

# **Computer Crime and Computer Fraud**

**A Study for the Montgomery County  
Criminal Justice Coordinating  
Commission**

**Michael Kunz & Patrick Wilson**

**January 27, 2004**

# Overview

- Define computer crime and computer fraud
- Detail different types of computer crime
- Outline scope of the issue
- Provide background on legislation and existing organizations
- Examine current practices used by law enforcement agencies through informational interviews

# Goal

- Formulate recommendations for Montgomery County
- Analyze best methods for preventing, investigating, and prosecuting computer crime and computer fraud

# Research Methods

- Review of the available research literature
- Informational interviews
- Developed conclusions

# Definitions and Crime Types

- Computer Crime

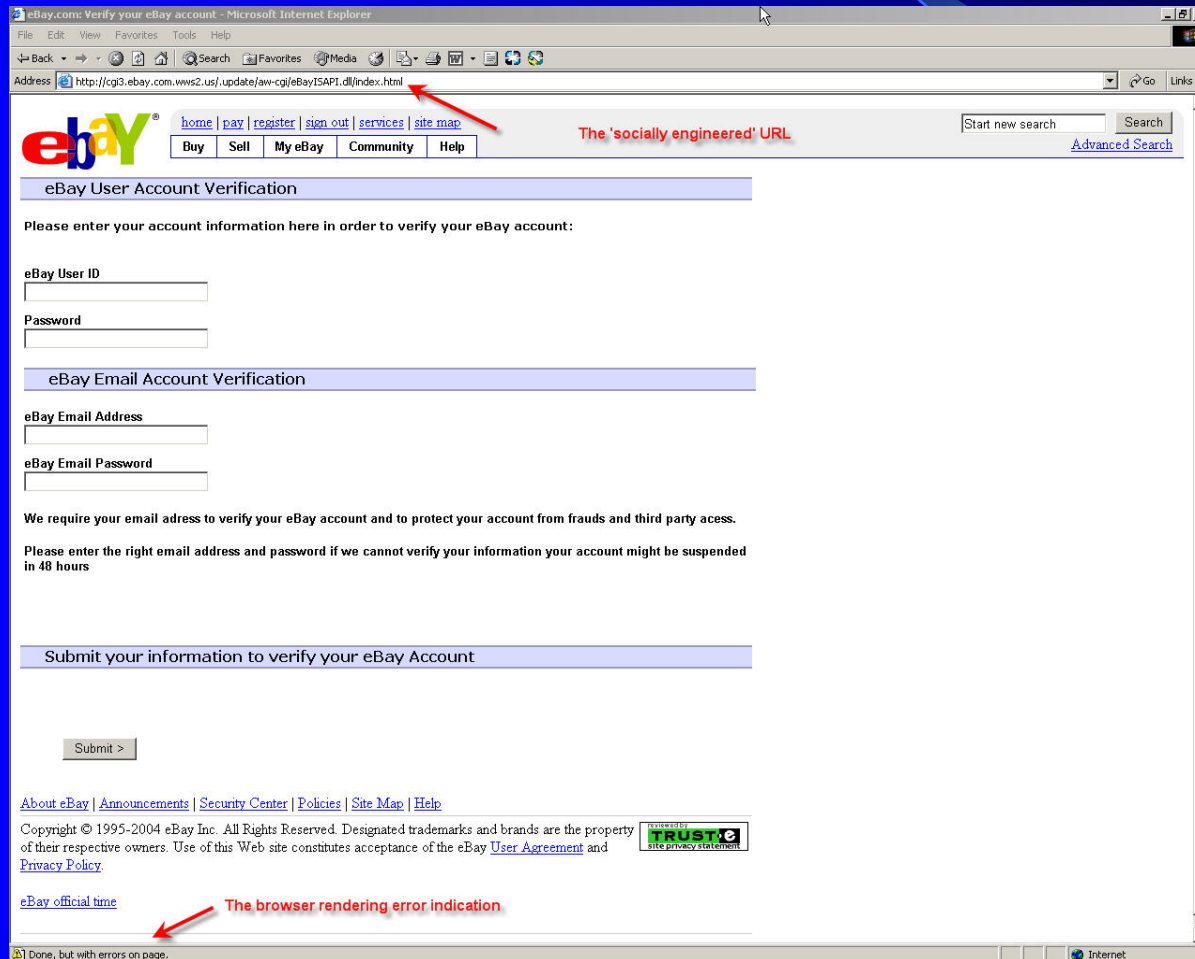
- Using or causing the use of a computer resource for the purpose of illicitly gaining goods or resources, or causing harm to another entity.
- Traditional: (fraud, theft), Harmful content: (child pornography, virus), Unauthorized access

# Definitions and Crime Types Continued

- Computer Fraud
  - A subset of computer crime. The use of electronic resources to present fraudulent or misrepresented information as a means of deception.
  - Online auction fraud, identity theft, phishing

# Phishing

- The misrepresentation of legitimate business to fraudulently acquire personal information.



