



## Evaluating Risk at your ATM

How a review of your ATMs could protect your business, customers, bottom-line, and brand.



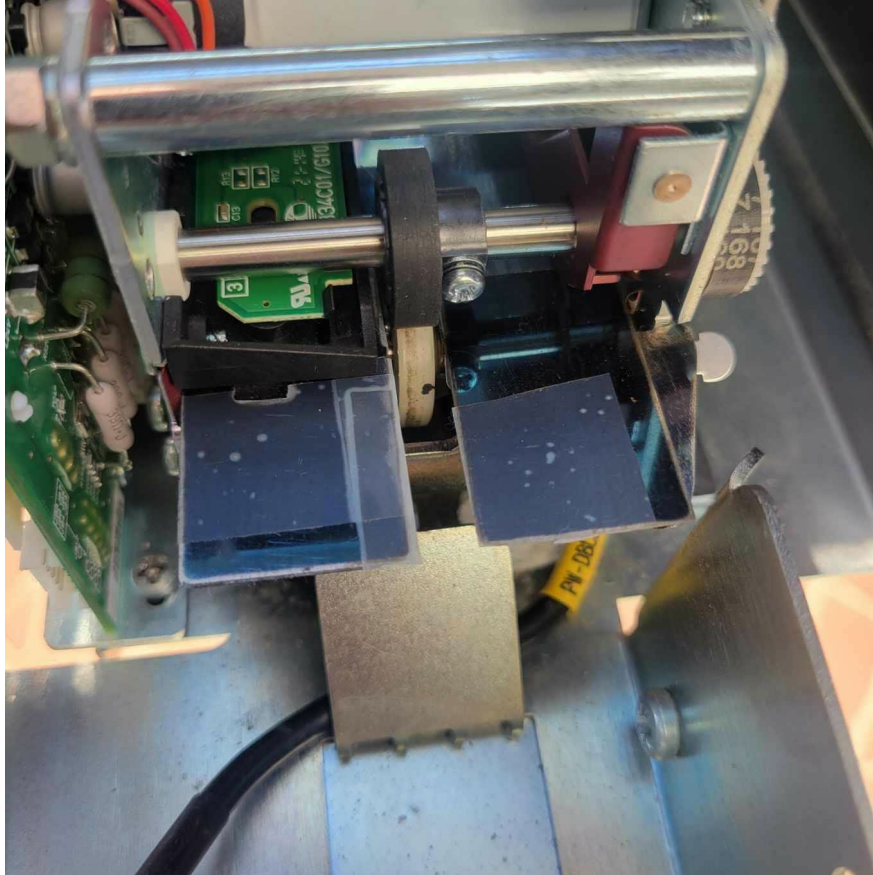
# Respect the threat!

Just because you can't see it, doesn't mean it isn't there.

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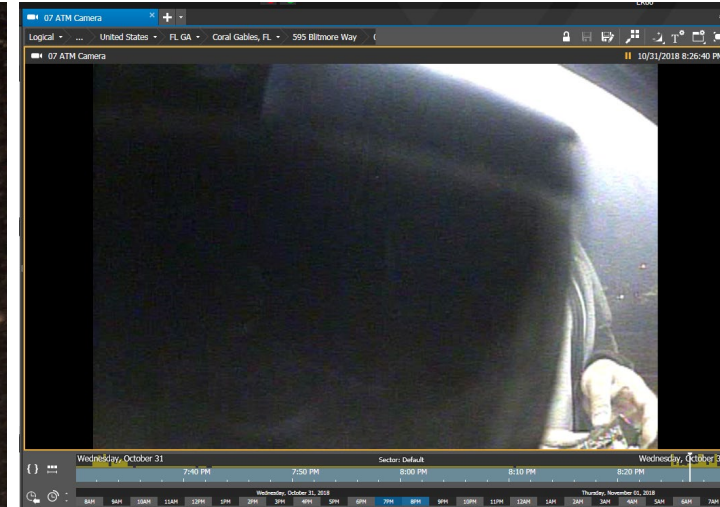
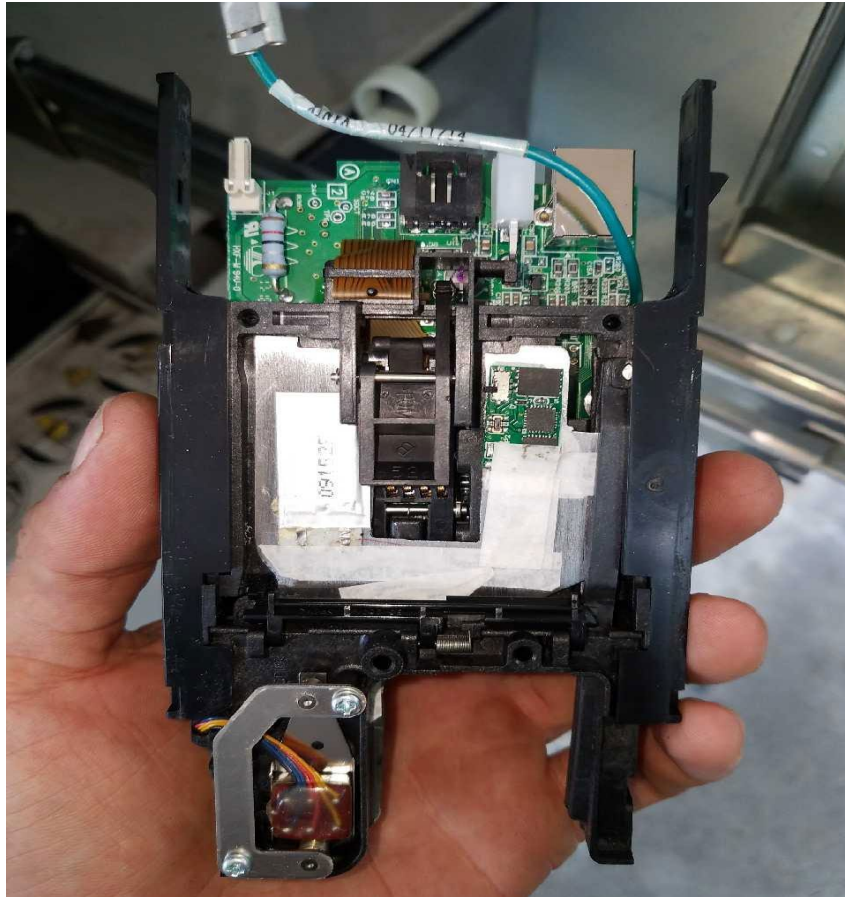
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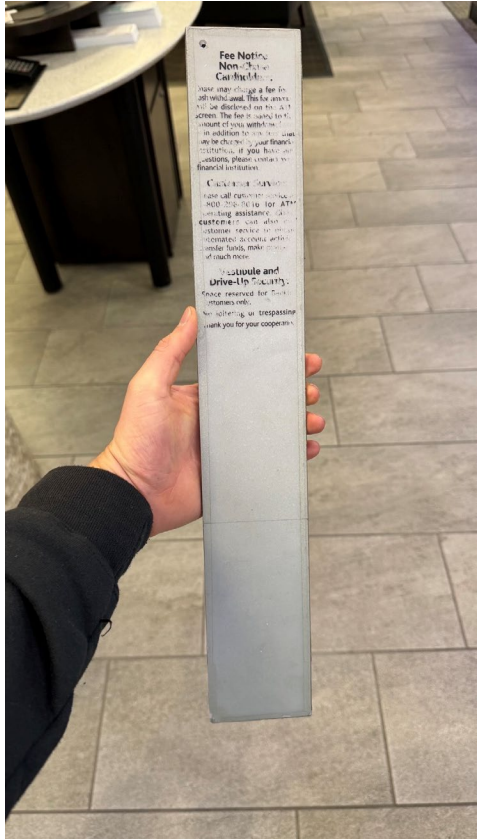
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Source: Krebbs on Security / Texas Bankers Association



# ATM crime isn't static

And organized criminals never stop

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# ATM crime isn't static, or stupid!

Our intelligence is pulled from a local and global network of incidents and responses!

## Cennox Solutions Overview

Tracking solutions  
ATM & CASH TRACKERS



Under Armour Protection  
FASCIA ANTI-PENETRATION SHIELDS



STAIN +  
INK/DYE PROTECTION



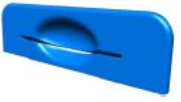
ASD SENTINEL KIT (Legacy & New style card readers)  
DEEP INSERT SKIMMING PROTECTION



THE ASD-iX AVFSI  
ANTI SKIMMING PROTECTION



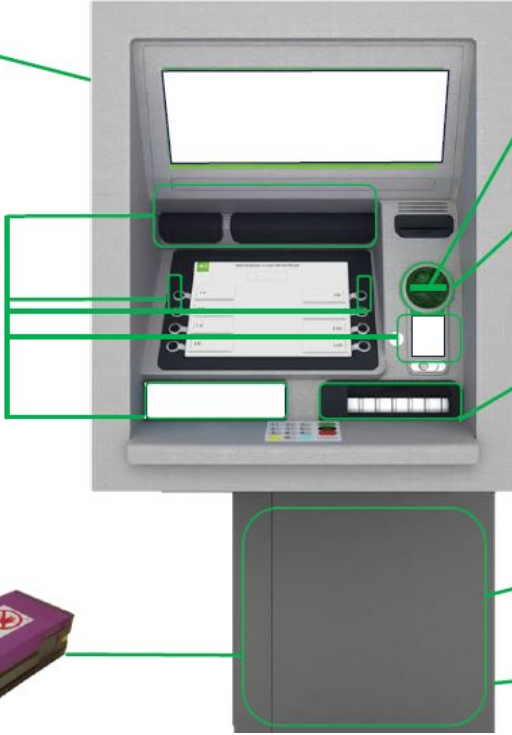
THE CENNOX CSG  
CASH SHUTTER GUARD



GRYPHON DOOR SOLUTION  
CASSETTE PROTECTION



AGN  
ANTI-GAS PROTECTION



# What is a Risk Evaluation Survey?

Too often, it is a wakeup, or close call moment.

