HARDI

Measuring the Impact of New York's Refrigerant Prohibition and the Impact of Shortages on Food Retail Infrastructure

MODELING HOW PART 494 WILL AFFECT FOOD RETAIL STORES

RESEARCH AND ANALYSIS:
Joey James
Senior Research Analyst

POLICY ANALYSIS:
Alex Ayers
Vice President of Government Affairs

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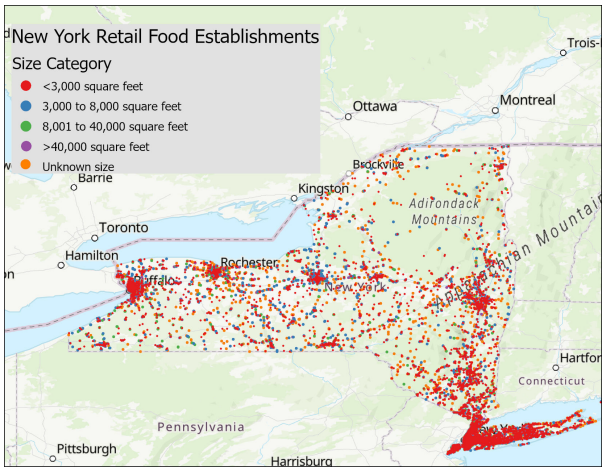
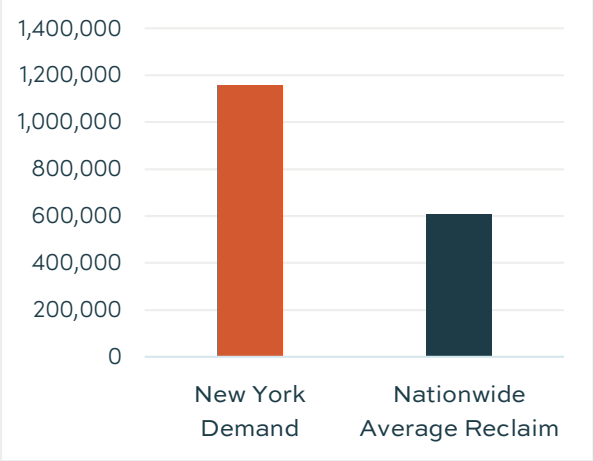
Executive Summary

On March 31, 2026, the New York State Department of Environmental Conservation (NYSDEC) is scheduled to resume enforcement of the high-GWP bulk refrigerant prohibition under 6 NYCRR Part 494 as it applies to R-404A and R-507A, common refrigerants used by retail food establishments. This enforcement follows the expiration of temporary enforcement discretion. If enacted, this prohibition will significantly disrupt the operation of an estimated 18,130 commercial refrigeration systems in New York grocery and convenience stores that use these refrigerants for essential food preservation. Refrigeration systems are indispensable for retail food establishments; they are vital, ongoing, and directly linked to food safety, public health, and community access to groceries.



Part 494, according to NYSDEC, permits the utilization of reclaimed refrigerants. However, data from the United States Environmental Protection Agency indicates that the average quantity of reclaimed refrigerant used by these systems is approximately 50% of the required amount to meet demand. Additionally, recent increases in reclaimed refrigerants remain insufficient to meet the demand required to maintain system operations.



In the absence of intervention by the NYSDEC or the state legislature, New York residents may face challenges accessing fresh produce from local retail outlets. Furthermore, NYSDEC's Part 494 is deficient in several respects, including poor drafting, insufficient evaluation of downstream economic impacts, and outcomes that jeopardize reliable refrigeration access in New York communities.

Assembly Bill A.9596 and Senate Bill S.9066 present the legislature with an opportunity to avert unnecessary economic and public health repercussions by repealing the prohibition on high-GWP virgin refrigerants under Part 494 before it causes extensive harm.

ABOUT HARDI:

A non-profit association, HARDI serves its members through government affairs and advocacy efforts, market intelligence and benchmarking, training programs, and world-class events. HARDI proudly represents more than 570 distributor members and their 5,000+ branch locations, and close to 600 suppliers, manufacturer representatives, and service vendors. HARDI Distributor members serve installation and service/replacement contractors in residential and commercial markets, as well as commercial/industrial and institutional maintenance staff. HARDI Affiliate members market, distribute, and support heating, air-conditioning, and refrigeration equipment, parts, and supplies.

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I. Cause: Part 494's Refrigerant Prohibition Creates an Artificial Shortage for Critical Food Infrastructure

Part 494 prohibits the manufacture, sale, distribution, and purchase of certain high global warming potential (GWP) bulk refrigerants, including R-404A and R-507A, which are extensively utilized in supermarket and convenience store refrigeration systems. According to the plain language of the regulation, NYSDEC bans the sale of all high-GWP refrigerants. However, fact sheets accompanying Part 494 indicate that reclaimed refrigerants are not prohibited, citing a reference to the California Health and Safety Code, and specify that only virgin high-GWP refrigerants are subject to prohibition, despite the absence of any direct reference to the relevant California statute in Part 494. NYSDEC has temporarily delayed enforcement of these provisions until March 31, 2026.[1]

Table 1: Bulk Refrigerant Prohibitions under Part 494, including Enforcement Discretion delaying the prohibitions

GWP Limitation (Note change to GWP20 in 2040)	**Prohibition Date**	**Common Banned Refrigerants**
Bulk regulated substances with a GWP100 ≥2,200	April 9, 2025	R-422B, R-438A
R-404A and R-507A under enforcement discretion	March 31, 2026	R-404A, R-507A
Bulk regulated substances with a GWP100 ≥1,500	January 1, 2030	R-410A, R-407A, R-407C, R-453A
Bulk regulated substances with a GWP100 ≥750	January 1, 2033	R-134a, R-448A, R-449A
Bulk regulated substances with a GWP20 ≥1600	January 1, 2040	R-32, R-452B, R-454B

R-404A and R-507A are not niche products. They are common refrigerants used in centralized rack systems in supermarkets and in remote condensing unit systems in convenience stores. These systems are long-lived assets, typically operating for 15 to 25 years or more. Thousands of food retailers across New York currently operate equipment designed around these refrigerants. Under Part 494, retail food establishments have three options when R-404A or R-507A is needed to service existing equipment: buy reclaimed refrigerant, retrofit the system to lower-GWP refrigerants, or replace the system.

