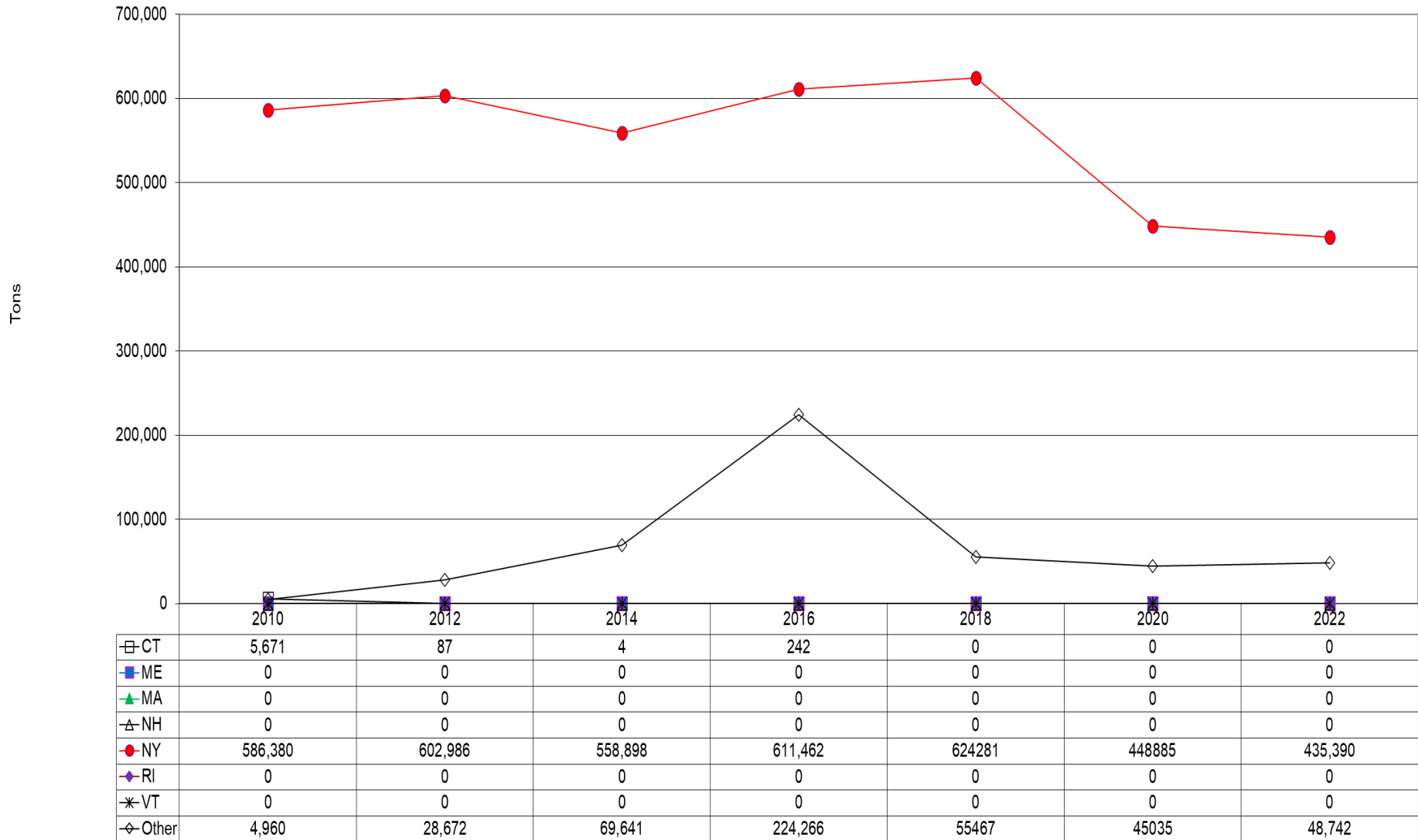
**Figure 19: MSW Exports from New Hampshire: 2010 through 2020
(Tons)**



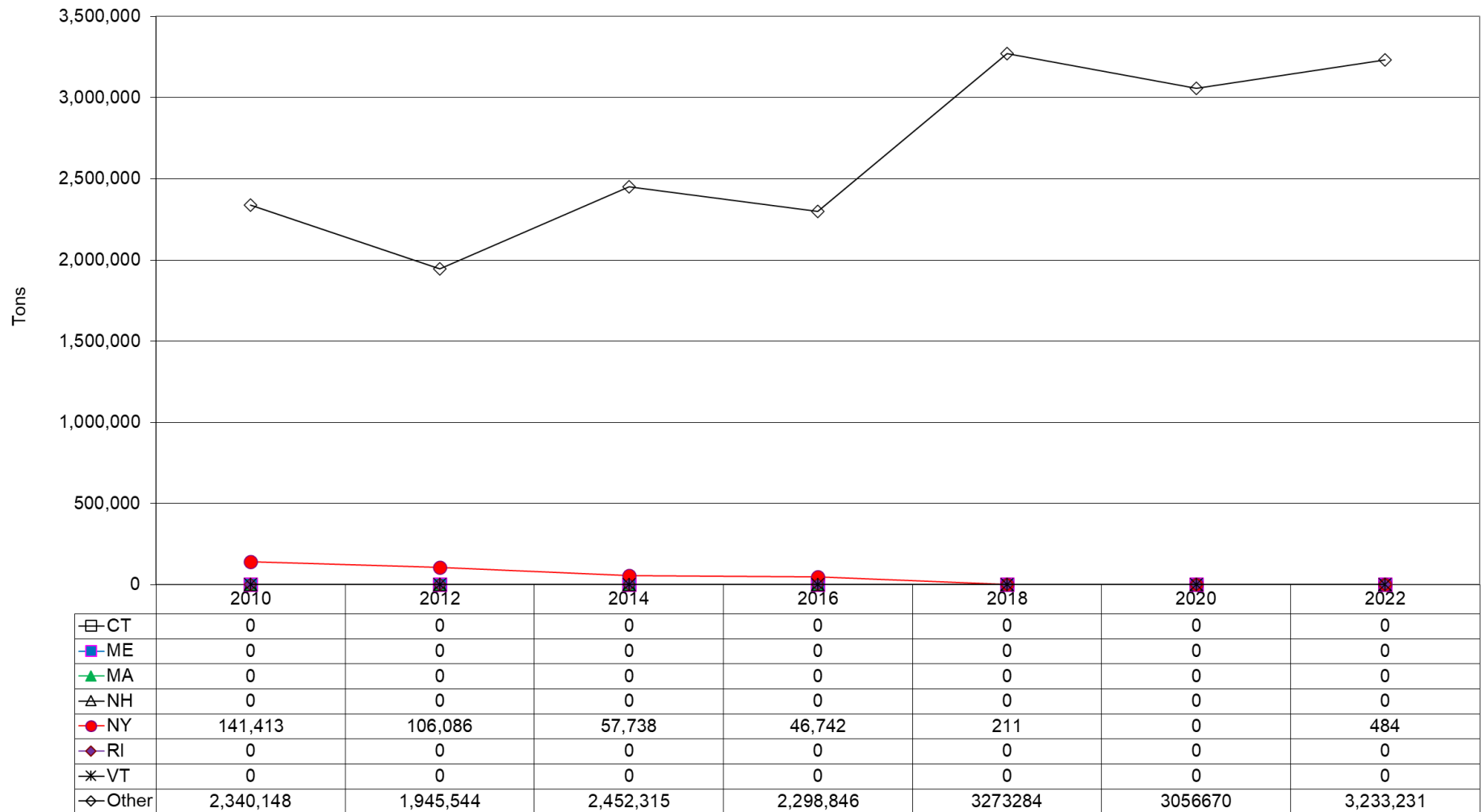