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Too often, our survey is a wakeup call that you have been compromised.



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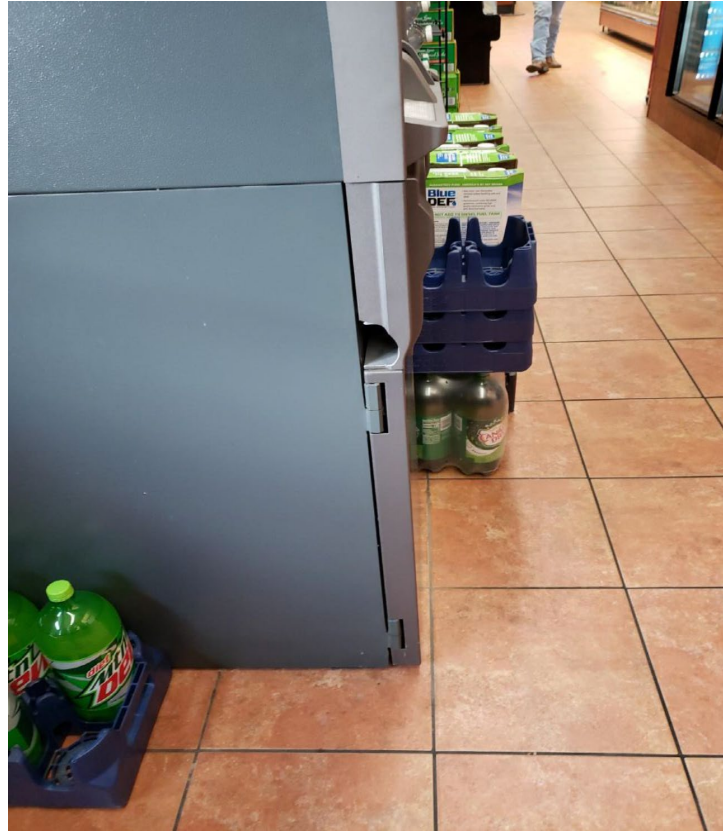
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Street	City	State	Zip Code	ATM Placement	ATM Lighting	Alarm and Siren	Assess Location	Hook and Chain Risk	Body Armor - Security Plates	Bollard Protection	Security Bolts/Plates	Surveillance Camera Assemblant	ATM Safe Level	Suggested Security Products
				PASS	PASS	NEEDED	PASS	PASS	PASS	FAIL	NEEDED	PASS	PASS	ATM ARMOR - ALARM
				PASS	PASS	NEEDED	PASS	PASS	PASS	FAIL	NEEDED	PASS	PASS	ATM ARMOR - ALARM
				FAIL CLOSE TO DOOR	PASS	NEEDED	PASS	FAIL	PASS	FAIL	NEEDED	PASS	PASS	ATM ARMOR - ALARM
				FAIL EXPOSED WIRES	PASS	NEEDED	PASS	FAIL	PASS	FAIL	NEEDED	PASS	PASS	ATM ARMOR - ALARM
				FAIL FASCIA ATTACK	PASS	NEEDED	PASS	FAIL	PASS	PASS	NEEDED	PASS	PASS	ATM ARMOR - ALARM
				FAIL FASCIA ATTACK	PASS	NEEDED	PASS	FAIL	PASS	PASS	NEEDED	PASS	PASS	ATM ARMOR - ALARM
				FAIL EXPOSED WIRES	PASS	NEEDED	PASS	PASS	PASS	PASS	NEEDED	PASS	PASS	ATM ARMOR - ALARM
				FAIL FASICA ATTACK	PASS	NEEDED	PASS	FAIL	PASS	PASS	NEEDED	PASS	PASS	ATM ARMOR - ALARM
				PASS	PASS	NEEDED	PASS	PASS	PASS	PASS	NEEDED	PASS	PASS	ATM ARMOR - ALARM
				PASS	PASS	NEEDED	PASS	PASS	PASS	PASS	NEEDED	PASS	PASS	ATM ARMOR - ALARM

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Asset / Customer Information				
Asset ID:	Old Asset ID:	CNX Site ID:	Customer Contract:	Last Review Status:
View History	View History	View History		Add New Review
Asset Information - Show/Hide				
Site Name:	Location: <b>OUTSIDE</b>	Appt Required:	Facility Lighting on IC3 Timer:	
Address:	Premise:	Contact Phone:	Surround Prod 1:	
Address 2:	Branch Number:	Contact Name:	Surround Prod 2:	
Land Mark:	Cost Center:	Access Type:	Surround Prod 3:	
Intersection:	Manufacturer:	Access Days:	Live Date: <b>12/23/2016</b>	
County: <b>JOHNSON</b>	Model Type:	Avail 24hrs:	Frequency: <b>M</b>	
MSA:	Serial Number:	Number of ATMS: <b>0</b>	Last Inspection Date: <b>09/07/2018</b>	
Site Description:	Platform:	Monitor:	Next Inspection Date: <b>11/2018</b>	
Program Name:	FR Load:	Card Type:	Route: <b>160</b> , Zone: <b>30</b>	
Branding:	Client Site/Property ID:	Client Facility ID:	Client Branch/Business Unit/Manhattan ID:	
Other Associated Assets:				
Work Order Information				
CNX Work Order #:	Client Work Order #:	Do Not Visit Before:	Scheduled Date:	
<b>2835352</b>		<b>10/01/2018 @ 12:00 AM</b>	<b>10/13/2018 @ 11:59 PM</b>	
Additional Services Requested:				
Service:				
Asset Information Verification				
Approach Type: <b>DRIVE UP</b>	Database Information Correct: <b>Yes</b>	Vestibule: <b>No</b>		
Marketing Product: <b>BackPanel</b>	Model Type:	Electrical Inspection Candidate:		
Surround Manufacturer:	Surround Model:	Trash Can: <b>N/A</b>		
Lock Inspection:	Lock Inspection Comments:			
Fascia Lights Working:	Surround Lights Working:	Wing Lights Working:		
Is there a check desk on site:	Does the audio jack work:	Did you call ANS:		
Work Order Actions / Ratings				
Check in at Site: <b>Yes</b>	Fascia Paint Quality: <b>Fair</b>	Overall Condition: <b>Fair</b>		
Completed Detail and Cleaning: <b>Yes</b>	Surround Paint Quality:	Stainless Steel Quality:		
Removed Surrounding Trash: <b>Yes</b>	Cabinet Paint Quality: <b>Fair</b>			
Refilled Deposit Envelopes: <b>Yes</b>	Topper Paint Quality: <b>Fair</b>			
Left Quality Questionnaire: <b>Yes</b>	Kiosk Paint Quality:			
Refurbishment Recommended: <b>No</b>	Bollard Paint Quality: <b>Fair</b>			

Asset Parts				
Deposit Cutoff Time:	Surcharge Amount:	High Risk Hours:	Languages:	Multi-Check:
Accepts Deposits:	Camera:	Voice ATM on Site: <b>N</b>	Voice Guidance:	Deposit Image:
Media Icons:				
STATUS	QTY USED	PART TYPE	ASSET QTY	PART NUMBER - DESCRIPTION
Work Order Hardware / Components				
HARDWARE / COMPONENT TYPE	STATUS	COMMENTS	DATE/TIME ADDED	
Work Order Photos				
Workorder Photos ( <input checked="" type="checkbox"/> Include Photos ( <input checked="" type="checkbox"/> Include Summary PDF <input type="checkbox"/> Include Full Photo PDF )				
Resolution Comments:			Date Started:	<b>10/09/2018 @ 02:21 PM</b>
Other Comments:			Date Completed:	<b>10/09/2018 @ 02:35 PM</b>
			Date Uploaded:	<b>10/09/2018 @ 02:35 PM</b>
Work Order Tasks				
TASK	COMPLETED	QTY	TRIP DATE	
	Yes	1	10/09/2018	
Work Order (Version 9292014 - 09/29/2014) / Status: <b>Completed</b>				
Name: Compliance Checklist (version 9292014 - 09/29/2014) / Status: <b>Completed</b>				

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Check ATM for skimming devices and skimming cameras. ATM HELP DESK PHONE NUMBER

Plastic overlays in card reader

Scratch marks around card receiver indicating the possible use of pliers or screwdrivers on the card receiver