Retrofitting systems has been an established practice for numerous years, typically employing medium-GWP refrigerants such as R-448A or R-449A. Unfortunately, the prohibition on bulk refrigerants will prohibit the sale of bulk medium-GWP refrigerants in 2033, providing only temporary relief.

Replacing entire rack systems with refrigerants unaffected by the prohibition necessitates substantial capital investments, potentially exceeding hundreds of thousands or even millions of dollars per store. This process cannot be completed quickly when an existing system requires service refrigerant to maintain operation. Moreover, the regulatory requirements outlined in Part 494 restrict the types of refrigerants permitted in new systems to those with

[1] Enforcement Discretion Letter: Part 494, Hydrofluorocarbon Standards and Reporting (N.Y. State Department of Environmental Conservation, July 21, 2025), https://dec.ny.gov/sites/default/files/2025-07/part494edletter.pdf

low-GWP alternatives. While the adoption of low-GWP refrigerants in new systems complies with federal regulations, the federal system does not mandate the early replacement of existing systems by prohibiting the sale and use of service refrigerants.

Supermarket refrigeration systems typically contain thousands of pounds of refrigerant. Even with regular maintenance, these systems are susceptible to leaks over time, making emergency repairs an integral aspect of food retail operations. Consequently, accessibility to refrigerant is a fundamental operational necessity for any food retail establishment. The prohibition on the sale of virgin R-404A and R-507A, commencing on March 31, as stipulated in Part 494, artificially restricts the supply of materials essential to maintaining critical food infrastructure.

Although NYSDEC has indicated that the regulation does not prohibit servicing itself and that reclaimed refrigerant may still be utilized, the ban on virgin bulk refrigerant transactions will inevitably restrict market supply, heighten legal uncertainty for distributors and contractors, and diminish the availability of refrigerant necessary for emergency repairs. The practical impact is a supply shock imposed by the regulation under Part 494 that will affect millions of consumers in New York.

II. Scope: Assessing the Number of Impacted Businesses and Estimating Refrigerant Demand in New York State

To estimate the annual refrigerant leakage and maintenance demand associated with retail food establishments in New York State operating refrigeration systems that utilize R-404A and R-507A, HARDI conducted a comprehensive four-step analysis. The purpose of this analysis is to quantify the volume of refrigerant required annually to service the existing installed base. The methodology encompassed: (A) identification and classification of retail food establishments; (B) estimation of refrigeration system counts by store type; (C) allocation of refrigerant shares to the installed system base; and (D) application of representative leakage and maintenance assumptions for calculating annual refrigerant demand.

A. Identification and classification of retail food establishments

Retail food establishment data, as illustrated in the figures below, were acquired from the New York State Department of Agriculture and Markets, Division of Food Safety & Inspection. The dataset comprises retail food stores that hold an Article 20-C Food Processing Establishment license or an Article 28 license in New York State. These retail food entities encompass convenience stores, bodegas, grocery stores, and supermarkets.

The dataset comprises 24,281 licensed retail food establishments throughout the state. HARDI categorized establishments in this dataset into four groups based on square footage to approximate standard refrigeration system configurations.

- Bodega/Micro convenience stores: <3,000 square feet
- Small-to-mid convenience stores: 3,000–8,000 square feet
- Traditional grocery stores: 8,000–40,000 square feet
- Large grocery/club stores: >40,000 square feet

