

Northeast Waste Management Officials' Association (NEWMOA)¹
Municipal Solid Waste (MSW) Interstate Flow in 2008
August 26, 2010
Prepared by the NEWMOA Solid Waste Metrics Workgroup²

State environmental agencies in the Northeast have a responsibility to monitor and manage solid waste (MSW) disposal capacity. To help fulfill this responsibility, all of the NEWMOA-member states gather data from the MSW facilities that they regulate on their waste imports, and most members collect data on waste shipped out-of-state in order to assess disposal capacity and to measure recycling and other waste diversion activities. Starting in 2000, the NEWMOA members began to share data and prepare reports to characterize the flow of MSW among the states in order to better validate the information they collect. The director of the solid waste program in each NEWMOA-member state appointed at least one representative to serve on a regional Solid Waste Metrics Workgroup. The purpose of this Workgroup is to oversee and manage NEWMOA's MSW data collection and analysis and preparation of this presentation. By working together, the Workgroup members have improved the accuracy of their state data.

This presentation presents the results from NEWMOA's 2008 data collection and analysis efforts through a series of figures that summarize both state-specific and region-wide MSW disposal data.³ Its purpose is to help inform MSW policy and program development of the NEWMOA-member states. NEWMOA has performed this analysis annually starting with calendar year 1999 data. In 2006, NEWMOA decided to collect and analyze MSW disposal data every other year. This Report presents figures for the calendar year 2008 data and compares the results with 1999 – 2006 data.

NEWMOA's Workgroup members provide summaries of the MSW data they collect from facilities to NEWMOA staff for analysis. The staff reviews the data and works with Workgroup members to resolve any discrepancies. A typical type of discrepancy is a situation where transfer facilities in State A indicate they sent X tons of MSW to disposal facilities in State B, whereas disposal facilities in State B report they received Y tons that originated in State A. Unless noted otherwise, the figures presented below are

¹ NEWMOA is a nonprofit, nonpartisan interstate association that has a membership composed of the hazardous waste, solid waste, waste site cleanup, and pollution prevention program directors for the environmental agencies in Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont. NEWMOA was established by the Governors of the New England states as an official regional organization to coordinate interstate hazardous and solid waste, pollution prevention, and waste site cleanup activities, and was formally recognized by the U.S. Environmental Protection Agency (EPA) in 1986.

² Membership of the NEWMOA Solid Waste Measurement Workgroup is listed at : www.newmoa.org/solidwaste/workgroups.cfm

³ Other types of solid waste, such as construction and demolition (C&D) wastes are not included in this analysis.

based on the data from the disposal facilities, since the Workgroup considers this data to be more accurate. As a result, the information presented in the figures might vary from data 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 and, therefore, is not provided by the state in which it was generated (called the generating state)
- If waste is transported to an out-of-state transfer station, and then sent from there to a disposal facility in a third state; the disposal facility would record the MSW as imported from the second state rather than the generating state – the second state is referred to as “pass through” in the notes on some of the figures below

By examining the MSW data provided by all of the NEWMOA-member states, the Workgroup adjusts for these situations and develops figures based on refined data. Because this presentation focuses on the NEWMOA region waste imports from and exports to non-NEWMOA-member states and/or Canadian provinces are aggregated into the “non-NEWMOA” or “Other” category.

**Figure 1: 2008 MSW Imports & Exports
(tons)**

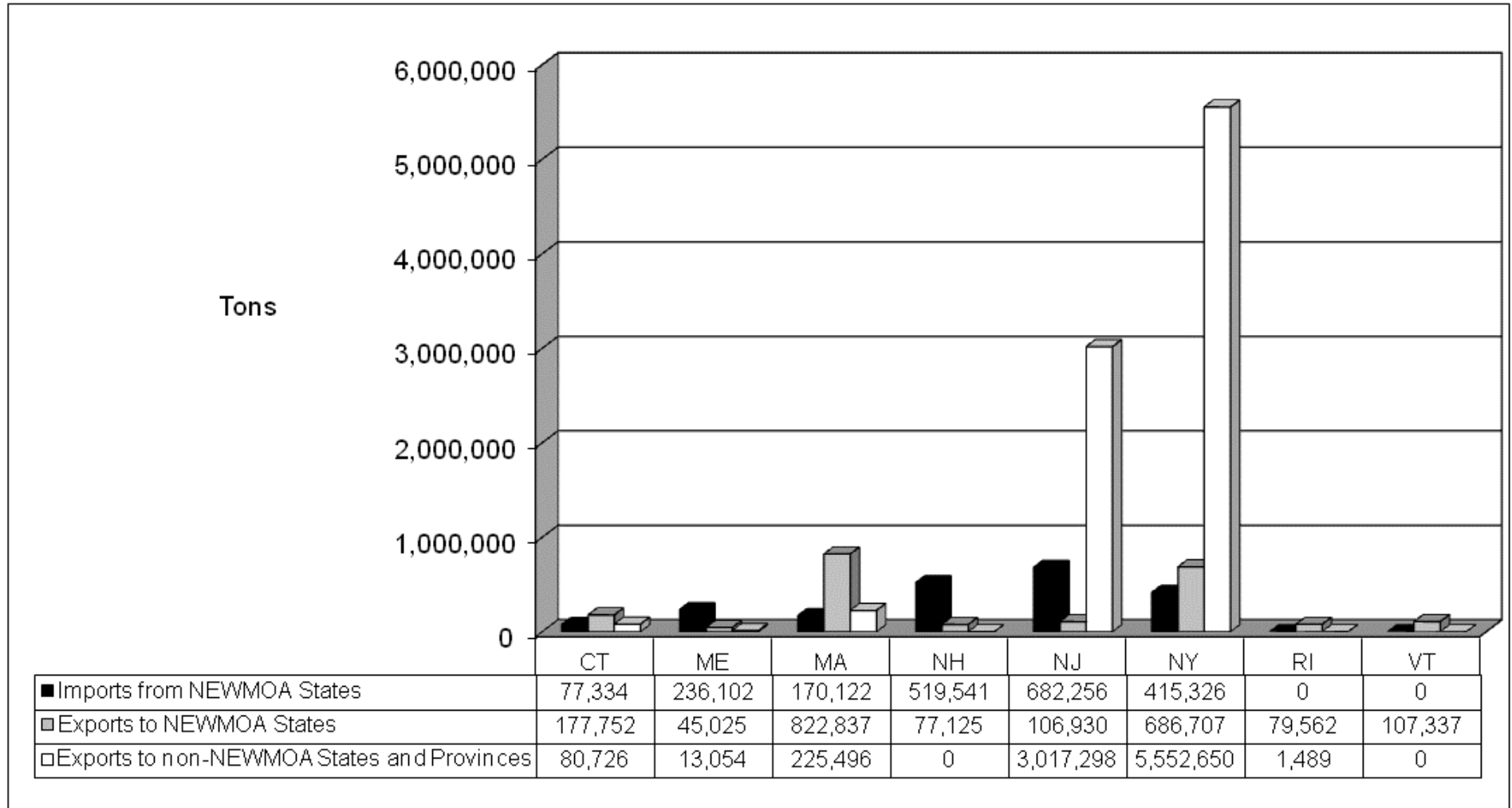
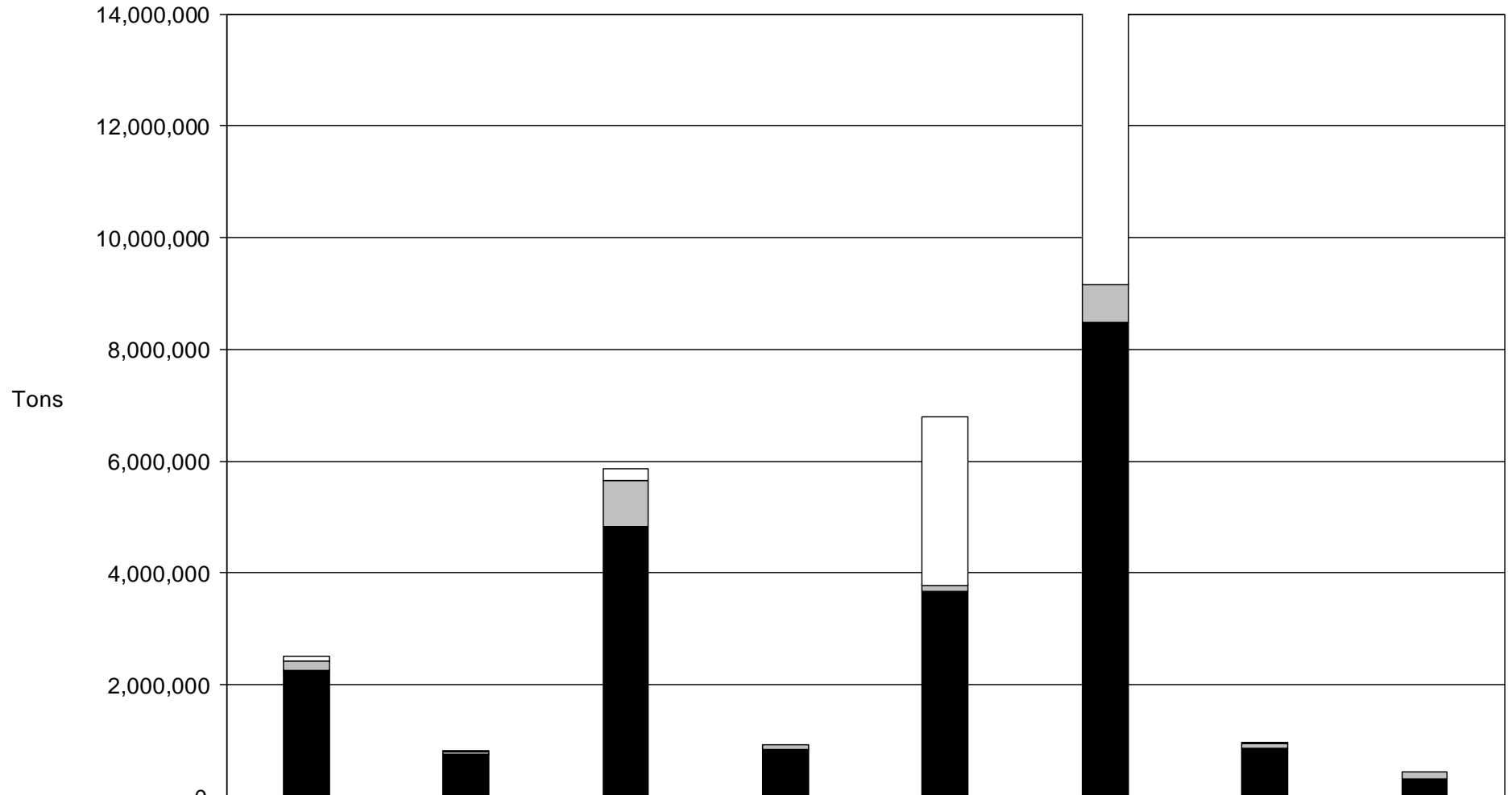


Figure 2: 2008 MSW Generated by State & Disposed (tons)



	CT	ME	MA	NH	NJ	NY	RI	VT
□ Exports to Non-NEWMOA	80,726	13,054	225,496	-	3,017,298	5,552,650	1489	0
▒ Exports to NEWMOA States	177,752	45,025	822,837	77,125	106,930	686,707	79,562	107,337
■ Disposed In-state	2,251,048	755,086	4,823,591	838,589	3,675,821	8,483,761	866,084	319,425

Figure 3: 2008 Total Quantity of MSW Disposed of In-State (tons)