Extra wires displaying from ATM

Adhesive tape marks indicating foreign objects placed on the device

Undue and suspicious scratches on ATM

Disclosure in ATM screens

Appropriate lighting around ATM

light bulbs

Cameras

Nearby security cameras that can observe PINPAD

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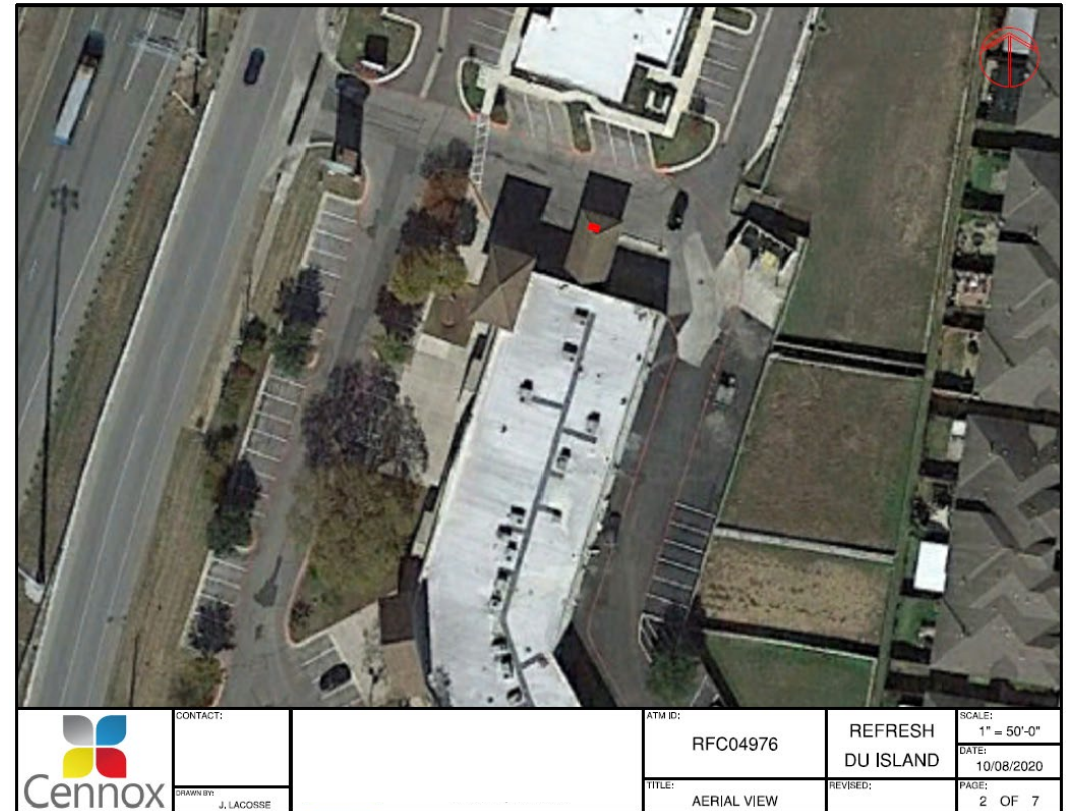
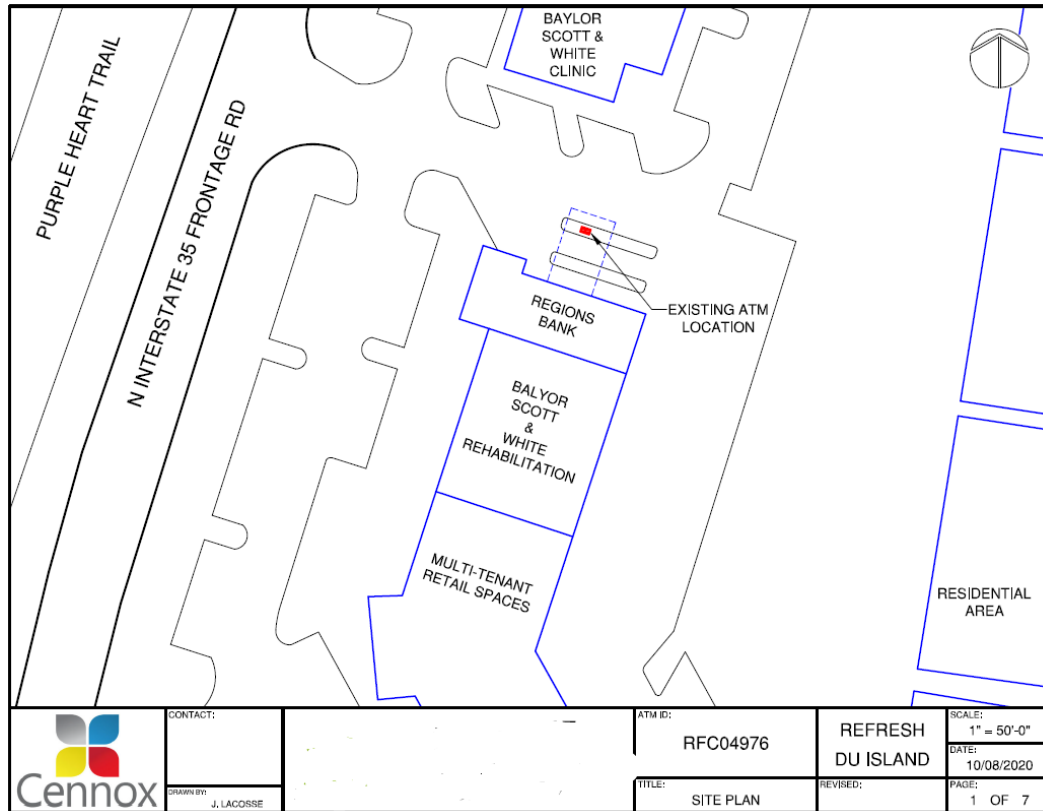
Too often, our survey is a wakeup call that you have been compromised.

CNX WORK ORDER	ASSET ID (BEN)	CLIENT WORK ORDER	SERVICE TYPE	SERVICE STATUS	SITE NAME	ADDRESS	CITY	ST	ZIP	DO NOT VISIT BEFORE	DO NOT VISIT AFTER	DATE SCHEDULED	DATE COMPLETED
<a href="#">4324249</a>				Approved			TUCSON	AZ	85750	12/01/22	01/02/23	12/28/22	12/23/22
<a href="#">4326447</a>				Approved			TUCSON	AZ	85750	12/01/22	01/02/23	12/28/22	12/23/22
<a href="#">4324248</a>				Approved			TUCSON	AZ	85750	12/01/22	01/02/23	12/28/22	12/23/22
<a href="#">4026754</a>				Approved			TUCSON	AZ	85750	12/01/21	12/23/21	12/18/21	12/06/21
<a href="#">4026755</a>				Approved			TUCSON	AZ	85750	12/01/21	12/23/21	12/18/21	12/06/21