Figure 1: Statewide retail food establishments

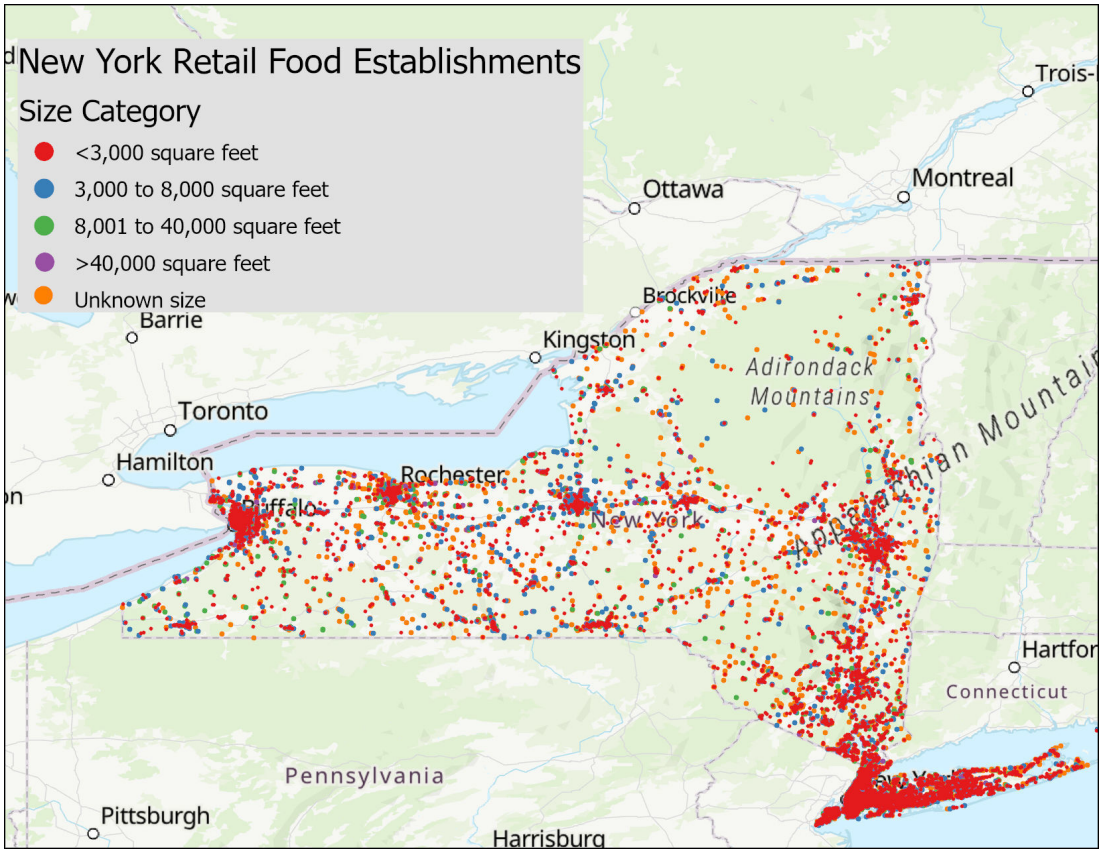
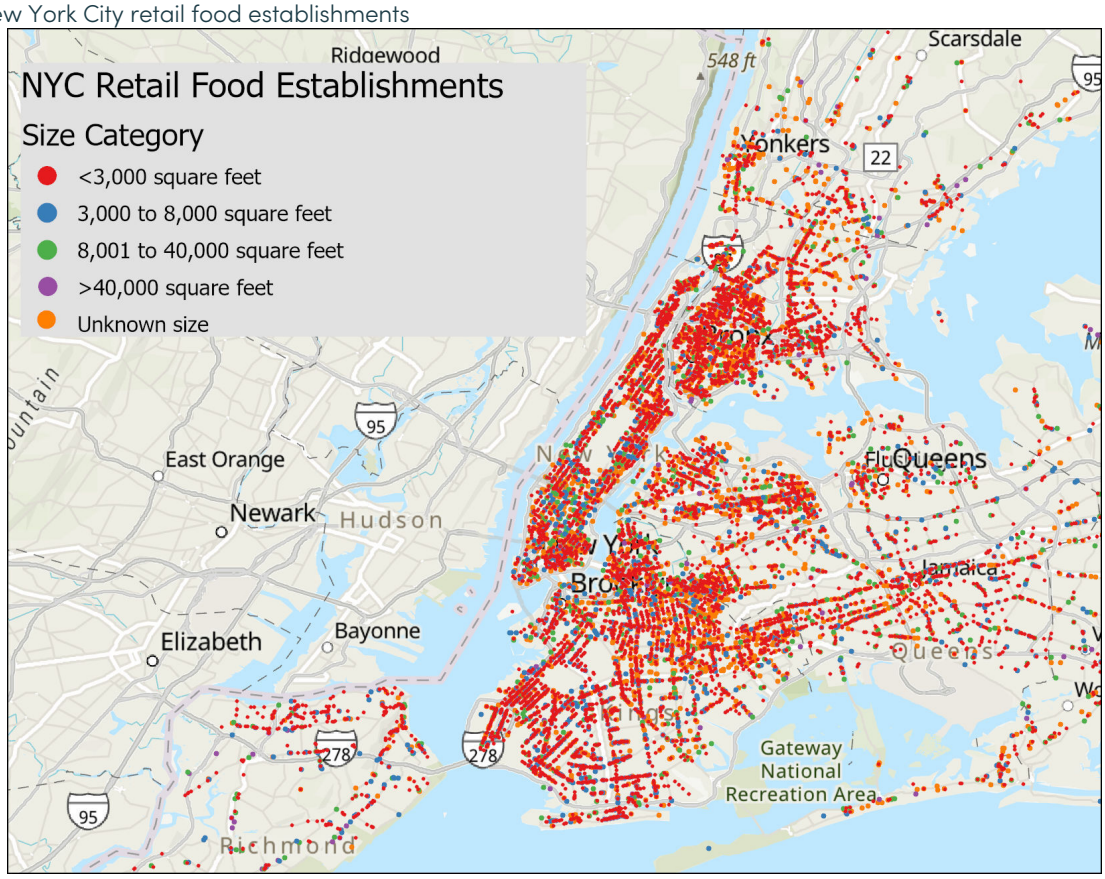


Figure 2: New York City retail food establishments



Square footage data were available for 17,498 establishments. To account for establishments without listed size information, store counts were proportionally expanded to match the full statewide total while preserving the observed distribution of store types. Table 2 provides HARDI's estimate for the total number of New York retail food establishments by type.

Table 2: Retail food establishments by type

Store type	Count
Bodegas/micro convenience stores	16,506
Small to mid-size convenience stores	3,831
Traditional grocery stores	3,172
Large grocery/club stores	757

B. Estimation of refrigeration system counts

To convert store counts into service-relevant refrigeration equipment counts, assumptions were formulated concerning the number of refrigeration systems per establishment. For this analysis, one "system" was defined as:

- One remote condensing unit (smaller-format stores), or
- One centralized rack system (grocery and club stores)

These assumptions represent standard design configurations prevalent in the commercial refrigeration industry and aim to approximate the existing installed base rather than focus on new construction.