**Figure 20: MSW Generated in New Jersey & Disposed of: 2010 through 2022
(Tons)**



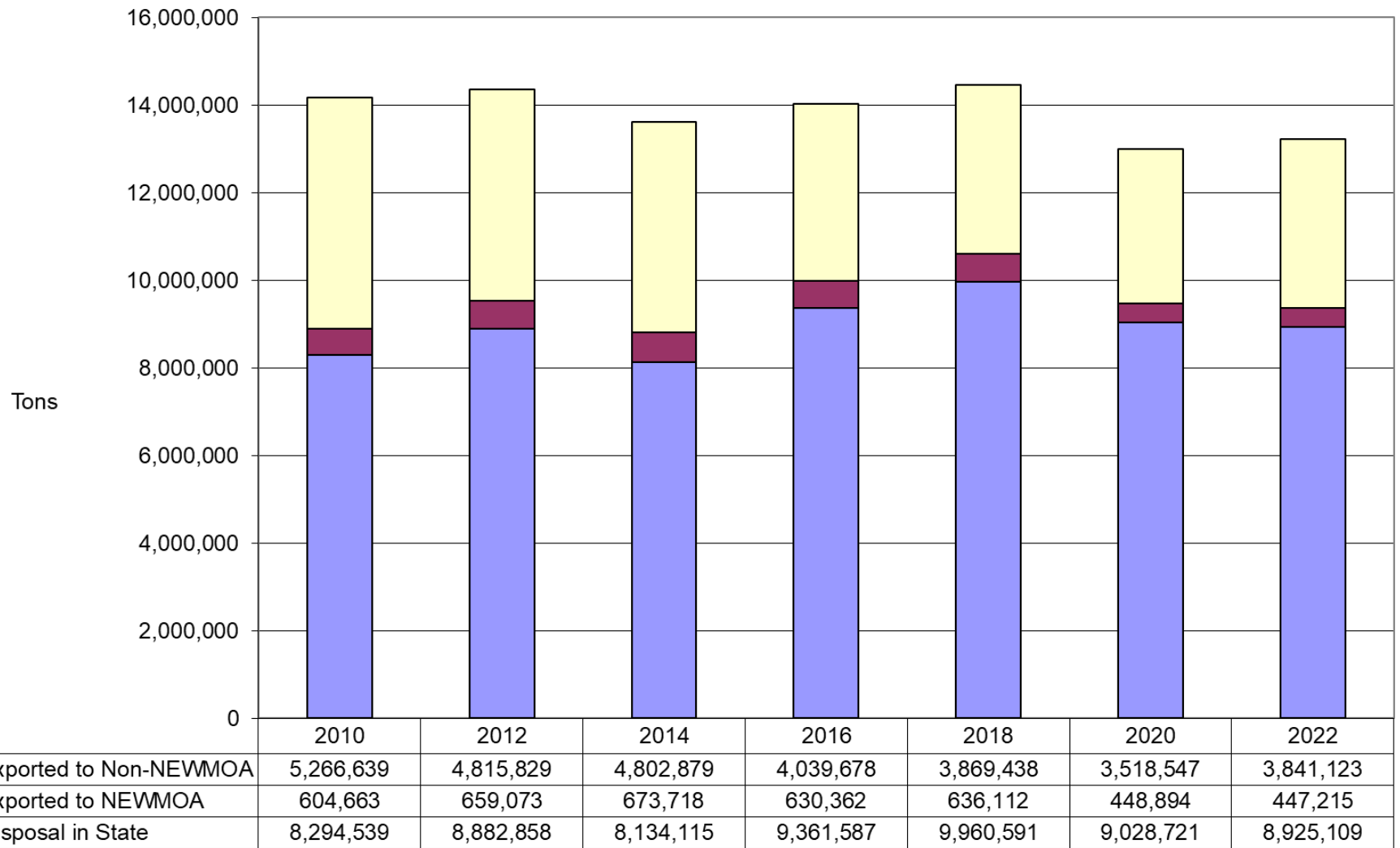