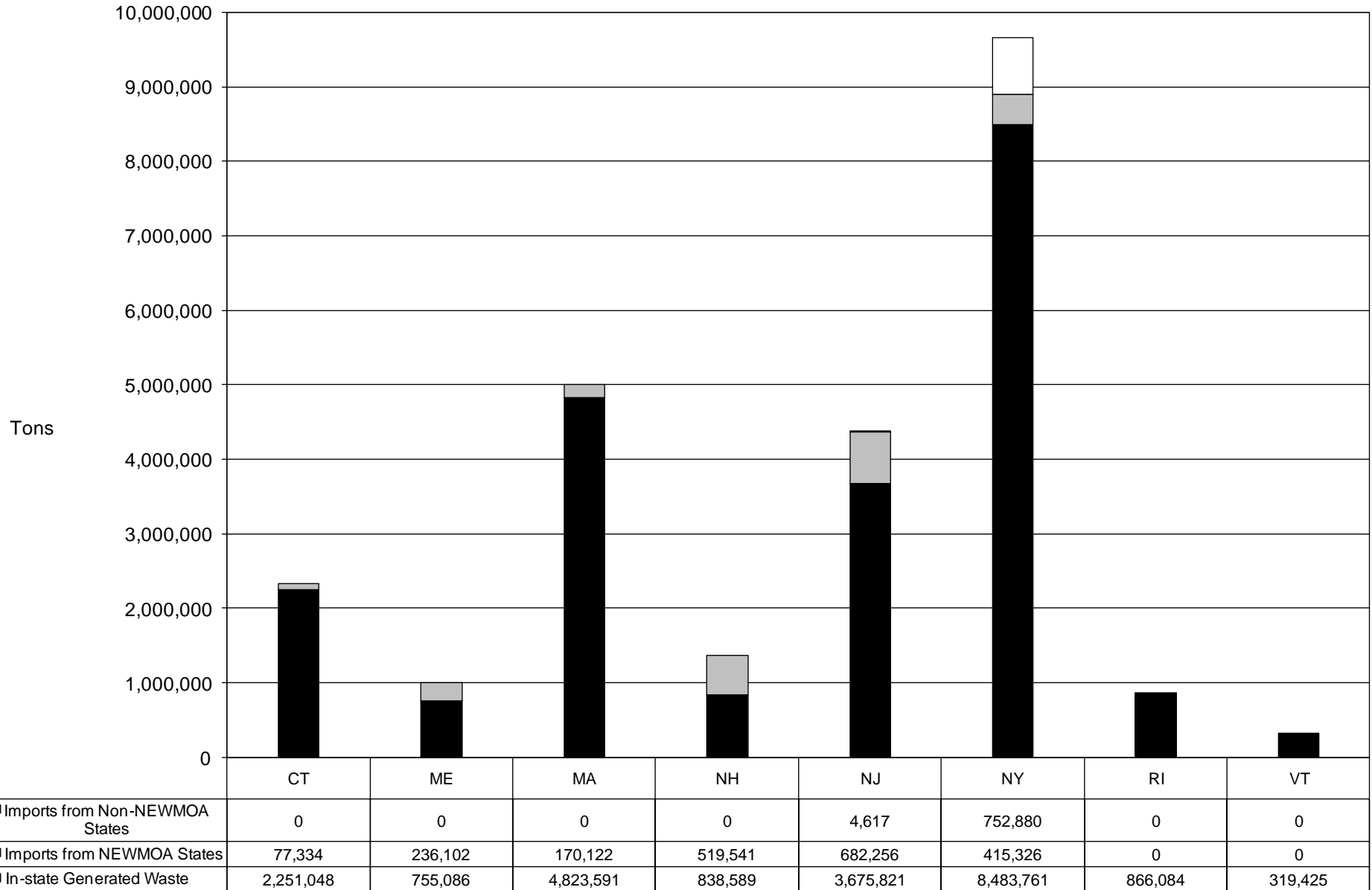
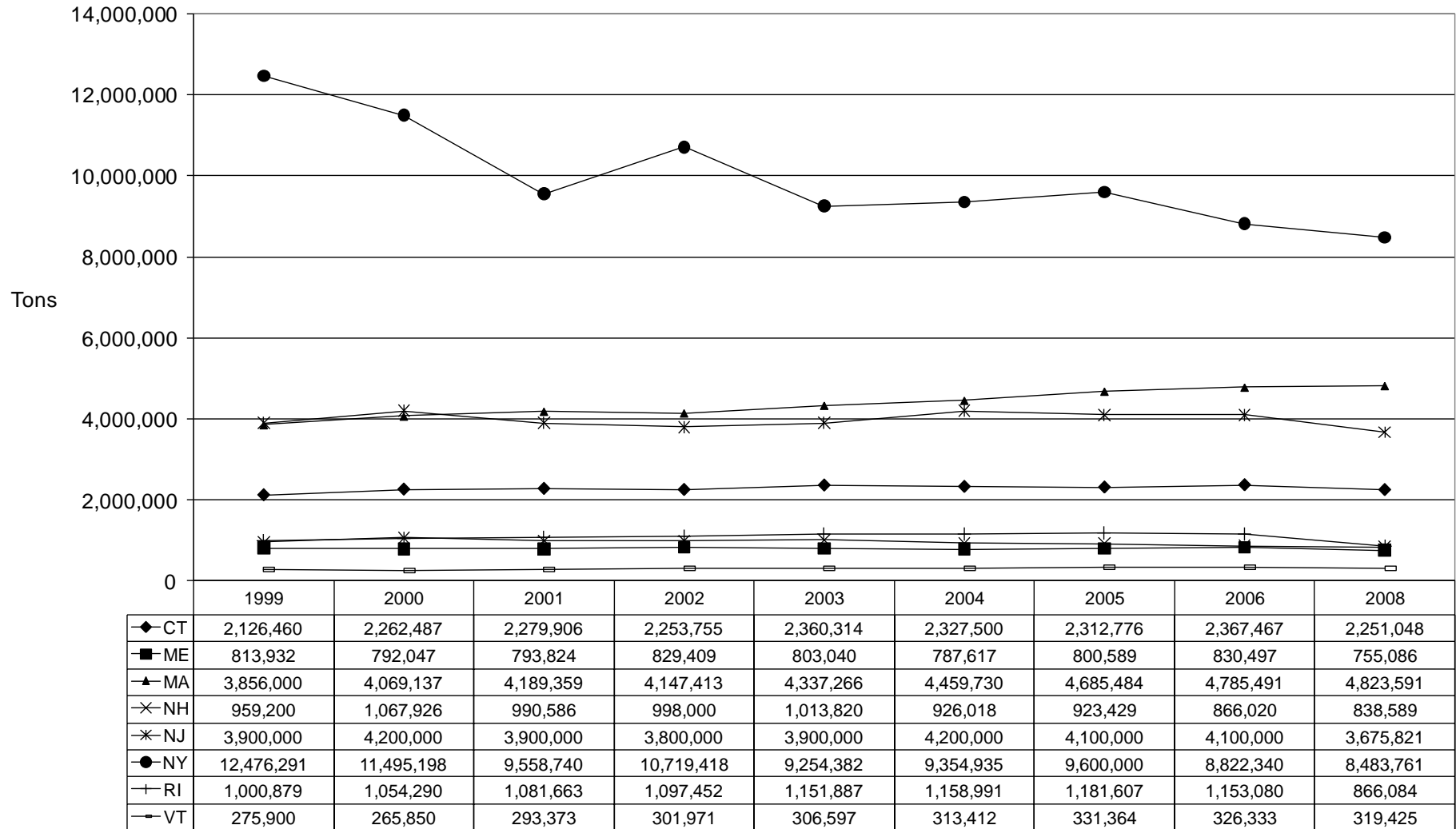
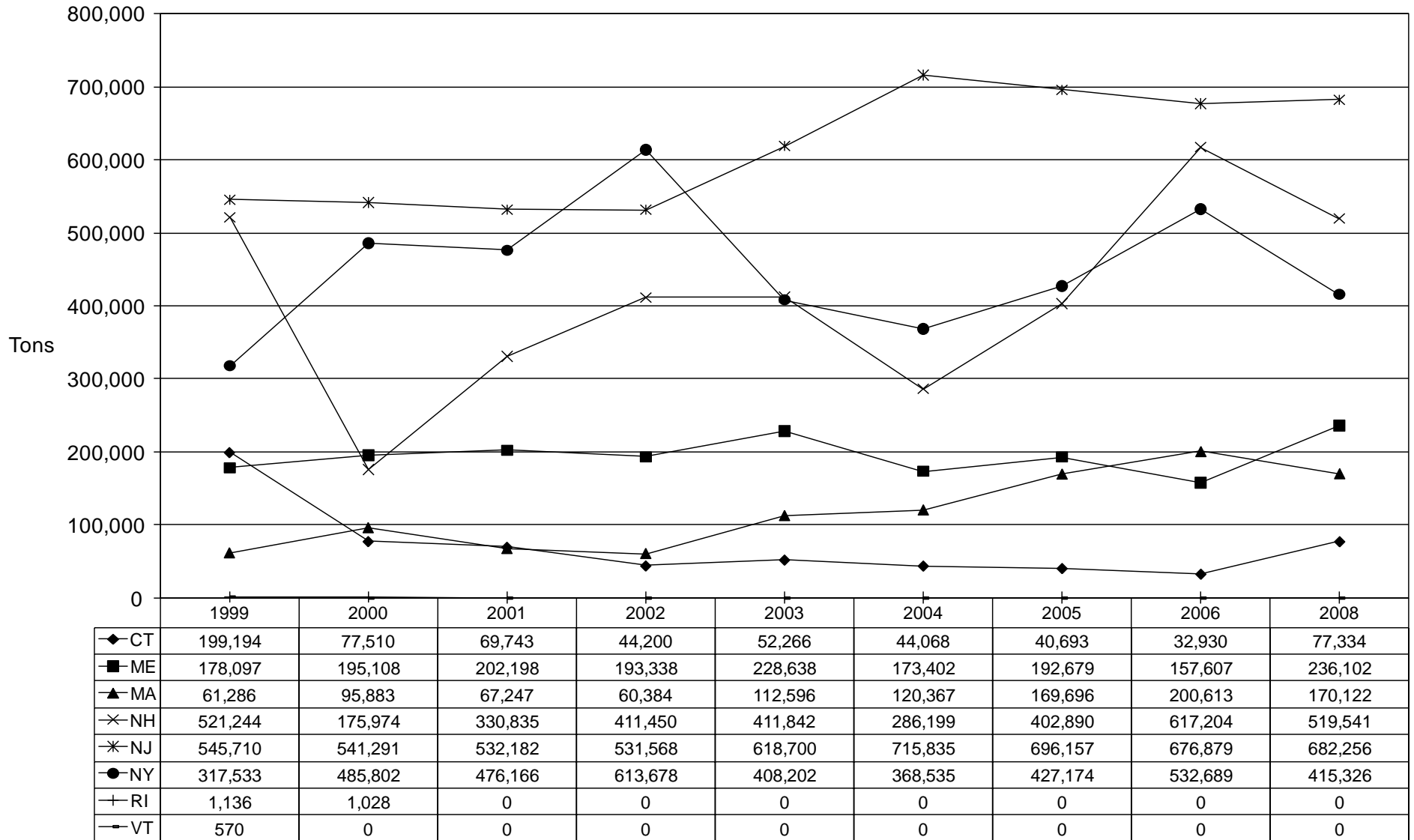


Figure 4: In-State Disposal of MSW Generated In-State: 1999 through 2008 (tons)

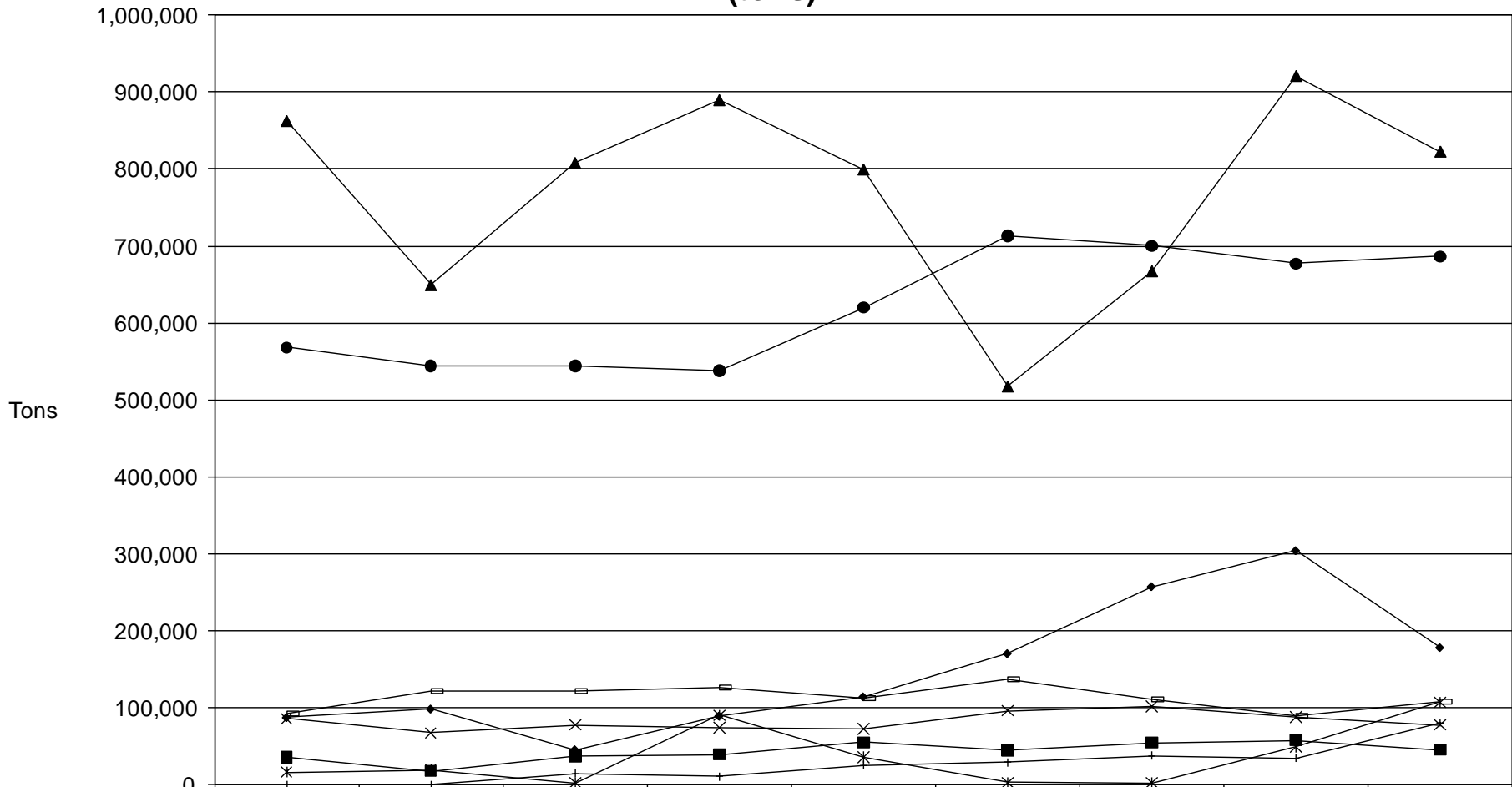


Note: for New York – for some or all years prior to 2006, there might be data quality issues for in-state disposal of in-state generated MSW that might overstate disposal.