Table 3: Equipment assumptions by store type

Store type	Systems per store	Rationale
Bodega/micro convenience stores	1	Small-format stores typically rely on a single remote condensing unit or limited centralized refrigeration circuit serving walk-ins and cases.
Small to mid-size convenience stores	2.5	Stores in this size range commonly operate multiple refrigeration circuits (e.g., separate medium- and low-temperature systems) or multiple remote condensing units. A midpoint assumption of 2–3 systems reflects typical equipment layouts.
Traditional grocery stores	1.5	Most supermarkets operate at least one medium-temperature and one low-temperature rack system. Smaller neighborhood grocery stores may operate a single combined rack, while larger stores operate two or more. A midpoint of 1–2 racks reflects this variability.
Large grocery/club stores	3.0	Large-format grocery and warehouse clubs frequently operate multiple rack systems to serve extensive case lines, freezer sections, and redundancy requirements. An assumption of 2–4 racks per store, with a midpoint of 3, reflects typical large-format design.

Applying these factors resulted in an estimated total of approximately 33,113 refrigeration systems across the state.

C. Assignment of refrigerant shares

Following the estimation of refrigeration system counts, HARDI allocated refrigerant type shares to accurately reflect the composition of the current installed base. These shares (detailed in the table below) are intended to approximate the proportion of systems that continue to use R-404A and R-507A, recognizing that commercial refrigeration equipment

generally has a lifespan of 15 to 25 years. Transition processes typically occur gradually through retrofit or replacement. The underlying assumptions are based on observed industry transition patterns, including an increasing adoption of lower-GWP alternatives in newer installations, while recognizing that a substantial portion of legacy systems remain operational throughout the state.

Table 4: Applied refrigerant shares by store type

Store type	Percentage of systems using R-404A/507A	Rationale
Bodega/micro convenience stores	40%	Many smaller stores still operate legacy remote condensing units; however, self-contained hydrocarbon systems are increasingly common in newer installations.
Small to mid-size convenience stores	80%	This segment contains a large installed base of older remote systems and walk-in configurations that historically used R-404A, with slower retrofit adoption.
Traditional grocery stores	55%	Supermarkets have implemented retrofits and CO_2 installations, but many older rack systems remain in operation.
Large grocery/club stores	55%	Large-format stores tend to adopt lower-GWP technologies more quickly, but a substantial share of legacy rack systems remains in service due to long capital cycles.

Applying these shares resulted in an estimated 18,130 R-404A/507A-dependent systems statewide. Table 5 provides estimates of the number of R-404A/507A-dependent systems by store type.

Table 5: Estimated number of R-404A/507A-dependent systems by store type

Store type	Count of R-404A/507A-dependent systems
Bodega/micro convenience stores	6,602
Small to mid-size convenience stores	7,662
Traditional grocery stores	2,617
Large grocery/club stores	1,249

D. Application of leakage and maintenance demand

The annual refrigerant leakage and maintenance demand were estimated by applying store-type-specific recharge factors (measured in pounds per system per year) to the projected number of systems dependent on R-404A/507A. Leak rates varied by system architecture: smaller remote condensing units exhibited lower recharge rates, while supermarket rack systems demonstrated substantially higher recharge volumes due to larger charge capacities and more intricate piping networks. The application of these assumptions (summarized in the table below) results in an estimated statewide annual refrigerant maintenance requirement of approximately 1.16 million pounds, a figure significantly exceeding the average nationwide reclamation volumes for R-404A/507A. Appendix A presents a detailed breakdown of this total maintenance requirement at the county and district levels.

Table 6: Leakage/maintenance demand by store type

Store type	Average annual demand per system	Total implied annual recharge requirement (pounds per year)
Bodega/micro convenience stores	1.5 pounds	9,903
Small to mid-size convenience stores	5 pounds	38,310
Traditional grocery stores	300 pounds	785,100
Large grocery/club stores	260 pounds	324,740
Total		1,158,053

IV. Effect: Lack of Supply Will Lead to Massive Shortages of Compliant Product

A. Nationwide Reclaimed Refrigerant Supplies are not Sufficient to Meet Demand

The New York State Department of Environmental Conservation (NYSDEC)'s reinstatement of the prohibition on high-GWP virgin bulk refrigerant, effective March 31, 2026, will create an immediate and unavoidable supply disturbance within New York's food retail sector. Grocery and convenience stores depend on uninterrupted refrigeration to ensure food safety and maintain business operations, with numerous facilities continuing to utilize systems designed for R-404A and R-507A. Although reclaimed refrigerant remains technically permissible per DEC supporting documentation, the restriction on virgin refrigerant commerce will significantly reduce the volume of legally available products in the supply chain, thereby impeding emergency repairs and service demand.

Based on industry usage patterns, installed equipment base, and historical servicing rates, we estimate that annual demand for the refrigerants subject to prohibition will total approximately 1.16 million pounds statewide. This volume reflects routine leak repair, system stabilization, emergency recharge events, and ongoing maintenance of existing refrigeration infrastructure. This demand is not discretionary consumption. It is an operational necessity required to prevent system failure and food loss.

Historical reclaim data for R-404A, as presented in Table 7, emphasizes the discrepancy between anticipated demand and the standard reclaimed supply. The United States Environmental Protection Agency (EPA) reports annual reclaimed quantities for R-404A and other hydrofluorocarbon (HFC) refrigerants. Between 2017 and 2024, the average yearly reclaimed volume was approximately 606,335 pounds.

