

NACSSHOW2019

PMIAA PEI CONEXXUS

Atlanta / Oct 1-4, 2019
Georgia World Congress Center

I have an idea—now what?



Launchers

EMV: Can you Afford not to Upgrade?

Wednesday October 2, 2019 8:00am

WE CAN CONEXXUS

Presenters



Kara Gunderson
POS Manager & PCIP
CITGO Petroleum Corp.



Jim Linton
Vice President
Folk Oil Company



Linda Toth
Director of Standards
Conexus

About Conexus

- ✓ We are independent & non-profit...
- ✓ We set standards...
- ✓ We provide clarity...
- ✓ We advocate for our industry...
- ✓ We improve profitability



Knowledge * Connections * Advocacy

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solve forward

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 **SECURITY
INNOVATION**

After This Session You Can...

1

List the risks associated with **waiting to convert** to EMV at the pump

2

Estimate the costs if you don't upgrade by October 1, 2020

3

Analyze the best practices and lessons learned from other retailers **implementing EMV**

What is EMV?

EMV

Europay

MasterCard

Visa

EMVCo maintains specification



Mag Stripe vs EMV (Chip)



- “Swipe”
- Static Card Data

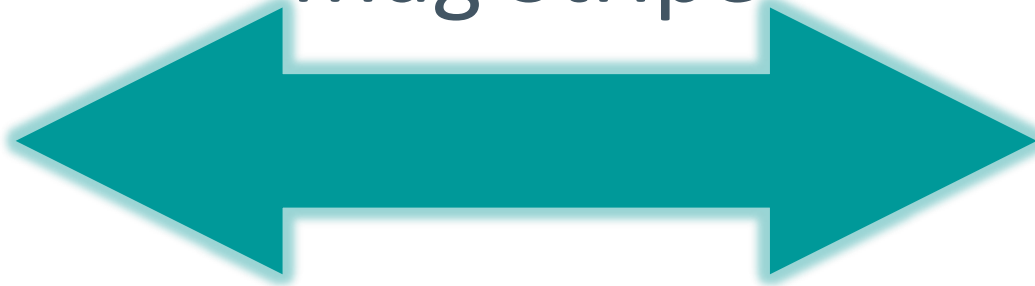
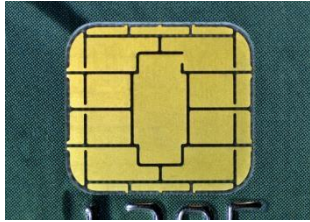
Chip: Secure IC (processor with memory)



- “Dip”
- Dynamic Card Data
- Magstripe Still Present
- Service Code Indicator in magstripe “EMV”

EMV Transaction

LOTS more data as compared to
Mag Stripe



Data secured with keys
"Cryptogram"

Liability Shift* Dates

Oct 1
2015

Oct 1
2020

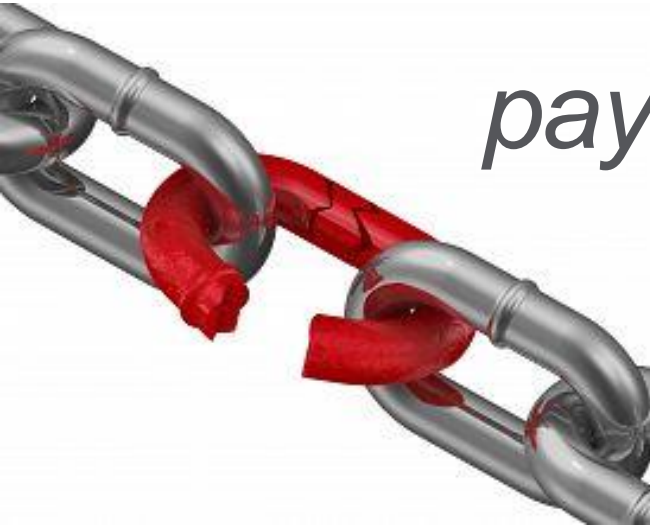
(3 yr. deferment)

Payment
Terminals
(except AFDs)

Outdoor
AFDs

Not a card brand mandate, but may be required by oil brands & is **a common-sense mandate*