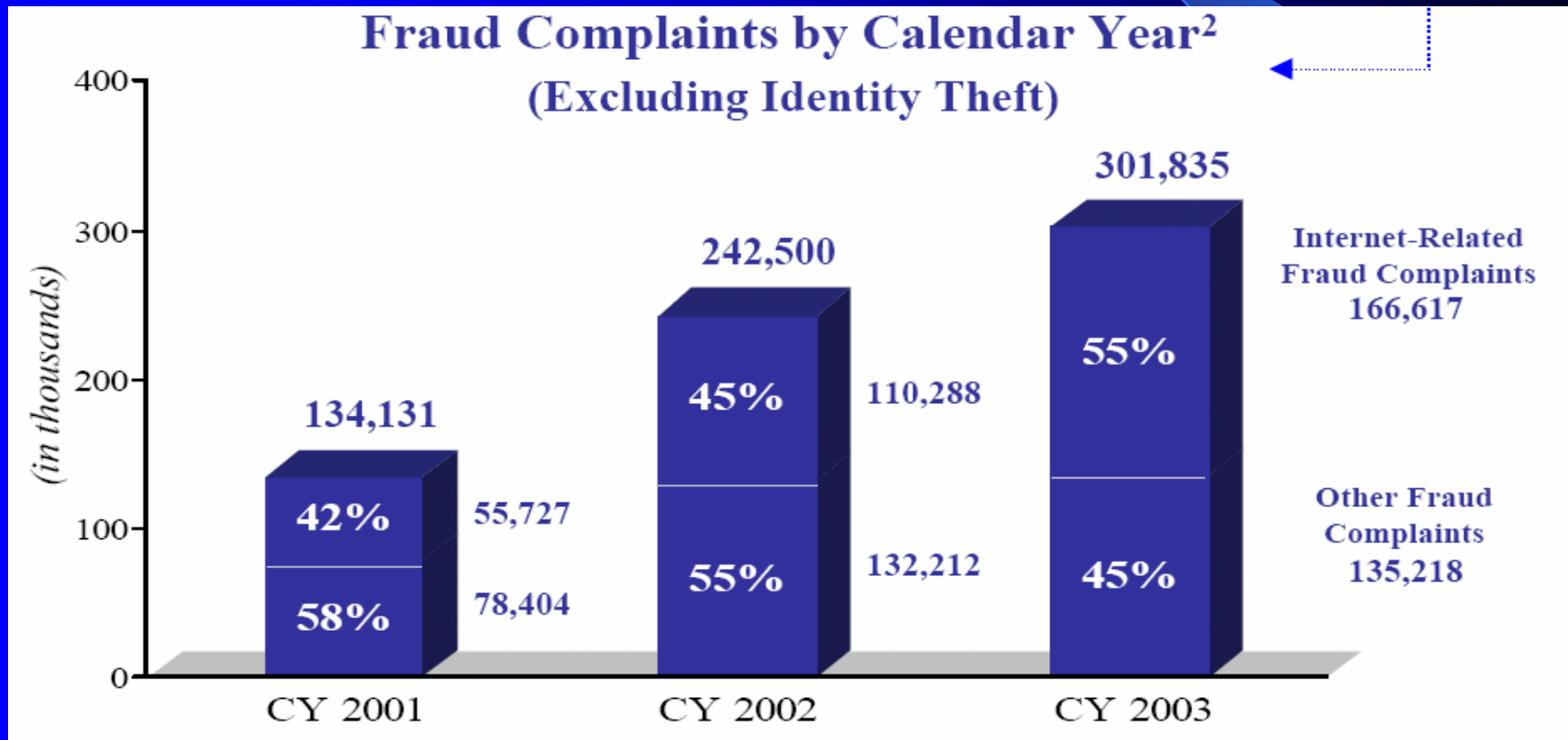
# Scope of the Problem

- Problem of finding statistical information
- Available crime statistics
- Comparison to traditional crime forms