Compared to the projected annual demand of 1.16 million pounds, the historical average reclaimed supply nationwide accounts for only about 50% of this requirement. Even assuming all available reclaimed R-404A nationwide could be efficiently redirected and immediately used to service food retailers in New York, a significant shortfall would persist. The increases in reclaimed volumes observed in 2023 and 2024 indicate volatility rather than a stable, assured supply; moreover, there is no guarantee that such elevated levels can be maintained consistently year after year, particularly in light of the tightening federal standards governing reclaimed content.[2]

[2] Starting in 2026, the EPA limits the use of virgin refrigerants to a maximum of 15 percent when producing certified reclaimed refrigerant. Virgin refrigerant is used to ensure the proper ratio of refrigerants in blends like R-404A and R-507A.

Table 7: Nationwide reclaimed R-404A per year as reported by the U.S. Environmental Protection Agency

Year	Reclaimed R-404A
2017	486,719 pounds
2018	506,639 pounds
2019	485,338 pounds
2020	478,556 pounds
2021	416,352 pounds
2022	443,977 pounds
2023	880,502 pounds
2024	1,152,761 pounds

The practical implication is evident. If virgin refrigerant is prohibited and the reclaimed supply averages approximately 606,335 pounds annually, retailers in New York may encounter a supply shortfall of roughly 500,000 pounds per year under normal servicing conditions.

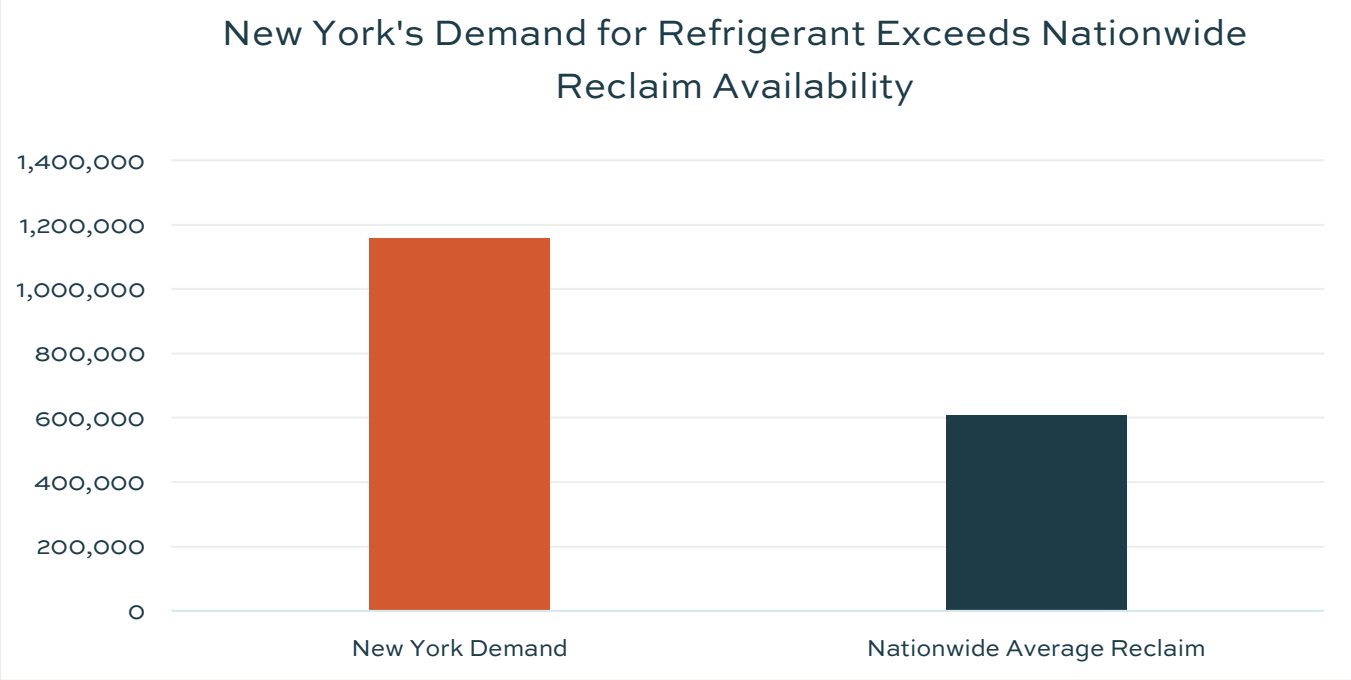


Figure 3 New York's Demand for Refrigerant Exceeds Nationwide Reclaim Availability

B. Economic Analysis of Refrigerant Shortage

We consider a moderate shortage scenario in which 50% of systems dependent on R-404A/507A experience service disruptions over 12 months due to restricted refrigerant availability for maintenance and recharging. This assumption is translated into store-level disruptions by applying an impact factor to the estimated proportion of establishments utilizing R-404A/507A systems, categorized by store type. Since establishments can continue to sell shelf-stable goods even when refrigeration capacity is compromised, and recognizing that some customers may shift their purchases to nearby retailers rather than abstain from purchasing altogether, a partial reduction in sales is assumed for affected stores rather than complete closure. Consequently, the losses are predominantly concentrated in refrigerated and frozen product categories.

Assuming an average disruption window of approximately one month per affected establishment, this scenario corresponds to an estimated approximately 1% reduction in

annual retail food store output statewide. This rounded estimate reflects variability in outage duration, store-level impacts, and consumer substitution behavior, while remaining consistent with the underlying physical constraints of the modeled refrigerant shortage.