**Figure 21: MSW Imports to New Jersey: 2010 through 2022
(Tons)**



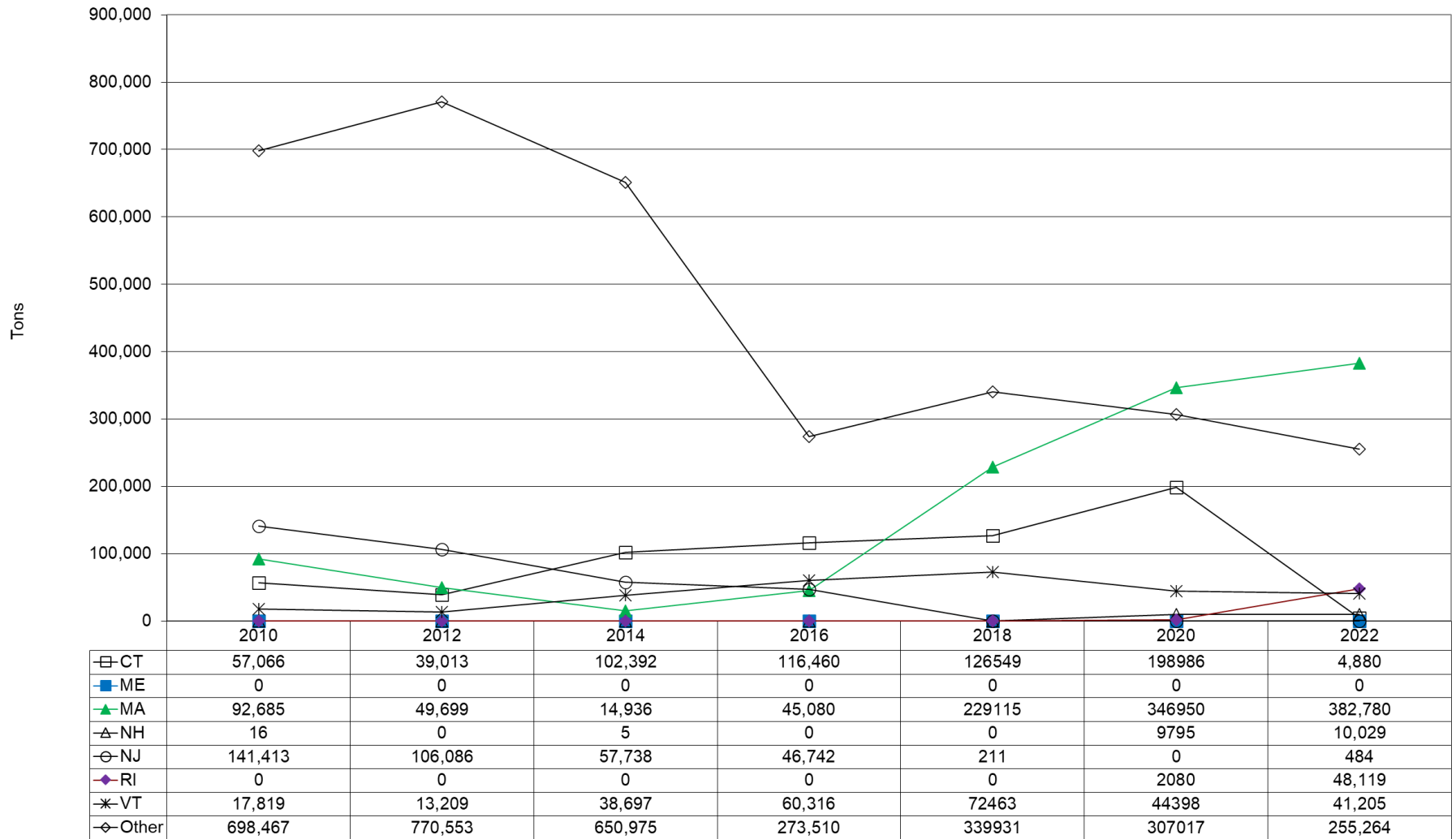
**Figure 22: MSW Exports from New Jersey: 