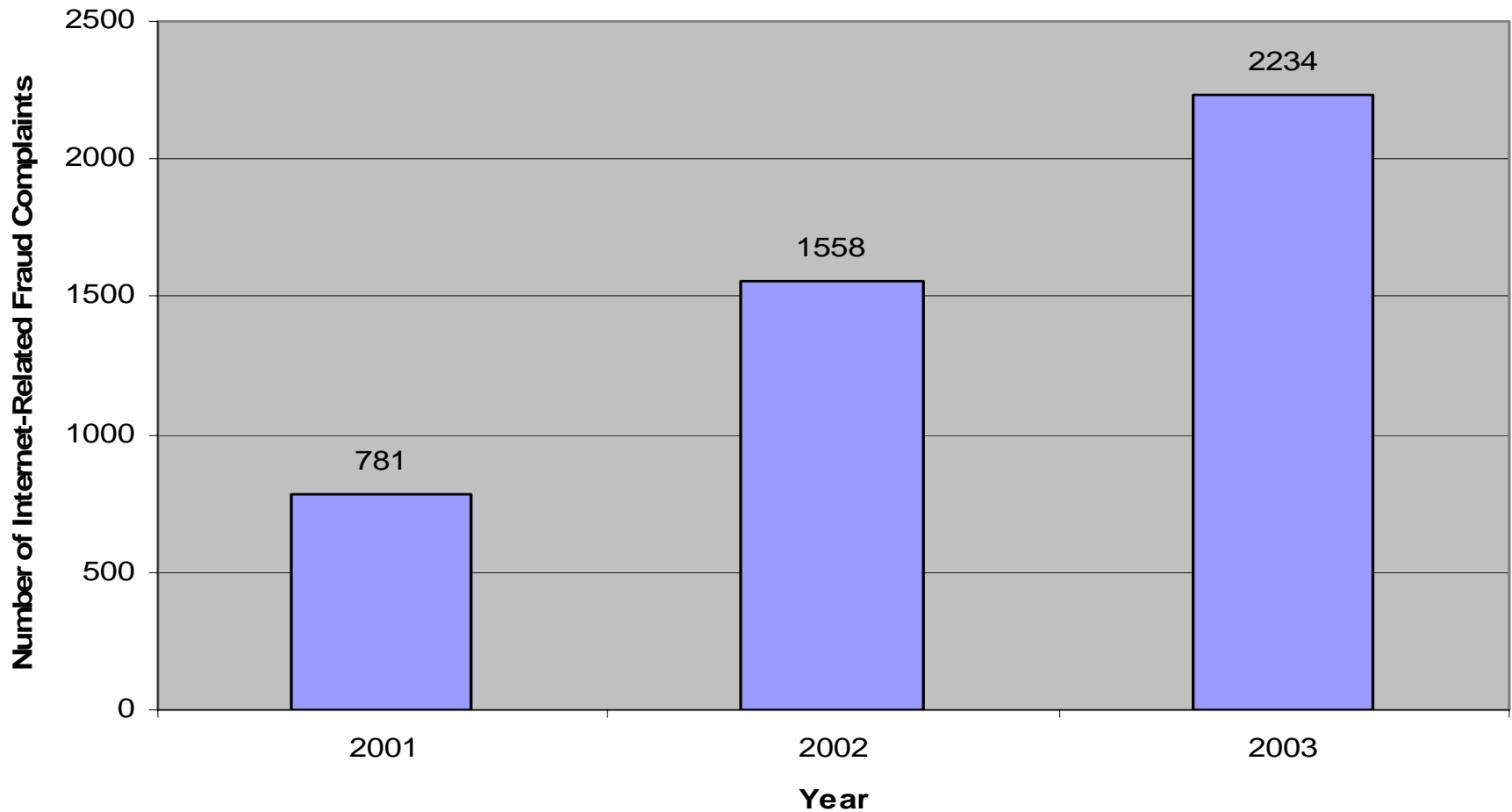
# Internet-Related Fraud

Yearly amounts of fraud complaints received by the FTC's *Consumer Sentinel* courtesy of <http://www.consumer.gov/sentinel>



