

NYC BIC

Exploring the Relationship Between Fines, Violations and Compliance

Guy Tallent - June 24, 2025

Good afternoon, today I'll be walking you through an analysis I conducted using New York Cities Business Integrity's Commission data, looking at how fines, violations, and compliance behavior are all interconnected. The goal is to uncover insights that can inform smarter enforcement and policy.

Summary Statistics (2015 - Present)

[Dashboard](#)

Total Violations	Total Fines Issued	Avg Fine per Violation
13,376	\$28,572,107.89	\$2,259.92
Median Fine per Violation	Max Fine Issued	Min Fine Issued
\$625.00	\$1,300,000.00	\$50.00
Total Accounts Fined	Avg Violations per Account	Avg Fines per Account
3,349	3.99	\$8,531.53

To start, I worked with two datasets: BIC-issued violations and complaint inquiries, with a focus on the last 10 years, as this had the most complete data window. The violations dataset, with over 13,000 entries and \$28M in fines issued, provided a rich base to explore patterns in enforcement fine severity, and compliance behavior.

In addition to this presentation, I also built a dashboard to make the data more interactive and explorable.

What I'll show here covers the key takeaways, but I'm happy to walk through it now or save it for the end.

Transition Sentence:

Given the scale of this data, the next question was:

What insights are most valuable to uncover?

Which led me to a few core questions.

Analytical Objective

What I Investigated

Key Questions

- Does increasing fine severity lead to improved compliance behavior?
- Which violation types are the most common?
- Which accounts are the most frequent violators?

Why It Matters

- Fines and enforcement are levers to improve public safety and improve compliance by reducing violations

These summary statistics raised three core questions:

1. Does increasing fine severity improve compliance?
2. Which violation types are most common?
3. Who are the most frequent violators?

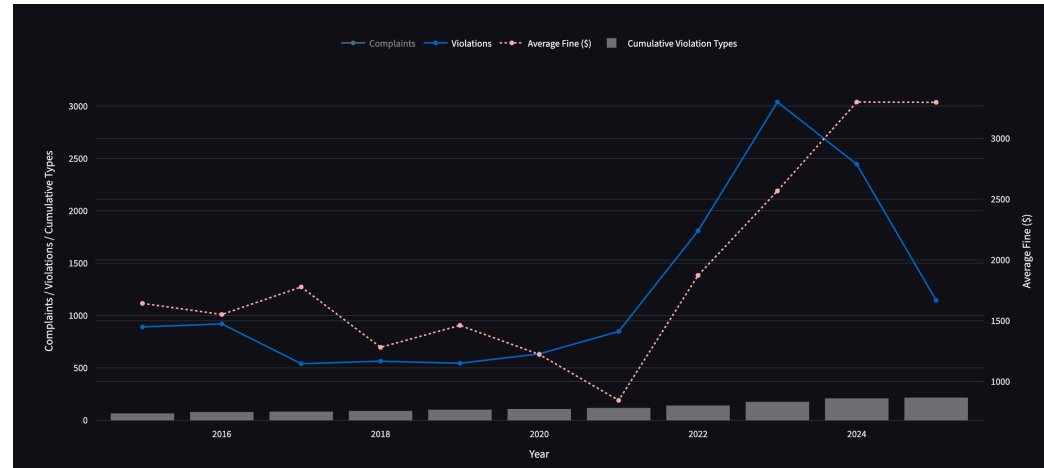
These questions matter because fines and enforcement aren't just penalties — they're policy levers. If used effectively, they can improve public safety and reduce violations by encouraging better compliance.

Transition Sentence:

So, let's start by taking a step back to look at the bigger picture: what's happened over time?

Fines and Violations Over Time

How Expanded Enforcement and Fine Spikes Impacted Compliance Trends



- Violations surged between 2021 and 2023, alongside a 228% rise in new violation types
- New violation types being introduced signal expanded enforcement
- Violations dropped in 2024–2025 as average fines reached their highest levels

On this slide, we zoom out and take a long-term view of the trends from 2015 to 2025.

What really stands out is the steep increase in violations between 2021 and 2023.

This trend lines up with a sharp increase in the number of new violation types — as nearly a third of the new violations are introduced during this time period.

Which is a strong indicator of expanded enforcement. Simply put: more rules mean more opportunities to commit violations.

But then, from 2024 to 2025, we see a drop in total violations. That decrease coincides with the highest average fines issued across the decade.

This suggests that those higher fines may have served as a deterrent — possibly influencing better compliance.