Showing 1 to 5 of 5 entries

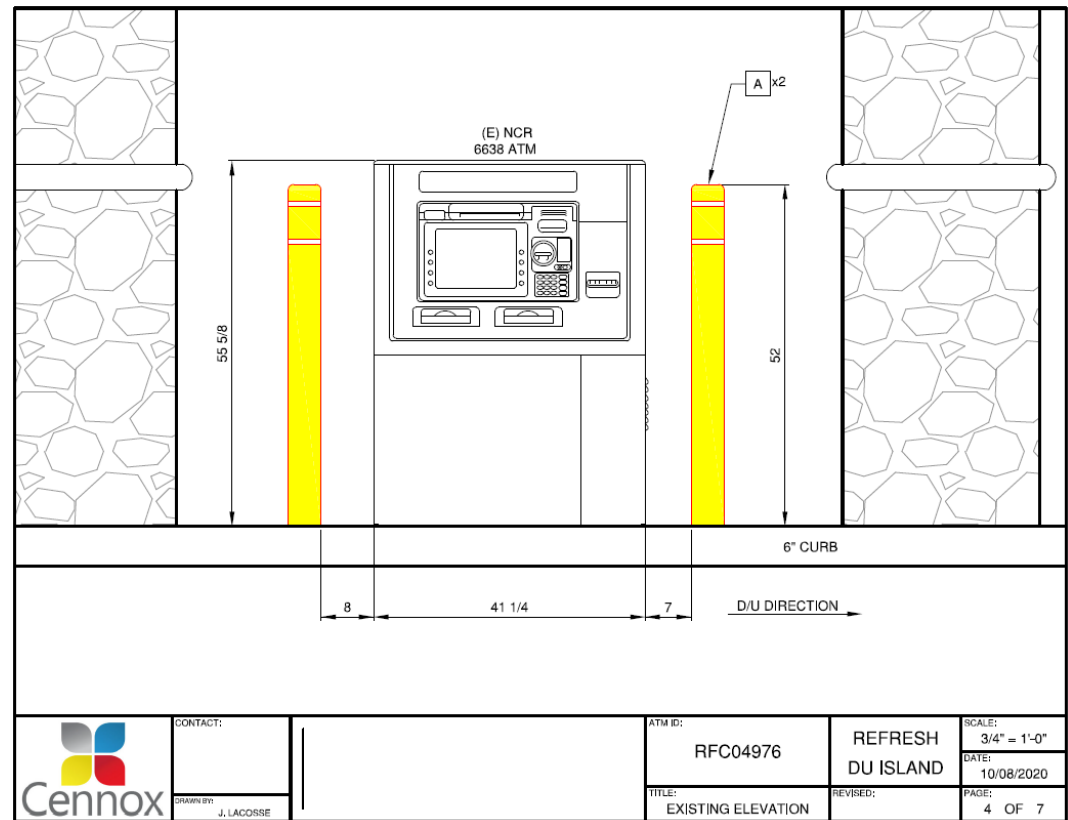
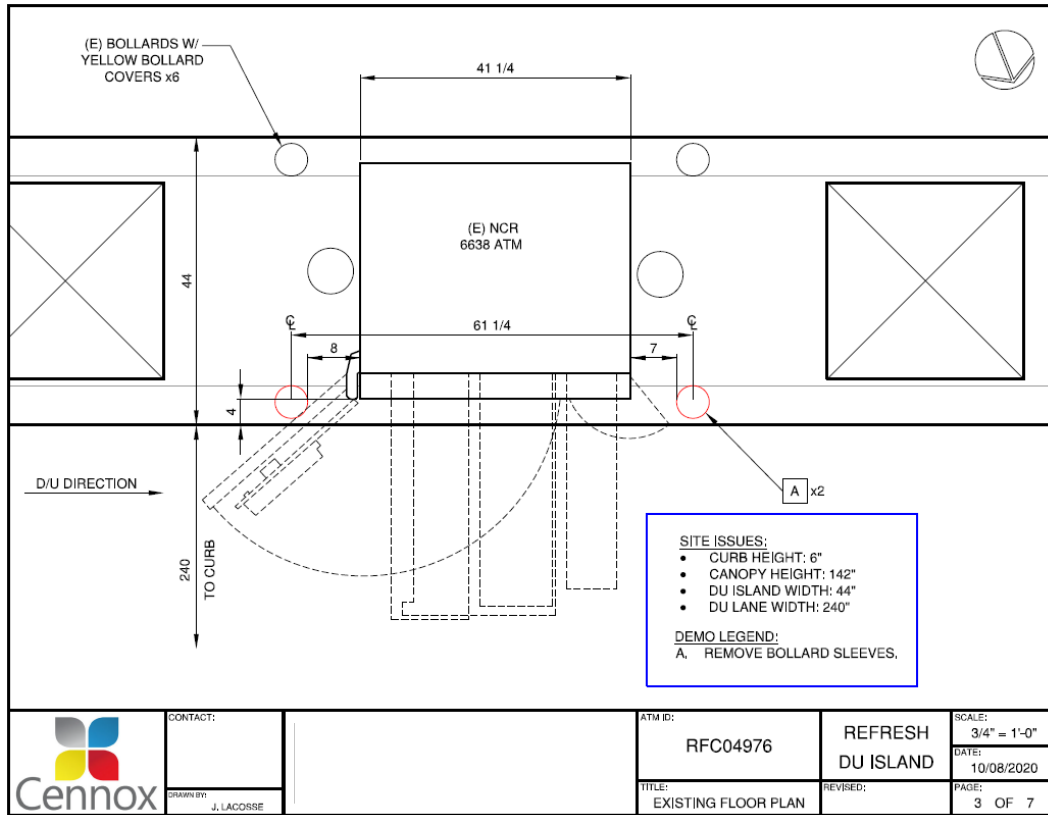
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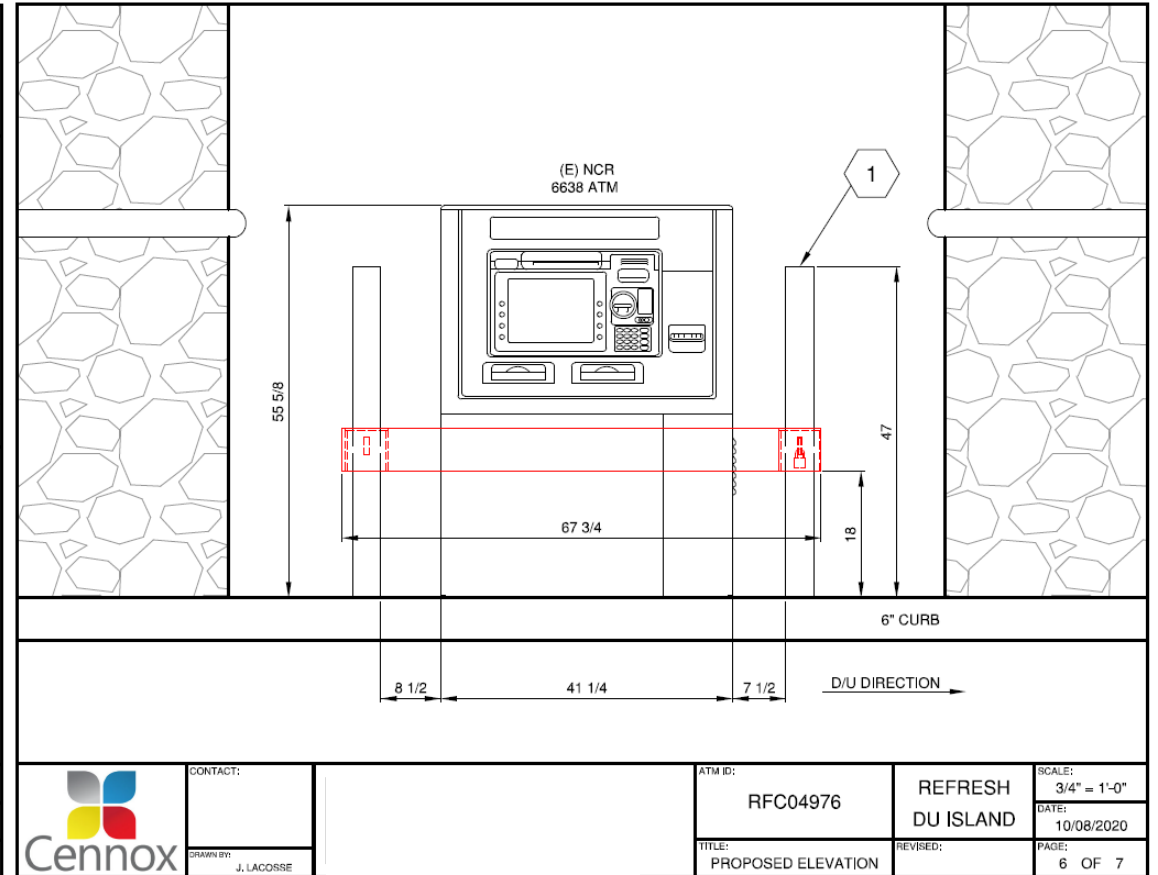
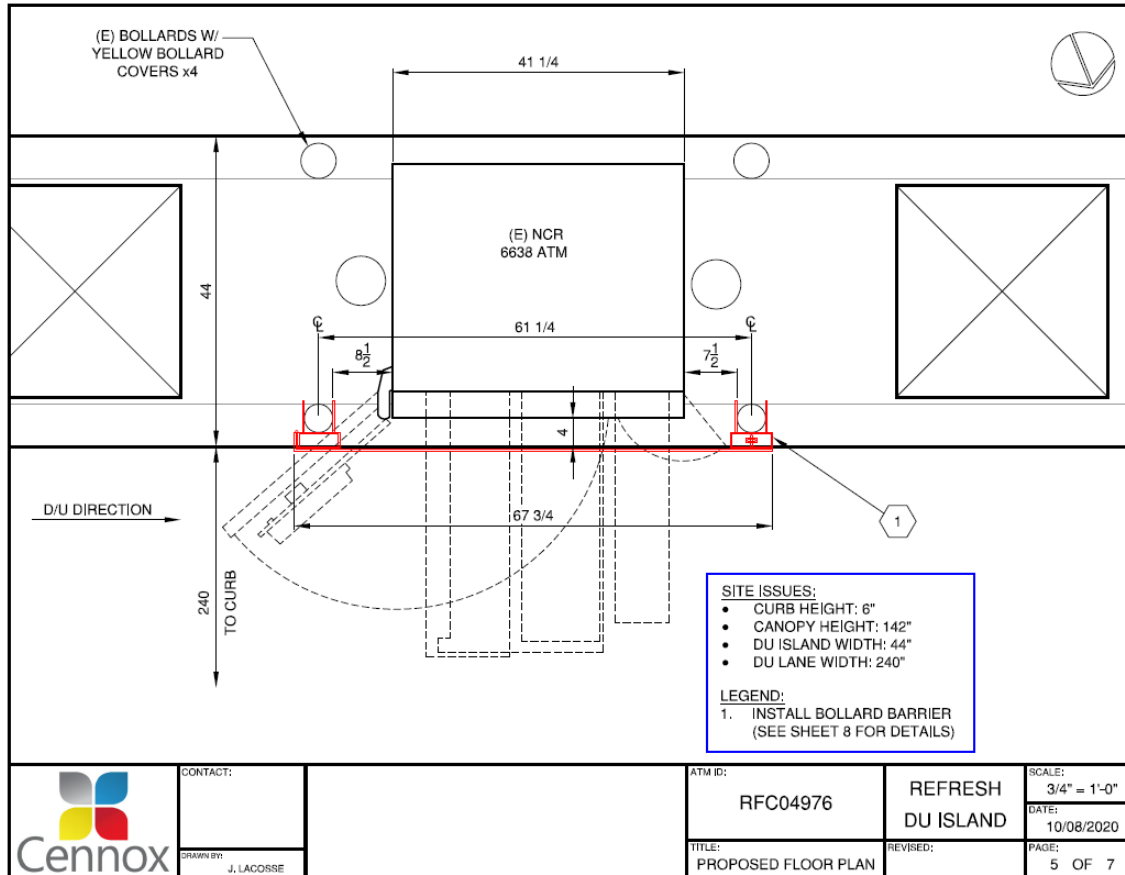
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# How we add value to our ATM customers

This is what we do and they are why we do it!