**Figure 5: MSW Imports from NEWMOA States: 1999 through 2008
(tons)**

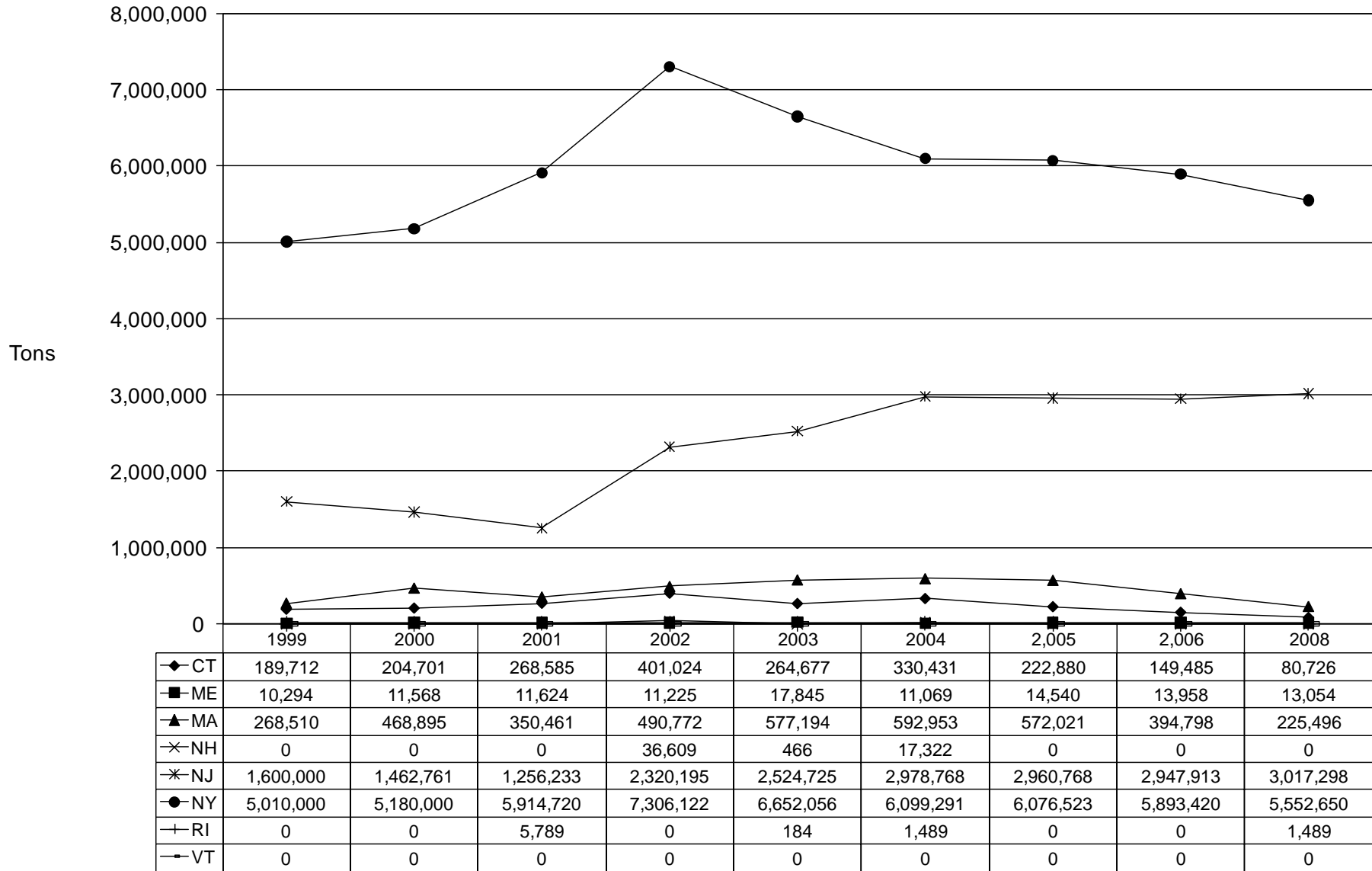


**Figure 6: MSW Exports to NEWMOA States: 1999 through 2008
(tons)**

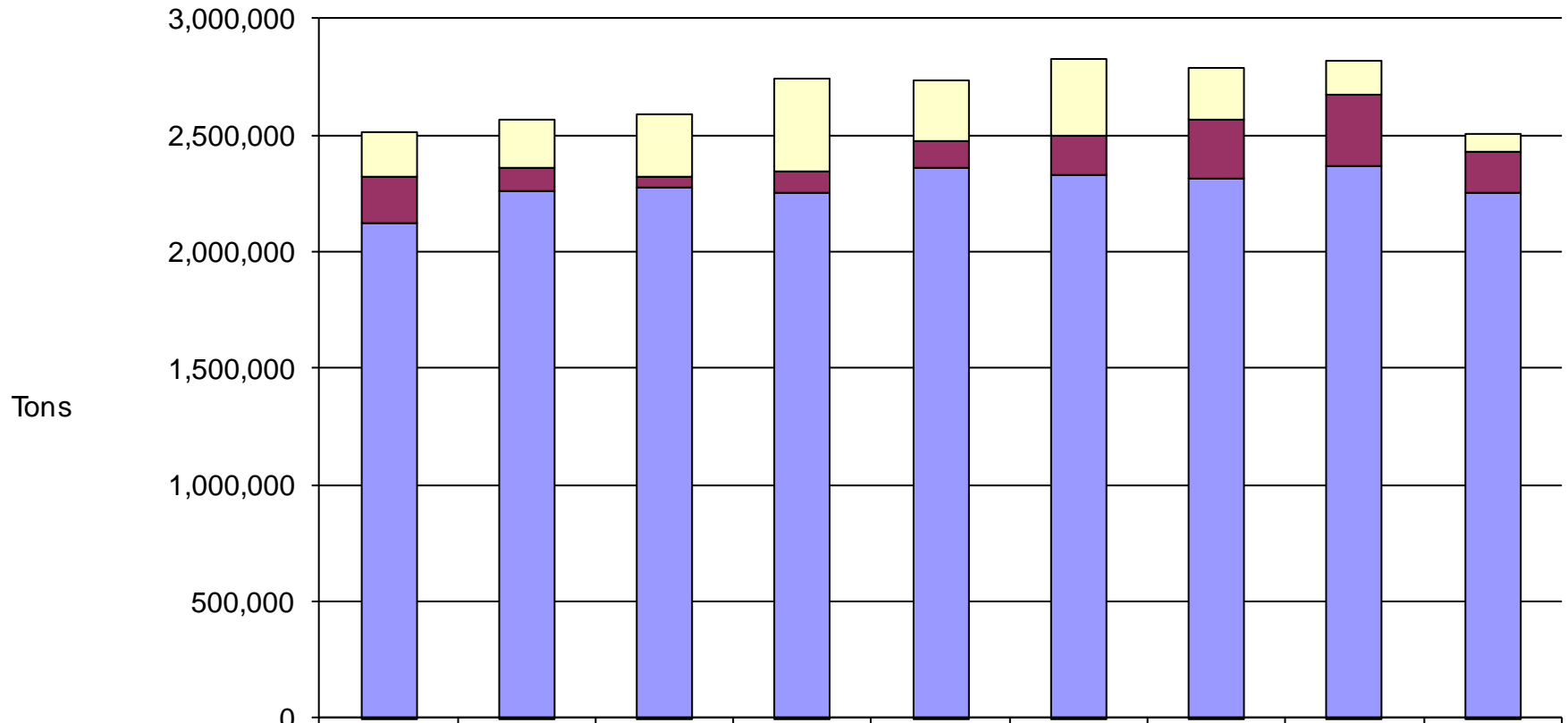


	1999	2000	2001	2002	2003	2004	2,005	2,006	2008
◆-CT	86,658	97,788	44,840	88,633	113,682	169,963	257,139	303,970	177,752
■-ME	35,277	17,057	36,449	38,643	54,515	44,346	54,157	57,142	45,025
▲-MA	862,623	649,476	808,023	889,635	799,572	517,812	667,454	921,115	822,837
×-NH	85,606	66,688	77,409	73,404	71,958	95,756	101,118	87,344	77,125
*-NJ	15,708	18,312	1,672	90,008	34,903	2,414	1,677	48,866	106,930
●-NY	568,238	544,181	543,797	537,838	620,025	712,979	700,111	677,051	686,707
+ -RI	0	0	14,331	10,101	24,859	28,266	37,388	34,061	79,562
—VT	92,077	121,546	121,876	126,256	111,438	136,870	110,245	88,373	107,337

**Figure 7: MSW Exports to Non-NEWMOA States & Provinces:
1999 through 2008 (tons)**

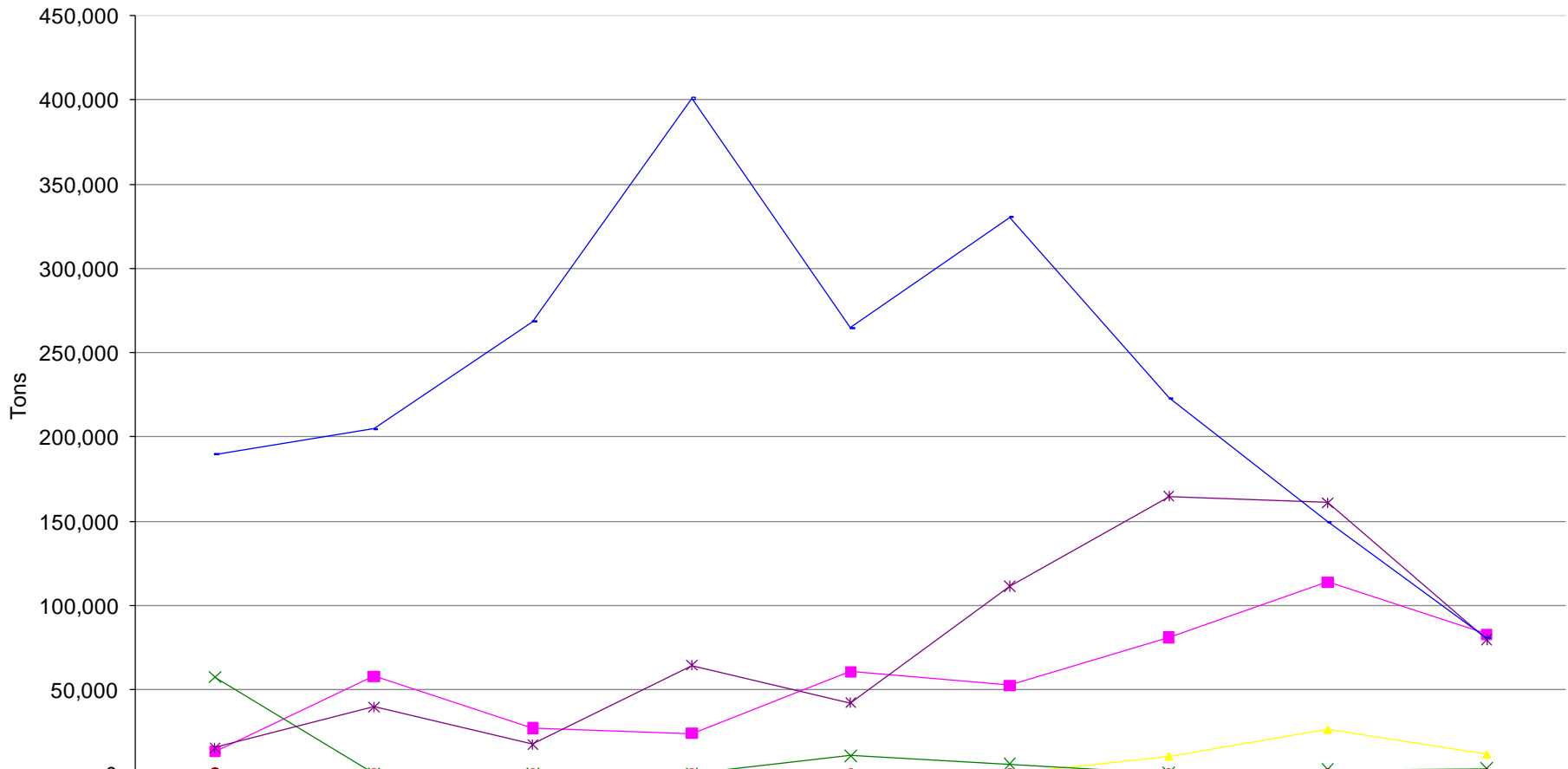


**Figure 8: MSW Generated in Connecticut & Disposed: 1999 through 2008
(tons)**



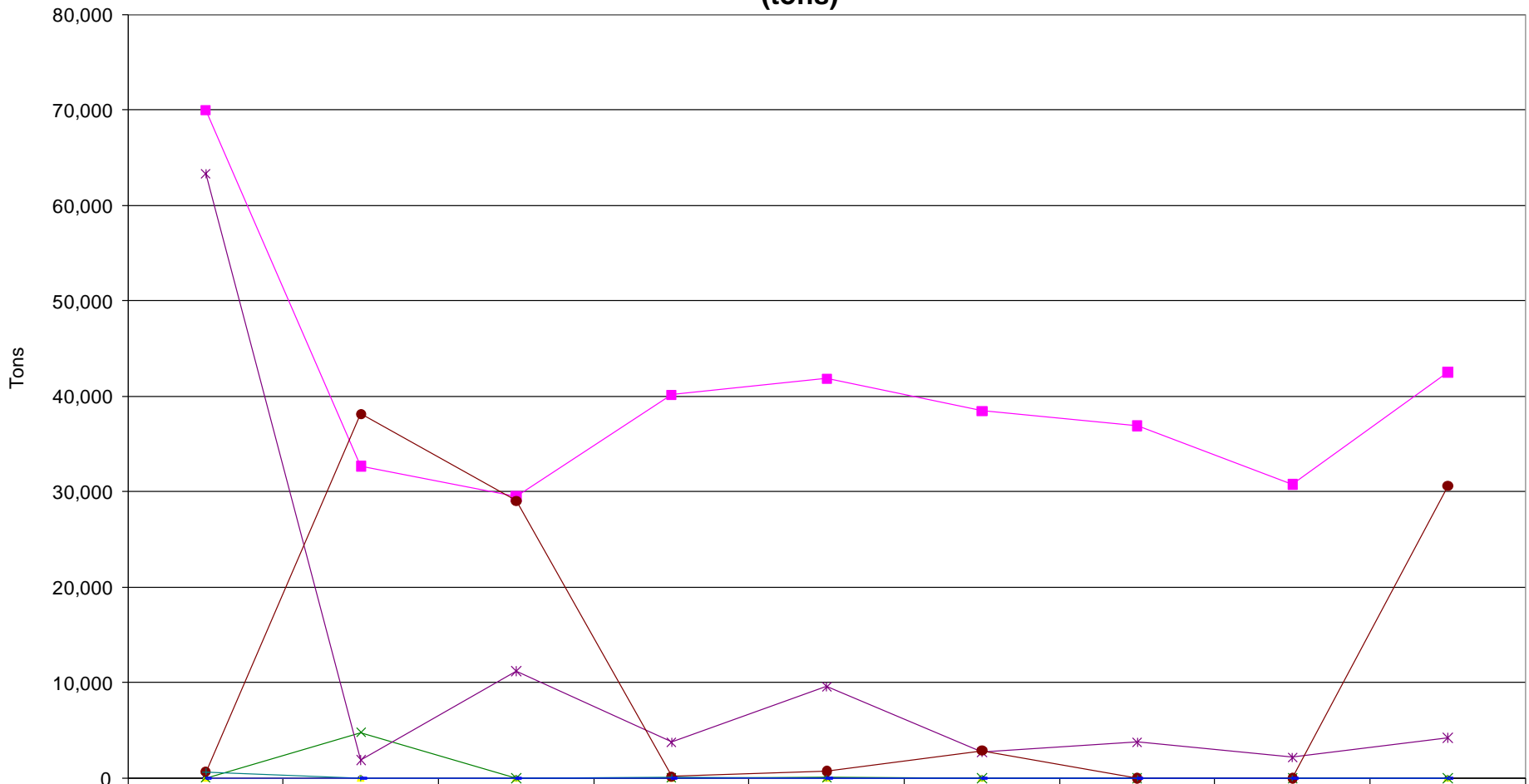
	1999	2000	2001	2002	2003	2004	2005	2006	2008
Exported to Non NEWMOA	189,712	204,701	268,585	401,024	264,677	330,431	222,880	149,485	80,726
Exported to NEWMOA	199,168	97,788	44,840	88,633	113,682	169,963	257,139	303,970	177,752
Disposed In State	2,126,460	2,262,487	2,279,906	2,253,756	2,360,314	2,327,500	2,312,776	2,367,467	2,251,048

**Figure 9: MSW Exports from Connecticut: 1999 through 2008
(tons)**



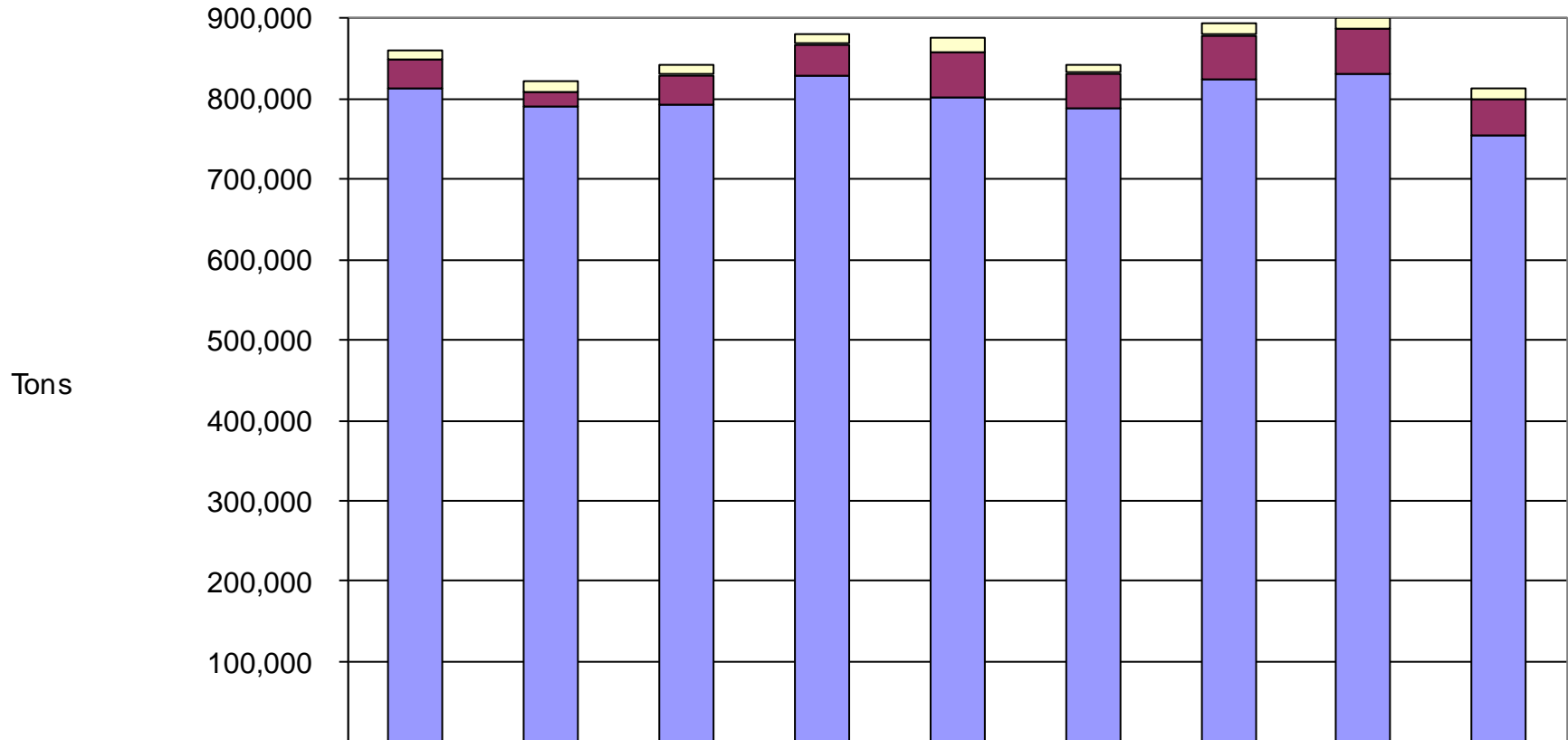
	1999	2000	2001	2002	2003	2004	2005	2006	2008
ME	0	0	0	0	0	0	0	0	0
MA	13,268	58,019	27,323	24,155	60,599	52,680	81,151	113,980	82,861
NH	0	77	0	0	0	0	10,661	26,474	11,845
NJ	57,498	0	36	7	10,926	5,804	442	2,571	3,213
NY	15,464	39,685	17,463	64,471	42,157	111,479	164,885	160,945	79,833
RI	428	7	0	0	0	0	0	0	0
VT	0	0	0	0	0	0	0	0	0
Other	189,712	204,701	268,585	401,024	264,677	330,431	222,880	149,485	80,726