*Liability shifts to the party in the
payment chain with the
least secure
payment technology*



Retailers are covered by
implementing EMV

Conexxus EMV Preparedness Survey
June 10 – July 8, 2019
1100+ Companies Invited
88 Responses representing 26,284 Sites

Indoor & Outdoor
Contact & Contactless
Fraud

EMV Preparedness

Conexxus Survey June, 2019

88 Responses representing 26,284 Sites

Indoor (Contact) EMV

100% Plan to Deploy

86% Fully Deployed

Lack of (Certified)
Software

EMV Preparedness

Conexxus Survey June, 2019

88 Responses representing 26,284 Sites

Outdoor (Contact) EMV

70% have ZERO sites deployed

80% Plan to deploy

17%
Undecided



EMV Preparedness

Conexxus Survey June, 2019

88 Responses representing 26,284 Sites

Outdoor (Contact) EMV

42% by Oct 1, 2020

+16% by
2021

25% Don't
Know

EMV Preparedness

Conexxus Survey June, 2019

88 Responses representing 26,284 Sites

Outdoor (Contact) EMV

17% Undecided about whether to Implement

Cost of Upgrades
(43%)*

Risk doesn't justify the
expense (43%)*

*Respondents could choose more than one reason

NOTICE!

\$451 MM projected in AFD fraud in 2020
How much will YOU be liable for?

Upgrade before
October 1, 2020

Why Upgrade to Outdoor EMV?

Chargeback Types

First, we need to explain the types of chargebacks
And who is paying for each type today

Chargebacks **Today**

**Lost or
Stolen**

Credit Card has been
lost or stolen

**Retailer
pays Fraud**

Counterfeit

Card in your wallet
Counterfeit card used
(Same card number)

**Bank
pays Fraud**

Without EMV after October 1, 2020

Lost or
Stolen

Credit Card has been
lost or stolen

Retailer
pays Fraud

Without EMV

Counterfeit

Card in your wallet
Counterfeit card used
(Same card number)

Retailer
pays Fraud

Who pays for what?

Let's look at that again

Outdoor EMV TODAY

Lost & Stolen Fraud

- Petroleum Retailers pay for lost & stolen chargebacks



Counterfeit Fraud

- Card Issuing Banks pay for counterfeit chargebacks



Install EMV by Oct 1, 2020

Lost & Stolen Fraud

Visa Lost &
Stolen paid
by Banks

Counterfeit Fraud

- Card Issuing Banks continue paying for counterfeit chargebacks



No EMV Outdoor Upgrade by Oct 1, 2020

Lost & Stolen Fraud

- Petroleum Retailers pay for lost & stolen chargebacks



Counterfeit Fraud

- Petroleum Retailers pay for counterfeit chargebacks



What Does That Mean?

10%

Lost & Stolen
Chargebacks

Paid by Retailers

TODAY

90%

Counterfeit
Chargebacks

Paid by Banks

UNTIL...Oct 1, 2020

What Does That Mean?

Without EMV

100%

10%

Lost & Stolen
Chargebacks

Paid by Retailers

90%

Counterfeit
Chargebacks

Paid by Retailers

Oct 1
2020

Check with your Oil Brand

Early upgrades may be required

Check with your oil brand or fuel supplier on the outdoor EMV liability shift.

Indemnification could end **before** Oct 1, 2020

NOTICE!

**Why pay for chargebacks AND
EMV upgrades?
Can you AFFORD both?**

**Upgrade before
October 1, 2020**



**Identify how to get ahead and justify
the investment in EMV**

**Upgrade before
October 1, 2020**

To Up Grade...
Or Not To...

Where are we at?

Folk Oil Outdoor EMV Status

100% completed!

To Upgrade...Or Not To...

Owner understanding the \$ impact

**Owner
Resistance**



Significant Investment

Calculating the Return on Investment (ROI)

Owner saves \$\$ by upgrading before Oct 1, 2020

Reduces Chargebacks

To Upgrade...Or Not To...

Why we chose to upgrade

GETTING AHEAD

Avoid paying chargebacks
and upgrading dispensers
after Oct 1, 2020

Avoid
Technician
Shortage

To Upgrade...Or Not To...