# Internet-Related Fraud in Maryland

Internet-Related Fraud Complaints in Maryland from 2001-2003



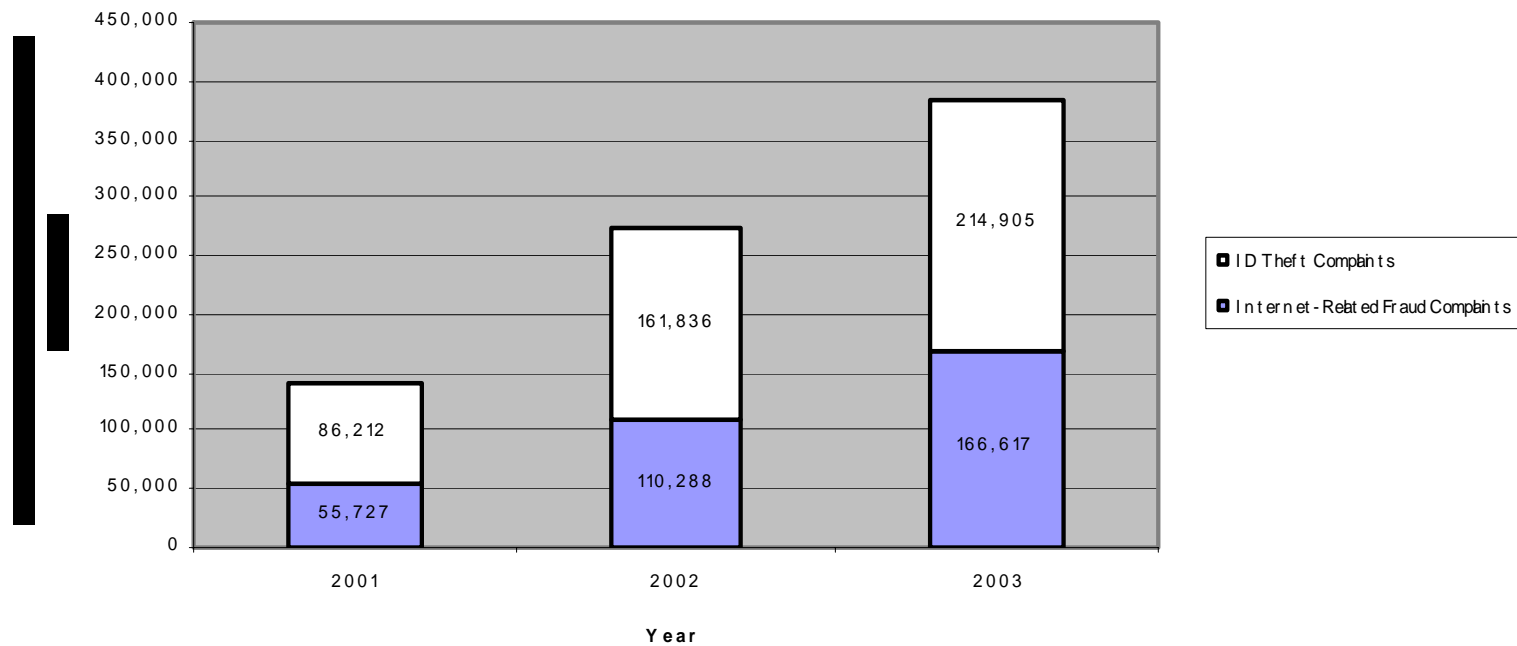
# Comparison to Traditional Crime Forms

Crime Type	Number of Incidents Reported	Total value of property lost	Total of value lost per incident
Internet-Related Fraud	166,617	\$199,355,357	\$1,341
Larceny-Theft	7,021,588	\$4,900,000,000	\$698
Motor Vehicle Theft	1,260,471	\$8,600,000,000	\$6,797
Burglary	2,153,464	\$3,500,000,000	\$1,626