**Figure 10: MSW Imports to Connecticut: 1999 through 2008
(tons)**



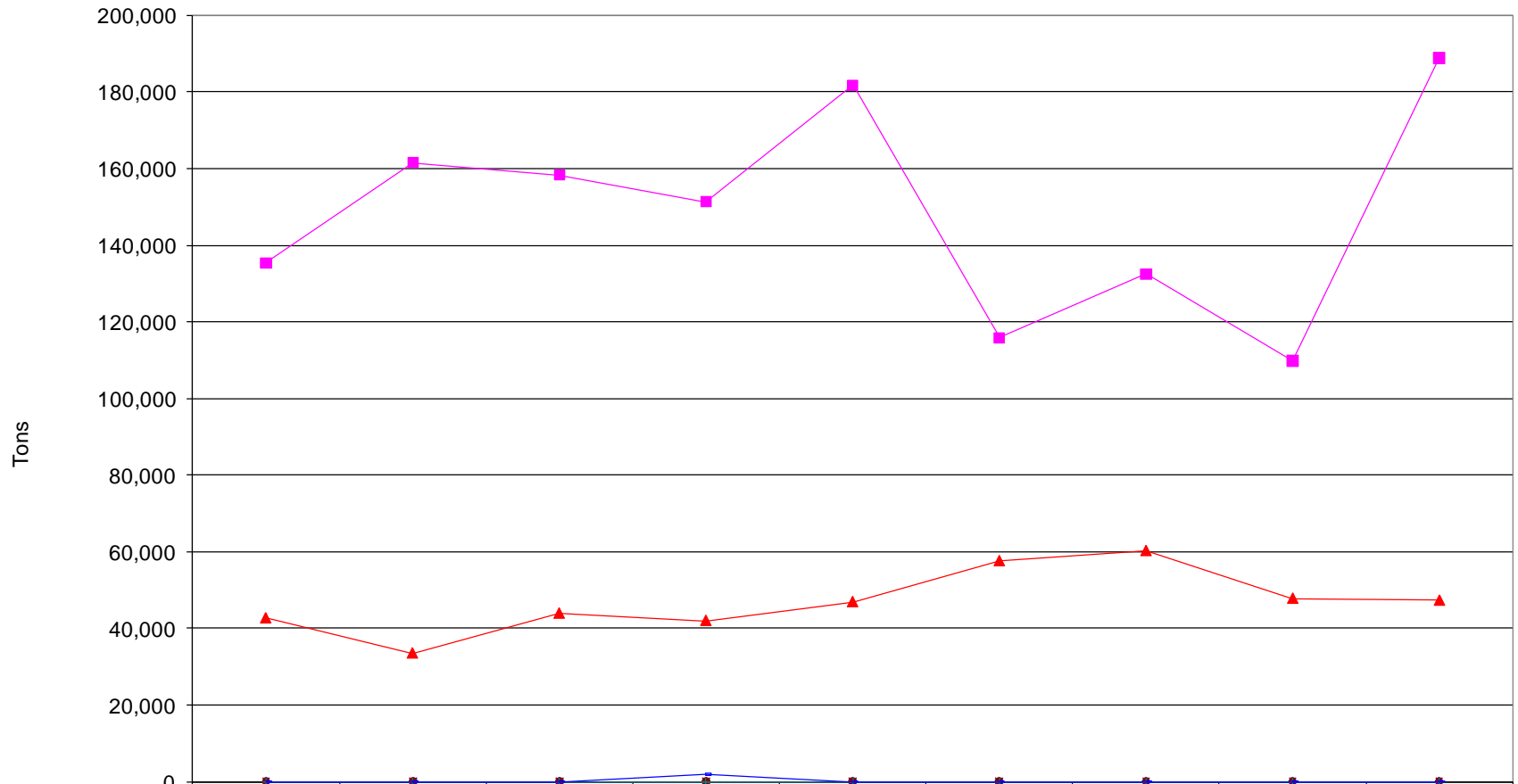
	1999	2000	2001	2002	2003	2004	2005	2006	2008
◆ ME	0	0	0	0	0	0	0	0	0
■ MA	69,974	32,682	29,501	40,168	41,869	38,479	36,924	30,767	42,517
▲ NH	0	0	0	0	0	0	0	0	0
× NJ	26	4,795	0	8	55	0	0	0	0
* NY	63,316	1,881	11,190	3,760	9,597	2,712	3,769	2,163	4,219
● RI	652	38,151	29,052	167	745	2,877	0	0	30,598
+ VT	641	0	0	97	0	0	0	0	0
→ Other	0	0	1	0	0	5	10	3	0

**Figure 11: MSW Generated in Maine & Disposed: 1999 through 2008
(tons)**



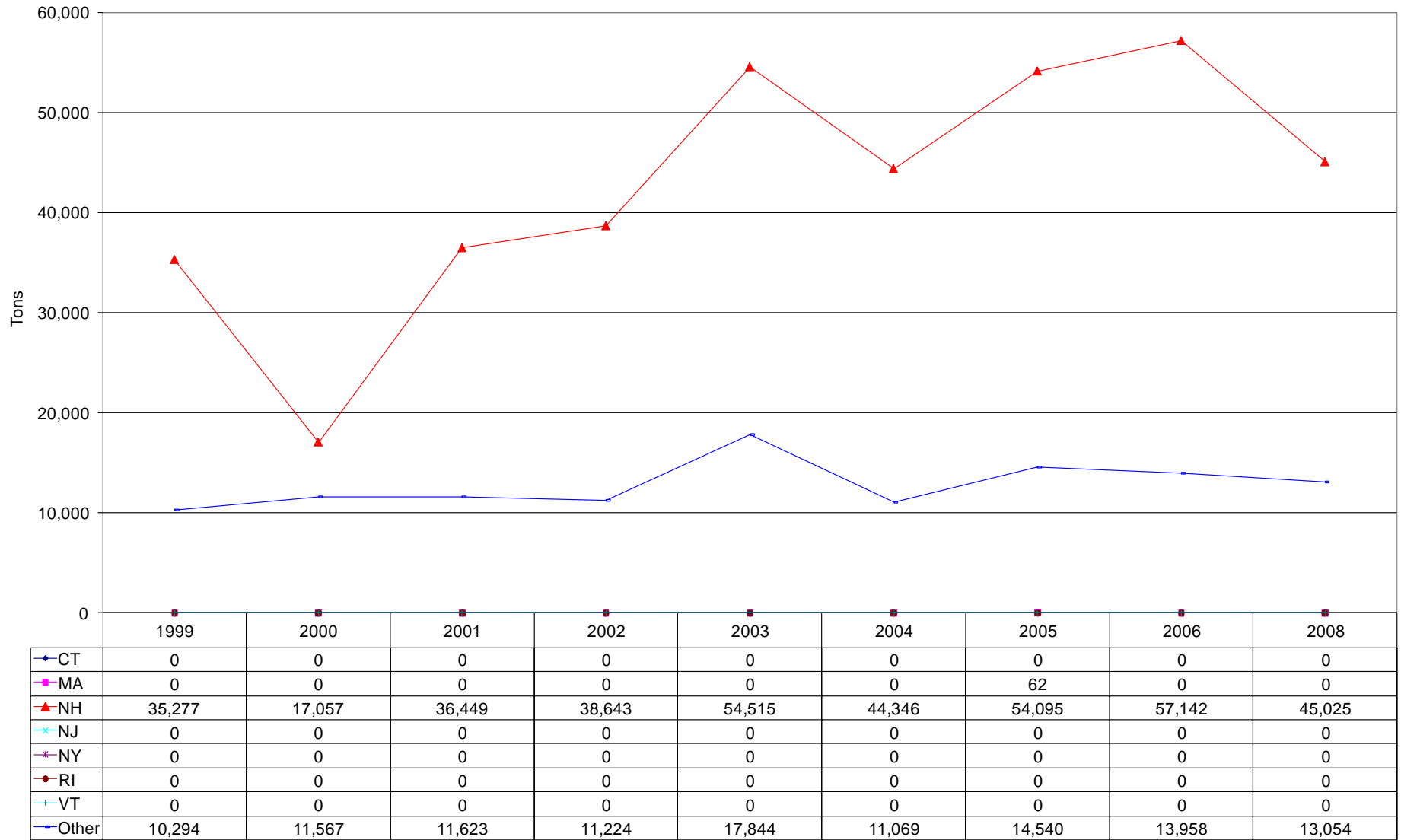
	1999	2000	2001	2002	2003	2004	2005	2006	2008
Exported to Non-NEWMOA	10,294	11,568	11,624	11,225	17,845	11,069	14,540	13,958	13,054
Exported to NEWMOA	35,277	17,057	36,449	38,643	54,515	44,346	54,157	57,142	45,025
Disposed In State	813,932	792,047	793,824	829,409	803,040	787,617	825,470	830,497	755,086

**Figure 12: MSW Imports to Maine: 1999 through 2008
(tons)**

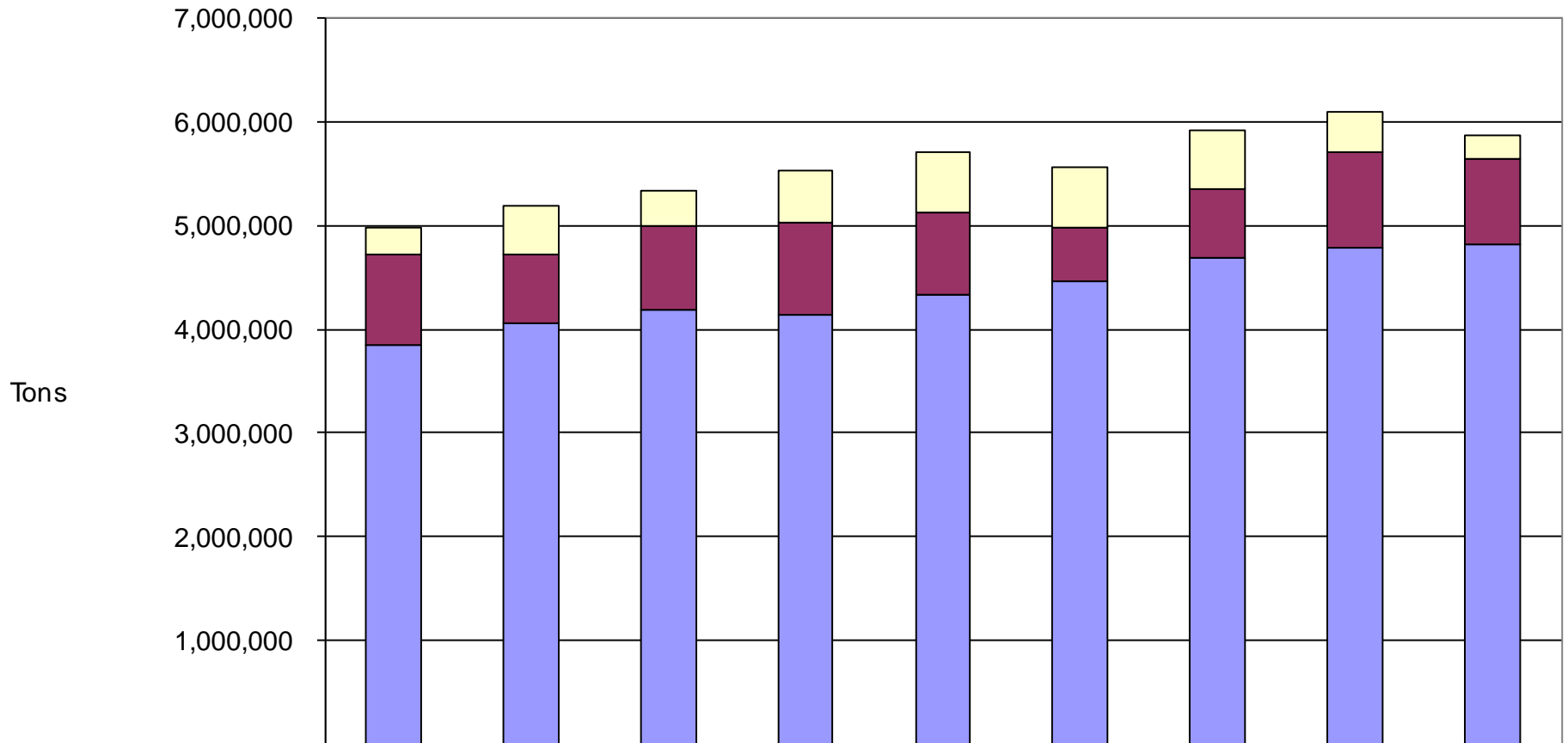


◆ CT	0	0	0	0	0	0	0	0	0
■ MA	135434	161573	158293	151338	181744	115,857	132,494	109,831	188,828
▲ NH	42663	33535	43905	42000	46894	57,545	60,185	47,776	47,274
✦ NJ	0	0	0	0	0	0	0	0	0
* NY	0	0	0	0	0	0	0	0	0
● RI	0	0	0	0	0	0	0	0	0
+ VT	0	0	0	0	0	0	0	0	0
◆ Other	0	0	0	1918	0	0	0	0	0