Technology upgrades

Early
Adoption

Consumer
Demand



NFC/Contactless (Tap & Pay)
\$27.23 Billion Sales by 2023*

*Source: Allied Market Research: "Contactless Payments by Market" white paper

To Upgrade...Or Not To...

Next steps after owner agreed

Individual Site Plans

Know
Technology
Upgrade
Options

New
Dispensers
-OR-
Retro Fit
Kits

CAT 6-7-8
Cables
-OR-
2-Pair or
Twisted

NOTICE!

**Potential chargebacks over next 7 years
will exceed \$201K per site!
Can you AFFORD to wait?**

**Upgrade before
October 1, 2020**



**Examine how to avoid counterfeit
chargeback fraud**

**Upgrade before
October 1, 2020**

Does EMV Really Work?

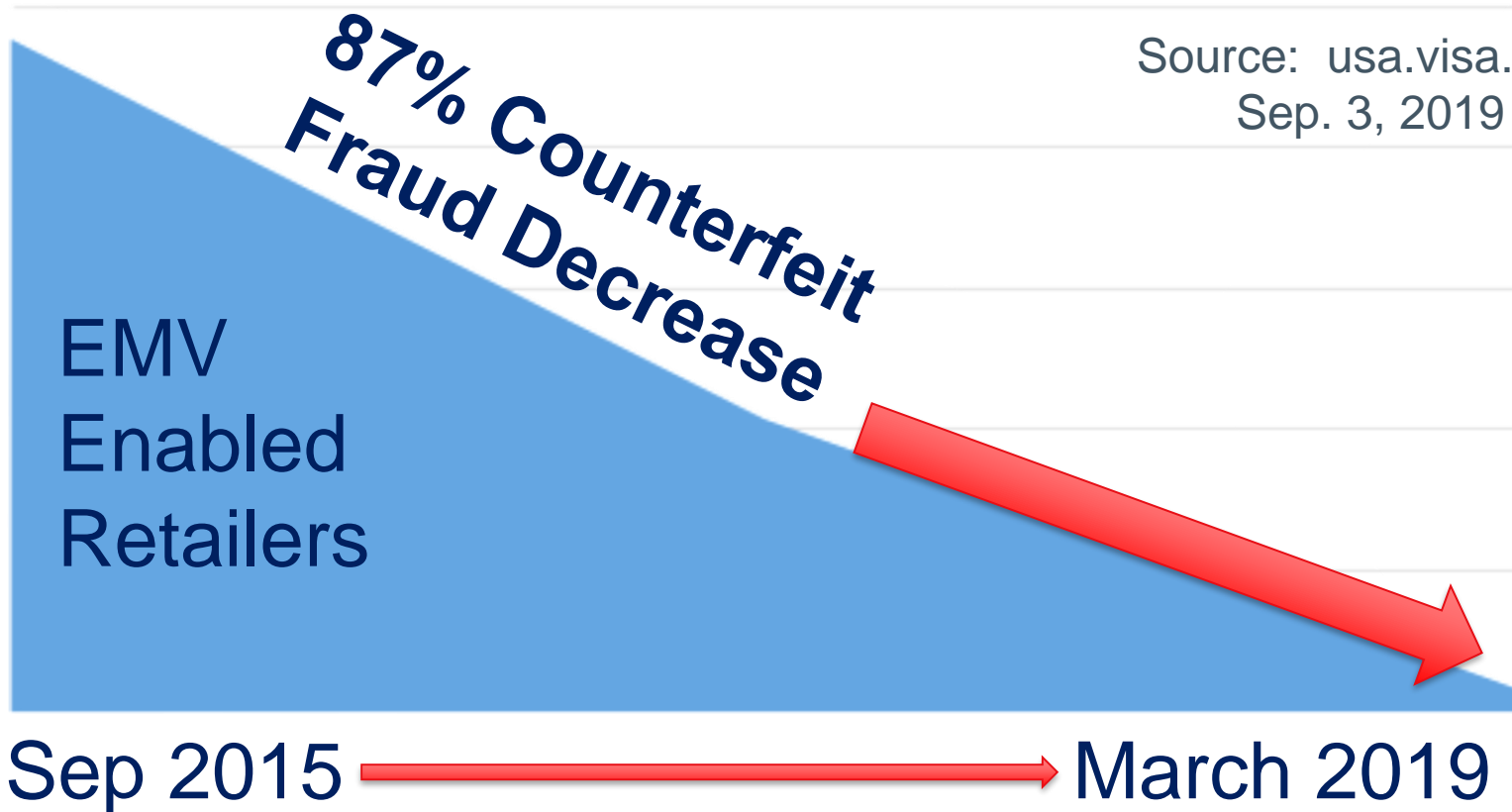
Does EMV Work?

