

RESEARCH · RETAIL

1.68 percent

Shrink at a decade high, four in five retail dollars still spent in person, and the camera that has never met the register.

SHRINK RATE	ANNUAL INDUSTRY LOSS	RETAIL SALES IN STORE	FRONTLINE TURNOVER
1.68%	\$112.1B	~84%	~60% / yr

Retail shrink reached 1.68 percent of revenue in 2024, the highest rate in over a decade; the prior survey cycle put the industry's annual losses at \$112.1 billion. The standard response has been more cameras. The average store now records more video than at any point in its history, with roughly the same ability to act on it: someone reviews footage after a loss is discovered, if it is discovered, if there is time.

This matters because the store is still the business. About 84 percent of US retail sales happen in physical stores. And the store is losing its memory: frontline turnover near 60 percent a year, at a replacement cost around 40 percent of salary, drains the institutional knowledge that once compensated for missing measurement, the veteran who knew Tuesday afternoons go quiet and the queue breaks at four customers.

The register and the camera each hold half the picture. The point of sale knows what sold, when, at what margin. The camera sees who was on the floor, where traffic dwelled, how long the line got before someone walked. Kept apart, each supports only hindsight. Read together, they answer operating questions: whether register activity matches floor activity, whether staffing followed the store or the calendar, whether the queue cost more than the labor that would have cleared it.

Reading them together has stayed rare for a reason. The obvious path, cloud video analytics with identity attached, walks into biometric privacy law, where settlements have run from \$12.1 million against Speedway for fingerprint time clocks to \$650 million against Facebook for faceprints. A mid-market retailer has no appetite for holding data it would have to defend.

WHAT A FIX HAS TO LOOK LIKE

No identity	So there is nothing to defend.
No new hardware estate	The cameras are already up and the capital budget is already spent.
Register and floor in one picture	Either alone is hindsight.

**Output in storage
the store controls**

The data describes the store's own business.

WHERE SIGNALS FITS

Signals reads camera and register together on site, at the edge, and keeps neither video nor identity: only counts, patterns and alerts. Shrink patterns surface from pairing register events with floor activity; staffing follows measured traffic; the queue alert fires before the walkout; the after-hours alert fires in a building that should be asleep. Everything it produces stays in the store.

SOURCES

NRF National Retail Security Survey, 2024 and FY2022 cycles.

US Census Bureau quarterly e-commerce and retail sales data, 2024.

US Bureau of Labor Statistics turnover data and published industry analyses.

BIPA settlement record: Rosenbach line of cases, Speedway and Facebook settlements.