**Figure 13: MSW Exports from Maine: 1999 through 2008
(tons)**

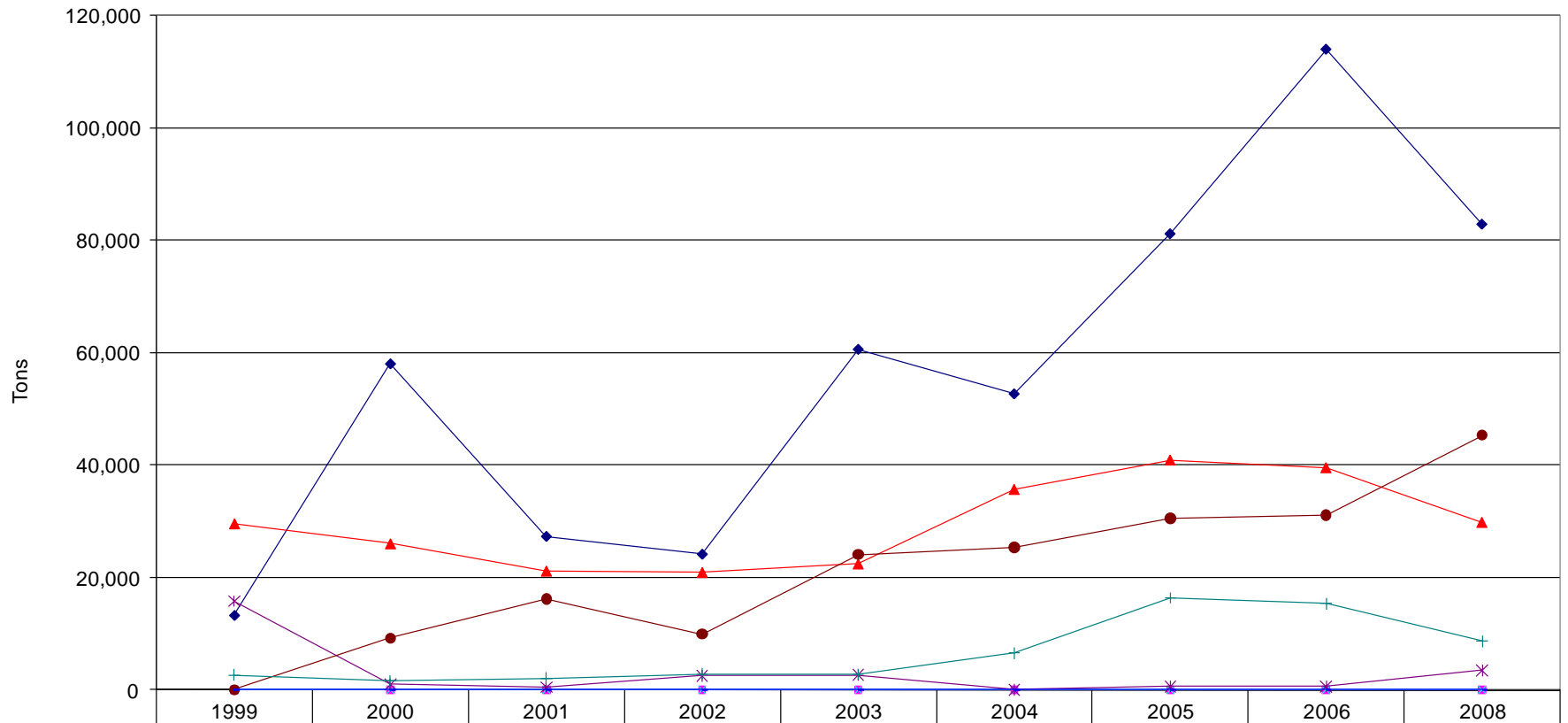


**Figure 14: MSW Generated in Massachusetts & Disposed: 1999 through 2008
(tons)**



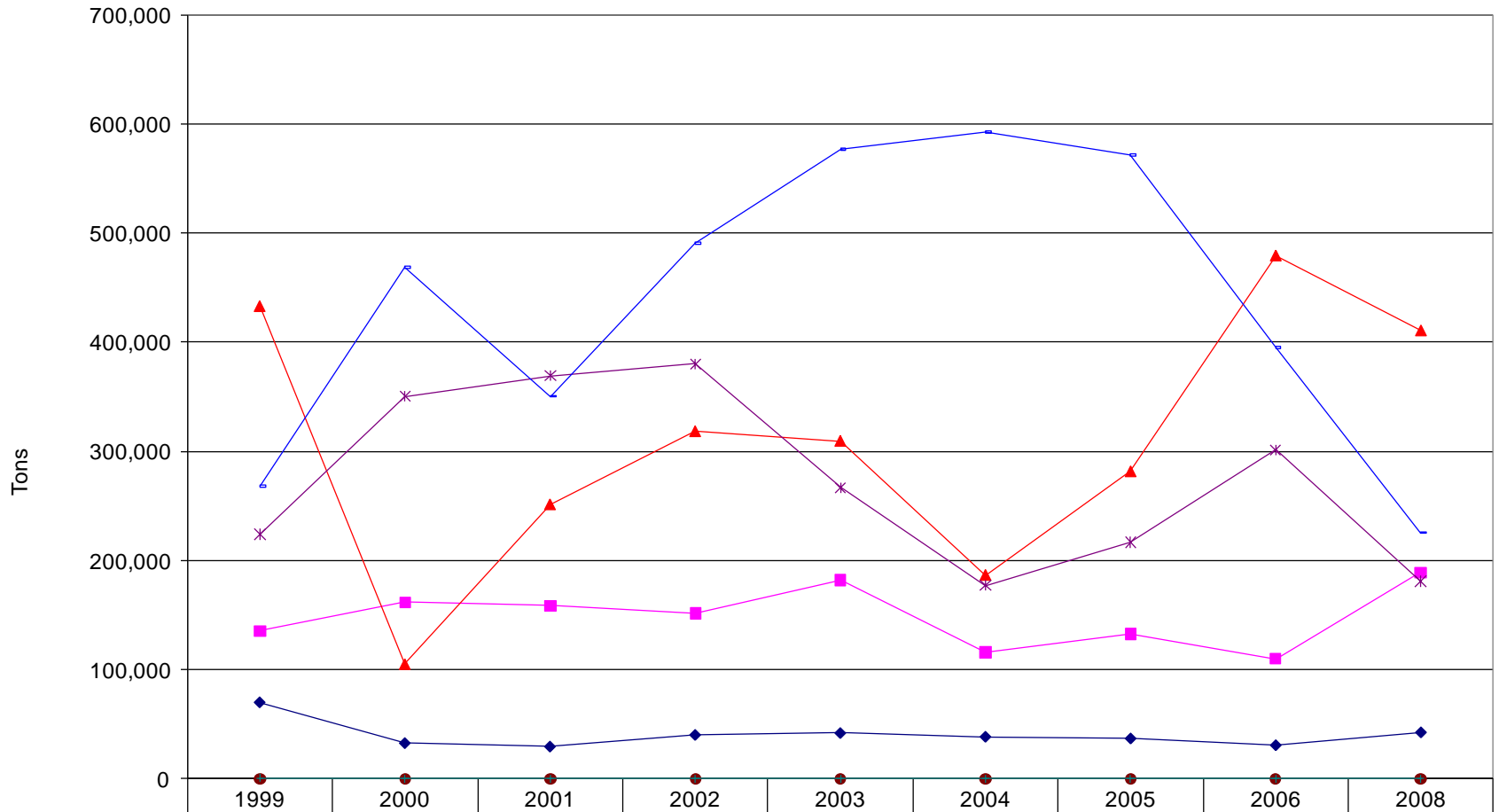
	1999	2000	2001	2002	2003	2004	2005	2006	2008
Exported to Non-NEWMOA	268,510	468,895	350,461	490,772	577,194	592,953	572,021	394,798	225,496
Exported to NEWMOA	862,623	649,476	808,023	889,635	799,572	517,812	667,454	921,115	822,837
Disposed In State	3,856,000	4,069,137	4,189,359	4,147,413	4,337,266	4,459,730	4,685,484	4,785,491	4,823,591

**Figure 15: MSW Imports to Massachusetts: 1999 through 2008
(tons)**



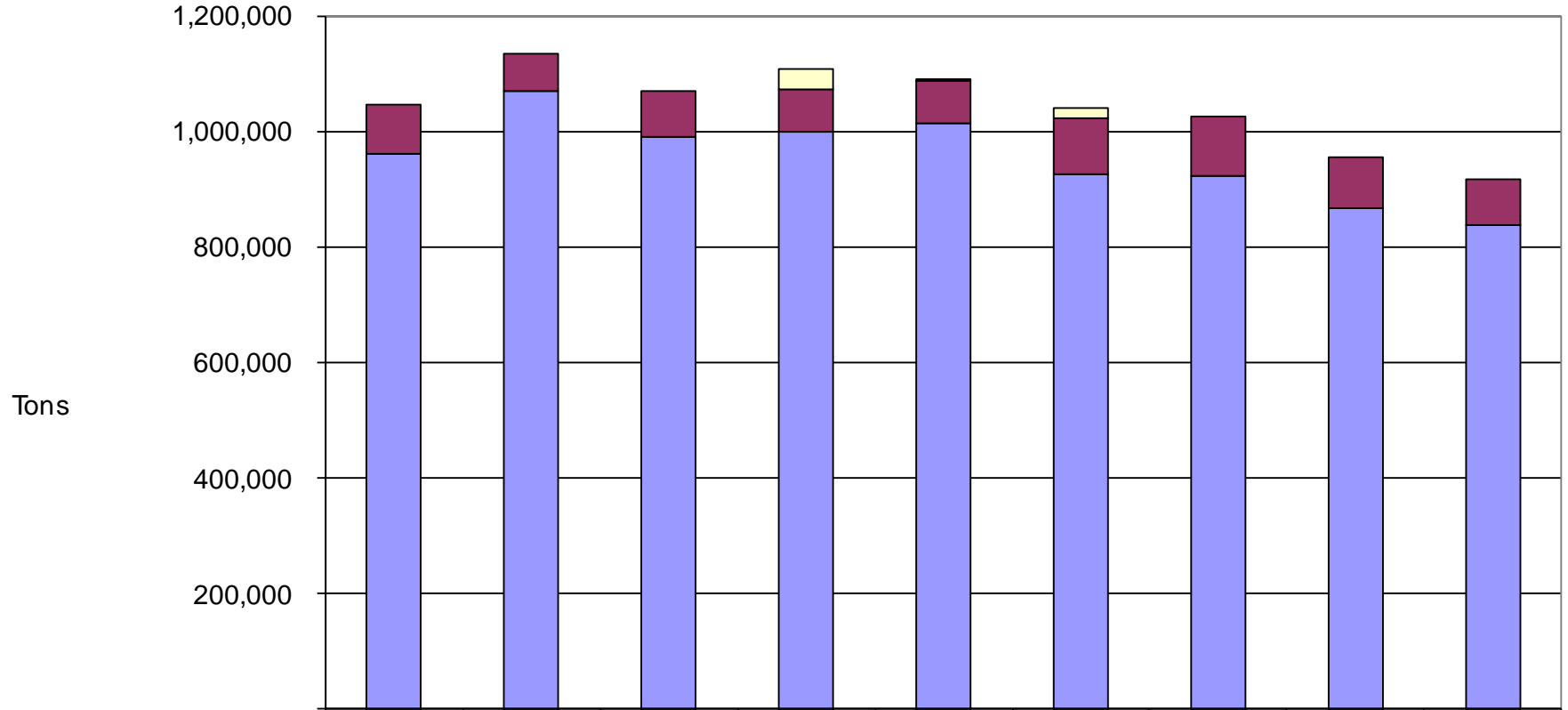
	1999	2000	2001	2002	2003	2004	2005	2006	2008
◆ CT	13,268	58,019	27,323	24,155	60,599	52,680	81,151	113,980	82,861
■ ME	0	0	0	0	0	0	62	0	0
▲ NH	29,597	26,047	21,196	20,952	22,471	35,705	40,933	39,568	29,851
✦ NJ	0	0	0	0	0	0	0	0	0
✱ NY	15,783	1,009	461	2,517	2,654	41	627	580	3,445
● RI	0	9,231	16,189	9,934	24,114	25,389	30,532	31,127	45,333
✚ VT	2,638	1,576	2,078	2,826	2,758	6,552	16,391	15,358	8,632
— Other	0	0	0	0	0	0	0	0	0

**Figure 16: MSW Exports from Massachusetts: 1999 through 2008
(tons)**



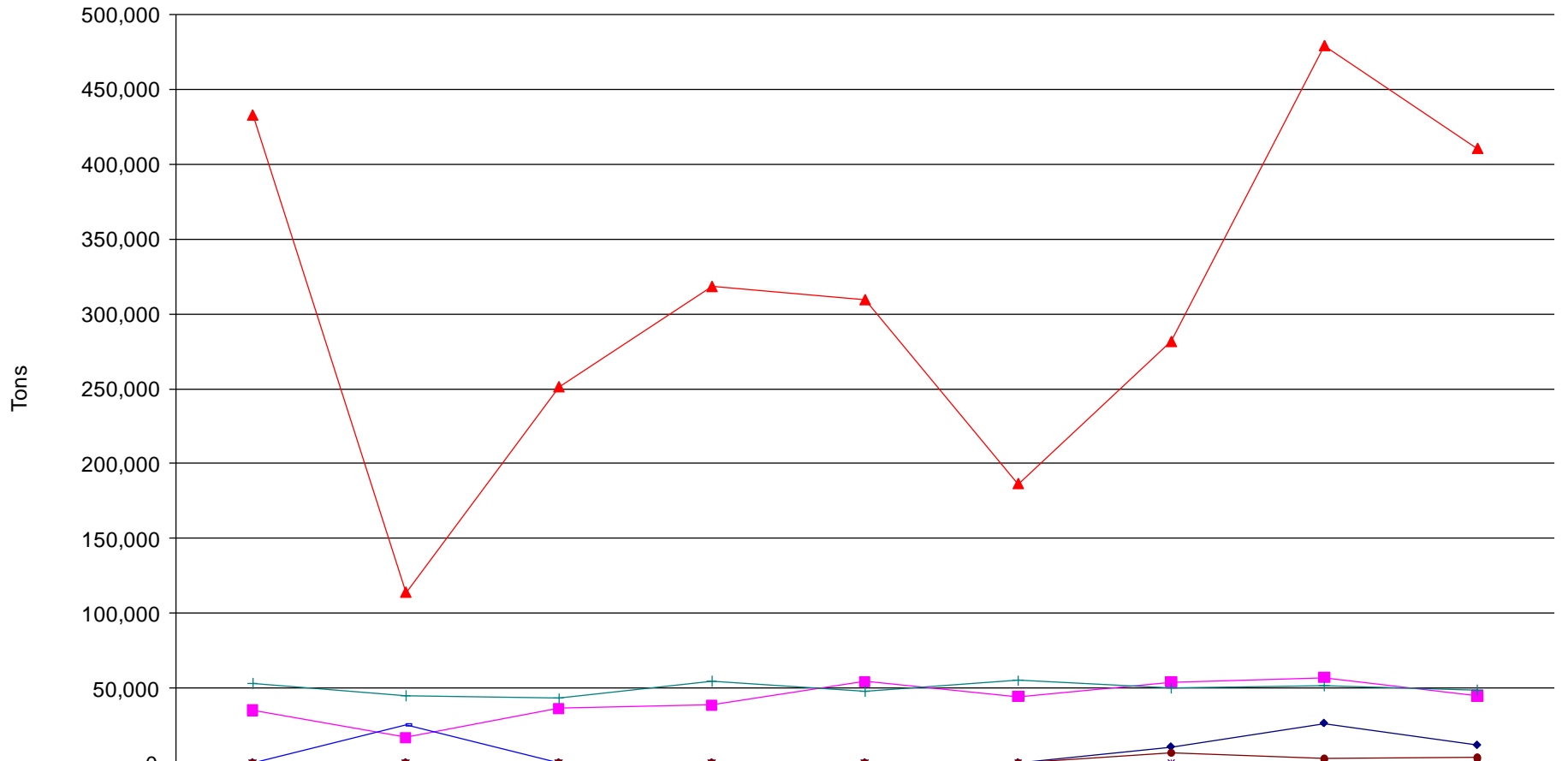
	1999	2000	2001	2002	2003	2004	2005	2006	2008
◆ CT	69,974	32,682	29,501	40,168	41,868	38,479	36,924	30,767	42,517
■ ME	135,434	161,573	158,293	151,338	181,744	115,857	132,494	109,831	188,828
▲ NH	432,702	104,709	251,137	318,129	309,335	186,455	281,375	479,144	410,466
✕ NJ	0	0	0	0	0	0	0	0	0
✱ NY	224,024	350,512	369,092	380,000	266,624	177,021	216,661	301,373	181,026
● RI	0	0	0	0	0	0	0	0	0
+ VT	489	0	0	0	0	0	0	0	0
● Other	268,510	468,895	350,461	490,771	577,194	592,953	572,021	394,798	225,496