EMV cards contain a “chip” that performs cryptographic functions making counterfeit fraud almost impossible.



Indoor EMV Results

EMV Works!



NOTICE!

**\$451 MM projected in AFD fraud in 2020
How much is YOUR share?**

**Upgrade before
October 1, 2020**

How did we calculate?

Glad you asked!

Counterfeit AFD Fraud

3 Major Card Brands Reporting as of 9/19

\$299 MM (actual) in 2018

23 % average YOY increase

Projected \$367 MM in 2019

Projected \$451 MM in 2020

Projected \$451 MM in 2020

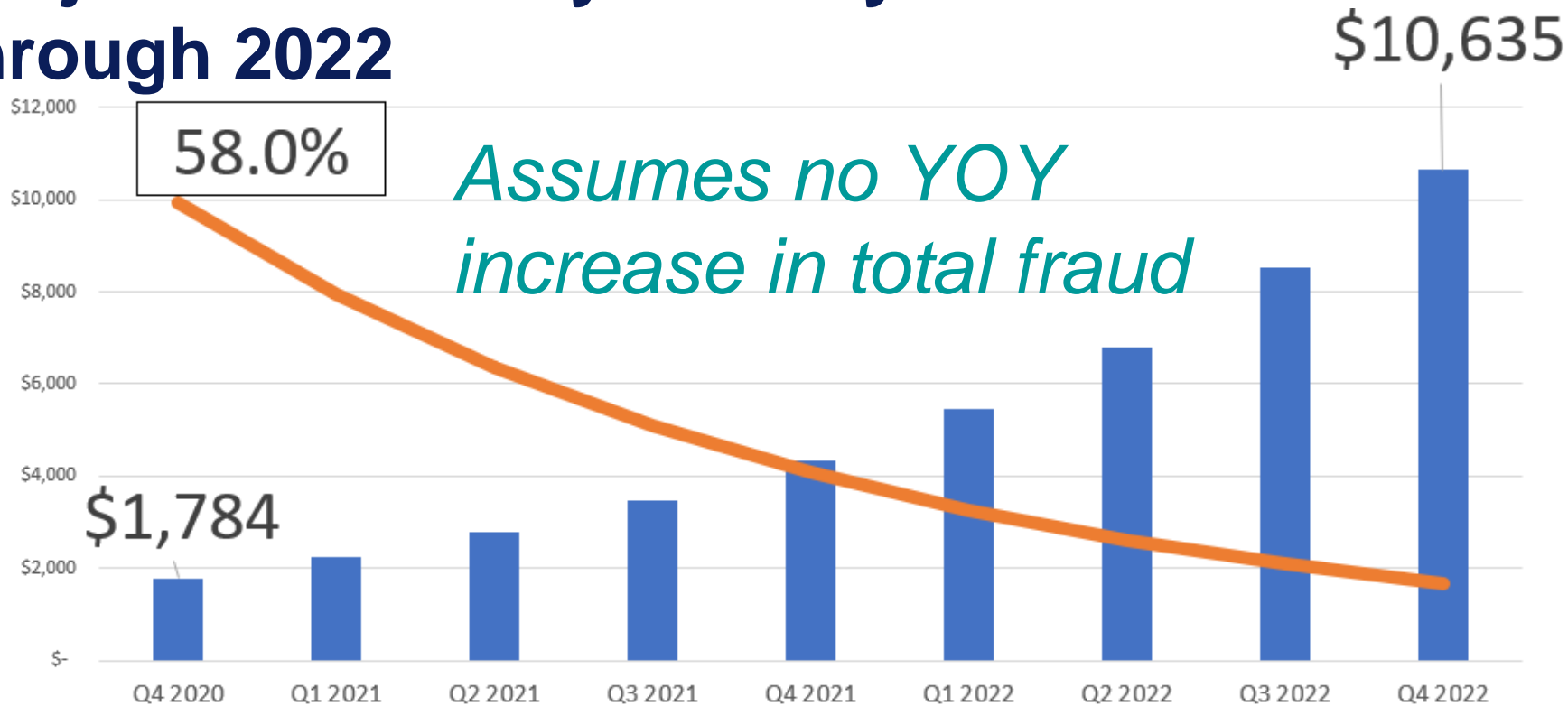
Fraud will seek non EMV
enabled sites!