Applying a 1% reduction in annual retail food store output statewide to account for service interruptions due to a refrigerant shortage results in an estimated decrease of $106.2 million in the overall economic output of New York State. This encompasses direct effects within retail food establishments as well as indirect and induced impacts throughout the wider economy. The modeled reduction is equivalent to approximately $76.7 million in decreased contribution to the gross domestic product (GDP), $40.7 million in diminished labor income, and $23.0 million in foregone federal, state, and local tax revenues.

In employment terms, the model estimates a reduction of approximately 717 jobs statewide.[3] In IMPLAN, employment impacts are expressed as annual-average jobs supported, not as permanent job losses. This means the estimate reflects the number of full-time and part-time positions that would be supported by the affected level of economic activity over the course of a year. If disruptions are shorter in duration or partially offset by consumer substitution to other retailers, the realized employment effects could be smaller than the modeled annualized estimate.

V. Issues: Operational, Economic, and Community Harms Will Follow

A. Immediate Risk of Refrigeration Failure and Food Spoilage

Food retailers operate refrigeration systems around the clock. In the event of a leak, technicians must promptly stabilize the system to prevent product loss and food safety violations. If contractors are unable to readily procure refrigerant within New York due to the prohibition effective on March 31, stores may be compelled to shut down cases, dispose of inventory, or, in extreme circumstances, temporarily close.

This matter is not merely hypothetical. Industry publications circulated images of decommissioned refrigeration systems shortly after Part 494 was implemented in January 2025, prior to the DEC issuing initial enforcement discretion delays for the provision.[4]

Centralized rack systems have the capacity to hold several thousand pounds of refrigerant and may experience significant leaks annually. Immediate access to refrigerant during emergencies is a standard operational requirement. Any delay in securing the supply heightens the risk of spoilage, food waste, and disruption to business operations.

B. Disproportionate Impact on Small and Independent Stores

Large national chains may possess the financial flexibility to stockpile refrigerant, negotiate reclaimed supply contracts, or expedite capital upgrades. Conversely, independent grocery stores and single-site convenience stores frequently lack such capabilities. For these

[3] The result does not necessarily imply that 717 individuals were laid off; rather, it reflects a combination of reduced hours, delayed hiring, unbackfilled attrition, or temporary employment reductions associated with lower economic activity.
[4] ACHR News, New York Rules Reportedly Leading to Refrigerant Shortages (January 13, 2025), https://www.achrnews.com/articles/163976-new-york-rules-reportedly-leading-to-refrigerant-shortages

businesses, a significant refrigeration incident coupled with rising refrigerant prices could prove to be financially devastating.

New York is home to thousands of convenience stores and grocery locations that serve urban neighborhoods, rural communities, and areas with food insecurity. Smaller retailers often operate on limited profit margins. The regulatory supply constraint introduced by Part 494 will disproportionately adversely affect these businesses and, consequently, the communities they serve.

C. Increased Consumer Prices and Reduced Food Access

Increased expenses related to refrigerants, elevated service complexity, and spoilage losses are unlikely to be restricted solely to the refrigeration sector. These costs will be transferred along the supply chain. Retailers within the grocery and convenience sectors, facing heightened operational expenses, will inevitably pass these costs onto consumers via adjusted pricing strategies. In communities already experiencing economic hardship, such additional costs will exacerbate issues related to food accessibility.

In specific regions, particularly rural and low-income communities, a sole grocery store frequently serves as the principal provider of fresh and frozen food. Should refrigeration failures become more frequent or if capital compliance costs lead to closures, residents may face reduced access to essential necessities.

D. Market Misalignment with Federal Transition Timelines

The federal HFC phasedown mandated by the American Innovation and Manufacturing Act establishes a structured timeline for transitioning refrigerants and for servicing obligations. The enforcement date set by New York for March 31, 2026, effectively expedites the retrofit and replacement of commercial refrigeration systems well before the anticipated end of the equipment's operational lifespan. This results in a misalignment between state and federal policies, increases capital costs, complicates compliance efforts, and imposes state-specific burdens not encountered by neighboring jurisdictions.

Such misalignment has the potential to deter suppliers from engaging with New York, dissuade contractors from operating in the state, and create competitive disadvantages for retailers based in New York.

VI. Need for Legislative Action: Replace Part 494 Under A.9596 / S.9066

The Legislature has the authority and duty to avert anticipated economic detriment and safeguard critical infrastructure. Assembly Bill A.9596 and Senate Bill S.9066 propose substituting Part 494 with the federal HFC transition schedule, thereby removing the impending supply restriction scheduled for March 31, 2026, which could disrupt food retail operations across the state.

Replacement of Part 494 is necessary for several reasons:

Firstly, Part 494 establishes regulatory mandates that surpass the current market preparedness. The existing fleet of refrigeration systems throughout New York cannot be

retrofitted or replaced within the present timeframe without incurring significant economic disruption. A policy that neglects the considerations of equipment lifecycles and capital planning realities risks producing unintended consequences.

Secondly, the prohibition weakens the resilience of the retail food system. Refrigeration is a fundamental component of public health and food safety. Regulatory measures that introduce uncertainty into refrigerant supply chains undermine that resilience.

Thirdly, replacing Part 494 restores alignment with federal policy and prevents the isolation of New York businesses caused by an overly restrictive regulatory regime. A patchwork approach elevates costs without providing proportionate environmental benefits.

Furthermore, the replacement serves to safeguard small enterprises and maintain competitive fairness within the retail food industry. Independent operators should not be compelled into insolvency or premature capital replacement due to a regulatory supply shock that could have been prevented through legislative intervention.

