



**3SI**  
Security Systems

GPS Tracking Tech:

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**A Better Way to Protect ATM Machines**



ATM crimes are on an upward trend. According to the ATM Industry Association (ATMIA), machine attacks increased by 42% in 2017 compared to the previous year, and continued to rise to 54% the following year. In 2019, the increase in machine attacks stood at a staggering 60%<sup>1</sup>. And while many factors are at play, one major reason is the proliferation of ATMs.

As a result of location closures and restructuring exercises, there has been a shift from in-branch services to self-service terminals over the years. On top of that, COVID-19 has most banks and credit unions taking preventive measures by limiting branch visits and encouraging more ATM use. It's no surprise why ATMs are an appealing target for criminals—the European Association for Secure Transactions (EAST) reports that criminals that perform successful attacks walk away with \$57,000 in stolen funds on average<sup>2</sup>.

And the thieves are getting even bolder: a significant percentage of these attacks are physical attacks on ATM machines. In the same ATMIA study, it was reported that in 2018, whole-ATM theft rose by 53% and the use of explosives increased by as much as 23%. It seems that they have discovered a modus operandi that works—use brute force to dislodge the ATM or pry it open and make a quick getaway with the cash before law enforcement arrives at the scene.

It's not just the loss of cash to ATM owners—banks, credit unions, and independent deployers. A machine replacement costs up to \$10,000<sup>3</sup>, not to mention the harm crime could cause to reputation and brand.

Crime is inevitable, and the current way of thinking about it—prevention and deterrence—has some inherent flaws. It's time to rethink security with an unconventional approach: tracking technology that gets criminals off the street and recovers stolen assets 90% of the time, usually within 20 minutes.

<sup>1</sup> ATMIA Global Fraud and Security Survey 2019, ATM Industry Association; <http://www.atmia.com/news/atmias-atm-security-association-releases-global-fraud-and-security-survey-results/9521/>

<sup>2</sup> European Association for Secure Transactions (EAST); <https://www.association-secure-transactions.eu/>

<sup>3</sup> How Profitable Is an ATM Machine?, Matt D'Angelo, Business News Daily; <https://www.businessnewsdaily.com/11229-profitable-atm-machine.html#:~:text=ATMs%20cost%20anywhere%20from%20%241%2C000,a%20used%20or%20new%20machine.>

# What's driving ATM crime?

ATM attacks are concentrated in two categories: logical attacks and physical attacks.

In a logical attack, criminals use software, skimming devices, or cameras to steal data or cash. The goals of logical attacks are to intercept data, to issue commands to dispense unauthorized currency, or to capture card and PIN data.

Physical attacks are typically focused on brute force or explosive attacks at the ATM site to try to gain access to the cash inside, or to physically remove the entire ATM to another location, usually with the use of a vehicle, called a “smash-and-grab” or “crash-and-grab.” In both of these cases, the tactics used are typically destructive to more than the ATM—often damaging the surrounding buildings and any other items within the vicinity.



In recent years, a new tactic used by criminals to target standalone ATMs and machines in vulnerable locations emerged. The “hook-and-chain” method is unique to the US market where there is an abundance of standalone driveup island ATMs. A case was reported in Milton, Florida, where an ATM fell victim to this method<sup>4</sup>. The criminals yanked off the ATM door using a chain hooked to a pickup truck and made off with an undisclosed amount of cash.



A spate of “smash-and-grab” attacks plagued Ohio between 2016 and 2019. This group of criminals was successful in most of their attempts, which involved crashing a stolen van into the targeted storefront, knocking the bolted-down ATM machine loose, and loading the machine into a getaway vehicle. In one instance, the entire robbery took only 55 seconds<sup>5</sup>.



In some cases, robbers were reported using heavy machinery like front-end loaders and forklifts to uproot ATMs, causing extensive structural damage to the crime site<sup>6</sup>. These incidents typically happen in the early hours of the morning so that the robbers can carry out their attack without witnesses and escape swiftly.

<sup>4</sup>Thieves rip door off ATM in Milton with stolen truck, Kristie Henderson, WEAR; <https://weartv.com/news/local/photos-thieves-rip-door-off-atm-in-milton-with-stolen-truck>

<sup>5</sup>Five suspects steal ATM in Fairview Park smash-and-grab, Jen Steer, FOX 8 News; <https://fox8.com/news/five-suspects-steal-atm-in-fairview-park-smash-and-grab/>

<sup>6</sup>Criminals use extreme methods to uproot ATMs across Florida, Tiffany Walden, Orlando Sentinel; <http://www.orlandosentinel.com/news/os-xpm-2013-11-21-os-chase-bank-atm-stolen-20131121-story.html>



## The true cost of crime

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For ATM owners, losing cash is not the worst of it. ATM theft—whether successful or not—can have a damaging effect on brand and reputation. Consumers are less likely to use a financial institution’s services when they don’t feel secure.

Furthermore, successful attempts embolden criminals to try again. Criminals will go to lengths to commit a crime when they are convinced they will not be caught for it.

Many ATM owners are now devoting more resources to fight crime and help apprehend criminals, and the majority of those improvements will take the form of technology investments. But are they exploring the right kind of tech?

# Why conventional security systems are flawed

When it comes to ATM security, conventional wisdom has always taken the approach of deterrence.



The problem is that deterrents don't account for the inevitability of crime.

Deterrents will stop some crime, most likely by diverting it to another location, but many criminals will not be dissuaded, especially the desperate variety. No matter whether there are cameras or sophisticated alarms in place, many ATMs eventually become the victim of a crime. It's not so much a question of if, but when. There's always a criminal brazen enough to attempt the crime, and when it happens, deterrents can only do so much.

