

# 2022 GWCO Congress



## Counterfeit Cash, Credit Card Cons, & Shoplifting Security

# Counterfeit Cash, Credit Card Cons, & Shoplifting Security

Dr Robert Reed Jr O.D.

GWCO

October 9, 2022



**“There’s a NEW sheriff in town.”**

# Financial disclaimer

Nobody pays me to sell you anything, nor influences what information I provide to you.

I'm willing to accept cash, but let's make sure it's NOT counterfeit!

# Disclosure



**I do NOT claim to be an expert in this area, but have been the victim of these incidents & want to share what I've learned by research & experience to keep the bad guys from winning.**

**If I offend anyone, I apologize now.**

**If anyone would like to contribute to the talk, I hope we'll have a few minutes at the end to hear other stories, & if not PLEASE share them with me after class.**

# Learning Objectives



**After completing lecture attendee will be able to:**

- 1) Recognize methods not-so-honest people use to illegally obtain merchandise & money**
- 2) Employ methods to identify real vs counterfeit currency of various denominations**
- 3) Employ behavior concepts if confronted by a possible situation in the office**
- 4) Exhibit confidence to prevent potential office losses**

# Class Description

We're so busy today trying to make money in practice, we sometimes don't think about ways we may be losing it. There is an ongoing & growing business in counterfeit cash, credit card scams, & shoplifting. What you don't know can hurt you financially, so come & learn some of the necessary tips & tricks to protect your practice.

**P.S. --- Bring a \$20 bill with you.**



# **It can't happen to me...** **...can it?**

## **Credit Card Cons**

**\$3.64T in CC 2019**

**\$41B fraud losses 2019**

**2021- 80% US cards hacked**

**30%+ ID breached**

**US 12% of CC business,  
but 35% of fraud total  
(2018)**

**As of October 2015**

**merchants can be held responsible for CC losses, NOT the banks. In 2020, business's, 'ate' 1/3 of fraud losses.**

## **Shoplifting Statistics 2021**

**\$62B in 2020**

**= \$169M/day**

**Less events/Larger value**

**Value 2-5% of office GROSS**

**Example-gross \$700,000**

**Loss = \$14T - \$35T**

# ...and Counterfeit Cash

\$2.04T in global circulation - \$1.02T in US

.03 of 1% counterfeit (~ 1 out of 10,000 bills)

>\$300M fake - # 1 - \$20 #2 - \$100 #3 - \$50

Optical is prime

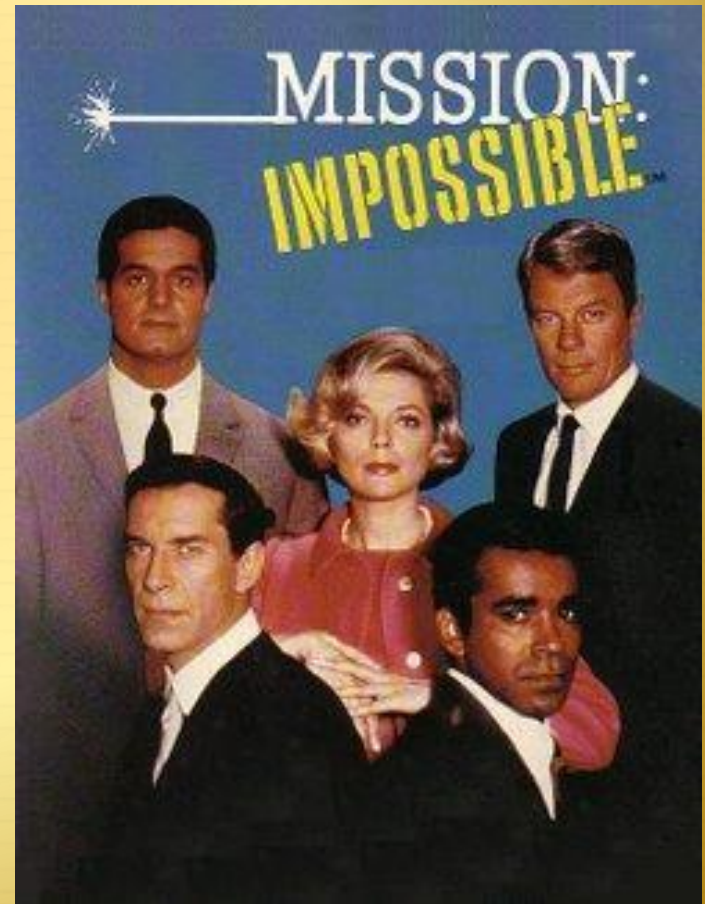
target for

phony cash





# Dishonest mentality difference



# Counterfeit passers



## 4 TYPES

## Situations

**Kids**

**Small purchase with large bill**

**Unknowing**

**Large purchase frame only or  
non-Rx sunglass**

**Amateurs**

**Professionals**

**Non-patient making quick  
buying decisions**

**Anyone paying all cash**

# **IDing a Counterfeit**



## **PAY ATTENTION TO CASH IN HAND!**

**First is the paper --- it “just doesn’t FEEL right”**

**Distinctive weight & texture, fine red & blue fibers**

**Rub across coat & collar of the pictured person on bill**

**Fine ridges are part of sophisticated printing process**

**Look at serial numbers**

**Number on 2 different places should match**

**If more than 1 bill, each bill has different number**

**Purchase & use Counterfeit pen**

**Gold is GOOD. Black or Blue is BAD**

# 2 Old \$5.00 Versions

## \$5 Note

Issued 1993 - 2000

All U.S. currency remains legal tender, regardless of when it was issued.



### Key Security Features

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the left of the Federal Reserve Bank seal. The thread is imprinted with the letters *USA* and the word *FIVE* in an alternating pattern and is visible from both sides of the note. The thread glows blue when illuminated by ultraviolet light.

#### Microprinting

Look carefully (magnification may be necessary) to see the small printed words *THE UNITED STATES OF AMERICA* along the outer edge of the portrait's oval frame.



### Additional Design and Security Features



**Federal Reserve Bank Seal**  
A black seal to the left of the portrait bears the name and corresponding letter of the distributing Federal Reserve Bank.



**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.



**Portrait and Vignette**  
The \$5 note features a portrait of President Lincoln on the front of the note and a vignette of the Lincoln Memorial on the back of the note.



**Serial Numbers**  
A unique combination of numbers and letters that appears twice on the front of the note. For information about the serial numbers and other indicators on the note click [here](#).



**Series Year**  
The design includes series years 1993 and 1995.

## \$5 Note

Issued 2000 - 2008

All U.S. currency remains legal tender, regardless of when it was issued.



### Key Security Features

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the left of the portrait. The thread is imprinted with the text *USA FIVE* and a small flag in an alternating pattern and is visible from both sides of the note. The thread glows blue when illuminated by ultraviolet light.

#### Watermark

Hold the note to light and look for a faint image of President Lincoln in the blank space to the right of the portrait. The image is visible from both sides of the note.



### Additional Design and Security Features



**Federal Reserve System Seal**  
A black seal to the left of the portrait represents the entire Federal Reserve System. A letter and number beneath the left serial number identifies the distributing Federal Reserve Bank.



**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.



**Paper**  
Federal Reserve note paper is one-fourth linen and three-fourths cotton, and contains red and blue security fibers.



**Microprinting**  
Look carefully (magnification may be necessary) to see the small printed words *FIVE DOLLARS* inside the left and right borders of the note and *UNITED STATES OF AMERICA* along the lower edge of the portrait's oval frame.



**Portrait and Vignette**  
The \$5 note features a portrait of President Lincoln on the front of the note and a vignette of the Lincoln Memorial on the back of the note.



**Green 5**  
A large green numeral 5 on the back of the note helps those with visual impairments distinguish the denomination.