**Figure 17: MSW Generated in New Hampshire & Disposed: 1999 through 2008
(tons)**



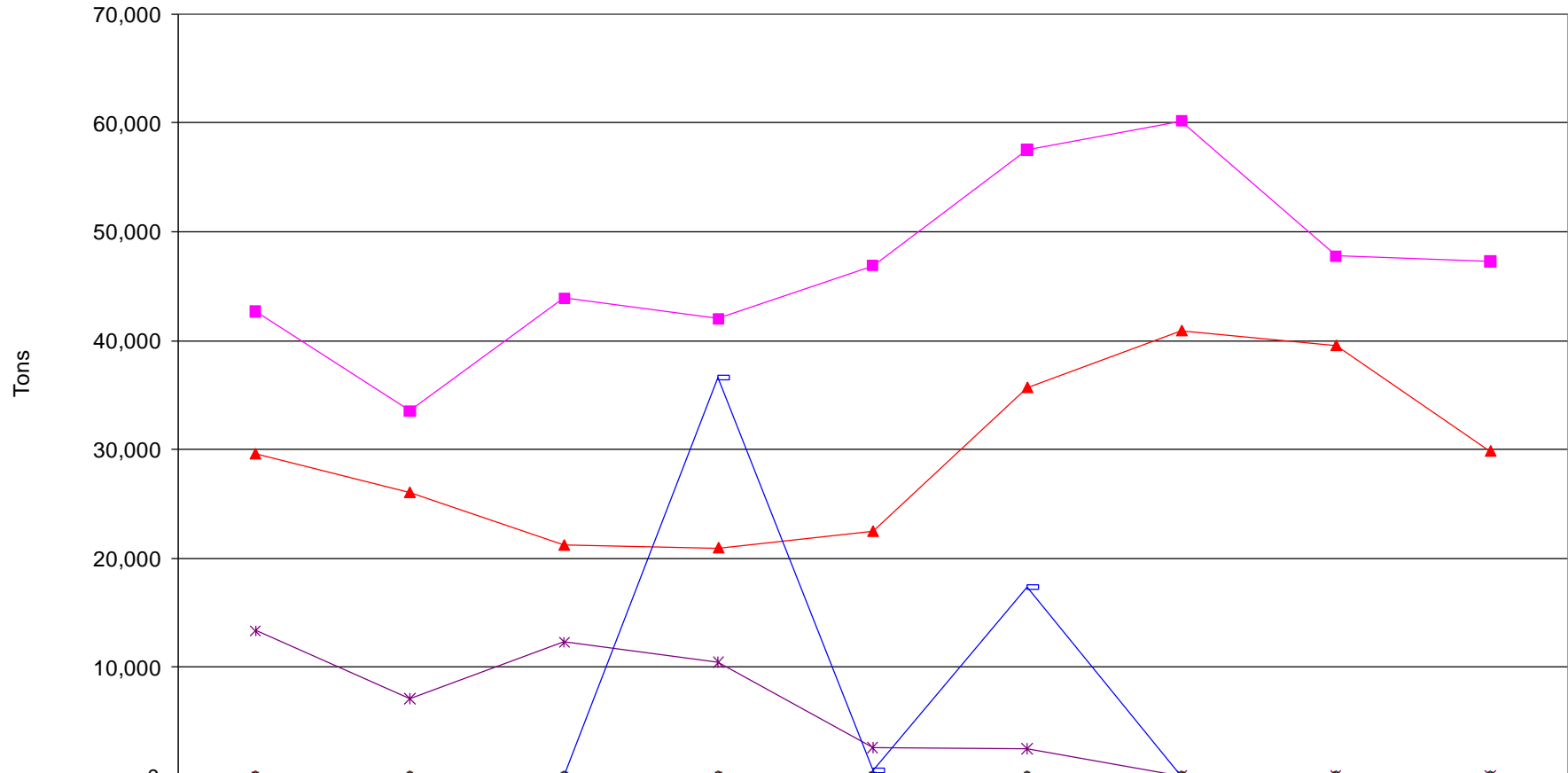
	1999	2000	2001	2002	2003	2004	2005	2006	2008
Exported to Non-NEWMOA	0	0	0	36,609	466	17,322	0	0	0
Exported to NEWMOA	85,606	66,688	77,409	73,404	71,958	95,756	101,118	87,344	77,125
Disposed In State	959,200	1,067,926	990,586	998,000	1,013,820	926,018	923,429	866,020	838,589

**Figure 18: MSW Imports to New Hampshire: 1999 through 2008
(tons)**



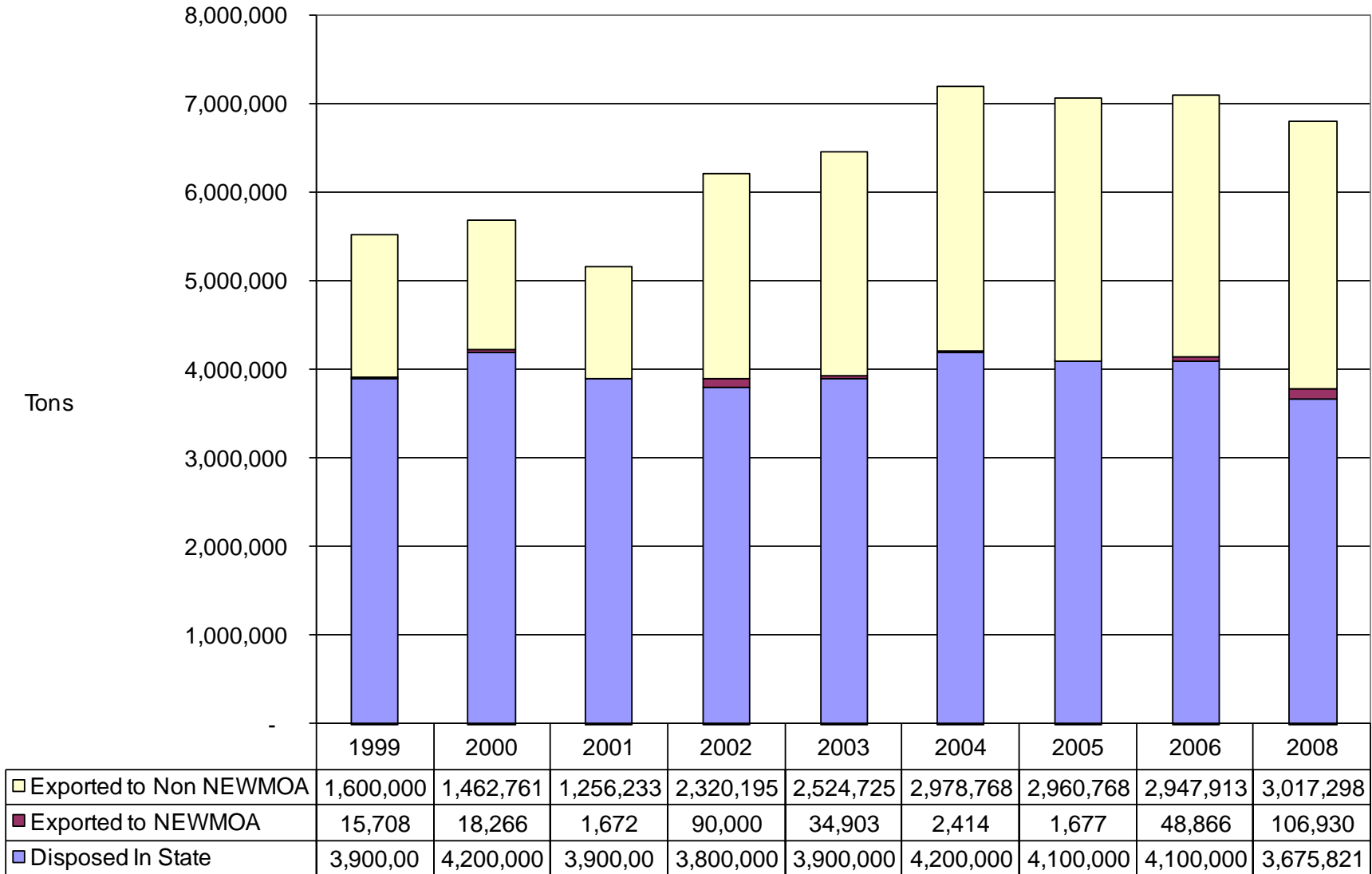
	1999	2000	2001	2002	2003	2004	2005	2006	2008
◆ CT	0	77	18	0	0	0	10,661	26,474	11,845
■ ME	35,277	17,057	36,449	38,643	54,515	44,346	54,095	57,142	45,025
▲ MA	432,702	113,852	251,137	318,129	309,335	186,455	281,375	479,144	410,466
⊕ NJ	0	0	0	0	0	0	0	0	0
* NY	138	0	0	0	0	195	0	0	0
● RI	0	0	0	0	0	0	6,856	2,934	3,631
+ VT	53,127	44,988	43,231	54,678	47,992	55,203	49,903	51,510	48,574
■ Other	0	25,424	0	0	0	0	0	0	0

Figure 19: MSW Exports from New Hampshire: 1999 through 2008 (tons)

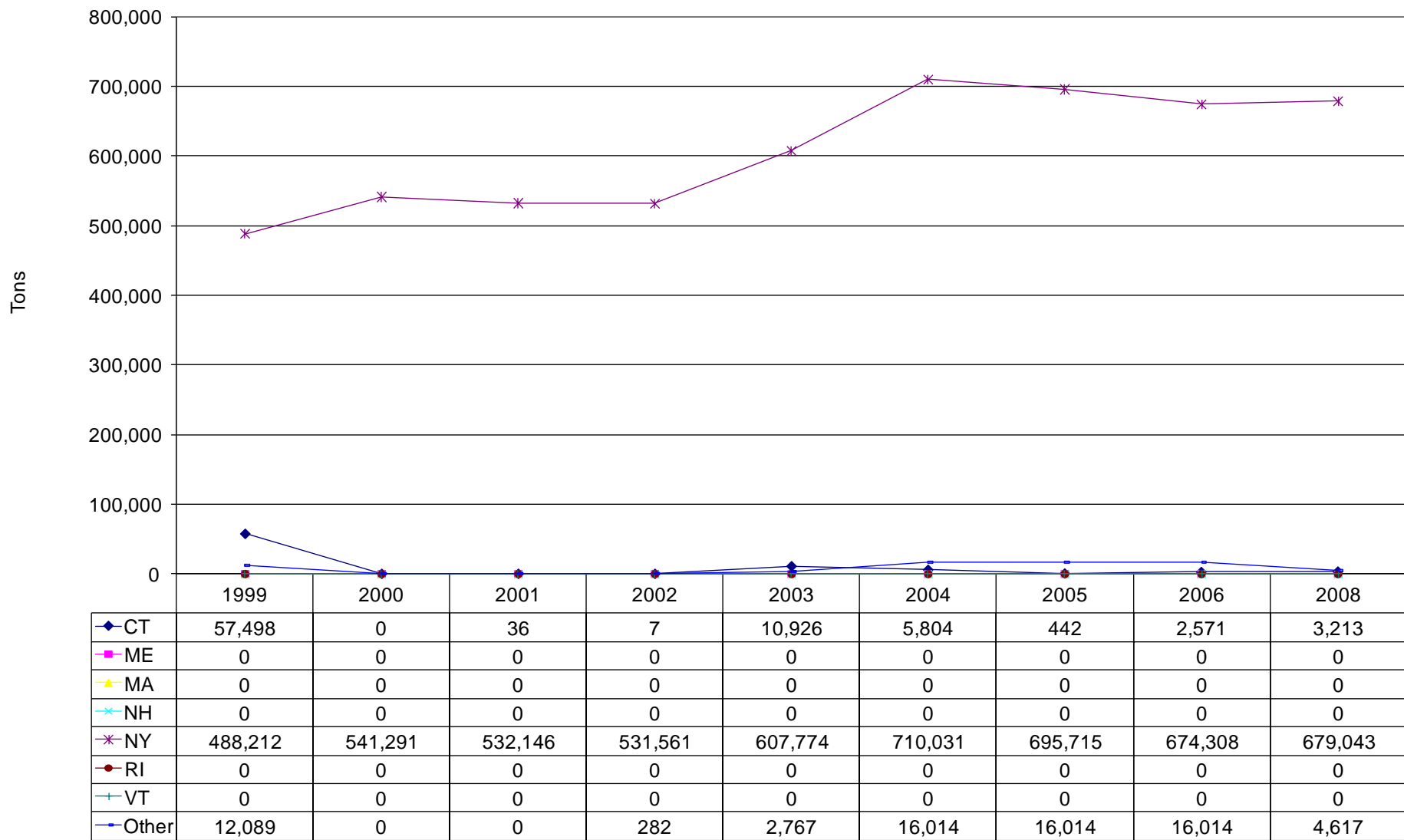


	1999	2000	2001	2002	2003	2004	2005	2006	2008
◆ CT	0	0	0	0	0	0	0	0	0
■ ME	42,663	33,534	43,905	42,000	46,894	57,545	60,185	47,776	47,274
▲ MA	29,597	26,047	21,196	20,952	22,471	35,705	40,933	39,568	29,851
✕ NJ	0	0	0	0	0	0	0	0	0
* NY	13,346	7,106	12,308	10,452	2,593	2,506	0	0	0
● RI	0	0	0	0	0	0	0	0	0
+ VT	0	0	0	0	0	0	0	0	0
■ Other	0	0	0	36,608	465	17,322	0	0	0