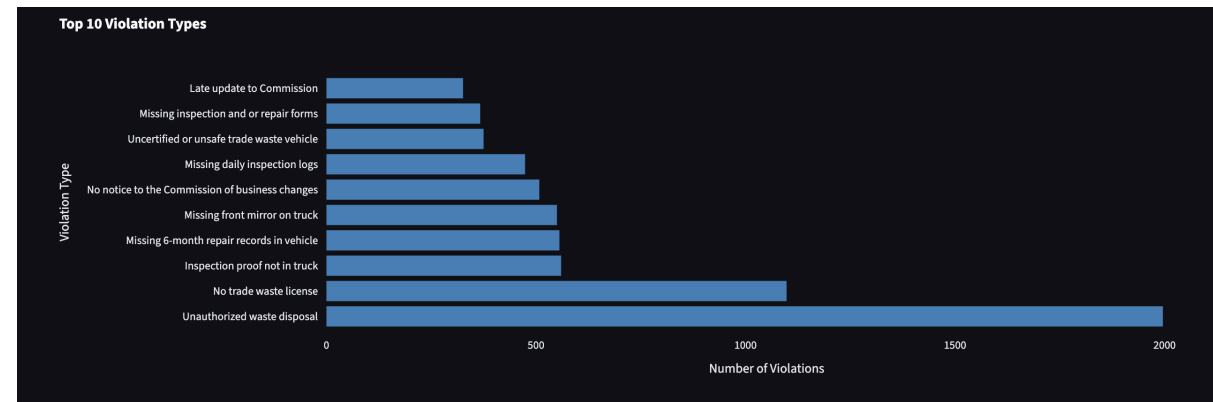
Transition sentence:

This decade-long trend gives us the big picture — but what about the details?

Which violations are actually the most common, and how have they changed over time?

Violation Categories

Most Common Violation Types



- Highlights top 10 most common violations — 50% of the violations and just under 40% of the fines
- Enables prioritization of enforcement
- Suggests areas where education may be useful

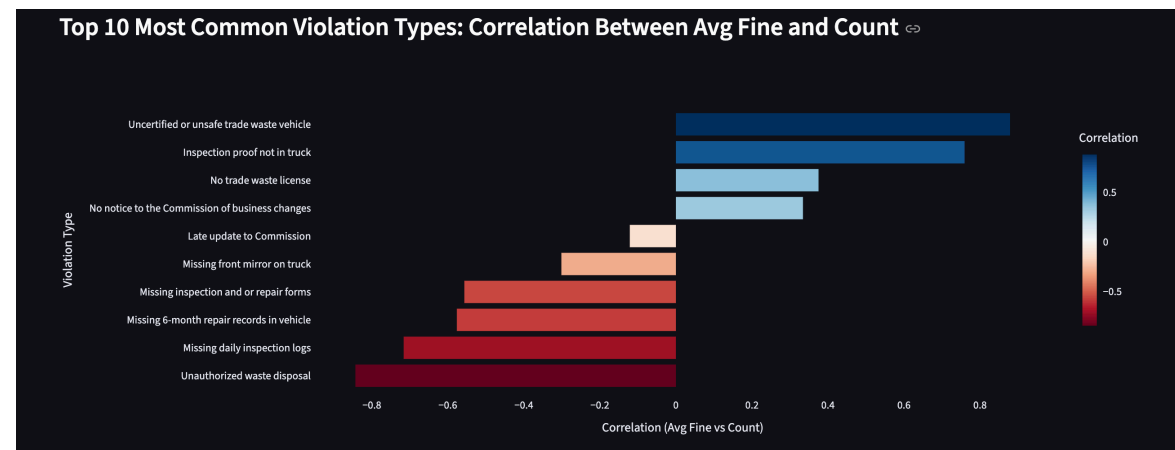
Here we focus on the top 10 violation types. These account for over half of all violations and nearly 40% of total fines. Which is a pretty huge portion.

This suggests that targeting just these categories — through education, or enforcement — large improvements could be made.

Transition sentence:

So we know what the top violations are. But do fines actually work to change behavior?

Can Fines Shape Compliance Behavior?



- Certain violation types show negative correlation
- Indicates that higher fines lead to a reduction in violations

To dig deeper, I tracked the correlation between average fines and the top 10 reoccurring violations. Many showed a negative correlation — as fines rose, violations dropped.

This suggests that fine increases may act as a deterrent — at least for categories like unauthorized waste disposal or or missing inspection logs.

Transition:

Now, I want to take a look at two examples from opposite ends of the spectrum.

Fine & Violation Trends by Violation Type

Exploring Fine Effectiveness: Two Case Studies



- Violations spike in 2022, coinciding with a drop in average fines
- When fines increased in 2023, violations dropped, suggesting a potential deterrent effect



- Violations peaked in 2024, when fines were at their highest
- In 2025, violation counts fell while fines stayed elevated, further suggesting a deterrent relationship

These two charts show violations that sit at opposite ends of the spectrum in terms of how strongly fines appear to influence compliance behavior.