**Treasury Seal**  
A green seal to the right of the portrait represents the U.S. Department of the Treasury.



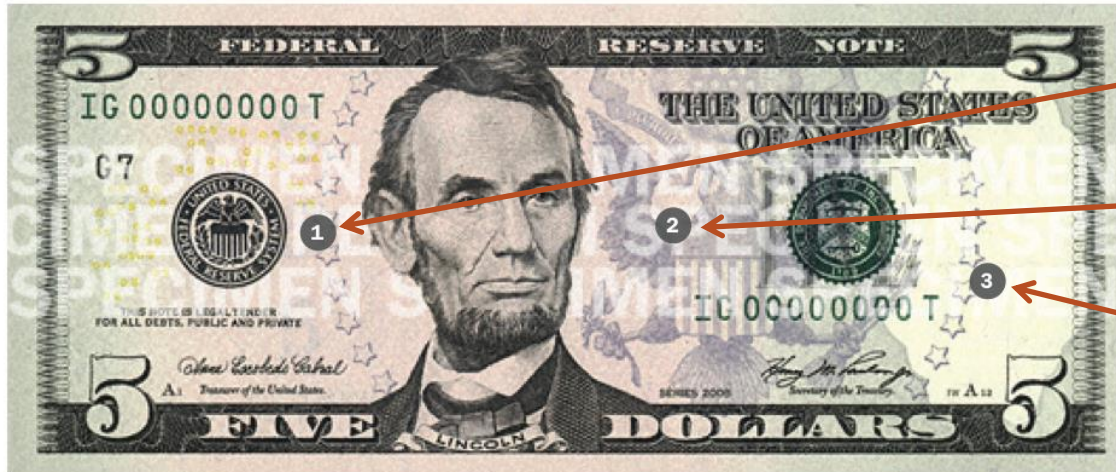
**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note click [here](#).



**Series Year**  
The design includes series years 1999, 2001, 2003, 2003A, and 2006.

# \$5

The redesigned \$5 note was first issued in 2008. It has three key security features that are easy to check: a column of three small numeral 5 watermarks, a security thread, and a large numeral 5 watermark.



**“5”s column**  
**security strip**  
**watermark “5”**



1. Watermark:  
Column of three smaller  
numeral 5s

2. Security Thread

3. Watermark:  
Large numeral 5

# \$10.00

## 2004 - present

## 2000 - 2004

## 1990 - 2000

Issued 2006 - Present



[Interactive Note](#)

[Security Features](#)

[Images](#)

[Flip](#)

Issued 2000 - 2006



[Security Features](#)

[Images](#)

[Flip](#)

Issued 1990 - 2000



# 2 Old \$10 Versions

## \$10 Note

Issued 2000 - 2006

All U.S. currency remains legal tender, regardless of when it was issued.



### Key Security Features

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the right of the portrait. The thread is imprinted with the text *USA TEN* and a small flag in an alternating pattern and is visible from both sides of the note. The thread glows orange when illuminated by ultraviolet light.

#### Watermark

Hold the note to light and look for a faint image of Secretary Hamilton in the blank space to the right of the portrait. The image is visible from both sides of the note.

#### Color-Shifting Ink

Tilt the note to see the numeral *10* in the lower right corner of the front of the note shift from green to black.



### Additional Design and Security Features

**Federal Reserve System Seal**  
A black seal to the left of the portrait represents the entire Federal Reserve System. A letter and number beneath the left serial number identifies the distributing Federal Reserve Bank.

**Microprinting**  
Look carefully (magnification may be necessary) to see the small printed words *THE UNITED STATES OF AMERICA* repeated just above Hamilton's name and *TEN* repeated in the numeral in the lower left-hand corner.

**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.

**Paper**  
Federal Reserve note paper is one-fourth linen and three-fourths cotton, and contains red and blue security fibers.

**Portrait and Vignette**  
The \$10 note features a portrait of Secretary Hamilton on the front of the note and a vignette of the United States Treasury Building on the back of the note.

**Green 10**  
A large green numeral *10* on the back of the note helps those with visual impairments distinguish the denomination.

**Treasury Seal**  
A green seal to the right of the portrait represents the U.S. Department of the Treasury.

**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).

**Series Year**  
The design includes series years 1999, 2001, and 2003.

For more information about U.S. currency visit [www.newmoney.gov](http://www.newmoney.gov)

## \$10 Note

Issued 1990 - 2000



### Key Security Features

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the right of the portrait. The thread is imprinted with the text *USA TEN* and a small flag in an alternating pattern and is visible from both sides of the note. The thread glows orange when illuminated by ultraviolet light.

#### Watermark

Hold the note to light and look for a faint image of Secretary Hamilton in the blank space to the right of the portrait. The image is visible from both sides of the note.

#### Color-Shifting Ink

Tilt the note to see the numeral *10* in the lower right corner of the front of the note shift from copper to green.



### Additional Design and Security Features

**Federal Reserve System Seal**  
A black seal to the left of the portrait represents the entire Federal Reserve System. A letter and number beneath the left serial number identifies the distributing Federal Reserve Bank.

**Microprinting**  
Look carefully (magnification may be necessary) to see the small printed text *THE UNITED STATES OF AMERICA* and *TEN DOLLARS* USA below the portrait and inside the borders of the note and *USA 10* repeated beneath the torch.

**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.

**Paper**  
Federal Reserve note paper is one-fourth linen and three-fourths cotton, and contains red and blue security fibers.

**Color**  
The note includes background colors of orange, yellow, and red.

**Portrait and Vignette**  
The \$10 note features a portrait of Secretary Hamilton on the front of the note and a vignette of the United States Treasury Building on the back of the note.

**Symbols of Freedom**  
An image of the torch carried by the Statue of Liberty is printed in red to the left of the portrait of Secretary Hamilton. A smaller metallic red image of the torch can be found on the lower right side of the portrait.

**Green 10**  
A large green numeral *10* on the back of the note helps those with visual impairments distinguish the denomination.

**Treasury Seal**  
A green seal to the right of the portrait represents the U.S. Department of the Treasury.

**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).

**Series Year**  
The design includes series years 2004A, 2006, 2009, and 2013.

For more information about U.S. currency visit [www.newmoney.gov](http://www.newmoney.gov)

# \$10



The redesigned \$10 note was first issued in 2006. It has three key security features that are easy to check: a security thread, portrait watermark, and color-shifting numeral 10.



1. Security Thread    2. Portrait Watermark    3. Color-Shifting 10



1. Security strip

2. Watermark

3. 10 changes Color



Issued 2003 - Present



[Interactive Note](#)

[Security Features](#)

[Images](#)

[Flip](#)

Issued 1998 - 2003



[Security Features](#)

[Images](#)

[Flip](#)

Issued 1990 - 1998



# \$20.00

## 2003 - present

New \$20 with Harriet Tubman replacing Jackson. Was supposed to be on \$10, but huge uproar due to “Hamilton” Broadway show by Lin-Manuel Miranda

## 1998 - 2003

## 1990 - 1998

# 2 Old \$20 Versions

## \$20 Note

Issued 1990 - 1998

All U.S. currency remains legal tender, regardless of when it was issued.



### Key Security Features

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the left of the Federal Reserve Bank seal. The thread is imprinted with the letters *USA* and the word *TWENTY* in an alternating pattern and is visible from both sides of the note. The thread glows green when illuminated by ultraviolet light.

#### Microprinting

Look carefully (magnification may be necessary) to see the small printed words *THE UNITED STATES OF AMERICA* along the outer edge of the portrait's oval frame.



### Additional Design and Security Features



**Federal Reserve Bank Seal**  
A black seal to the left of the portrait which bears the name and corresponding letter of the distributing Federal Reserve Bank.



**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.



**Portrait and Vignette**  
The \$20 note features a portrait of President Jackson on the front of the note and a vignette of the White House on the back of the note.



**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).



**Series Year**  
The design includes series years 1990, 1993, and 1995.

For more information about U.S. currency visit [www.newmoney.gov](http://www.newmoney.gov)

## \$20 Note

Issued 1998 - 2003

All U.S. currency remains legal tender, regardless of when it was issued.