**Figure 20: MSW Generated in New Jersey & Disposed: 1999 through 2008
(tons)**

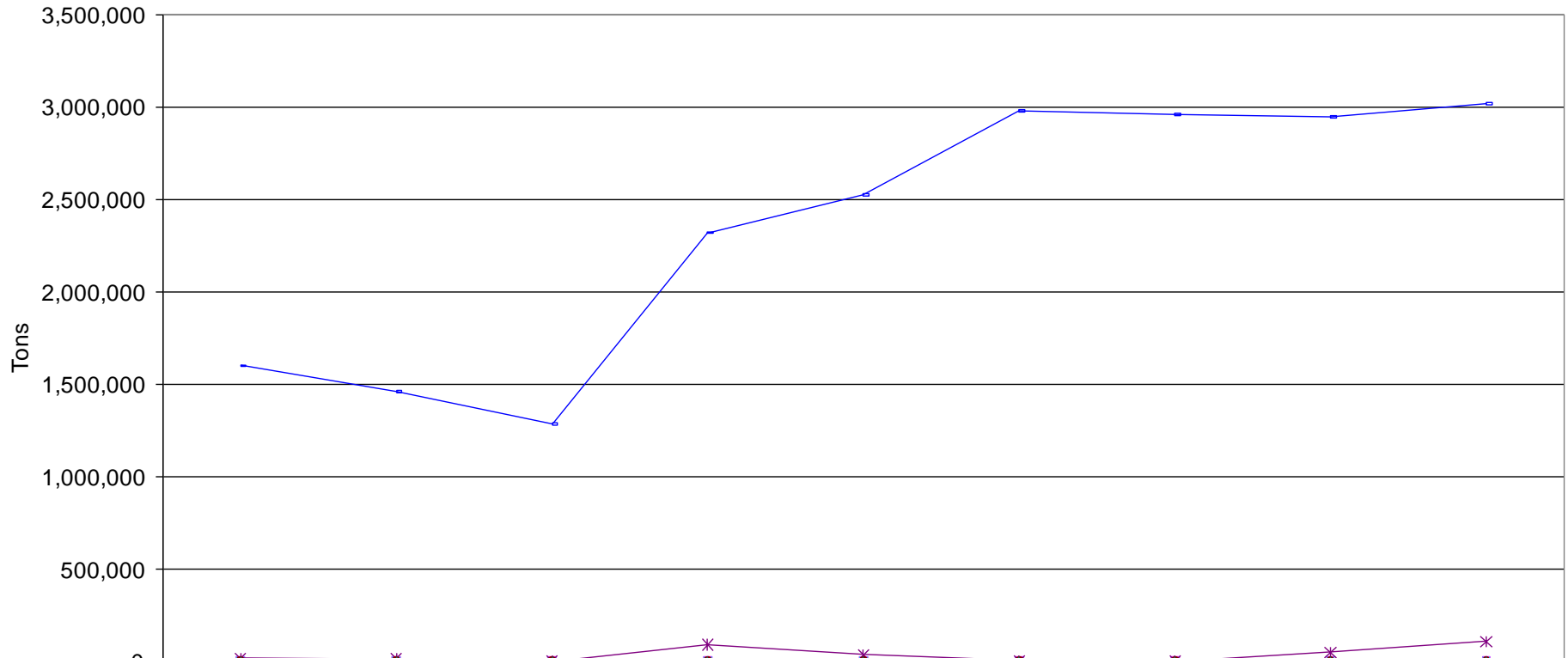


**Figure 21: MSW Imports to New Jersey: 1999 through 2008
(tons)**



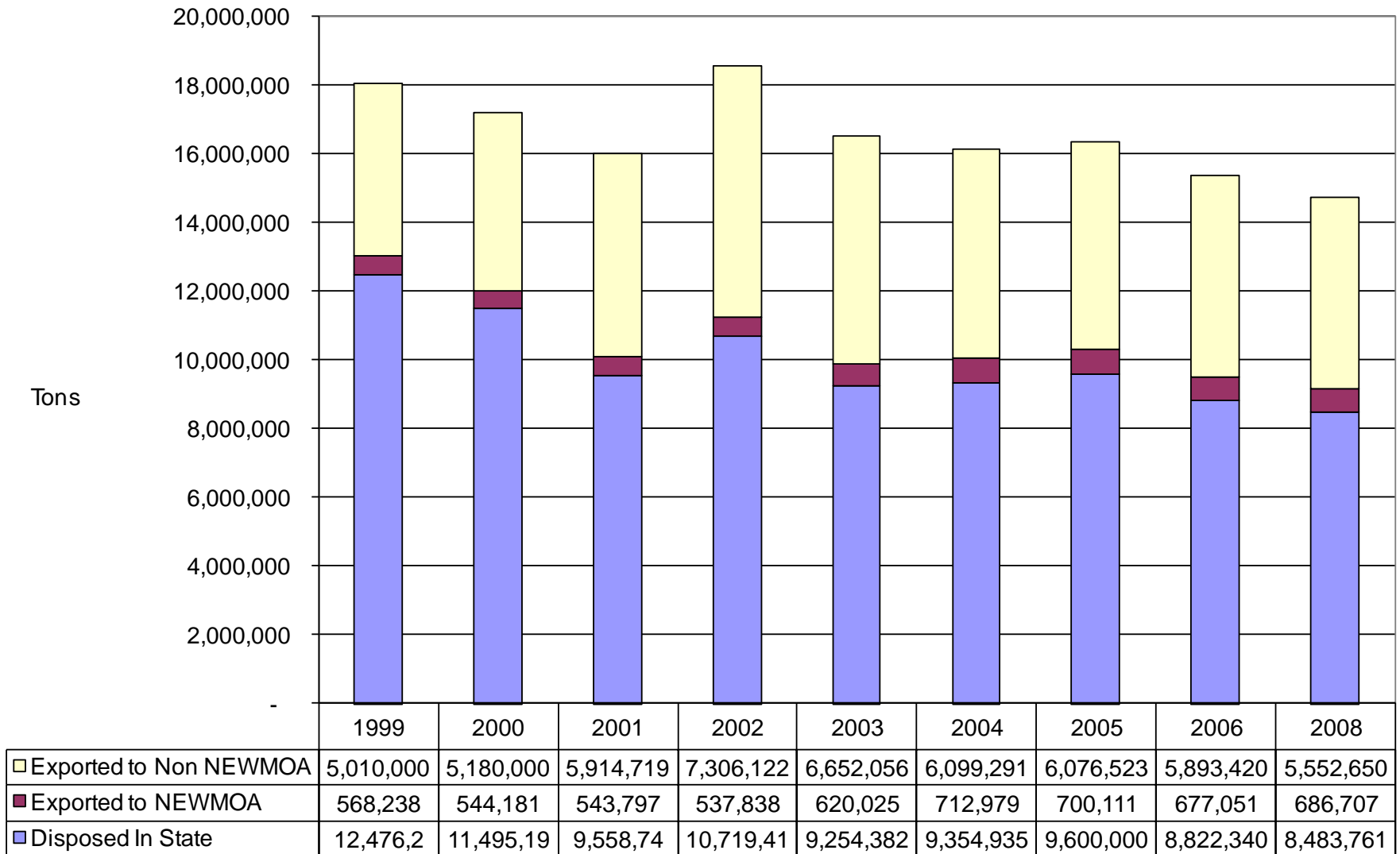
Note: for 2008, the amount sent from NY to NJ subtracts 544,334 tons of waste from NY that passed through NJ for disposal in PA

**Figure 22: MSW Exports from New Jersey: 1999 through 2008
(tons)**



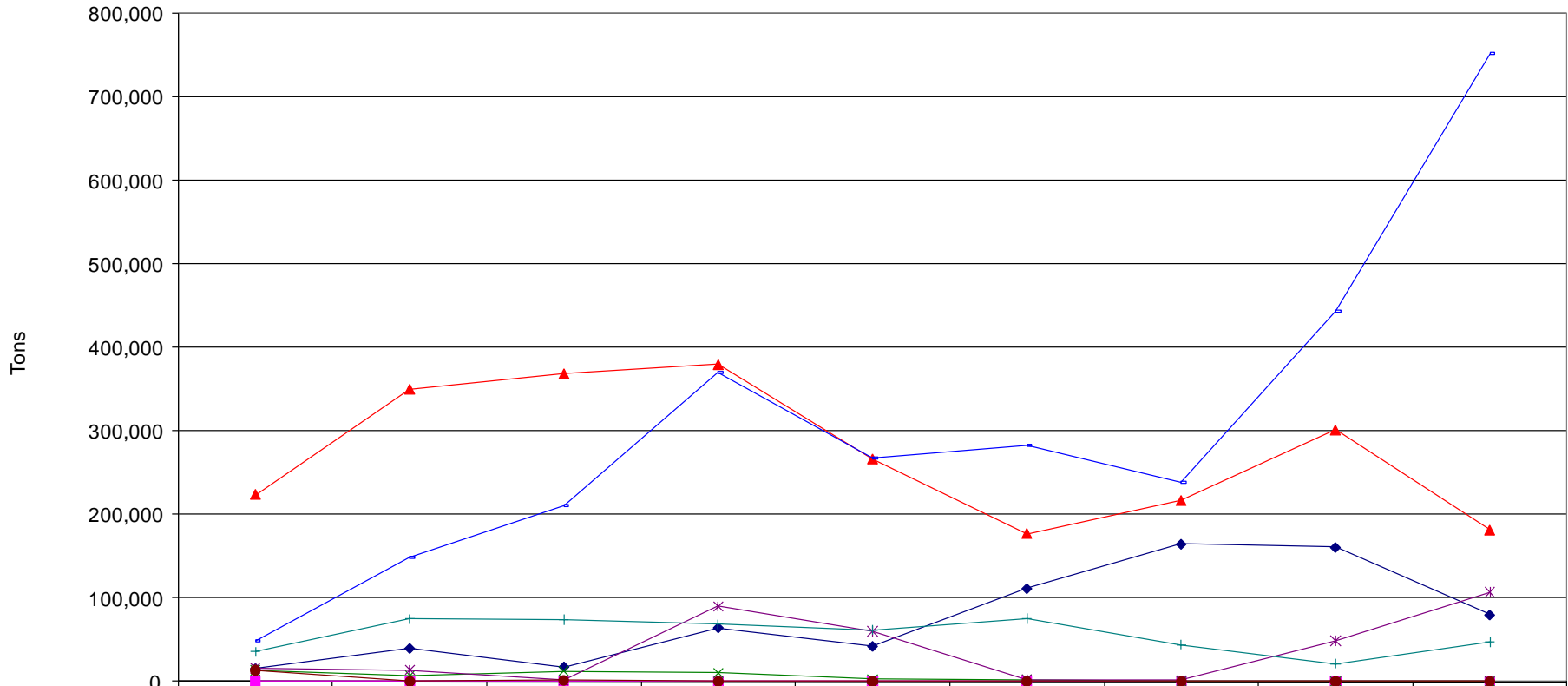
	1999	2000	2001	2002	2003	2004	2005	2006	2008
CT	26	4,795	0	8	55	0	0	0	0
ME	0	0	0	0	0	0	0	0	0
MA	0	0	0	0	0	0	0	0	0
NH	0	0	0	0	0	0	0	0	0
NY	15,682	13,471	1,672	90,000	34,848	2,414	1,677	48,866	106,930
RI	0	0	0	0	0	0	0	0	0
VT	0	0	0	0	0	0	0	0	0
Other	1,600,000	1,462,761	1,286,233	2,320,195	2,524,725	2,978,768	2,960,768	2,947,913	3,017,298

**Figure 23: MSW Generated in New York & Disposed: 1999 through 2008
(tons)**



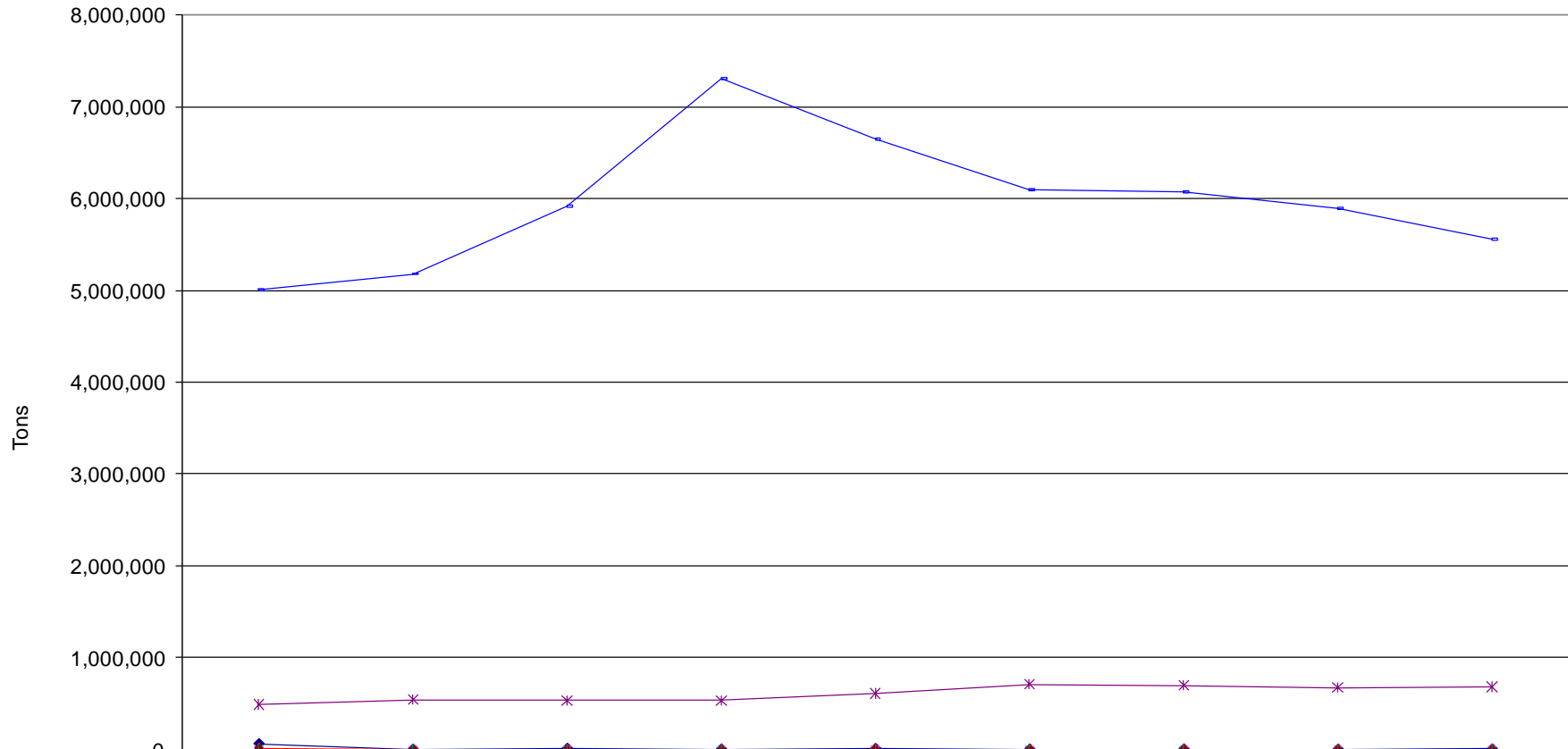
Note: for New York – for some or all years prior to 2006, there might be data quality issues for in-state disposal of in-state generated MSW that might overstate disposal.