2010 through 2022
(Tons)**



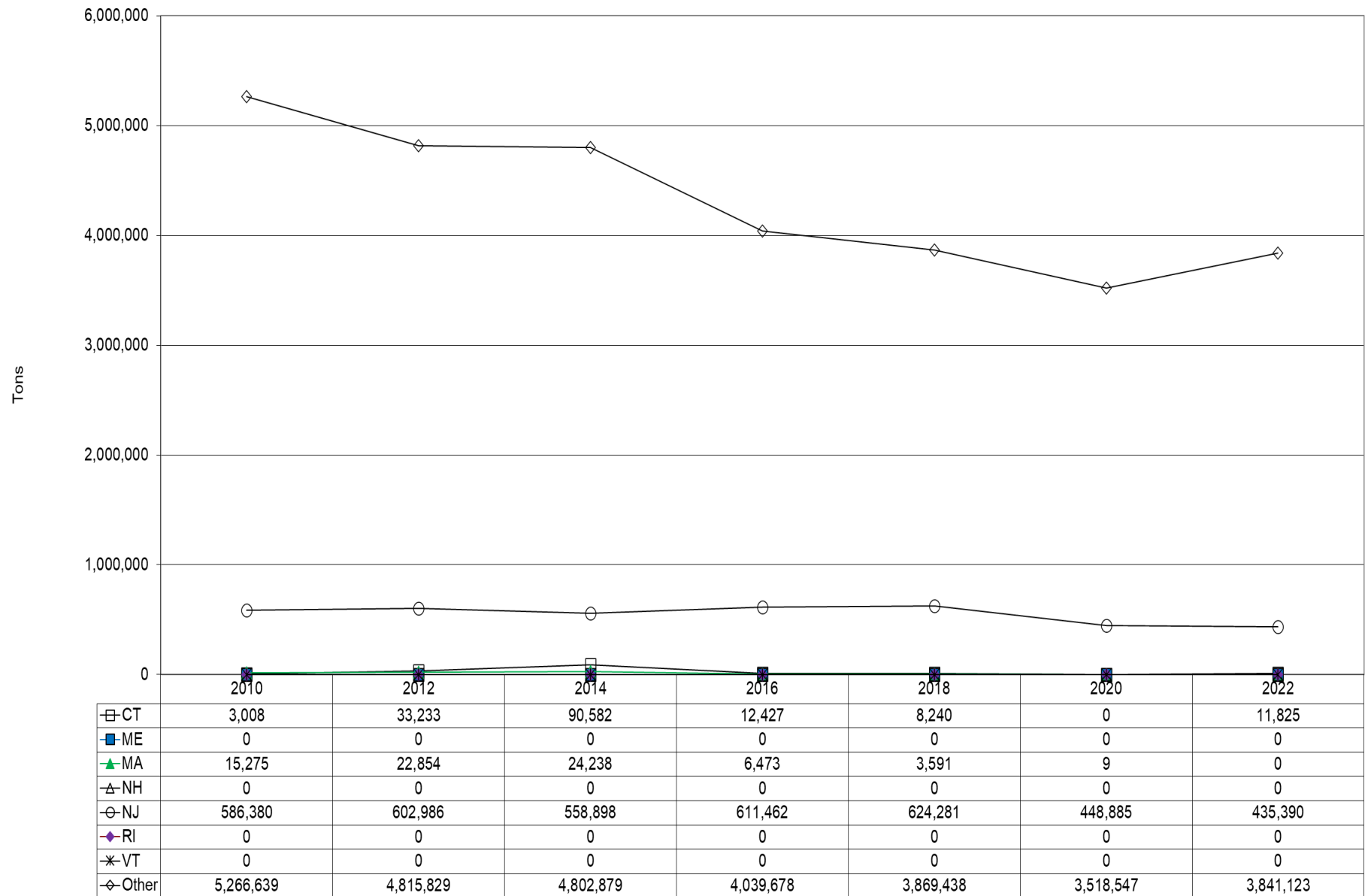
**Figure 23: MSW Generated in New York & Disposed of: 2010 through 2022
(Tons)**