### Key Security Features

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the left of the portrait. The thread is imprinted with the text *USA TWENTY* and a small flag in an alternating pattern and is visible from both sides of the note. The thread glows green when illuminated by ultraviolet light.

#### Watermark

Hold the note to light and look for a faint image of President Jackson in the blank space to the right of the portrait. The image is visible from both sides of the note.

#### Color-Shifting Ink

Tilt the note to see the numeral *20* in the lower right corner of the front of the note shift from green to black.



### Additional Design and Security Features



**Federal Reserve System Seal**  
A black seal to the left of the portrait represents the entire Federal Reserve System. A letter and number beneath the left serial number identifies the distributing Federal Reserve Bank.



**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.



**Paper**  
Federal Reserve note paper is one-fourth linen and three-fourths cotton, and contains red and blue security fibers.



**Microprinting**  
Look carefully (magnification may be necessary) to see the small printed text *USA20* repeated within the numeral in the lower left corner on the front of the note and *THE UNITED STATES OF AMERICA* along the lower edge ornamentation framing the portrait.



**Portrait and Vignette**  
The \$20 note features a portrait of President Jackson on the front of the note and a vignette of the White House on the back of the note.



**Green 20**  
A large green numeral *20* in the lower right corner on the back of the note helps those with visual impairments distinguish the denomination.



**Treasury Seal**  
A green seal to the right of the portrait represents the U.S. Department of the Treasury.



**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).



**Series Year**  
The design includes series years 1996, 1999, and 2001.

For more information about U.S. currency visit [www.newmoney.gov](http://www.newmoney.gov)

# \$20 Note

Issued 2003 - Present

All U.S. currency remains legal tender, regardless of when it was issued.



# \$20



## Watermark

## 20 shifts color

## security thread

### Key Security Features

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the left of the portrait. The thread is imprinted with the text *USA TWENTY* and a small flag in an alternating pattern and is visible from both sides of the note. The thread glows green when illuminated by ultraviolet light.

#### Watermark

Hold the note to light and look for a faint image of President Jackson in the blank space to the right of the portrait. The image is visible from both sides of the note.

#### Color-Shifting Ink

Tilt the note to see the numeral *20* in the lower right corner of the front of the note shift from copper to green.



### Additional Design and Security Features



#### Federal Reserve System Seal

A black seal to the left of the portrait represents the entire Federal Reserve System. A letter and number beneath the left serial number identifies the distributing Federal Reserve Bank.



#### Raised Printing

Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.



#### Portrait and Vignette

The \$20 note features a portrait of President Jackson on the front of the note and a vignette of the White House on the back of the note.



#### Treasury Seal

A green seal to the right of the portrait represents the U.S. Department of the Treasury.



#### Microprinting

Look carefully (magnification may be necessary) to see the small printed text *USA 20* along the border of the first three letters of the blue *TWENTY USA* ribbon to the right of the portrait and *THE UNITED STATES OF AMERICA 20 USA 20* in black in the border below the Treasurer's signature.



#### Paper

Federal Reserve note paper is one-fourth linen and three-fourths cotton, and contains red and blue security fibers.



#### Symbols of Freedom

The large blue eagle in the background to the left of President Jackson's portrait is representative of those drawn and sculpted during his time period. The smaller metallic green eagle to the lower right of the portrait is a more contemporary engraving.



#### Serial Numbers

A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).



#### Color

The note includes background colors of green and peach. The words *TWENTY USA* have been printed in blue in the background to the right of the portrait.



#### Green 20

A large green numeral *20* in the lower right corner on the back of the note helps those with visual impairments distinguish the denomination.



#### Series Year

The design includes [series years](#) 2004, 2004A, 2006, 2009, and 2013.

Issued 2004 - Present



[Interactive Note](#)

[Security Features](#)

[Images](#)

[Flip](#)

Issued 1997 - 2004



[Security Features](#)

[Images](#)

[Flip](#)

Issued 1990 - 1997



# \$50.00

## 2004 – present

## 1997 – 2004

## 1990 - 1997

# 2 Old \$50 Versions

## \$50 Note

Issued 1990 - 1997

All U.S. currency remains legal tender, regardless of when it was issued.



### Key Security Features

### Security Thread

Hold the note to light to see an embedded thread running vertically to the right of the portrait. The thread is imprinted with the text *USA 50* in an alternating pattern and is visible from both sides of the note. The thread glows yellow when illuminated by ultraviolet light.

### Microprinting

Look carefully (magnification may be necessary) to see the small printed words *THE UNITED STATES OF AMERICA* along the outer edge of the portrait's oval frame.



### Additional Design and Security Features



**Federal Reserve Bank Seal**  
A black seal to the left of the portrait bears the name and corresponding letter of the distributing Federal Reserve Bank.



**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.



**Portrait and Vignette**  
The \$50 note features a portrait of President Grant on the front of the note and a vignette of the United States Capitol on the back of the note.



**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).



**Series Year**  
The design includes series years 1990 and 1993.

For more information about U.S. currency visit [www.newmoney.gov](http://www.newmoney.gov)

## \$50 Note

Issued 1997 - 2004

All U.S. currency remains legal tender, regardless of when it was issued.



### Key Security Features

### Security Thread

Hold the note to light to see an embedded thread running vertically to the right of the portrait. The thread is imprinted with the text *USA 50* and a small flag in an alternating pattern and is visible from both sides of the note. The thread glows yellow when illuminated by ultraviolet light.

### Watermark

Hold the note to light and look for a faint image of President Grant in the blank space to the right of the portrait. The image is visible from both sides of the note.

### Color-Shifting Ink

Tilt the note to see the numeral 50 in the lower right corner on the front of the note shift from green to black.



### Additional Design and Security Features



**Federal Reserve Bank Seal**  
A black seal to the left of the portrait represents the entire Federal Reserve System. A letter and number beneath the left serial number identifies the distributing Federal Reserve Bank.



**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.



**Paper**  
Federal Reserve note paper is one-fourth linen and three-fourths cotton, and contains red and blue security fibers.



**Microprinting**  
Look carefully (magnification may be necessary) to see the small printed words *FIFTY* repeated in the alternating spaces in the vertical side borders of the note and *THE UNITED STATES OF AMERICA* in the left side of President Grant's collar.



**Portrait and Vignette**  
The \$50 note features a portrait of President Grant on the front of the note and a vignette of the United States Capitol on the back of the note.



**Green 50**  
A large green numeral 50 on the back of the note helps those with visual impairments distinguish the denomination.



**Treasury Seal**  
A green seal to the right of the portrait represents the U.S. Department of the Treasury.



**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).



**Series Year**  
The design includes series years 1996 and 2001.

For more information about U.S. currency visit [www.newmoney.gov](http://www.newmoney.gov)

# \$50 Note

Issued 2004 - Present

All U.S. currency remains legal tender, regardless of when it was issued.



# \$50



watermark

50 changes color

security strip

## Key Security Features

### Security Thread

Hold the note to light to see an embedded thread running vertically to the right of the portrait. The thread is imprinted with the text *USA 50* and a small flag in an alternating pattern and is visible from both sides of the note. The thread glows yellow when illuminated by ultraviolet light.

### Watermark

Hold the note to light and look for a faint image of President Grant in the blank space to the right of the portrait. The image is visible from both sides of the note.

### Color-Shifting Ink

Tilt the note to see the numeral *50* in the lower right corner on the front of the note shift from copper to green.



## Additional Design and Security Features



### Federal Reserve System Seal

A black seal to the left of the portrait represents the entire Federal Reserve System. A letter and number beneath the left serial number identifies the distributing Federal Reserve Bank.



### Microprinting

Look carefully (magnification may be necessary) to see the small printed text *FIFTY*, *USA*, and *50* inside two of the blue stars to the left of the portrait, *FIFTY* repeated within both side borders of the note, and *THE UNITED STATES OF AMERICA* in President Grant's collar.



### Raised Printing

Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.