Fraud Will Move Rural

When outdoor EMV is implemented in high fraud areas such as CA, AZ, TX, FL, fraud will shift to the “lower risk” areas



Projected Quarterly Liability Per Site through 2022



- Projected Liability per Store, per Quarter
- % of Stores Without EMV

Projected \$451 MM in 2020

Fraud will seek non EMV
enabled sites!

Annual Projected Liability Per Store

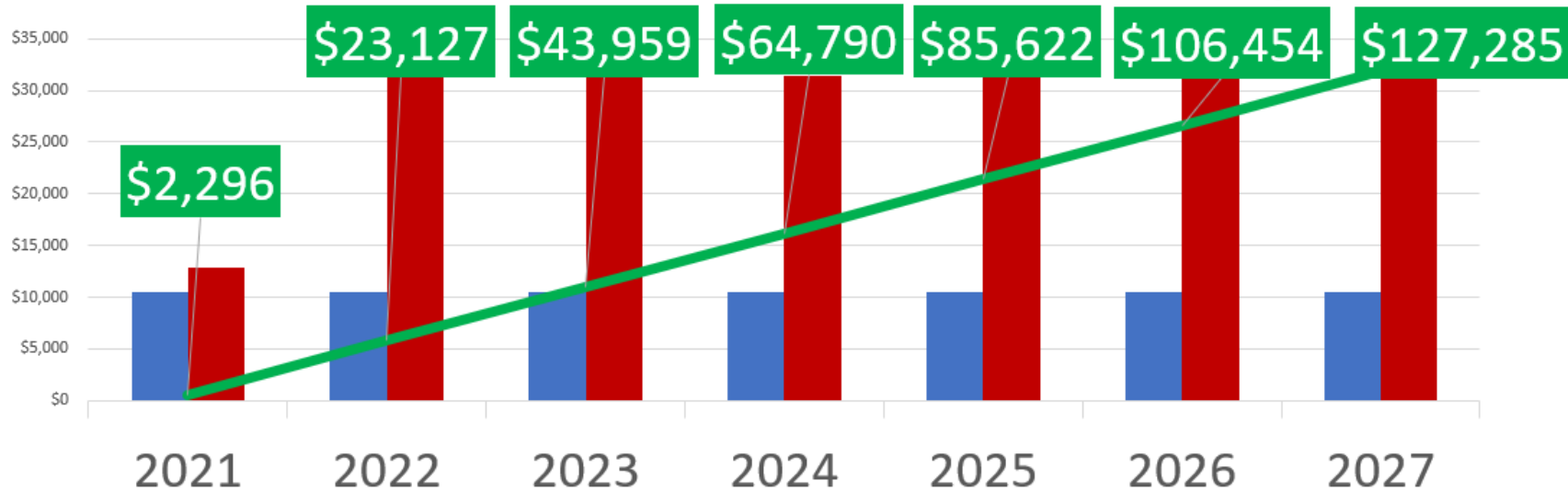
2021 = \$12,860

2022 = \$31,396

ROI – Finance Example

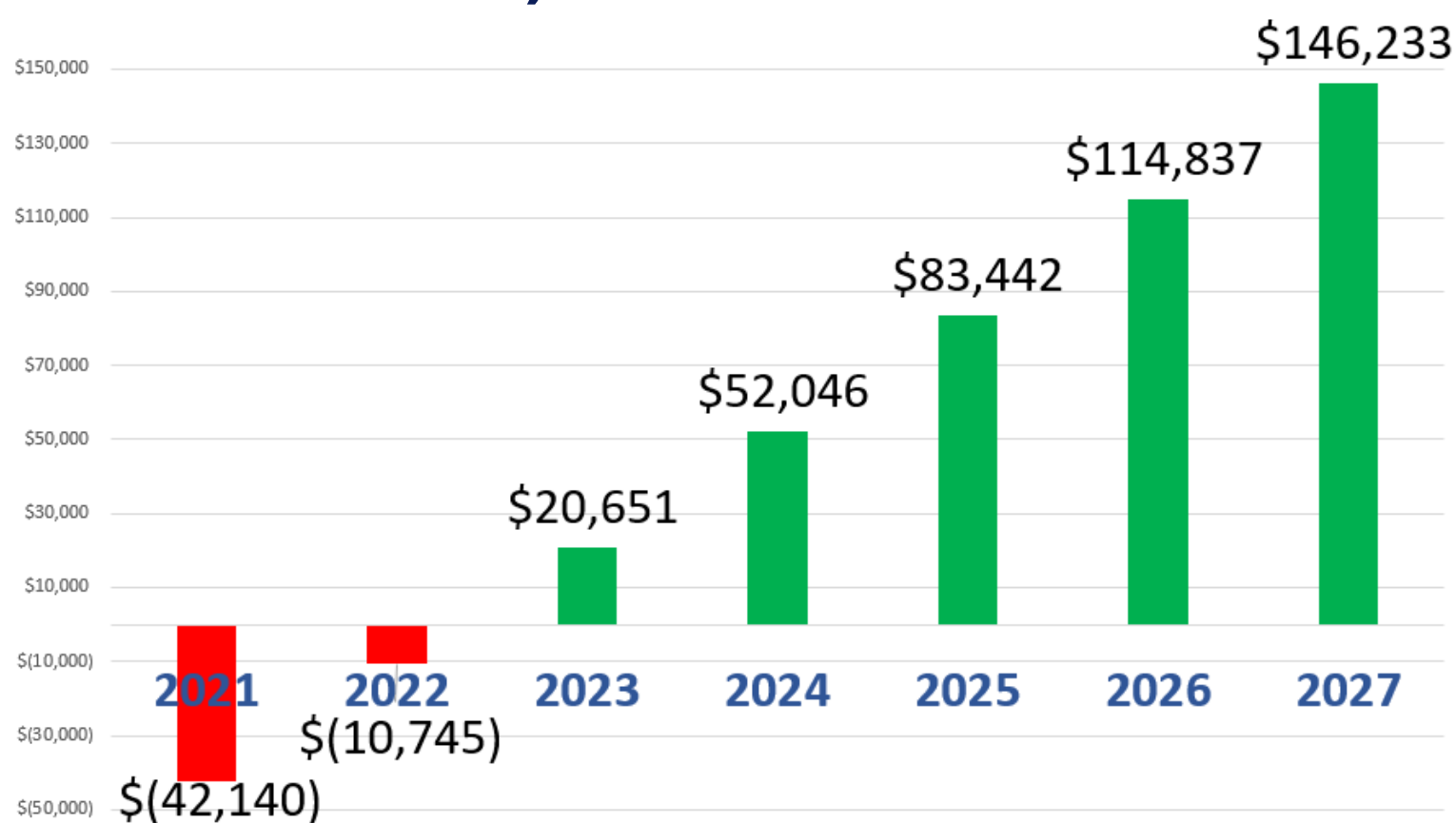
(Assumes \$55K at 8% over 7 years)

\$AVED



- Financed Upgrade Cost/Year (\$10,564)
- Annual Fraud Avoided (\$12,860, \$31,396)
- Cumulative Net Return on Investment \$AVE

ROI – Cash Example (Assumes \$55K)



Dispenser EMV is a 5-7 Year Investment!

Example \$55K Investment

Finance Example:

\$127K saved in chargebacks over 7 years

Cash Example:

\$146K saved in chargebacks over 7 years

NOTICE!

**Potential chargebacks over next 7 years
will exceed \$201K per site!
Can you AFFORD to wait?**

**Upgrade before
October 1, 2020**



**Analyze costs to calculate ROI
and upgrade benefits**

**Upgrade before
October 1, 2020**

Analyze Costs & Calculate ROI

Can you afford to wait?