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# This is why our customers rely on us

Because this is what we do, and they are why we do it!



- OFFICE LOCATIONS
  - Alpharetta, GA (Global headquarters)
  - Murrieta, CA
  - Fort Lauderdale, FL
  - New Albany, IN
  - Springfield, MO
  - Missoula, MT
  - Millersport, OH
  - Edmond, OK
- 📍 WAREHOUSE LOCATIONS
- FIELD TECHNICIANS



# This is why our customers rely on us

Because this is what we do, and they are why we do it!

## PRODUCTS & SOLUTIONS

- + Deep insert skimming protection
- + Anti skimming protection
- + Black box protection
- + Anti ram-raid plinths
- + Locks and anchors
- + Ink & glue solutions
- + Smoke protection
- + Covert asset tracking
- + Anti gas solutions
- + Device tracking
- + Alarm solutions
- + Security barriers



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## SECURITY SOLUTIONS

ATM Security Solutions  
Asset Protection  
Services & Installation  
In-House Security Manufacturing  
CCTV Installation & Maintenance  
Access Control Systems  
Enterprise Video Management  
Physical Security Solutions  
Alarm Services

## SERVICE DELIVERY

First line / Second line Maintenance  
Installation Services  
Cleaning & Disinfecting Services  
Logistics -Storage & Site Delivery  
Professional Services  
Crisis Response & Site Repair  
In-House Help Desk Support  
Surveys & Inspections  
PCI & Regulatory Compliance

## TRANSFORMATION PROJECTS

Construction  
Project Management  
Signage & Branding  
Custom Signage  
Fit-Out Service  
Brand Management  
EV Charging Solutions

## HARDWARE SOLUTIONS

Self-Service & Cash Recycling Technology  
Safes and Smart Safes  
Equipment Procurement  
Multi-Vendor Technology & Maintenance  
Refurbished Parts & Hardware  
Parts Management  
Storage & Brokerage

# Thank you

Any questions?

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Expert Lighting Group



# Lighting for ATM Safety: State Mandates & Industry Best Practices

Eric M. Hansel CLEP MIES  
President  
Expert Lighting Group





Expert Lighting Group

## About me...

- Over 30 years commercial lighting
- Founded Expert Lighting Group in 2014
- Member - Illuminating Engineering Society
- Certified Lighting Efficiency Professional
- University of Michigan (NATIONAL CHAMPIONS) graduate





# Today's Presentation

- ATMs are safer with proper lighting
- Characteristics of LED lighting
- State Statutes
- Advances in lighting technology
- Your Perfect Scenario





## ATM Trends

- 40% of people in the U.S. utilize an ATM 8 to 10 times per month
- The average ATM is used 300 times per month
- ATM industry will grow tenfold in four years



# ATM Crime Statistics: United States

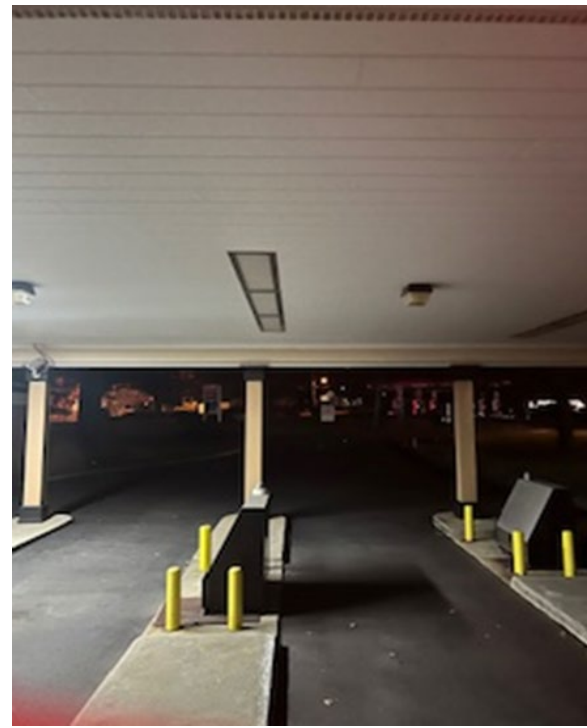
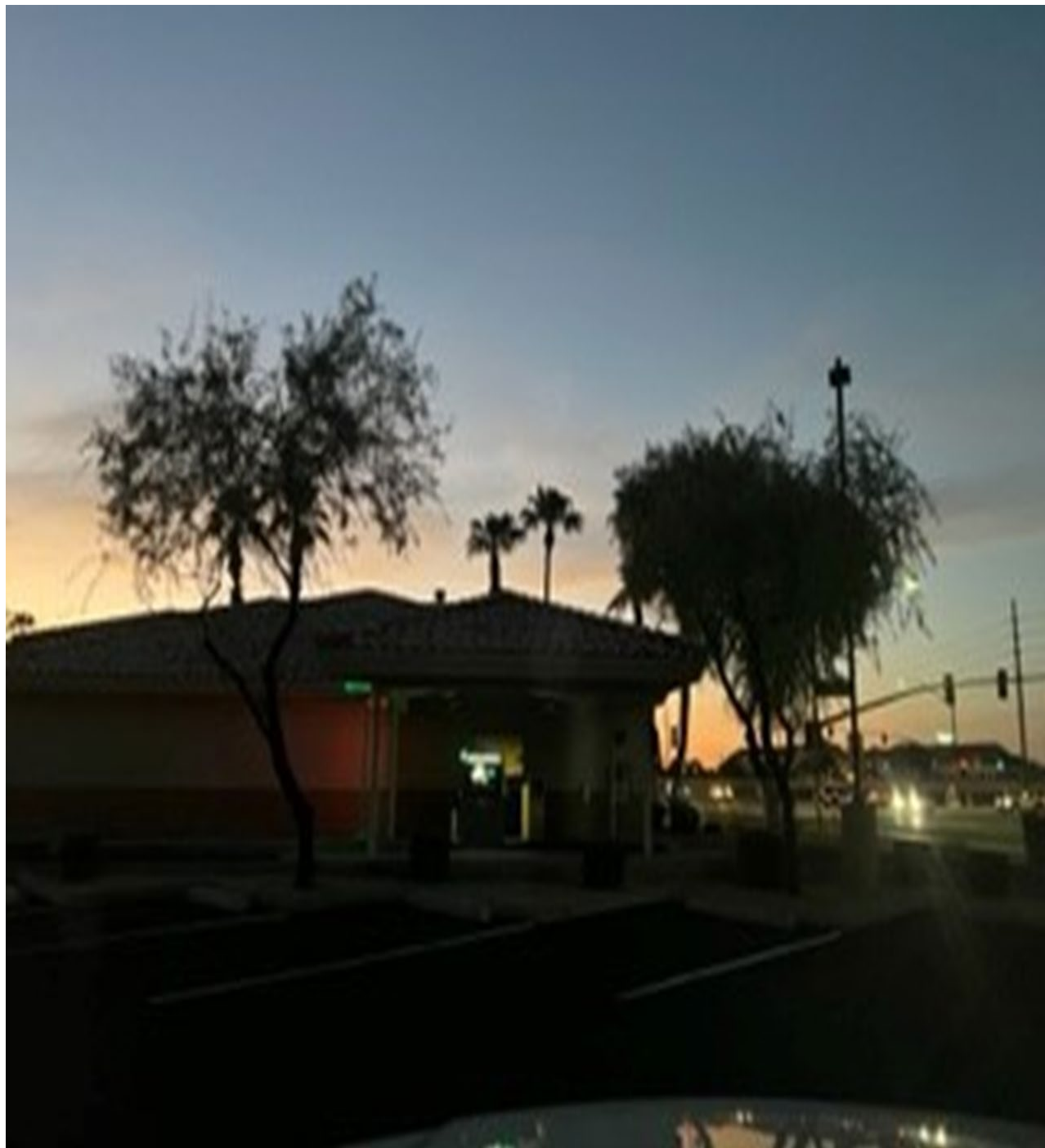
- The ATM Industry Association reports that overall ATM attacks rose **58%** from 2018 to 2019
  
- FBI's bank crime statistics reports a **600%** increase in ATM crimes in the United States from 2019 to 2021:
  - Physical attacks
  - Card skimming devices
  - Robberies
  
- The Bank Administration Institute reveals roughly **40%** of ATM-related crimes happen between 7:00 p.m. and midnight