**Figure 24: MSW Imports to New York: 1999 through 2006
(tons)**



	1999	2000	2001	2002	2003	2004	2005	2006	2008
◆ CT	15,464	39,684	17,463	64,471	42,156	111,479	164,885	160,945	79,833
■ ME	0	0	0	0	0	0	0	0	0
▲ MA	224,024	350,512	369,092	380,000	266,624	177,021	216,661	301,373	181,026
✕ NH	13,346	7,106	12,308	10,452	2,593	2,506	0	0	0
✱ NJ	15,682	13,517	1,672	90,000	60,278	2,414	1,677	48,866	106,930
● RI	13,346	0	1,500	0	0	0	0	0	0
+ VT	35,671	74,982	74,131	68,655	61,980	75,115	43,951	21,505	47,537
□ Other	49,000	148,595	211,297	370,172	268,006	283,351	238,710	444,076	752,880

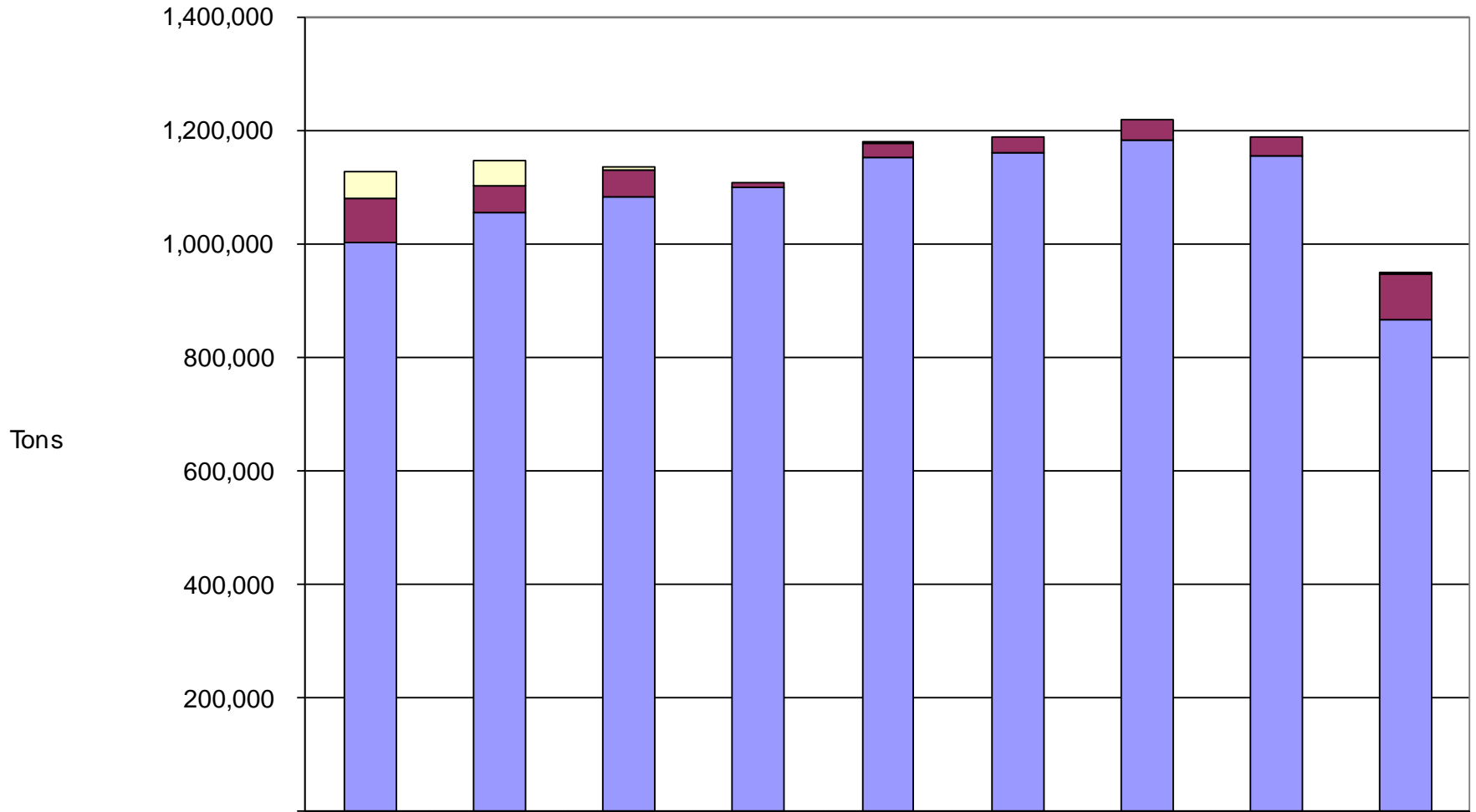
**Figure 25: MSW Exports from New York: 1999 through 2008
(tons)**



	1999	2000	2001	2002	2003	2004	2005	2006	2008
◆ CT	63,316	1,881	11,190	3,760	9,597	2,712	3,769	2,163	4,219
◆ ME	0	0	0	0	0	0	0	0	0
▲ MA	15,783	1,009	461	2,517	2,654	41	627	580	3,445
◆ NH	138	0	0	0	0	195	0	0	0
* NJ	488,212	541,291	532,146	531,561	607,774	710,031	695,715	674,308	679,043
● RI	708	0	0	0	0	0	0	0	0
◆ VT	81	0	0	0	0	0	0	0	0
◆ Other	5,010,000	5,180,000	5,914,719	7,306,122	6,652,056	6,099,291	6,076,523	5,893,420	5,552,650

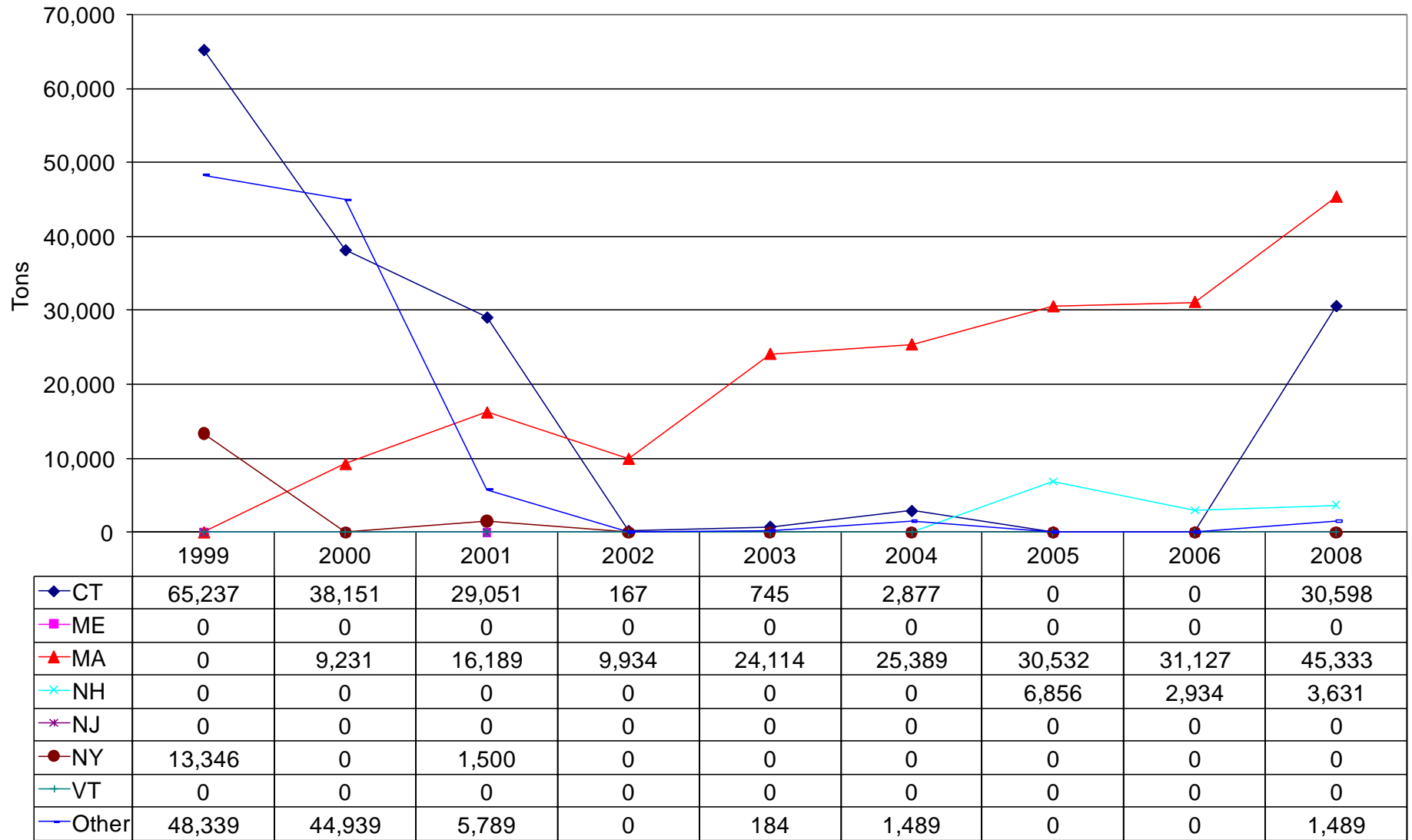
For 2008, the amount sent from NY to NJ subtracts 544,334 tons of waste from NY that passed through NJ for disposal in PA. The amount sent from NY to non-NEWMOA states includes this 544,334 tons of NY MSW that passed through NJ before disposal in PA. A similar adjustment was made in each prior year.

**Figure 26: MSW Generated in Rhode Island & Disposed: 1999 through 2008
(tons)**

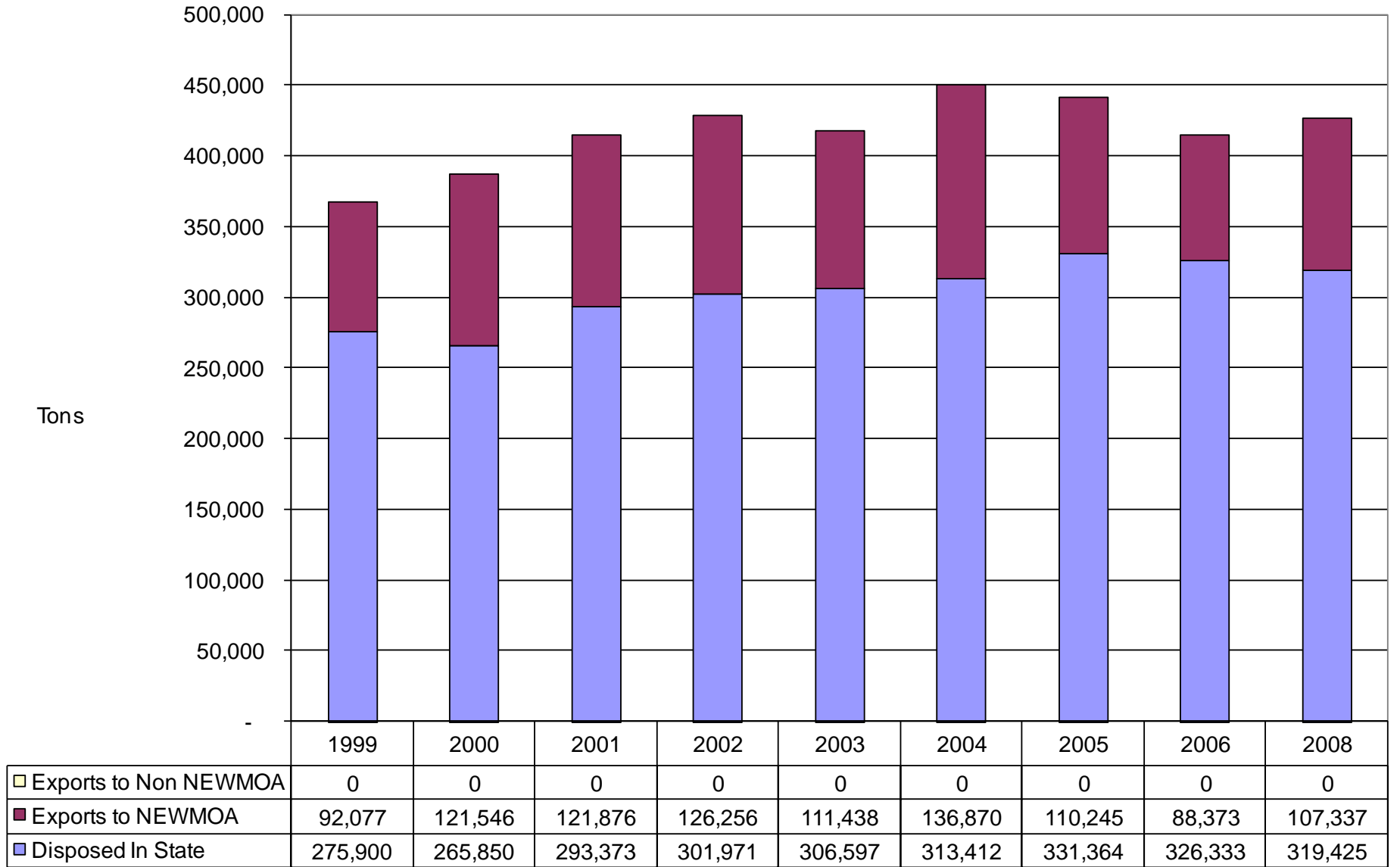


	1999	2000	2001	2002	2003	2004	2005	2006	2008
Exported to Non NEWMOA	48,339	44,939	5,789	0	184	0	0	0	1,489
Exported to NEWMOA	78,583	47,383	46,741	10,101	24,859	28,266	37,388	34,061	79,562
Disposed In State	1,000,879	1,054,290	1,081,663	1,097,452	1,151,887	1,158,991	1,181,607	1,153,080	866,084

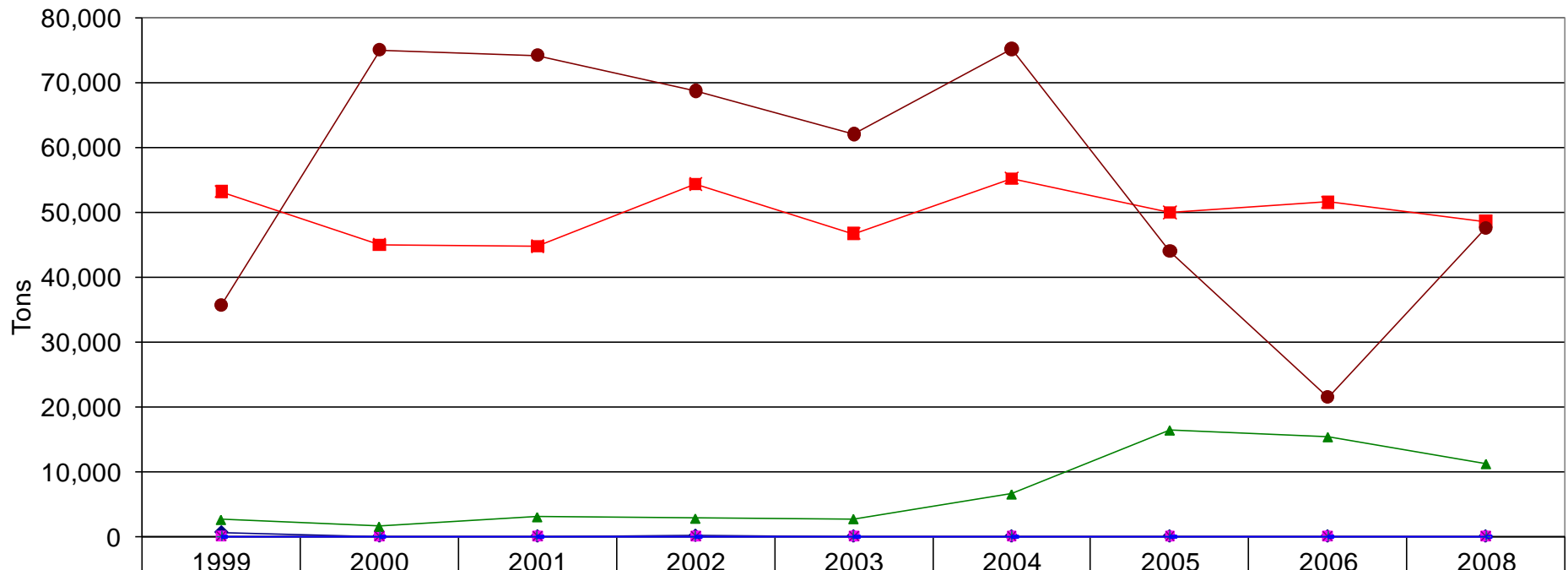
**Figure 27: MSW Exports from Rhode Island: 1999 through 2008
(tons)**



**Figure 28: MSW Generated in Vermont & Disposed: 1999 through 2008
(tons)**



**Figure 29: MSW Exports from Vermont: 1999 through 2008
(tons)**



	1999	2000	2001	2002	2003	2004	2005	2006	2008
CT	641	0	0	97	0	0	0	0	0
ME	0	0	0	0	0	0	0	0	0
MA	2,638	1,576	3,053	2,826	2,758	6,552	16,391	15,358	11,226
NH	53,127	44,988	44,692	54,268	46,700	55,203	49,903	51,510	48,574
NJ	0	0	0	0	0	0	0	0	0
NY	35,671	74,982	74,131	68,655	61,980	75,115	43,951	21,505	47,537
RI	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0