Statistics Courtesy of the *Consumer Sentinel* and FBI UCR for 2003

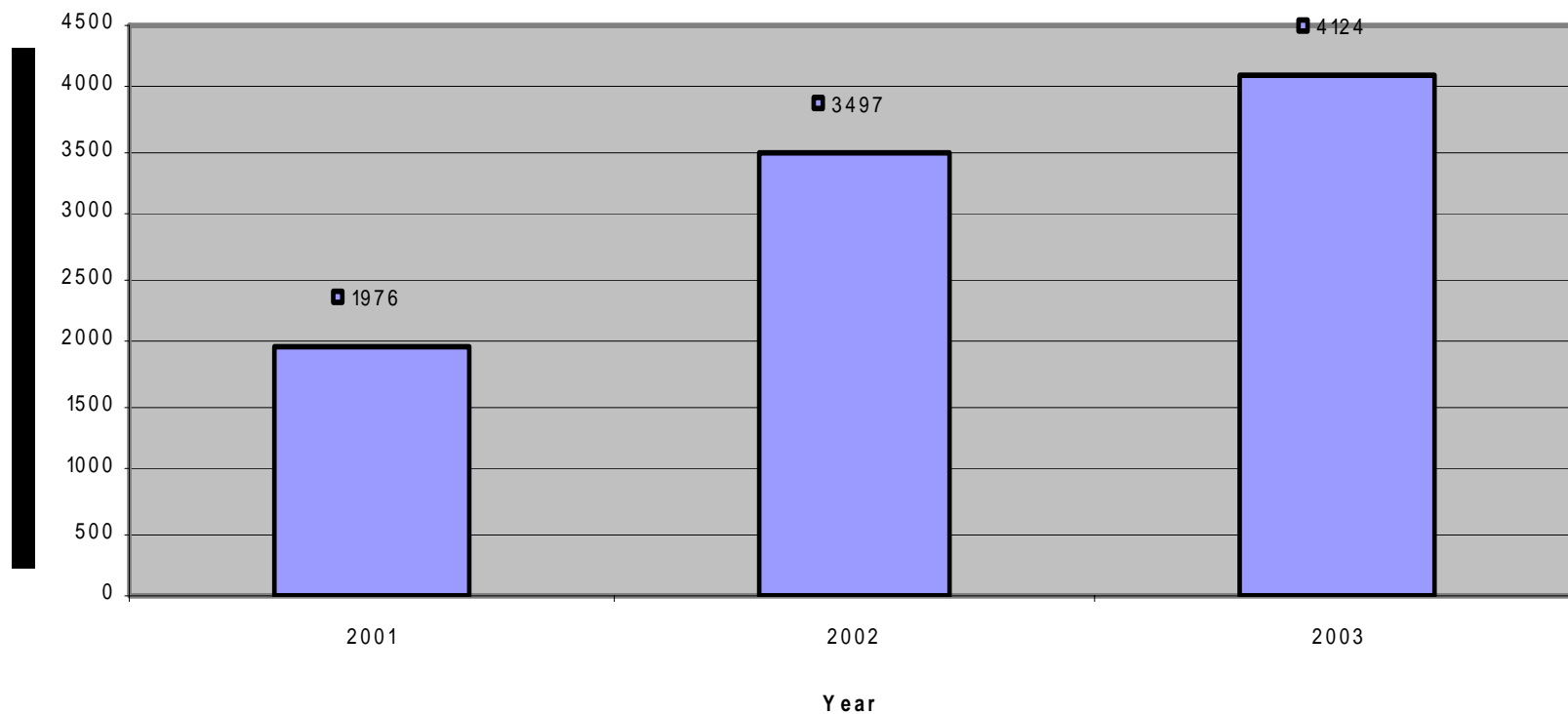
# Computer Fraud Compared to Identity Theft