### Paper

Federal Reserve note paper is one-fourth linen and three-fourths cotton, and contains red and blue security fibers.



### Color

The note includes subtle background colors of blue and red to both sides of the note.



### Portrait and Vignette

The \$50 note features a portrait of President Grant on the front of the note and a vignette of the United States Capitol on the back of the note.



### Symbols of Freedom

Representative of the United States flag, a field of blue stars is located to the left of the portrait, while three red stripes are located to the right of the portrait. A small metallic silver-blue star is located on the lower right side of the portrait.



### Green 50

A large green numeral *50* on the back of the note helps those with visual impairments distinguish the denomination.



### Treasury Seal

A green seal to the right of the portrait represents the U.S. Department of the Treasury.



### Serial Numbers

A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).



### Series Year

The design includes [series years](#) 2004, 2004A, 2006, and 2009.

Issued 2013 - Present



Interactive Note

Security Features

Images

Flip

# \$100.00

## 2013 – present

Issued 1996 - 2013



Security Features

Images

Flip

## 1996 – 2013

Issued 1990 - 1996



## 1900- 1996

# 2 Old \$100 Versions

## \$100 Note

Issued 1990 - 1996

All U.S. currency remains legal tender, regardless of when it was issued.



### Key Security Features

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the left of the portrait. The thread is imprinted with the letters *USA* and the numeral *100* in an alternating pattern and is visible from both sides of the note. The thread glows pink when illuminated by ultraviolet light.

#### Microprinting

Look carefully (magnification may be necessary) to see the small printed words *THE UNITED STATES OF AMERICA* along the outer edge of the portrait's oval frame.



### Additional Design and Security Features

**Federal Reserve Bank Seal**  
A black seal to the left of the portrait bears the name and corresponding letter of the distributing Federal Reserve Bank.

**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.

**Portrait and Vignette**  
The \$100 note features a portrait of Benjamin Franklin on the front of the note and a vignette of Independence Hall on the back of the note.

**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).

**Series Year**  
The design includes series years 1990 and 1993.

**Treasury Seal**  
A green seal to the right of the portrait represents the U.S. Department of the Treasury.

**Paper**  
Federal Reserve note paper is one-fourth linen and three-fourths cotton, and contains red and blue security fibers.

For more information about U.S. currency visit [www.newmoney.gov](http://www.newmoney.gov)

## \$100 Note

Issued 1996 - 2013

All U.S. currency remains legal tender, regardless of when it was issued.



### Key Security Features

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the left of the portrait. The thread is imprinted with the letters *USA* and the numeral *100* in an alternating pattern and is visible from both sides of the note. The thread glows pink when illuminated by ultraviolet light.

#### Watermark

Hold the note to light and look for a faint image of Benjamin Franklin in the blank space to the right of the portrait. The image is visible from both sides of the note.

#### Color-Shifting Ink

Tilt the note to see the numeral *100* in the lower right corner of the front of the note shift from green to black.



### Additional Design and Security Features

**Federal Reserve System Seal**  
A black seal to the left of the portrait represents the entire Federal Reserve System. A letter and number beneath the left serial number identifies the distributing Federal Reserve Bank.

**Raised Printing**  
Move your finger along the note's surface to feel the raised printing, which gives genuine Federal Reserve notes their distinctive texture.

**Paper**  
Federal Reserve note paper is one-fourth linen and three-fourths cotton, and contains red and blue security fibers.

**Portrait and Vignette**  
The \$100 note features a portrait of Benjamin Franklin on the front of the note and a vignette of Independence Hall on the back of the note.

**Treasury Seal**  
A green seal to the right of the portrait represents the U.S. Department of the Treasury.

**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).

**Series Year**  
The design includes series years 1996, 1999, 2001, 2003, 2003A, 2006, and 2006A.

**Microprinting**  
Look carefully (magnification may be necessary) to see the small printed text *USA 100* within the numeral in the lower left corner and *THE UNITED STATES OF AMERICA* in the line in the left lapel of Franklin's coat.

For more information about U.S. currency visit [www.newmoney.gov](http://www.newmoney.gov)



# \$100 Note

Issued 2013 - Present

All U.S. currency remains legal tender, regardless of when it was issued.



# \$100.00

## Watermark

## 3-D strip

## 100 color shift

## bell in inkwell

## security thread

### Key Security Features

#### 3-D Security Ribbon

Tilt the note back and forth while focusing on the blue ribbon. You will see the bells change to 100s as they move. When you tilt the note back and forth, the bells and 100s move side to side. If you tilt it side to side, they move up and down. The ribbon is woven into the paper, not printed on it.

#### Bell in the Inkwell

Tilt the note to see the color-shifting bell in the copper inkwell change from copper to green, an effect which makes the bell seem to appear and disappear within the inkwell.

#### Watermark

Hold the note to light and look for a faint image of Benjamin Franklin in the blank space to the right of the portrait. The image is visible from both sides of the note.

#### Color-Shifting Ink

Tilt the note to see the numeral 100 in the lower right corner of the front of the note shift from copper to green.

#### Security Thread

Hold the note to light to see an embedded thread running vertically to the left of the portrait. The thread is imprinted with the letters USA and the numeral 100 in an alternating pattern and is visible from both sides of the note. The thread glows pink when illuminated by ultraviolet light.



### Additional Design and Security Features



**Federal Reserve System Seal**  
A black seal to the left of the portrait represents the entire Federal Reserve System. A letter and number beneath the left serial number identifies the distributing Federal Reserve Bank.



**Raised Printing**  
Move your finger up and down Benjamin Franklin's shoulder on the left side of the note. It should feel rough to the touch, a result of the enhanced intaglio printing process used to create the image. Traditional raised printing can be felt throughout the \$100 note, and gives genuine Federal Reserve notes their distinctive texture.



**Portrait and Vignette**  
The \$100 note features a portrait of Benjamin Franklin on the front of the note and a vignette of Independence Hall on the back of the note.



**Symbols of Freedom**  
Phrases from the Declaration of Independence and the quill the Founding Fathers used to sign the historic document are found to the right of the portrait.



**Gold 100**  
A large gold numeral 100 on the back of the note helps those with visual impairments distinguish the denomination.



**Treasury Seal**  
A green seal to the right of the portrait represents the U.S. Department of the Treasury.



**Serial Numbers**  
A unique combination of eleven numbers and letters appears twice on the front of the note. For information about the serial numbers and other indicators on the note [click here](#).



**Series Year**  
The design includes series years 2009 and 2009A.

For more information about U.S. currency visit [www.newmoney.gov](http://www.newmoney.gov)

# Raised Printing



- Move your finger up and down Benjamin Franklin's shoulder
- Should feel rough to the touch



## 3-D Security Ribbon

- Tilt the note back and forth, while focusing on the ribbon
- You will see images of bells change to 100s in the ribbon as the note moves