**Can you afford the financial
impact?**

Analyze



RISK



REWARD

Wait Until AFTER Oct 1, 2020



RISK

- Pay for 100% Chargebacks
-- AND --
- Upgrade Fuel Dispensers

Upgrade BEFORE Oct 1, 2020

- ✓ Upgraded Fuel Dispensers
- ✓ New Technology
- ✓ Meet Customer Demands
- ✓ Reduced Chargebacks



REWARD

Calculate Risk

Obtain Counterfeit Fraud Amount

Sources



Major Oil - Fuel Brand

Credit Card Processing
Company

Look for Bundle
Deals with Other
Equipment or
Upgrades

Financing
Companies



Major Oil / Fuel
Brand Funding

Manufacturer
Upgrade \$pecials

NOTICE!

**Why pay for chargebacks AND
EMV upgrades?
Can you AFFORD both?**

**Upgrade before
October 1, 2020**



**Follow the steps to avoid
counterfeit chargeback fraud**

**Upgrade before
October 1, 2020**

Steps to Upgrade AFD's

Planning Outdoor EMV



4 to 6 Months

Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

1

Outdoor EMV
POS Software
Availability

Plan To Be Ready

Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

2

Age &
Reliability of
Dispensers

10+ Years	Replace
0-9 Years	Replace or Retrofit Kit

Consult with Dispenser Distributor

Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

3

Upgrade
Forecourt
Communication

Broadband Internet

Consult with Dispenser Distributor

Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

4

Order
Dispensers or
Retrofit Kits

Allow Plenty of Time

Consult with Dispenser Distributor

Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

5

Install
Dispensers or
Retrofit Kits

Schedule Ahead
Technicians in Demand

Consult with Dispenser Distributor

Planning Outdoor EMV Timeline

AUTOMATED FUEL DISPENSER ("AFD") UPGRADES

6

Allow 4-6
Months or
more!

Schedule Ahead
Technicians in Demand

Consult with Dispenser Distributor

Choose Technician

- For each location

Schedule Technician

- Weeks/months in advance



Technician Scheduling

Prior to Installation

Contact Provider(s)

Firewall,
MNSP and/or
Network

Update POS Profile

Terminal
Profile
Update with
Processor or
Brand

Obtain Permits

Building, EPA
& other

Be Patient!

Down times are longer

Technicians need to **follow your**
Implementation & Installation Guides

All brands and processors are different

New software for everyone

Expect a few hiccups with **software bugs**

Outdoor
EMV
Lessons
Learned

1. **Avoid Fridays & Holidays**
2. **Technician use** and **follow** customer-specific POS **implementation & installation guides**
3. **Individual Site Surveys** before ordering pumps
4. **Test & verify transactions** with payment processor or brand before technician leaves
5. Pay **technician** to **stay** extra 30-60 minutes to **watch for issues**

NOTICE!

Waiting to upgrade could cost you \$201K per site over the next 7 years.

Can you AFFORD to wait?