# Report: ATM Safety and Security Recommendations

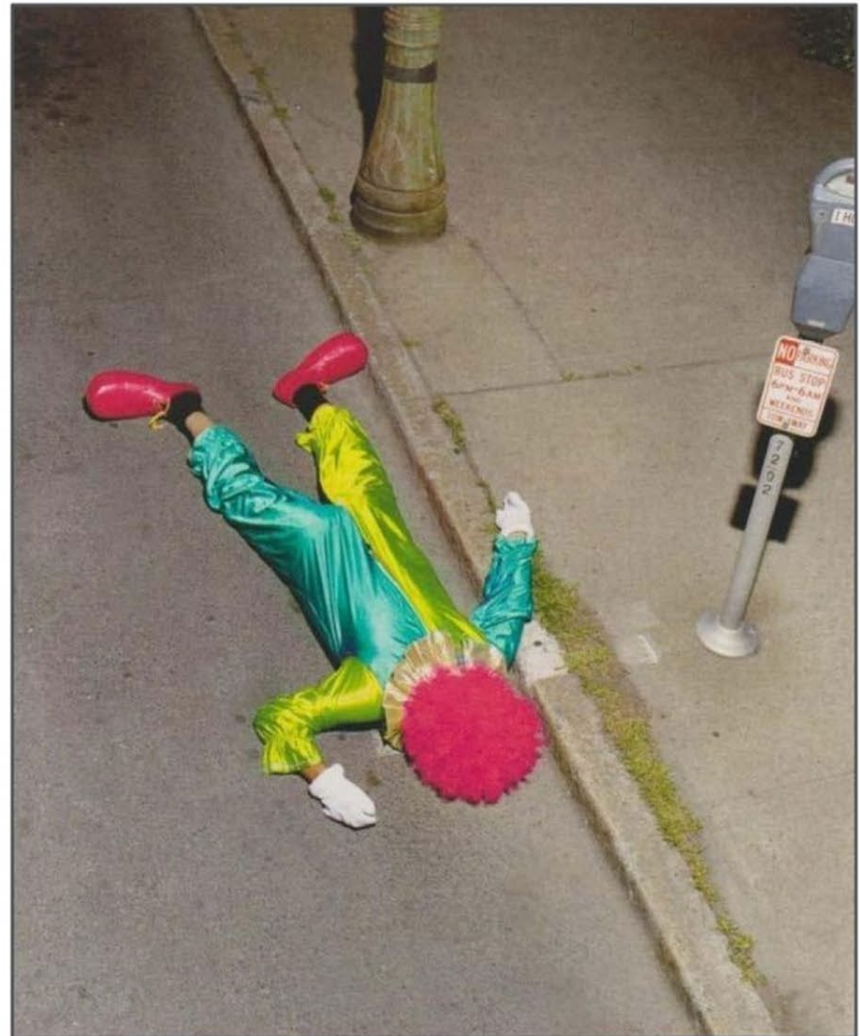
American Bankers Association special precaution:

- *“If the lights at the ATM are not working don’t use it.”*





Non-LED



LED

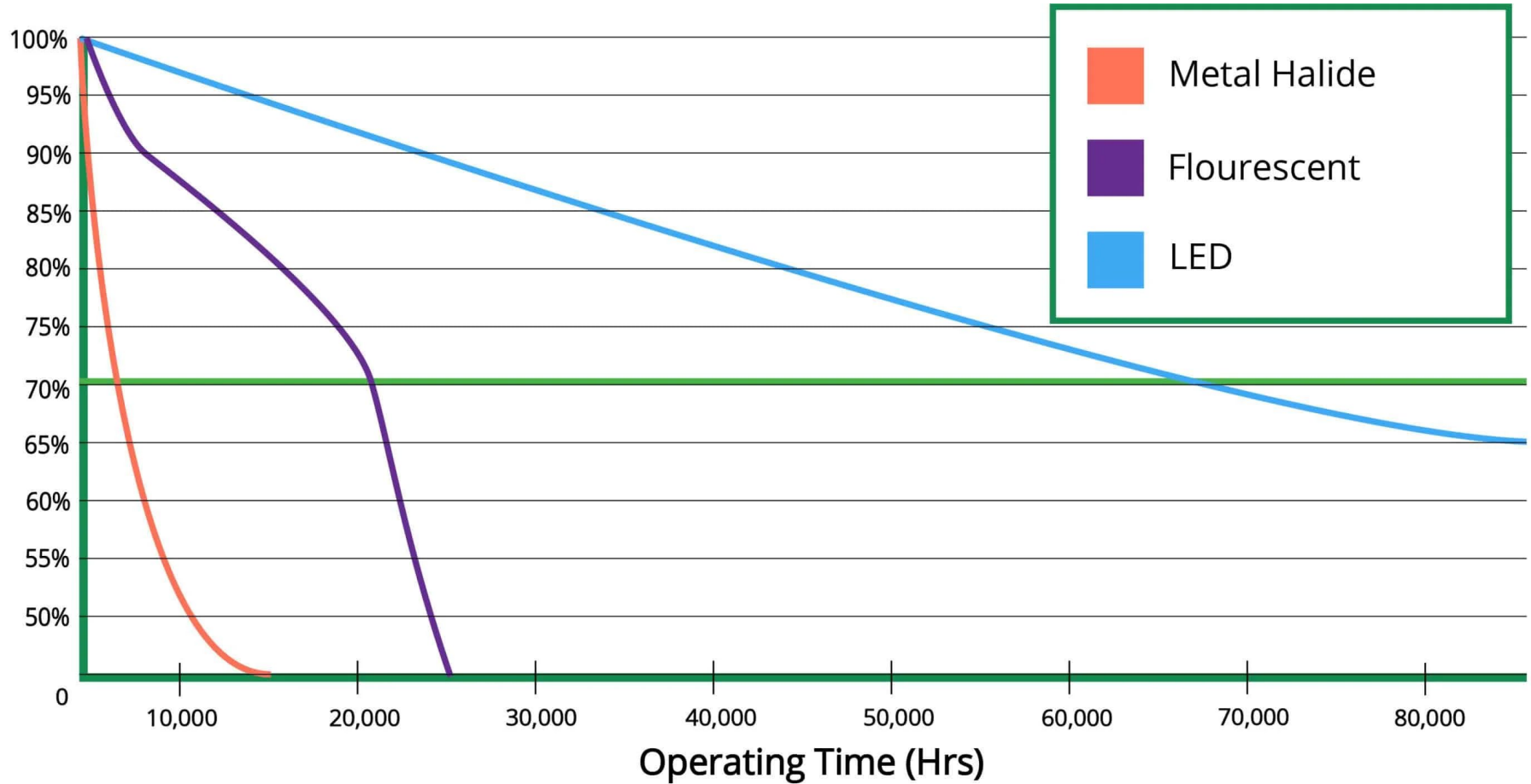


## LED Light Fixture Characteristics

- Slowly loses light output over a long period of time
- Color shift dramatically as it ages or overheats
- Major differences in performance - will lose 30% of it's initial light output at:
  - 100,000 burn hours (best-in-class)
  - 50,000 burn hours (average)
  - 25,000 burn hours (poor quality)