Bells



100s



Security Ribbon



## Bell in the Inkwell

- Tilt the note to see the bell change from copper to green



Copper



Green



Bell in the Inkwell



# Portrait Watermark

- Hold the note to light to see the watermark



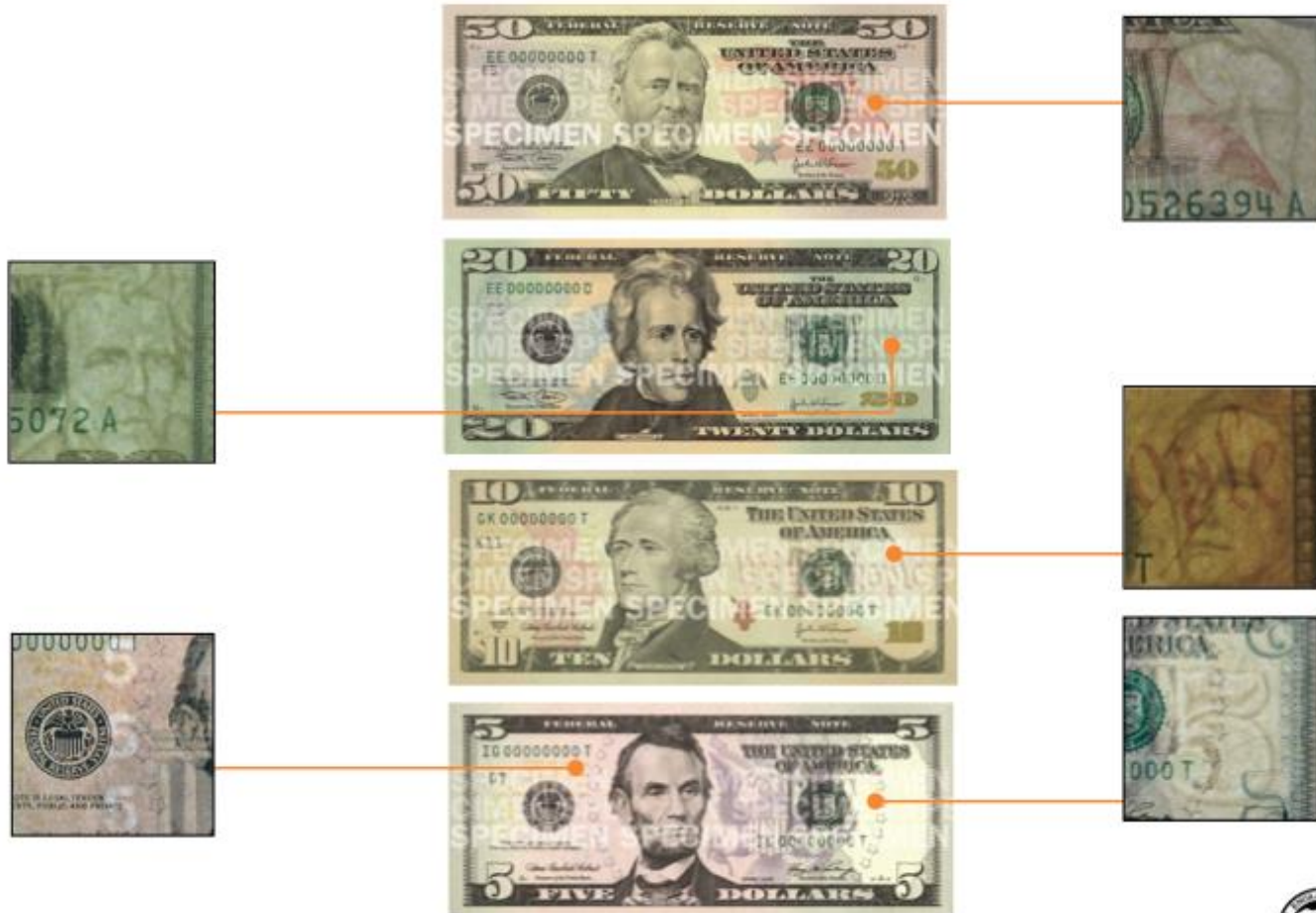
Portrait  
Watermark



Portrait  
Watermark



# Watermarks in Other Redesigned Currency



# Security Thread



- Hold the note to light to see the embedded security thread



# Security Thread





# Security Threads in Other Redesigned Currency



# Security Threads in Other Redesigned Currency



# Color-Shifting 100

- Tilt the note to see the numeral 100 shift from copper to green



Copper



Green



Color-Shifting 100



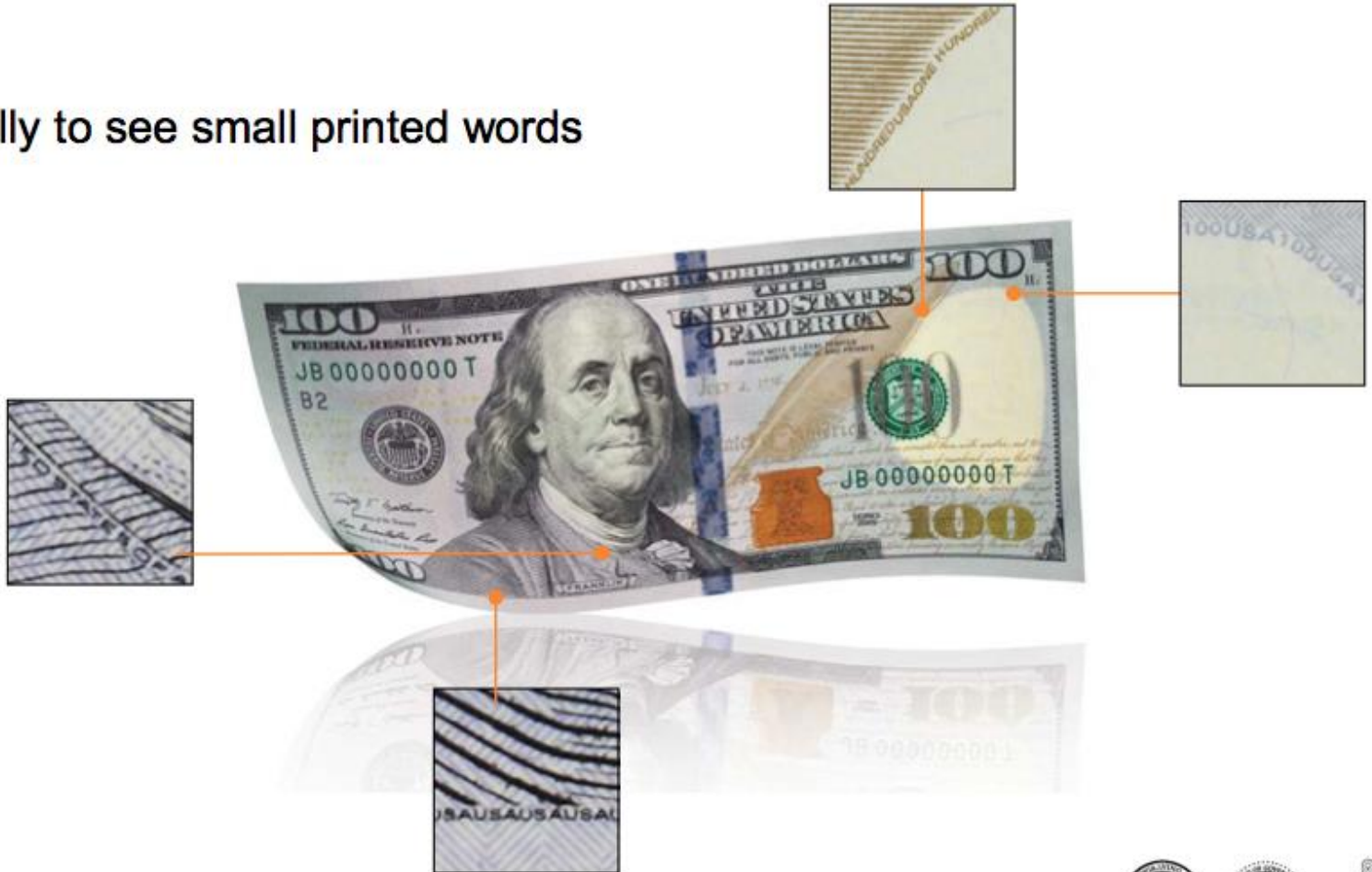
## Gold 100

- Look for the large Gold 100 on the back of the note



# Microprinting

Look carefully to see small printed words



# OMG – I GOT ONE?!

## If You Suspect a Counterfeit Note

- Contact your local police department or United States Secret Service field office ([www.newmoney.gov/locator.htm](http://www.newmoney.gov/locator.htm))
- Write your initials and the date in the border of the suspect note
- Limit handling of the note and place in protective covering
- Surrender the note only to a police officer or a U.S. Secret Service agent
- **It's OK to tell the person who gave you the note that it is counterfeit and call the police. BUT DO NOT GIVE IT BACK TO THEM!**
- **Most people will be fascinated by the experience if they are innocent.**
- **The ones who know they are passing fake cash will bolt. Get a description and picture of them and their car and license number on your cell for authorities.**



# Get to know these guys

## Redesigned U.S. Currency



**P.S. In 2030, the \$20 bill is adding Harriet Tubman**



# Who can do this?

## Redesigned U.S. Currency



looking for a  
volunteer...