Finally, replacement does not obstruct ongoing advancements in emissions reduction. Market dynamics, federal phasedown schedules, technological innovation, and corporate sustainability commitments are already propelling the transition away from high-GWP refrigerants. A deliberate and coordinated transition will achieve emissions-reduction objectives without compromising food access, economic stability, or the viability of small businesses.

VII. Conclusion

Beginning March 31, 2026, the reinstatement of the high-GWP bulk refrigerant prohibition under NYSDEC Part 494 will restrict access to essential materials required for the operation of grocery and convenience stores across New York. The foreseeable outcomes include increased instances of refrigeration failures, food spoilage, higher consumer prices, disproportionate adverse effects on small businesses, and diminished food access in vulnerable communities.

Assembly Bill A.9596 and Senate Bill S.9066 offer a definitive and prompt resolution. The replacement of Part 494 will avert unnecessary interruptions to vital food infrastructure, while facilitating the refrigerant transition in a coordinated, market-ready, and federally consistent manner.

For the stability of New York's food retail sector, the protection of small businesses, and the preservation of community food access, legislative action to replace Part 494 is urgently needed.

Appendix A. County- and District-level Breakdowns of R-404A and R-507A Refrigerant Demand

Cumulative totals presented in this appendix may not exactly match the statewide totals due to independent rounding at the county and district levels. Minor differences reflect rounding applied to intermediate calculations and do not materially affect the overall estimates.

The county-by-county breakdown was developed using the county attribute contained in the retail food establishment dataset obtained from the New York State Department of Agriculture and Markets, Division of Food Safety & Inspection. The Assembly and Senate district breakdowns were developed using point location data for establishments with known coordinates, with an expansion factor applied to account for retail food establishments lacking point location data.

A. County-level Breakdown

Table 8: County-level Breakdown

County	Number of Retail Food Establishments	Estimated Number of R-404A/507A Refrigerant Systems in County	Estimated Annual Leakage/Maintenance Requirement (lbs of refrigerant)
ALBANY	384	326	21,115
ALLEGANY	68	67	5,483
BRONX	2,235	1,297	57,153
BROOME	241	204	17,640
CATTARAUGUS	94	81	8,874
CAYUGA	78	66	4,985
CHAUTAUQUA	157	161	15,287
CHEMUNG	103	111	9,353
CHENANGO	75	51	3,913
CLINTON	118	100	9,299
COLUMBIA	126	105	7,299
CORTLAND	62	64	5,974
DELAWARE	101	91	4,721
DUTCHESS	375	282	18,845
ERIE	1,089	922	76,248
ESSEX	78	59	4,670
FRANKLIN	63	51	3,523
FULTON	69	69	4,934
GENESEE	78	73	7,243
GREENE	78	67	4,998
HAMILTON	17	18	79
HERKIMER	76	71	5,071
JEFFERSON	152	148	12,770
KINGS	4,254	2,873	111,138
LEWIS	45	52	2,401
LIVINGSTON	69	67	7,197
MADISON	88	85	4,762

County	Number of Retail Food Establishments	Estimated Number of R-404A/507A Refrigerant Systems in County	Estimated Annual Leakage/Maintenance Requirement (lbs of refrigerant)
MONROE	698	603	66,735
MONTGOMERY	91	67	5,578
NASSAU	1,144	877	84,753
NEW YORK	1,921	1,326	82,339
NIAGARA	230	219	16,537
ONEIDA	328	296	22,714
ONONDAGA	515	532	42,175
ONTARIO	129	125	12,370
ORANGE	446	353	29,102
ORLEANS	47	48	4,089
OSWEGO	122	134	10,942
OTSEGO	103	76	6,777
PUTNAM	97	66	3,176
QUEENS	2,542	1,720	93,854
RENSSELAER	196	154	9,713
RICHMOND	520	386	19,171
ROCKLAND	315	219	15,794
SARATOGA	230	216	19,172
SCHENECTADY	199	163	11,664
SCHOHARIE	56	44	2,912
SCHUYLER	34	37	731
SENECA	46	58	3,359
ST. LAWRENCE	133	120	9,096
STEUBEN	132	114	11,066
SUFFOLK	1,636	1,289	104,765
SULLIVAN	164	133	9,719
TIOGA	45	56	2,613
TOMPKINS	98	93	6,310
ULSTER	275	241	13,797
WARREN	128	107	8,523
WASHINGTON	84	80	4,770
WAYNE	105	96	7,786
WESTCHESTER	999	693	55,561
WYOMING	46	42	2,710
YATES	54	49	3,022

B. Assembly District Breakdown

Table 9: Assembly District Breakdown

District	Number of Retail Food Establishments	Estimated Number of R-404A /507A Refrigerant Systems in District	Estimated Annual Leakage/Maintenance Requirement (lbs of refrigerant)
1	247	178	8,517
2	166	106	9,565
3	186	135	8,944
4	81	63	5,908
5	138	125	10,057
6	128	89	7,223
7	157	141	9,384
8	118	97	10,128
9	82	78	8,080
10	101	86	7,855
11	132	102	11,352
12	110	81	9,028
13	105	90	8,113
14	92	72	6,657
15	114	94	7,724
16	114	79	8,658
17	96	83	8,927
18	159	94	5,938
19	147	124	11,768
20	118	88	8,633
21	122	90	9,195
22	103	80	5,951
23	127	97	4,434
24	136	76	3,138
25	106	69	5,352
26	86	79	5,000
27	109	78	4,669
28	119	91	5,389
29	193	136	5,593
30	131	94	3,430
31	110	68	4,786
32	191	127	5,544
33	153	114	4,799
34	147	97	5,689
35	106	74	4,090
36	200	122	6,028
37	200	120	6,438
38	175	103	5,119
39	143	92	3,712
40	120	83	6,609