Expert Lighting Group



# Lumen Depreciation



Initial



50,000 Hours



60,000 Hours

Light Output

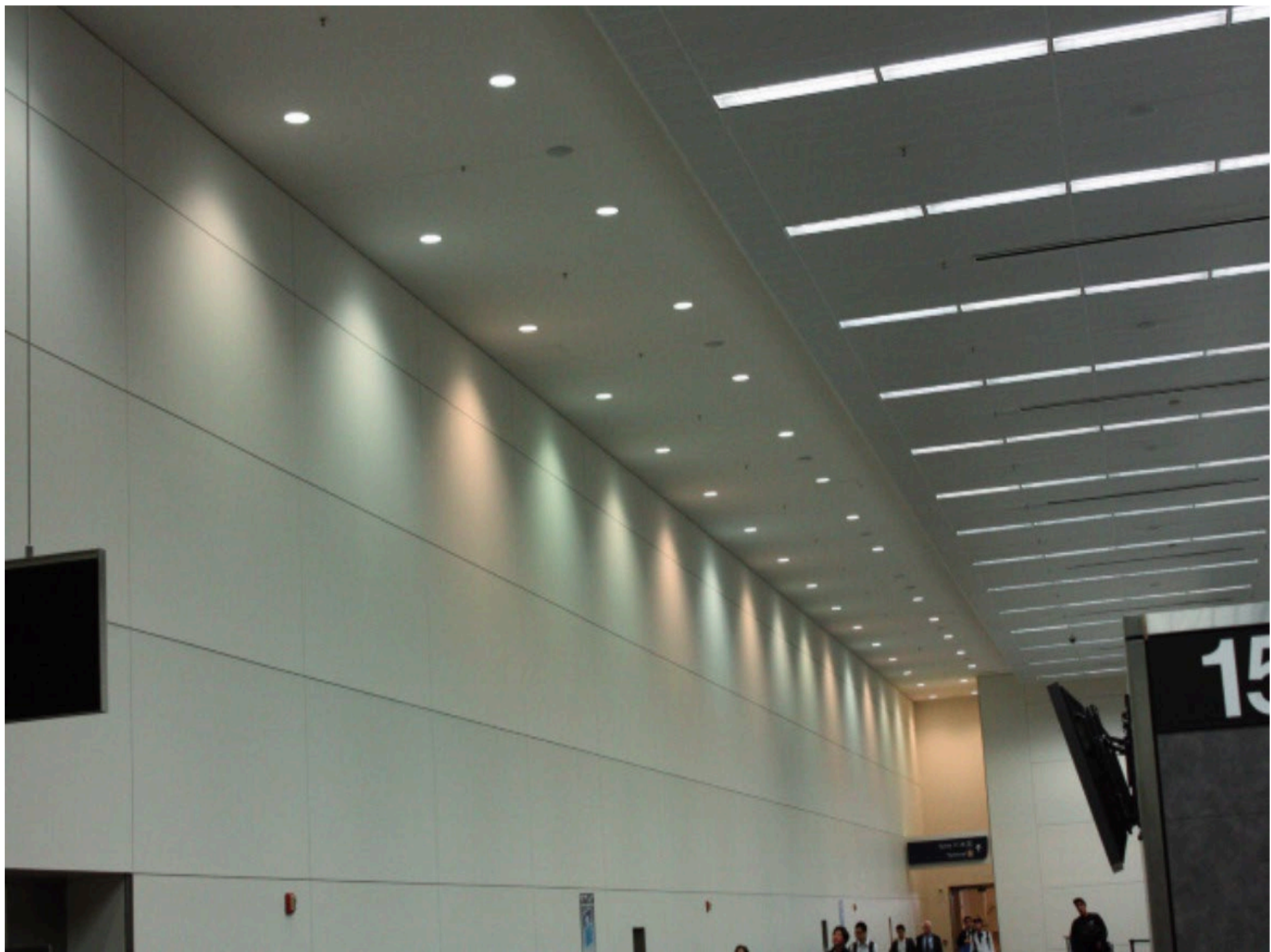


NIGHT ONE

VS.

AFTER 50,000 HOURS?







Arizona



Massachusetts



Florida



# State Statutes

- Currently, only 22 states have laws on the books
- Varying statutes by state:
  - New York requires light level verification 2x per calendar year
  - Florida requires landscaping not to exceed specific heights, in addition to specific ATM light levels
  - California requires 2x more foot candles at the face of ATM than New York
  - Michigan, Indiana, and Wisconsin, for example, have NO state statute for ATM light levels
- As ATM crime upticks, it is important to put pressure on all states to adopt requirements



## 2022 New Jersey Revised Statutes

### Title 17 - Corporations and Institutions for Finance and Insurance

### Section 17:16K-10 - Minimum lighting requirements

Universal Citation: [NJ Rev Stat § 17:16K-10 \(2022\)](#)

#### 17:16K-10. Minimum lighting requirements

4. Each operator and any person or entity controlling an access area or defined parking area in operation after the effective date of this act shall provide:
- a. A minimum of 10 candlefoot power at the face of an unenclosed automated teller machine and extending in an unobstructed direction outward five feet.
  - b. A minimum of two candlefoot power within 50 feet in all unobstructed directions from the face of the automated teller machine or the entrance of an automated teller machine facility. In the event any such automated teller machine or automated teller machine facility is located within 10 feet of the corner of the building in which it is located and the automated teller machine or automated teller machine facility is generally accessible from the adjacent side of such building, there shall be a minimum of two candlefoot power along the first 40 unobstructed feet of the adjacent side of the building, measured from the corner.
  - c. A minimum of two candlefoot power in that portion of the defined parking area within 60 feet of an automated teller machine or the entrance to an automated teller machine facility.
  - d. With respect to the interior of an automated teller machine facility, sufficient lighting to permit a person entering the facility to readily and easily see all persons occupying the facility, and to permit a person inside the facility to readily and easily see all persons entering the facility.



## States Without Statutes

- Follow lighting industry best practices
  - Illuminating Engineering Society (IES) Handbook
  - Occupational Safety and Health Administration (OSHA) Guidelines
  - Local city or county ordinances
  - Company created standards





## Concerns for Financial Institutions

- Exterior lights are OFF when employees arrive (8:30am) and leave (5:30pm)
- Facility personnel are typically responsible for multiple branches and may not regularly check exterior lighting



# Advances in Lighting Technology

- Cloud-based systems allow for monitoring of exterior and interior lighting
- Daily / Weekly / Monthly / Annual reporting available remotely





# Advances in Lighting Technology

- Lumen adjustable light fixtures
- Color temperature adjustable light fixtures
- 10+ year luminaire warranty covering lumen depreciation and color shift