# What's in YOUR wallet?



**Pull out some cash & give it a quick inspection. Seems very different than when you ever looked at it before, eh?**

**Now Pull out credit cards:**

**Do credit cards have a “Gold square” on front**

**Do you know that is a mini-computer? 64% of Americans didn't know there was such a thing in August 2015 survey of 5000**

# Credit Card Cons

Protocol for physical credit cards

## TYPES

Family

Check card for signature

Stolen card

Check name against the person

Stolen ID

Ask for ID to verify identity

Verify signature

“Con game”

Run through CC machine or take  
number, exp, CCV

Check for magnetic strip

Get billing address

Questions call CC company for  
verification

# **Credit card con actions**

## **Confidence game**

**Discuss at staff meetings**

**Don't "advertise" non-doctor days or short-staff**

**JDSR**

**Engagement**

**Make copy of card**

**Keep CC contact info at phone**

**All hands on deck**

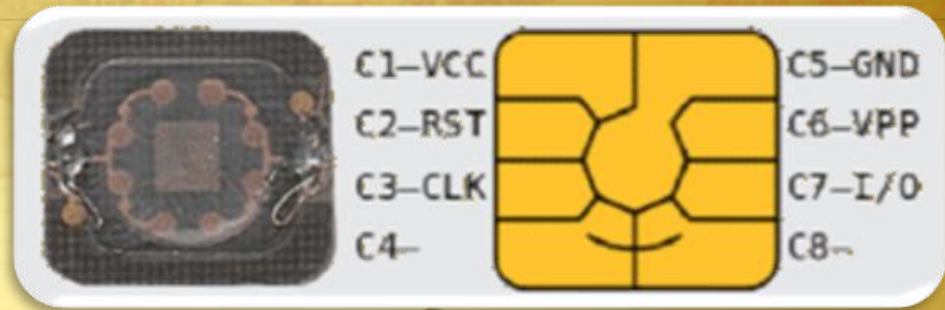
**Security system**



**New gold  
computer  
chip  
smart cards  
&  
card  
paypass**



# Gold chip



**Microprocessor** (center) – **Brain** - gold chip's “CPU.” Oversees transaction

**VCC** (top left 1) & **GND** (top right 5) – **Power** Turns chip on when inserted or near terminal terminal

**RST** (mid left 2) – **Screenener** analyzes security data terminal is requesting. If not correct, it powers chip down & stops transaction immediately.

**CLK** (bottom left 3) – **Validator** Matches frequency between terminal & chip before transmission occurs. If no match, chip powers down.

**VPP** (mid right 6) – **Programming Voltage** Provides voltage to create transaction.

**I/O or Input & Output** (mid 7 & bottom right 8) – **Translators** connect terminal & chip. Chip creates cryptogram. One-time unique code generated for each purchase made by gold chip card. Sent to terminal so transaction takes place.

# Using new chip card terminal

1

At chip-enabled terminals, insert your card with the chip toward the terminal, facing up. Do not remove until prompted.

2  
Provide your signature or PIN as prompted by the terminal. Some transactions may not require either.

3

When the terminal says the transaction is complete, remove your card.

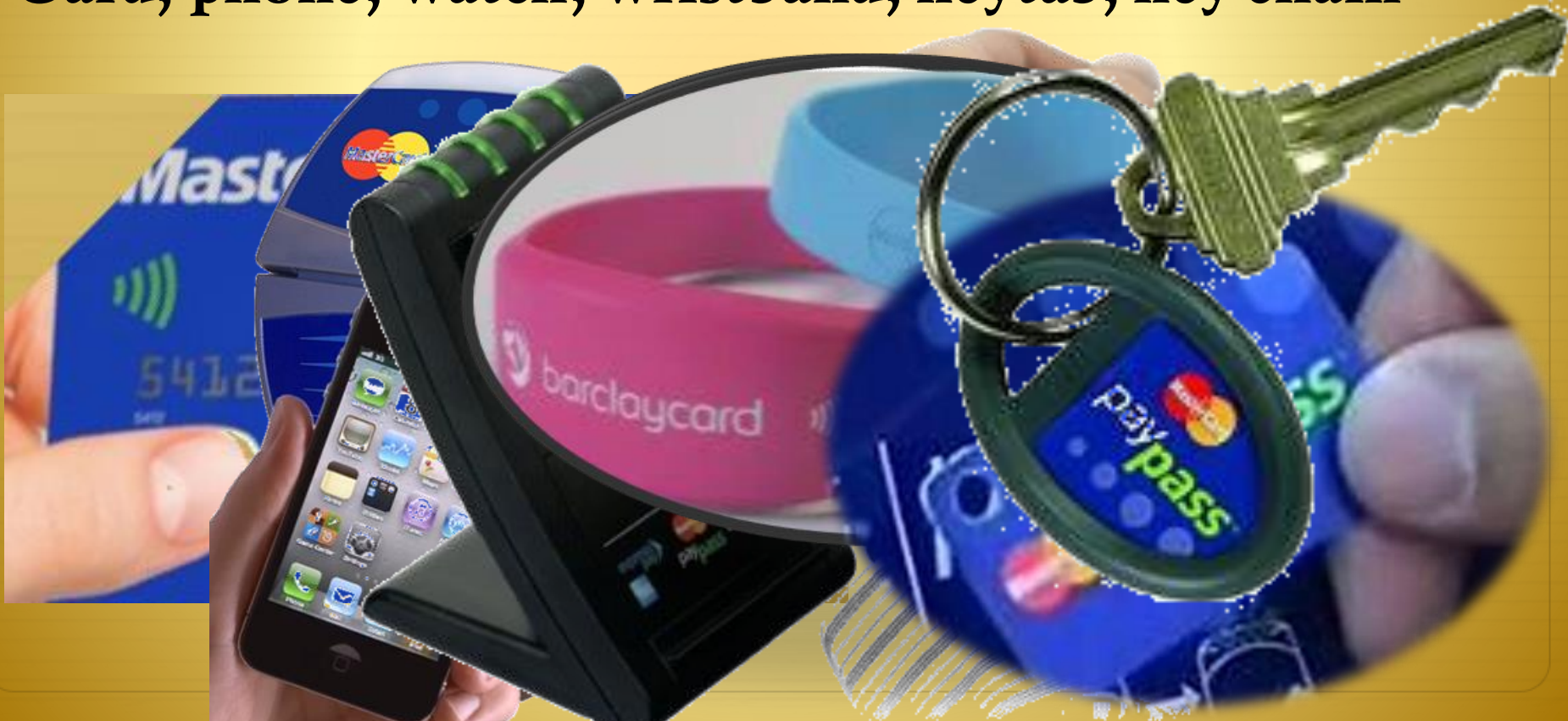
# New chip cards



- ✦ **EMV technology (Europay, Mastercard, Visa)**
- ✦ **Each transaction is single code that does NOT contain your personal ID info like magnetic strip**
- ✦ **One time code (stealing it's like stealing expired password)**
- ✦ **Used worldwide for 15 years**
- ✦ **ID theft down 75-95% using chip card tech worldwide**
- ✦ **USA is LAST country to convert. (~75% of USA CCs now)**
- ✦ **1.06B CCs in US (average 4/adult)**
- ✦ **Personal office story of \$7000 'con'**

# Newer Card Paypass

No gold chip – uses RF embedded chip tech  
Touchless transactions speed security, sanitary  
Card, phone, watch, wristband, keytab, key chain