ATM owners need to address this risk. In the same way the risk of fire is acknowledged and best-practice steps are taken to prepare for it (e.g., developing a fire plan, conducting drills, installing fire extinguishers), they must prepare for the inevitability of ATM theft.

So if conventional security systems can't deter a determined criminal, how do you protect your ATMs?



## Rethinking security: a layered approach

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ATMs are vulnerable. Why? First, they have to be accessible 24/7 so they are out in the open and unprotected, especially during the quiet hours when no witnesses are around to see a crime being committed. To serve people in less-populated areas, machines are frequently placed in isolated areas. These factors combine to make attacking an ATM low-risk to criminals, but you can't afford to watch every ATM 24/7/365, can you?

Consider this example: a group of robbers target an ATM machine and make away with it in a getaway vehicle. They trip the alarm system but by the time authorities get to the scene, the ATM is gone and the only evidence left is grainy surveillance camera footage.

But what if, when the robber escaped with the ATM (or even the cassettes within), they're carrying a state-of-the-art tracking device, one that immediately began sending real-time location data to nearby law enforcement, who then tracked the suspect and moved rapidly to pursue and apprehend them?

What if the criminal ransacking the cookie jar was guaranteed to leave a trail of crumbs?

# What to look for in a robust security solution

In evaluating a new kind of security solution for protecting ATMs—one that goes beyond conventional security—consider the following key differentiators.

1

It should be more proactive than conventional security that employs a deterrent method. It shouldn't just take into account the potential of theft, but expect it, and instead increase the chances of asset recovery.

2

It should reliably detect criminal activity while itself remaining undetected, in order not to alarm the criminal. It needs to activate instantly at the point of the attack without intervention to prevent the criminals from escaping and ensure ease of tracking.

3

It needs to trigger a consequential law enforcement action. At the end of the day, criminals need to know law enforcement will track and apprehend them.

A comprehensive security solution for ATMs needs to account for the inevitability of crime, and when that happens, discreetly trigger a sequence of actions that can lead to recovery of the cash and apprehension of the criminals.



3SI's Tracking Platform utilizes multiple security and tracking technologies, including 4G/LTE, GNSS (Global Navigation Satellite Systems), WiFi, GPS, and RF. Together, the multiple systems ensure reliable tracking data with nearly pinpoint accuracy.

# Protecting ATMs and tracking for recovery

3SI, a leading provider of security solutions since 1971, offers tiered technology to protect the ATM as well as the cassettes within from most kinds of physical attacks. The technology automatically detects the crime and silently reports to 3SI's advanced tracking system. Criminals in the act of theft don't even realize there's a tracker leading police to them until the handcuffs are on.

## ATM Tracker™

Detects attack and tracks stolen ATMs for recovery

## Cassette Tracker™

Protection stays with the cassettes even if they are removed from the machine

## Add-on Sensors

Detect unauthorized access and many additional types of physical attacks

This kind of layered approach gives ATM owners peace of mind when it comes to machine attacks. Should conventional measures fail to deter an act of crime, the ATM Tracker acts as a safeguard to track the stolen ATM. If the criminal suspects the ATM is rigged and attempts to steal the cash cassettes instead—that's where they get tricked. Just like the ATM Tracker, the Cassette Tracker is also fitted with GPS tracking technology and acts as an added layer of security. In instances where criminals attempt to rob technicians on their service rounds, the technicians can just hand over the cash cassettes, let the tracker do its job, and avoid confrontation and harm.

As soon as it detects an attack, 3SI trackers steadily update their location information via 3SI's sophisticated tracking technology. This information is relayed directly to local law enforcement dispatch, who then directs police officers as they begin pursuing the criminals. 3SI also has a dedicated U.S.-based Tracking Support Center that, upon activation of any tracker, will contact law enforcement to ensure that they received the notification and are taking action.

**90%+**

Success rate for recovery of cash in ATMs with a 3SI tracker following an attack



## A nationwide network of law enforcement

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A key element of 3SI's tracking solutions is not the tech itself, but what it enables. The moment a tracker detects an attack, it notifies law enforcement, who are prepared for the call and respond accordingly.

That's because local law enforcement receives comprehensive training as a part of any 3SI engagement. They're trained by the company's own dedicated Law Enforcement Division, comprising active and retired officers themselves. It's cop talking to cop, and this lends an authority via the shared sense of understanding. Re-training is also conducted regularly, so that at any time, there is a readiness of response when trackers are triggered.

Over 9,000 law enforcement agencies—a nationwide network at the local, state, and federal level that protects and serves over 300 million people in the U.S.—utilize 3SI technology to protect their communities against crime. That's the kind of network that 3SI customers can rely upon when they become victims of a crime.



## Peace of mind with 3SI

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ATMs will continue to come under attack, and criminals will devise even more ingenious and sophisticated tactics to commit theft. But ATM owners can stay one step ahead of crime, by investing in reliable security solutions that don't just deter the criminals, but actually work to break the crime cycle and prevent future victimization.

That's what 3SI offers: their trackers provide action and intelligence to apprehend suspects through robust partnerships with law enforcement.

**\$136,000,000+** assets recovered

**15,300+** criminals apprehended

That peace of mind? That's what security should be.

# About 3SI

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As the world's leading provider of asset protection, asset recovery, and criminal apprehension solutions for ATMs, Financial institutions, Law Enforcement, Retail, and Transport, 3SI Security Systems can help keep cash safe while helping to break the crime cycle. **Contact one of our Security Experts to find out more.**

**3SI**

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