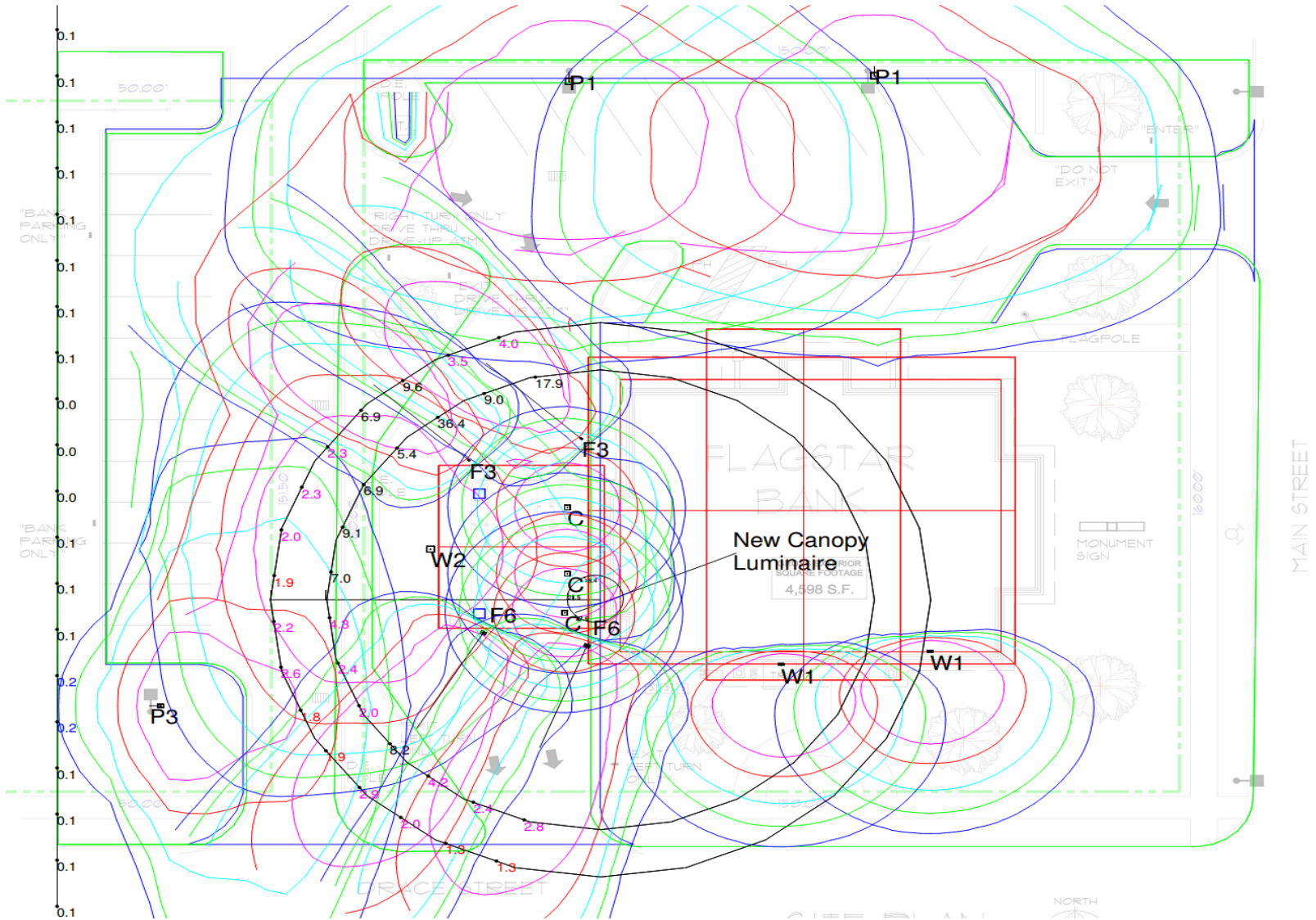


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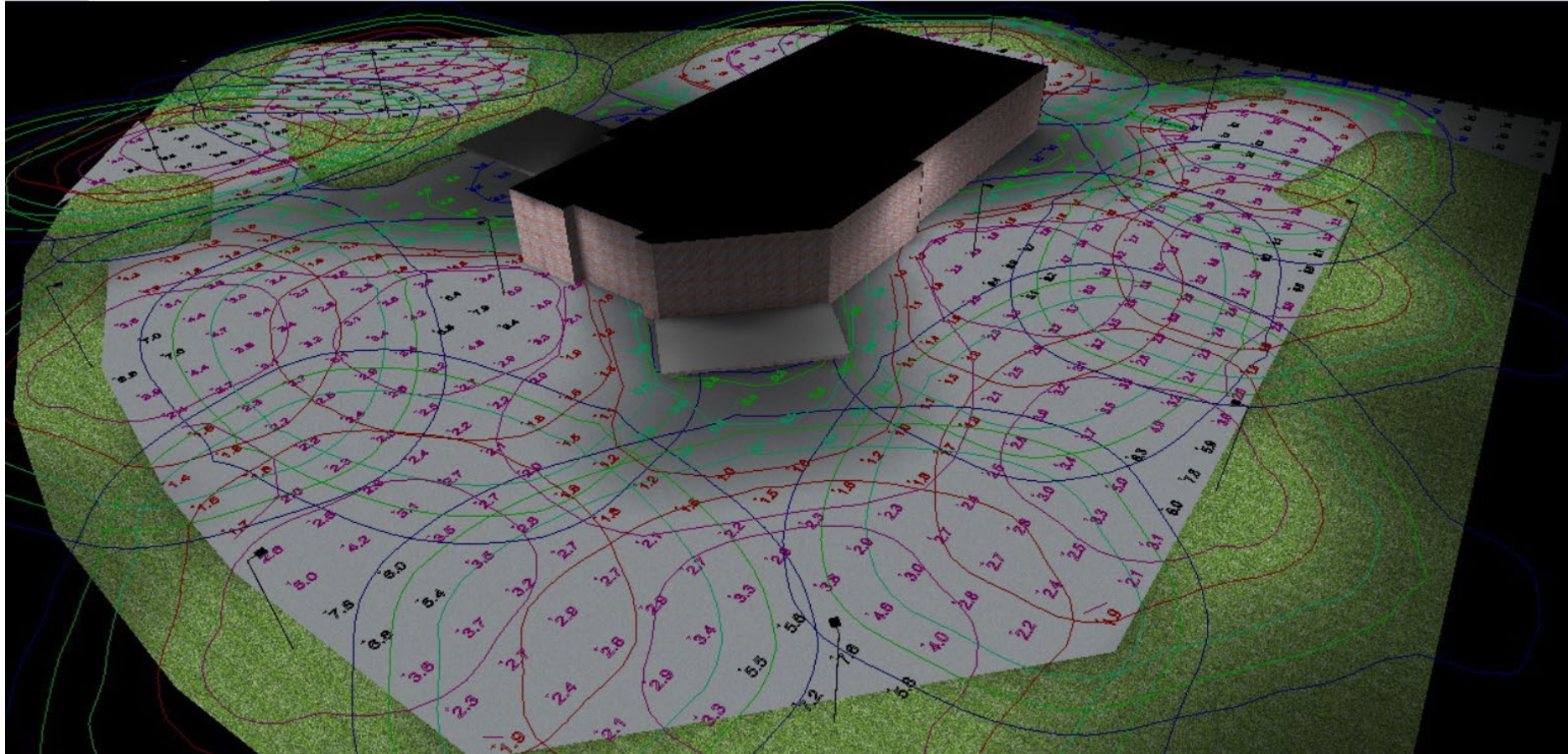
## Your Perfect Scenario

- Complete a computer-generated lighting layout

# Sample Layout with Foot Candles



# Sample Layout with Foot Candles





## Your Perfect Scenario

- Identify and only specify quality luminaires
  - Strong overall warranty
  - Lumen depreciation warranty
  - Color shift warranty



## Your Perfect Scenario

- Remote monitoring and reporting
- Regular light level audits
- Follow state regulations and lighting industry best practices

# Questions?

If you think  
it's expensive  
to hire a  
professional...



Wait until  
you hire an  
amateur.



Expert Lighting Group



# Thank you



Eric M. Hansel CLEP MIES  
President

[eric@expertlightinggroup.com](mailto:eric@expertlightinggroup.com)

888-858-6367

[expertlightinggroup.com](http://expertlightinggroup.com)

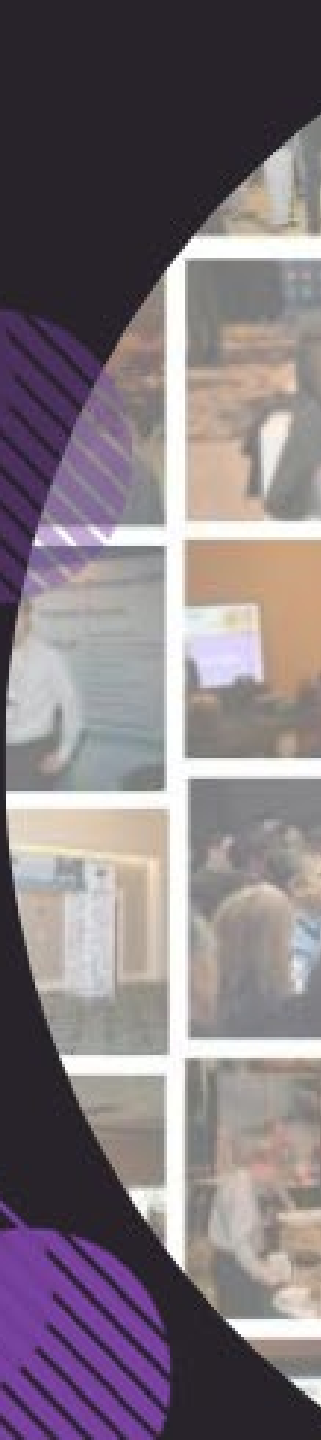




Workshop 2:

# ATM Security-Trends, Tactics & Strategy

Brett Fenoglio,  
Supervisory Special Agent, FBI Las Vegas





# Workshop 2: ATM Security: Trends, Tactics & Strategy

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- **Brad Moody - EVP, Operations, Lowers Risk Group**
- **Brett Fenoglio - Supervisory Special Agent, Federal Bureau of Investigation**
- **Eric Hansel - President, Expert Lighting Group**
- **Jon Groussman - President, Lowers Risk Group**
- **Michael Negley - National Account Executive- SME, Cennox, Inc.**



# Human Capital Risks Commonly Stem From One or More of These 5 Critical Areas

**COMPLACENCY**



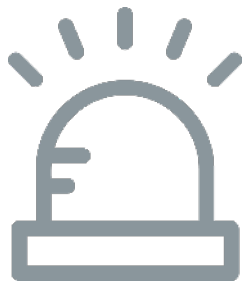
**TURNOVER**



**OCCUPATIONAL  
FRAUD**



**CATASTROPHIC  
WORKPLACE EVENTS**



**NEGLIGENT HIRING  
RETENTION**



**LEGAL  
IMPLICATIONS**



# Culprits of Complacency



**Foregoing a 'Moment Of Insight'**



**Excessive Sense of Confidence**



**False Sense of Reality**



**Tendency to Make Excuses**



**Lack of Situational Awareness**

# Social Engineering Methods

*Mediums/Methods of Attack Include:*



**Telephone**



**Email**



**Internet**



**Social Media**



**Mobile Devices**



**Dumpster Diving**



**Malware**

# Next Steps to Get Started

- Update policies and procedures
- Employee & vendor education and awareness programs
- Acceptable use agreements (signed/dated)
- Targeted assessments focused specifically on the top 2 digital assets

- Name your top 2 digital assets
- Create a network map
- Practice a Digital Disaster

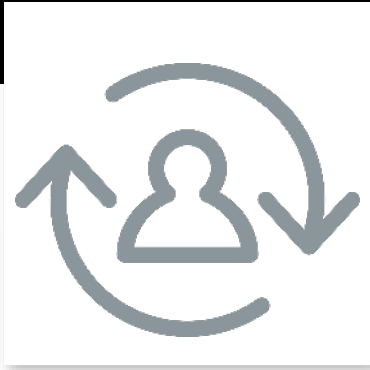
**30 to 90  
Days**

- Establish a Cross Functional Fraud & Security Council
- Work with Legal to discuss your data privacy and security standards
- Work with your Insurance company to plan out the coverages you need for cyber liability

**0 to 30  
Days**

**90+ Days**

# Turnover: A Costly Risk



## Direct Costs

- Separation
- Temporary Staffing
- Replacement
- Training



## Indirect Costs

- Lost Productivity
- Coping with Vacancy
- Learning Curve of New Employee
- Reduce Morale
- Lost Clients
- Lost Knowledge



Companies typically pay between **25% and 250%** of an employee's annual salary to replace that employee.

# Occupational Fraud



## Types

- **Corruption**
- **Asset Misappropriation**
- **Financial Statement Fraud**



## Costs

- **Management Costs**
- **Brand**
- **Staff Morale**
- **External Business Relations**
- **Regulator Relationships**
- **Share Value**



**Companies lose 5% of top-line revenue to fraud every year.**



# Catastrophic Events



The consequences of large failures can impose financial, reputational, loyalty, and other brand-related costs that will persist for a very long time.

- Active Assailant Incidents
- Major Data Breaches
- Armed Robberies
- Kidnappings
- Workplace Violence
- Etc.



**Every employer must not only prepare, but anticipate each potential catastrophic workplace event, before it occurs.**

# Negligent Hiring/Retention



Employers lose 75-80% of all negligent hiring claims.



It's about what you knew or **SHOULD HAVE KNOWN.**



Did you learn from the **Great Resignation?**



Employers bear the legal responsibility to exercise reasonable due diligence, ensuring they do not pose a foreseeable risk of harm to others within the scope of their employment.

# Legal Implications



**How to determine “Reasonable” security measures**



**Negligent Security Claims**



**Negligent Security Liability**



**Customer Security Liability**

# Questions & Wrap-Up

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