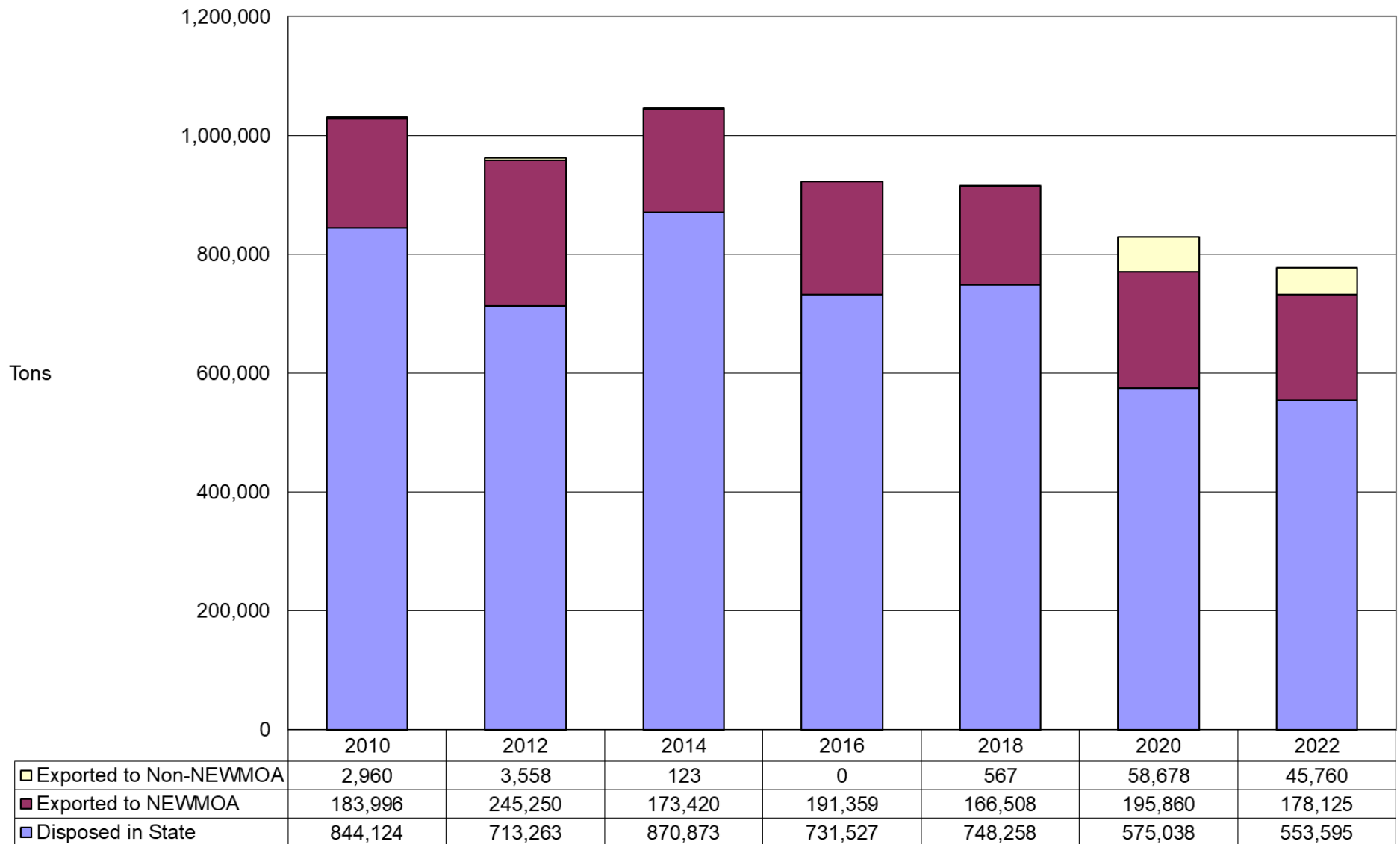
**Figure 24: MSW Imports to New York: 2010 through 2022
(Tons)**



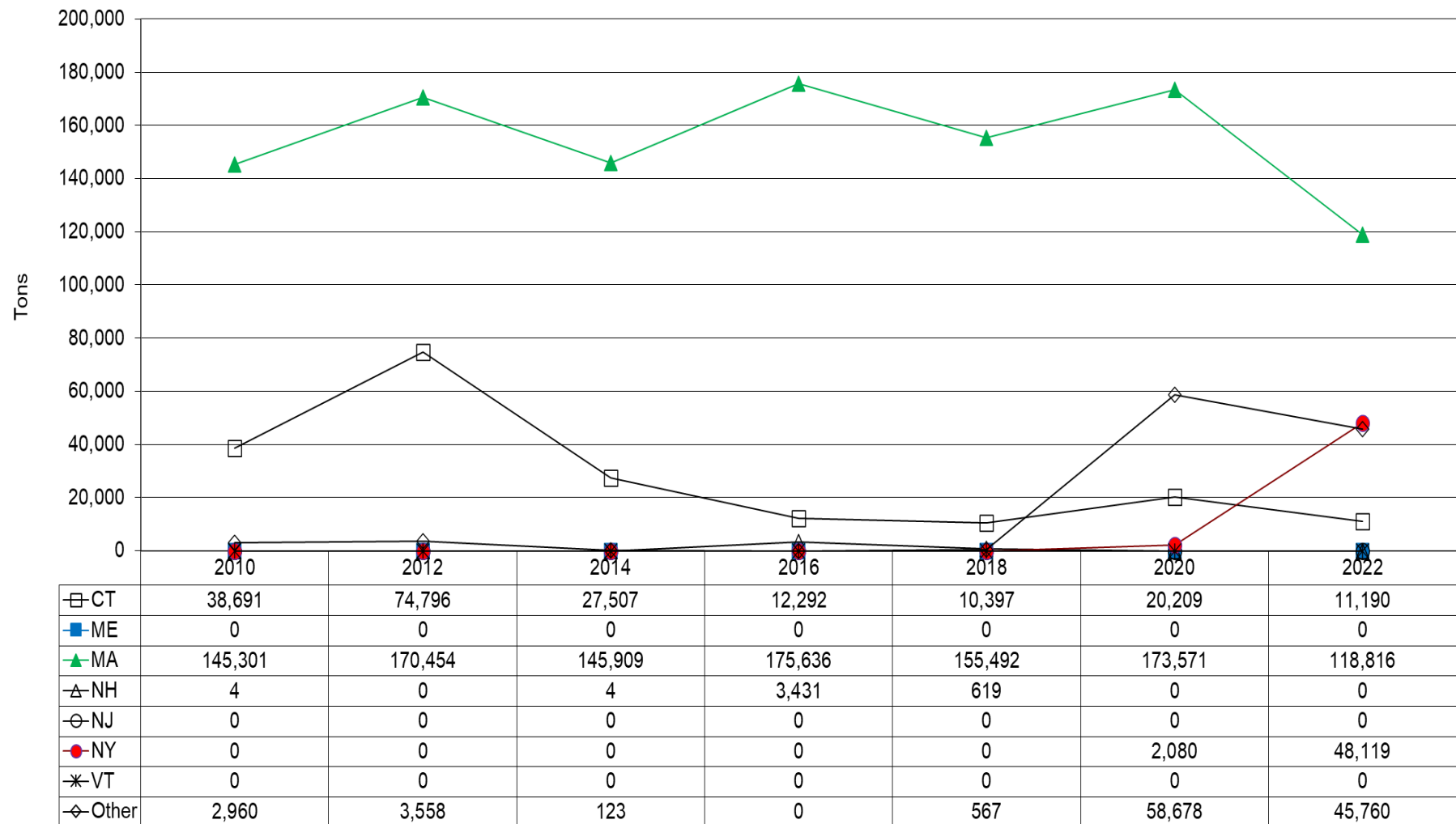