# **HUGE ACTION POINT**

**Tell YOUR Docs about this!**

**It has ALREADY happened...We can be denied payment for fraud.**

**Check your office CC machine for compatibility of EMV & paypass & update**

**Check your OWN CCs for chip & don't use "old" swipe cards**

# eCommerce fraud



**Phone/ Online/ app/ digital wallets**

**Fraud \$2.8B 2014, \$5.5B 2018, est >\$7B 2021(COVID)**

**Friendly fraud – orders/ gets/ forgets & challenges charge**

**Chargeback fraud – order/ rcvs/ challenges to get \$ back**

**BEWARE - CC rate reduction/ phishing/ SS & Gov't scams**

**ID theft - take over CC, bank acct, or open new cards**

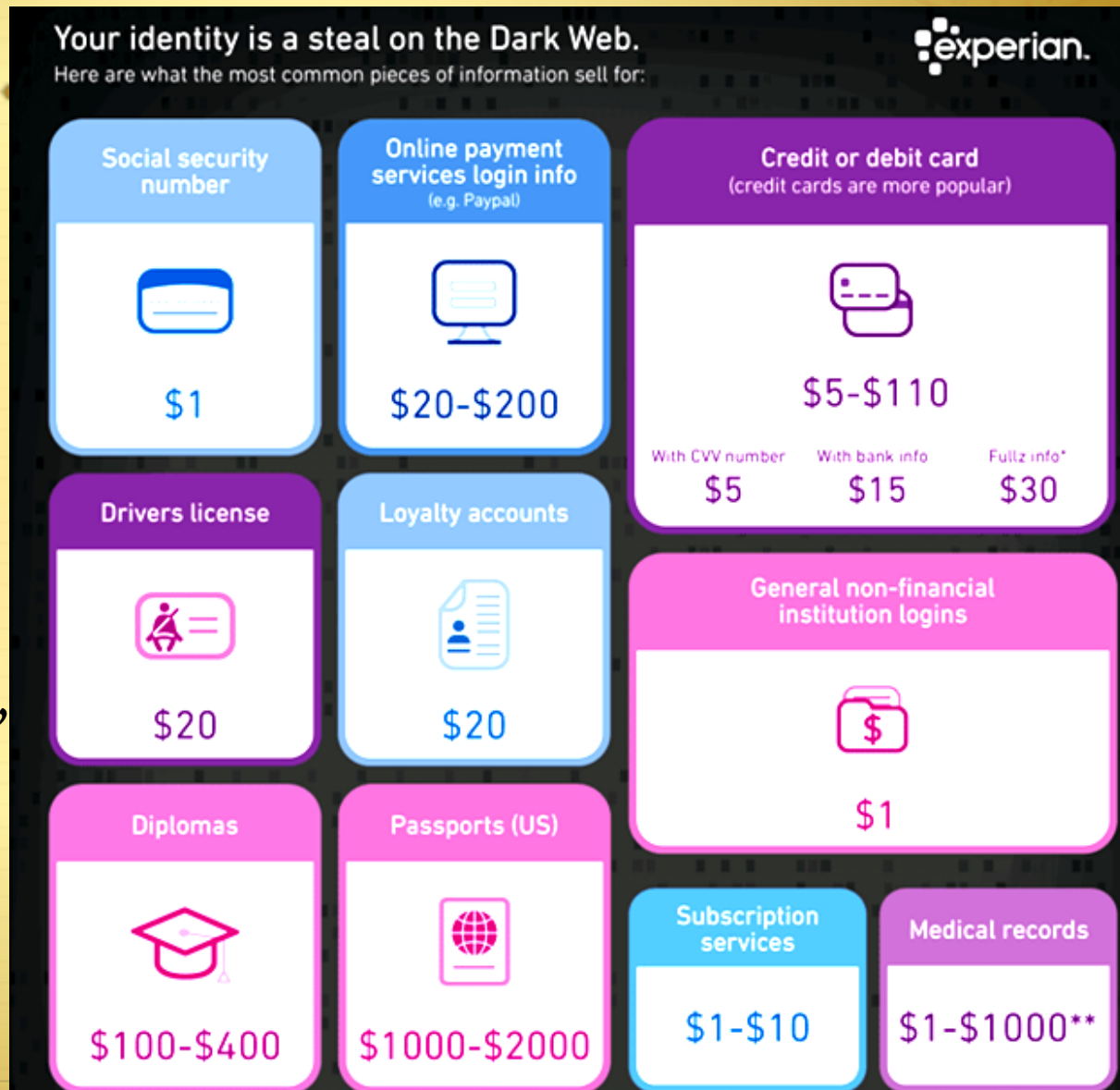
# Your ID is a steal

10,818 data breaches  
accounting for >1.6B  
Records compromised 2005  
– 2019

2019 - 88% CC fraud was  
opening new acct

CNP is 81% vs POS

\*Fullz is Name, SSN, DOB,  
Acct#, bank info, CCV  
\*\*single record v entire  
database



# **ID protection**



**Protect bills & receipts**

**Balance & report quickly**

**Don't reply to online deals**

**Go to official websites**

**ID monitor service**

**SS admin has free**

**Cyber-protection**

**Authentication/AI procedures**

**text/email when charge made**

**Annualcreditreport.com 1/y**

**Experion/TransUnion/Equifax**

**Fraud alert if compromised**

**Freeze credit (all 3)**

**Reduce social media 'blab'**

**...But let's talk about the office!**

# Shoplifting suspects



## On the rise because:

Shaky economic conditions

More part time staff

Less supervision

Ease of selling stolen goods

Decline in honesty

Entitlement

Large dollar, small item

Low chance of being caught

Small chance of prosecution or  
jail time

## Types

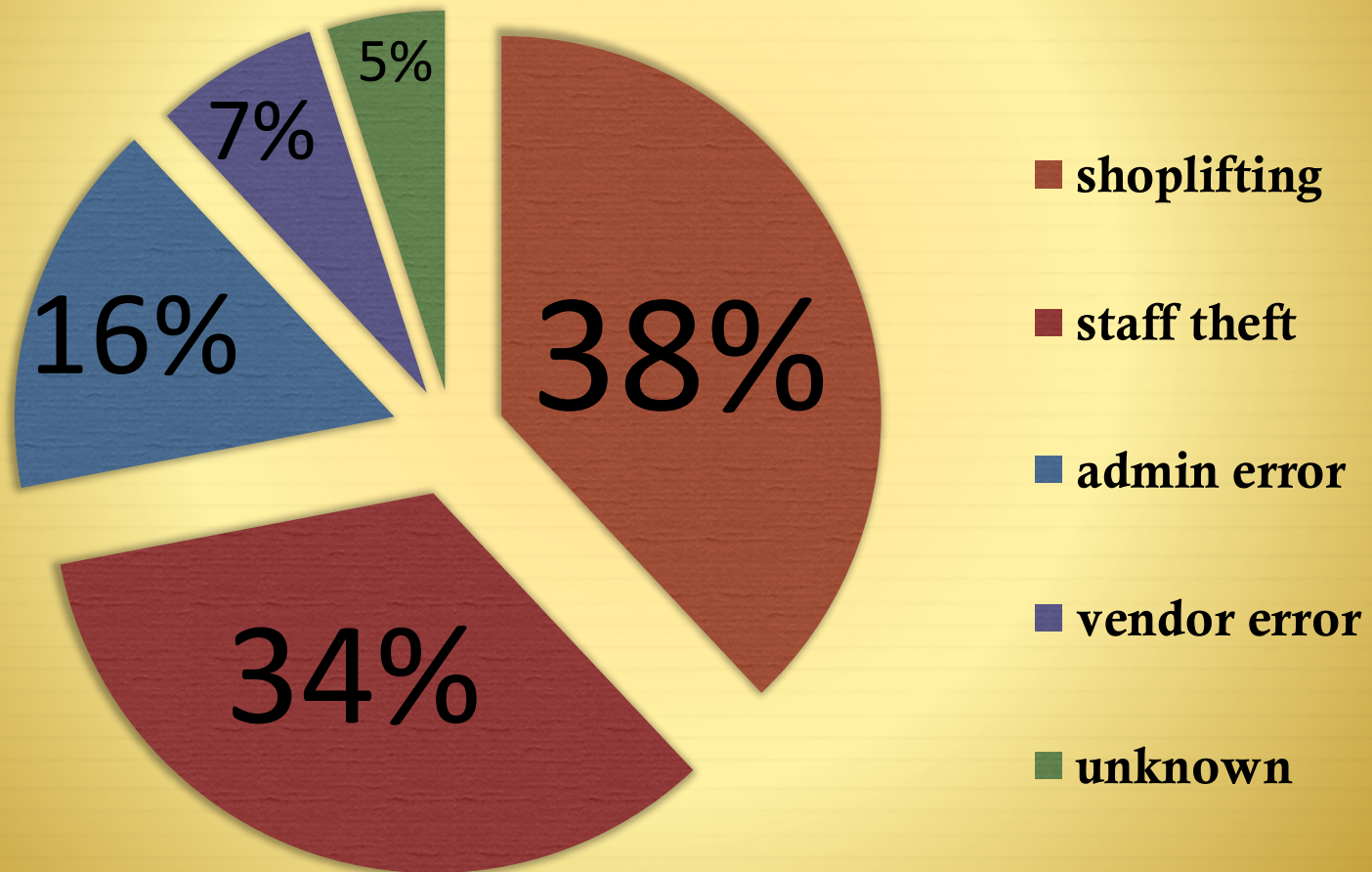
Spur-of-the-moment  
(75%)