ID theft and Internet-Related Fraud Complaints from 2001-2003



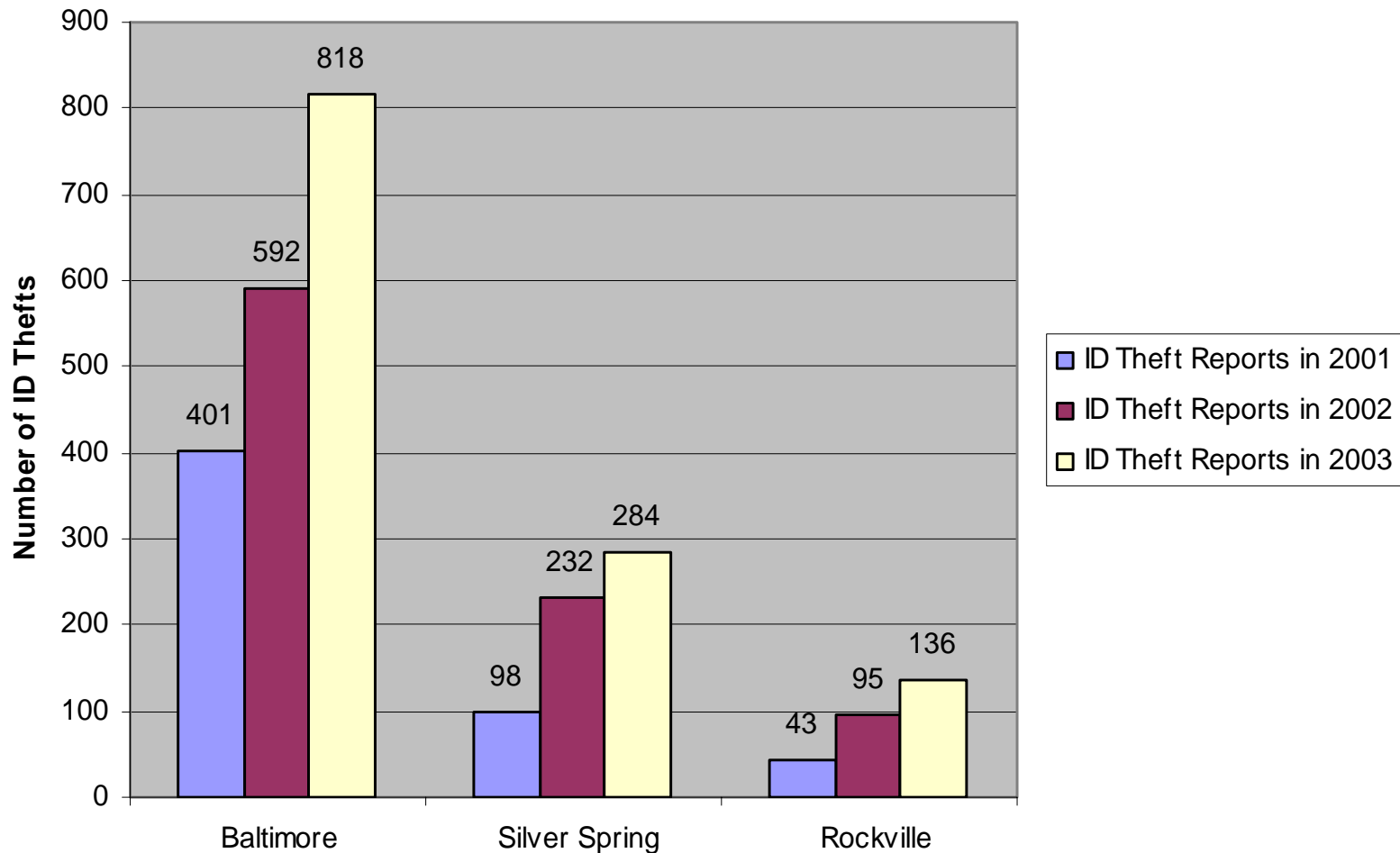
# Victims of Identity Thefts in Maryland