**Figure 25: MSW Exports from New York: 2010 through 2022
(Tons)**



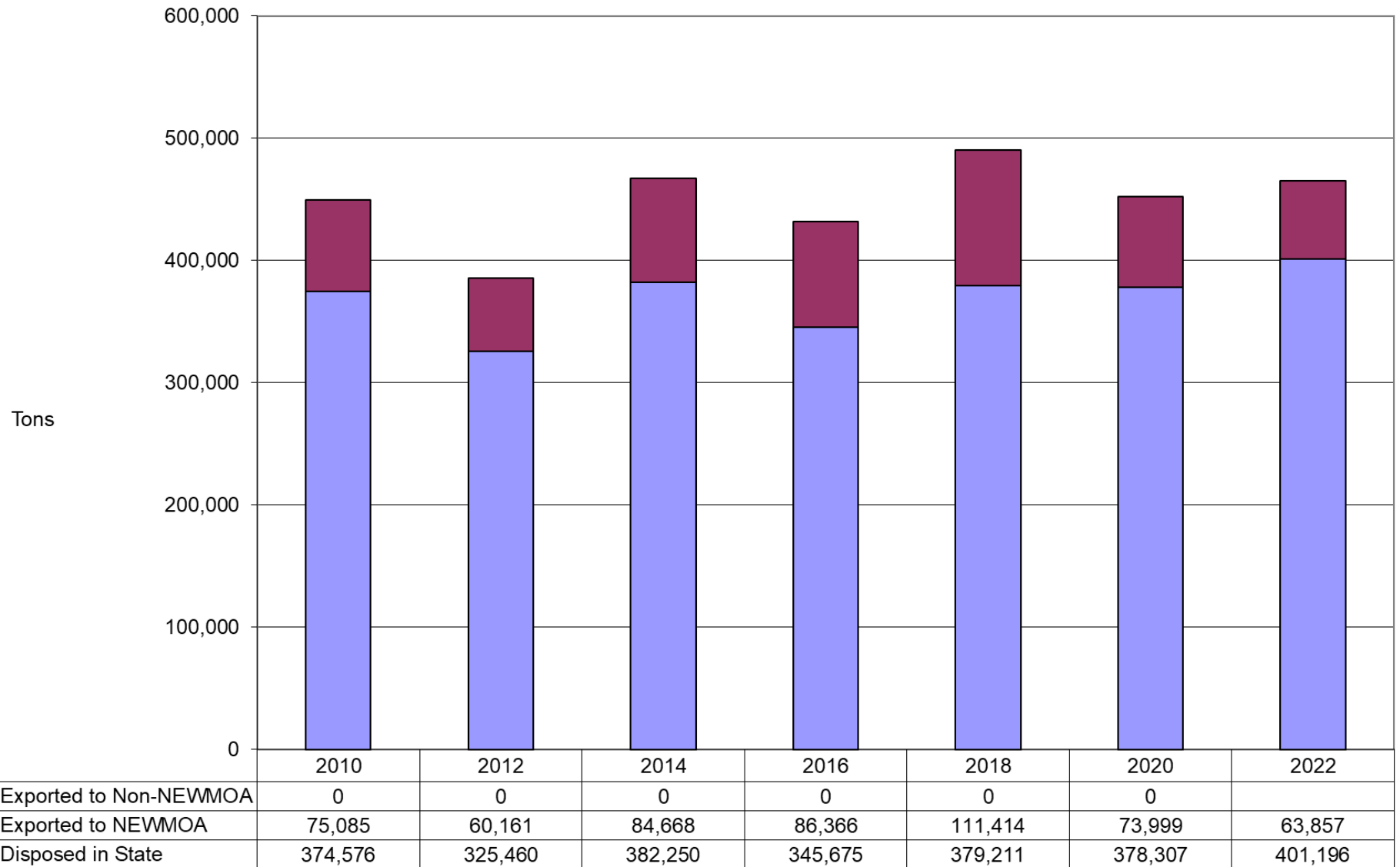
**Figure 26: MSW Generated in Rhode Island & Disposed of: 2010 through 2022
(Tons)**



**Figure 27: MSW Exports from Rhode Island: 2010 through 2022
(Tons)**



**Figure 28: MSW Generated in Vermont & Disposed of: 2010 through 2022
(Tons)**



**Figure 29: MSW Exports from Vermont: 2010 through 2022
(Tons)**