District	Number of Retail Food Establishments	Estimated Number of R-404A /507A Refrigerant Systems in District	Estimated Annual Leakage/Maintenance Requirement (lbs of refrigerant)
41	184	129	3,858
42	193	117	5,768
43	138	89	1,677
44	251	166	5,181
45	269	203	5,542
46	232	155	5,923
47	273	186	5,260
48	268	193	5,279
49	305	187	5,944
50	249	158	7,623
51	347	225	6,379
52	199	160	8,169
53	247	164	7,907
54	187	113	2,294
55	200	133	6,784
56	222	143	3,141
57	192	126	4,804
58	153	120	5,569
59	109	77	5,680
60	128	82	6,166
61	282	183	5,794
62	100	78	5,390
63	162	133	8,023
64	187	147	6,487
65	188	128	7,797
66	171	131	8,821
67	90	72	4,667
68	232	132	5,298
69	114	77	6,783
70	160	91	5,385
71	138	71	3,843
72	245	139	6,499
73	154	124	6,813
74	106	83	4,459
75	196	161	8,111
76	111	81	5,346
77	205	107	5,090
78	214	128	1,845
79	213	128	4,220
80	234	138	2,779
81	138	80	4,384
82	147	97	4,021

District	Number of Retail Food Establishments	Estimated Number of R-404A /507A Refrigerant Systems in District	Estimated Annual Leakage/Maintenance Requirement (lbs of refrigerant)
83	122	66	3,596
84	306	176	12,487
85	208	114	4,883
86	245	134	3,782
87	200	115	6,409
88	113	94	9,655
89	176	99	5,938
90	139	102	7,459
91	138	87	4,956
92	140	99	8,130
93	105	75	6,072
94	123	83	5,204
95	150	107	8,271
96	143	109	9,175
97	115	73	3,936
98	127	79	3,353
99	114	86	8,071
100	214	151	14,406
101	186	158	9,971
102	196	165	8,664
103	250	201	11,823
104	236	183	11,090
105	166	115	8,709
106	239	192	12,430
107	126	103	6,716
108	165	127	4,163
109	194	144	4,703
110	151	137	9,042
111	181	139	7,424
112	131	123	9,238
113	146	135	10,576
114	193	171	12,170
115	175	149	12,140
116	179	160	12,553
117	123	137	8,983
118	207	181	10,028
119	170	148	10,050
120	170	177	14,509
121	188	150	9,391
122	151	141	8,953
123	152	120	11,183
124	129	133	10,141

District	Number of Retail Food Establishments	Estimated Number of R-404A /507A Refrigerant Systems in District	Estimated Annual Leakage/Maintenance Requirement (lbs of refrigerant)
125	105	98	8,785
126	133	134	11,606
127	112	137	14,052
128	166	168	12,019
129	158	134	7,569
130	95	83	9,667
131	126	141	9,217
132	213	197	12,220
133	123	110	12,154
134	41	34	3,523
135	49	51	5,535
136	65	58	5,685
137	117	82	4,232
138	87	77	11,287
139	164	153	16,570
140	169	152	12,847
141	251	164	7,365
142	162	153	13,799
143	180	166	19,281
144	152	138	10,267
145	155	146	10,800
146	134	141	15,303
147	169	150	15,196
148	168	144	15,192
149	201	155	6,858
150	190	199	19,645

C. Senate District Breakdown

Table 10: Senate District Breakdown

District	Number of Retail Food Establishments	Estimated Number of R-404A /507A Refrigerant Systems	Estimated Annual Leakage/Maintenance Requirement (lbs of refrigerant)
1	429	574	19,099
2	261	382	22,525
3	403	577	22,889
4	304	428	21,177
5	254	382	21,764
6	350	461	22,274
7	269	380	17,421
8	275	421	21,755
9	269	376	17,481
10	255	329	11,040
11	305	422	12,520
12	439	550	12,934
13	308	379	9,493
14	385	489	11,223
15	371	464	12,321
16	264	353	14,594
17	703	858	11,732
18	547	682	12,778
19	366	476	13,019
20	387	489	6,105
21	412	517	13,898
22	602	788	12,913
23	572	739	12,023
24	320	460	17,868
25	493	618	11,418
26	575	753	18,379
27	396	528	17,095
28	348	486	17,239
29	559	668	19,192
30	383	446	10,968
31	434	518	11,630
32	571	648	10,787
33	536	627	7,606
34	410	513	11,844
35	343	450	18,487
36	358	426	11,274
37	238	319	15,148
38	309	407	13,388
39	470	651	24,365
40	325	432	17,215

District	Number of Retail Food Establishments	Estimated Number of R-404A /507A Refrigerant Systems	Estimated Annual Leakage/Maintenance Requirement (lbs of refrigerant)
41	565	801	27,705
42	333	455	20,885
43	385	567	16,164
44	361	530	21,088
45	399	584	25,130
46	386	534	14,932
47	264	355	13,804
48	368	537	19,969
49	414	674	28,193
50	324	592	33,505
51	503	712	24,971
52	310	466	23,504
53	397	603	21,878
54	263	430	26,684
55	166	256	15,694
56	173	256	13,723
57	477	751	45,178
58	389	632	27,374
59	374	475	15,195
60	368	563	33,126
61	396	617	28,524
62	340	544	27,255
63	510	718	27,787