**Upgrade before
October 1, 2020**



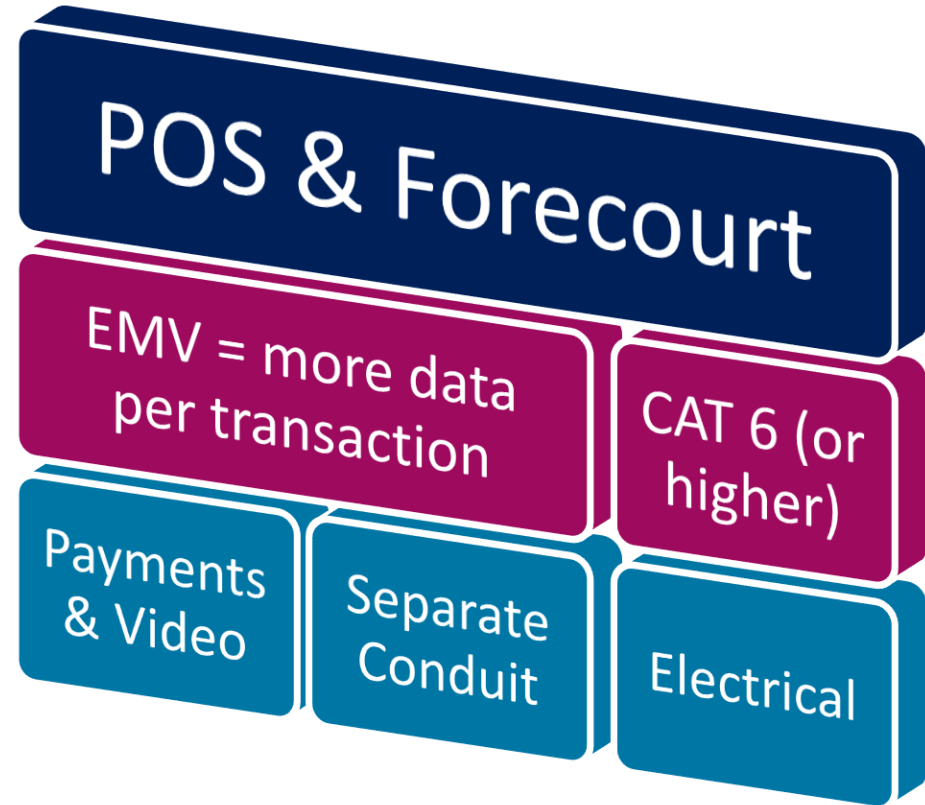
**Identify additional upgrade
requirements**

**Upgrade before
October 1, 2020**

Other Forecourt Upgrades

Communication Upgrades

**Business
Grade
Broadband
Internet for
Forecourt &
POS**



Triple DES PIN Pad

Oct 1, 2020 Requirement



- Triple Debit Encryption Standard
- “TDES”
- **Required for PIN Debit if not upgrading to EMV**
- **Included with EMV Upgrade**

Single DES PIN Pad

Discontinue Oct 1, 2020



- Single Debit Encryption Standard
- “SDES”
- Upgrade to EMV or TDES, or disable PIN debit acceptance

CAUTION

**TDES does not replace
EMV**

**Lost, Stolen & Counterfeit
Chargebacks will be yours**

NOTICE!

TDES only
is NOT EMV
Acceptance

\$451 MM projected in AFD fraud in 2020
How much will YOU be liable for?

**Upgrade before
October 1, 2020**



**Make good business decisions to
avoid long-term costs**

**Upgrade before
October 1, 2020**



Technician Helpful Tips

Technicians

Technician **demand** exceeds supply

- 700+ fuel technician job postings

Technician **lead times** for your project

- 6-8 weeks; will only get longer

Down time during installation

- EMV upgrades take many hours

Black-out periods

- Holidays
- Winter Weather





**Work together for successful
outdoor EMV upgrades**

**Upgrade before
October 1, 2020**

Purchase? Or Finance?

Financing Upgrades

\$ Purchase \$

**New
Dispensers
Capitalize &
Depreciate**

**Retrofit
Kits
Expense**

\$ Finance \$

**Monthly
Payments**

**Companies
here at
NACS**



Upgrade Today!

Avoid counterfeit chargeback fraud

**Upgrade before
October 1, 2020**

UPGRADE NOW!

Upgrade to Outdoor EMV

1 Plan & meet with staff and technicians

2 Individual Site Plans

- Upgrade POS Software
- Schedule technicians
- Business-grade Broadband Internet for fuel dispensers and POS
- Order & install dispensers/upgrades

3 Complete before Oct 1, 2020

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Don't Delay!

WE CAN

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**Upgrade to
Outdoor EMV
Now!**

WE CAN

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**Upgrade before
Oct 1, 2020**

WE CAN

Plan 4-6 Months

NOTICE!

EMV:

Can you AFFORD not to upgrade?

**Upgrade before
October 1, 2020**

Session Notes

1

Learned the risks associated with **waiting to convert** to EMV at the pump

2

Estimated the costs if you don't upgrade by October 1, 2020

3

Analyzed the best practices and **lessons learned** from other retailers **implementing EMV**

Resources

Conexxus.org

- Resources/EMV Resources (Resource Guide, Survey Results)
- Webinars (webinars@conexxus.org)

NACS Show

- Vendors Booths
- Tech Edge Solution Center # 3755







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