Purposeful individuals

ORC (organized retail  
crime)

In-house?!? WHAT?

# Inventory shrinkage breakdown



# **Internal theft**

## **Cash, Time, Product**

---

**Employee testing**

**2020 NFIB retail survey**

**Inventory system**

**2/3 of US small business**

**Electronic surveillance**

**“Sweethearting”**

**Vacations**

**“Buddy-punching” (75%)**

**\$1380 average case**

**Policy manual rules on  
personal goods &  
services**

**US Chamber of Commerce**

**75% of employees**

**50% repeatedly**

**>70% of cash thefts are**

**manager or bookkeeper**

# Counter measures



**Security systems**

**Security cameras**

**Perimeter protection**

**Signage**

**Acknowledge & eye  
contact**

**Engage & stay with  
customer**

**Locking displays**

**Keep frame boards full \***

**Keep high price items  
visible**

**JDSR**

**“The Doc”**

**“Low Vision Trade”**



# Inventory Shrinkage

(Now it's getting 'personal')

## Doing the UGLY math

2 - 5 % of gross lost---

\$1,200,000/y x 2% =

\$24,000/y / \$60/frame =

400 frames/y ÷

200 days/y open =

2 frames /day gone

looking at it from physical inventory...

Rotation 8 weeks = 6x/year

Each visit 3-5 frames missing =

18 - 30 frames missing/vendor x

10 vendors in office =

180- 300 frames/year missing ÷

200 days/y open =

1-2 frames /day gone

# Security system in entry



# Shoplifting Security

LOAD & LOCK!



Matte finish  
aluminum

Uber-slim  
polycarbonate  
temple supports

Stabilized locking  
mechanism

Soft rubber  
bridge rest



Security systems – 6 cameras/phone  
app/digital recording < \$200

# Shoplifting Signs

**Win a FREE Ride in a  
Police Car just by  
shoplifting from this store.**



**Lucky Winners will  
also get their name  
in the newspaper for  
their friends and  
family to see!**

**Won't Mom & Dad be proud?**

**SHOPLIFTING  
IS A CRIME**

**FREE  
BRACELETS**   
**with each theft**

**We LOVE shoplifters  
BBQ'd extra crispy  
with lots of sauce**



# Shoplifting apprehension

shoplifting 6 step rules must apply.

- 1) You must see the person approach the merchandise.
- 2) You must see the person take possession of the item.
- 3) You must see where the person hid the merchandise.
- 4) You must maintain UNinterrupted surveillance.
- 5) You must see that the person didn't pay for the item.
- 6) You must stop the person as they leave the office.

# Things you DO next



**ALWAYS** consider safety of yourself & other staff

Police already called by another staff member

Person witnessing shoplifting must stay “with”  
shoplifter.

Doctor/owner/person in charge needs brought in

Description of person, picture, picture of car make,  
model, & license

“soft confrontation”

# **“Soft confrontation”**



**“Let me get you a case for those tortoise sunglasses”**

**“Those Prada glasses will look terrific on you. Let me show you how to clean them.”**

**Lets person know you're aware what they've done**

**Gives chance to produce the item & retrieve the property, best case scenario**

**Tell them police called to straighten things out**



# What happens next?



**They'll get loud, cry, scream, threaten to sue, become belligerent, bargain, be sorry, or amazingly "find the frame they didn't realize they had"**

**Pros & experienced shoplifters will bolt.**

**If they do, keep in sight, see they go, get pictures of vehicle & license**

**Write everything down immediately while fresh in your mind.**

# What NOT to do



**Do NOT put your hands on an individual**

**Do Not name call, become verbally abusive,  
or yell**

**Do not lose your temper or cool**

**Keep a soft tone & BREATHE**

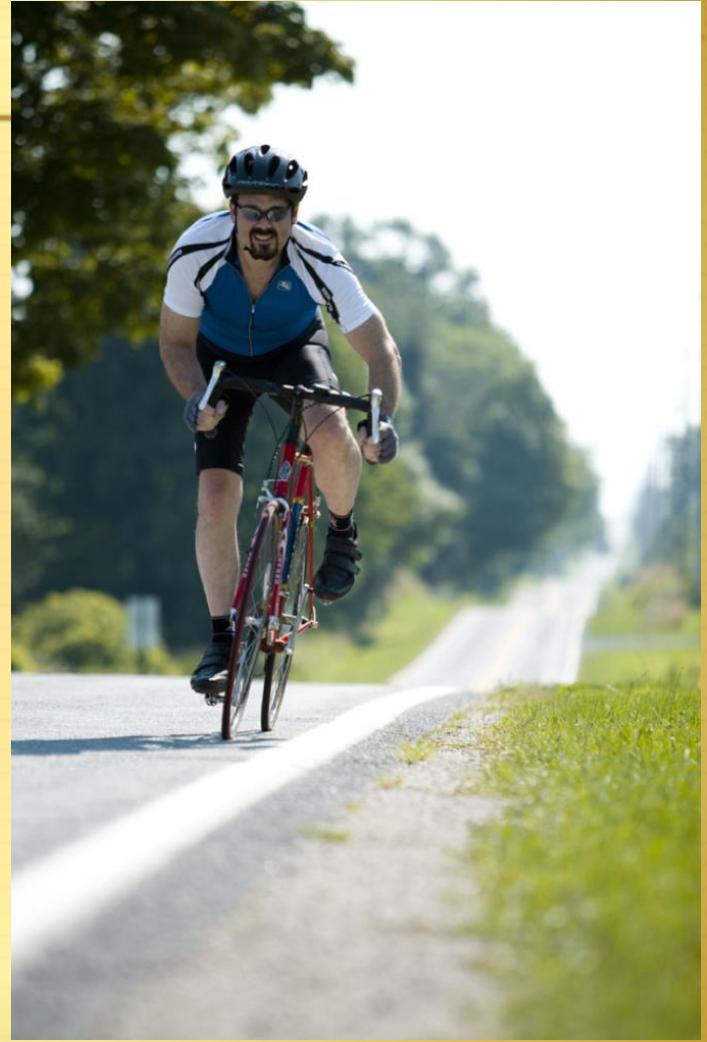
**Do NOT chase them on foot or in vehicle**

**Do NOT put yourself in danger... it's ONLY  
product & money**

# Counterfeit cash in news



# The future is how you see it



**Thanks for sharing your time with me for 2 days!**

# Questions ?



**Robert Reed Jr O.D.**

**1431 Trebor Rd**

**St. Joseph, MI 49085**

**269-428-2268**

**bobreed@cpuinc.net**

**Hope y'all had a real good time, hear!**