On the left, we have unauthorized waste disposal, which had the most negative correlation among the top 10 violation types. You can see that in years where the average fines decreased, like from 2019 to 2022, violations actually increased — particularly with a big spike in 2022 when fines hit their lowest. This suggests that lower penalties may have encouraged more violations in this category.

On the right, we have uncertified or unsafe trade waste vehicles, which had the most positive correlation. This is a newer violation type that ramped up around 2023. As fines remained high — over \$4,000 — we saw violation counts drop in 2025, possibly signaling that the high penalties served as a strong deterrent.

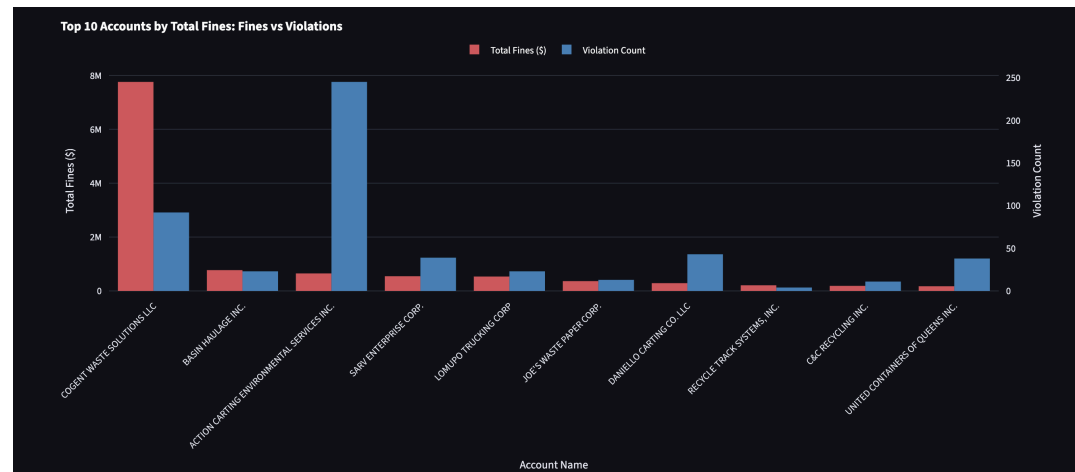
Together, these cases highlight how fine levels may be used strategically to influence compliance.

Transition sentence:

Now that we've seen this at the violation level — now let's look at individual accounts.

Who Repeatedly Violates?

Top 10 Accounts by Fines



40% of fines come from just 10 accounts

It's worth noting that a handful of accounts repeatedly show up in the data.

The top 10 violators are responsible for a disproportionate share of violations and fines.

This reinforces the idea that targeted interventions for repeat offenders could make a significant impact.

Transition sentence:

Let's dive into one of those accounts to understand behavior change over time.

Tracking Behavioral Change



- Violations peaked in 2023 alongside over \$5M in fines
- Violations dropped in 2024-2025
- Suggests that compliance improved after the increase in fines

This chart focuses on Cogent Waste Solutions, one of the top 10 most fined accounts.

We see a rapid rise in both violations and total fines through 2023, with over 40 violations and more than \$5 million in fines issued that year alone.

What's notable is what happens next — by 2024 and 2025, violations drop off sharply. This could reflect a behavior shift in response to the financial pressure from those peak fines.

It's a good example of how consistent enforcement, especially with meaningful financial consequences, might help drive better compliance at the company level.

Transition sentence:

To wrap things up, I wanted to go over the key takeaways

What This Analysis Tells Us

Key Takeaways

- Increased enforcement through expansion of violation types and higher fines appears to be effective — violations decline after successive years of increased enforcement and fine spikes
- A small number of violation types and accounts drive most of the activity
- Targeted enforcement and education can improve compliance

Further Exploration:

- Testing fine thresholds — For each violation, is there a fine amount that maximizes compliance without over-penalizing first-time offenders?

To wrap up, a few key takeaways stood out.

First, increased enforcement — both through new violation types being introduced and higher fines — seems to have a real impact. We saw violations decline after sustained spikes in fines.

Second, violations are highly concentrated. A handful of violation types and repeat offenders account for a large share of total fines and activity. That suggests an opportunity to prioritize targeted enforcement.

Lastly, I found myself wondering — is there an optimal fine level? One that maximizes compliance without going too far, especially for first-time offenders?

Notes:

Why consider first time offenders:

1. Encouraging Compliance, Not Punishment

Goal of enforcement is behavior change, not just punishment.

A first-time violator may simply be unaware of the rule. An excessively harsh fine might feel arbitrary and discourage future cooperation.

Moderate fines paired with education can promote long-term compliance more effectively than punitive measures.

Thank You!

[Dashboard](#)