Victims of Identity Theft in Maryland from 2001-2003



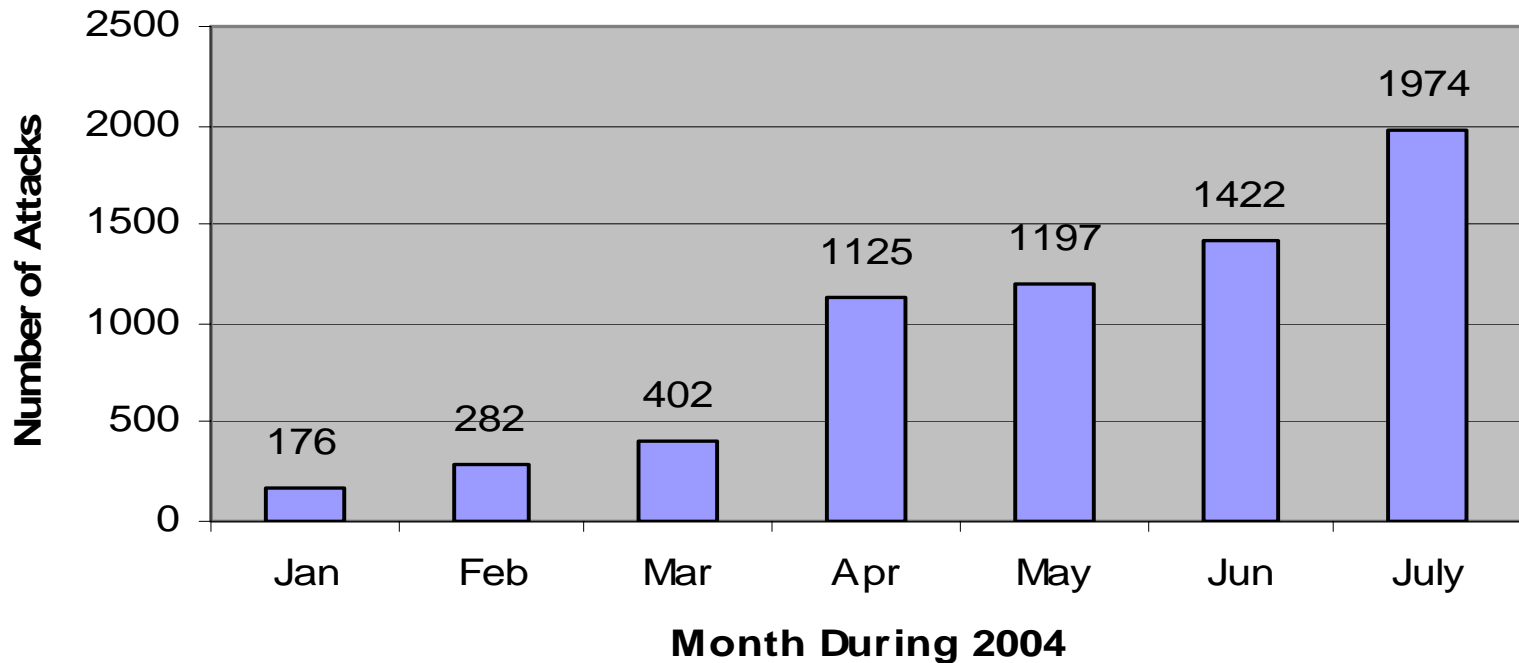
# Top ID Theft Locations in Maryland

ID Theft Reports in Maryland's Top Three locations for ID theft



# Phishing

Monthly Phishing Attacks Reported to the APWG



Statistics Courtesy of  
[www.antiphishing.org](http://www.antiphishing.org)

# Existing Legislation

- State Statues
- Federal Statues
- Strengths and shortcomings



# Professional Organizations & Resources

- Roles
  - Training & investigative resource
  - Community education & protection
- Independent & governmental initiatives

# Professional Organizations & Resources

- **Training**

- National Cybercrime Training Partnership
- National Law Enforcement & Corrections Technology Center

- **Investigative**

- National Infrastructure Protection Center
- Internet Fraud Initiative
- Internet Fraud Complaint Center

- **Education**

- Business Software Alliance
- CyberAngels
- Computer Crime Research Center
- Cyber Security Policy & Research Center

- **Protection**

- Internet Fraud Complaint Center
- National Fraud Information Center
- Anti-phishing Working Group

# Problems and Suggestions in the Literature

## Problems

- Need for definition
- Lack of reporting
- Jurisdictional challenges
- Level of importance

## Recommendations

- Public awareness
- Comprehensive statistical data
- Jurisdictional issues
- Provide support
- Develop/maintain computer crime unit
- Review legal infrastructure
- Research & publications

# Informational Interviews

- Maryland State Police
- Montgomery County Computer Crime Unit
- Prince George's Police Department
- National White Collar Crime Center
- Maryland States Attorney's
- United States Secret Service

# Topics of Discussion

- Definitions
- Training & Resources
- Focus & Areas of Concentration
- Investigative Process
- Difficulties & Successes
- Suggestions

# Recommendations

- Definition
- Statistical records
- Community awareness and education
- Jurisdictional issues
- Training and resources
- Examination of legal infrastructure
- Research and Publications

# Further Contacts



- **SGT Robert Smolek**  
Maryland State Police  
Criminal Investigation Division  
Computer Crimes Unit  
410.290.1620 x-397  
410.290.1831 fax  
rsmolek@mdsp.org
- **Dr. Doris MacKenzie**  
2220 LeFrak Hall  
University of Maryland  
College Park, MD 20742  
301.405.3008  
301.405.4733 fax  
dmackenzie@crim.umd.edu