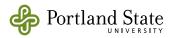
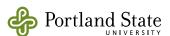
# CS305: Social, Legal, and Ethical Implications of Technology

#### **Privacy and the Government**



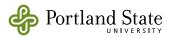


## What's this to do with Privacy?



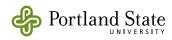
## Key aspects of privacy

- Freedom from intrusion
  - "being left alone"
- Control of Information about oneself
- Freedom from surveillance
  - being followed, tracked, listened-to, eavesdropped-upon

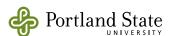


# **Privacy Overview**

- Introduction
- U.S. legislation restricting information collection
- Information collection by the government
- Covert government surveillance
- U.S. legislation authorizing wiretapping
- USA PATRIOT Act

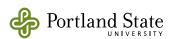


- Regulation of public and private databases
- Data mining by the government
- National identification card
- Information dissemination
- Invasion



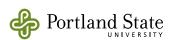
# A Balancing Act

- Federal, state, and local governments in United States have had significant impact on privacy of individuals
- Government must balance competing desires
  - desire to be left alone
  - desire for safety and security
- National security concerns increased significantly after 9/11 attacks



# Solove's Taxonomy of Privacy

- Information collection: Activities that gather personal information
- Information processing: Activities that store, manipulate, and use personal information that has been collected
- Information dissemination: Activities that spread personal information
- Invasion: Activities that intrude upon a person's daily life, interrupt someone's solitude, or interfere with decision-making

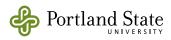


# 6.2 U.S. Legislation Restricting Information Collection



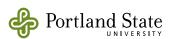
## Employee Polygraph Protection Act

- Passed in 1988
- Prohibits private employers from using lie detector tests under most conditions
- Cannot require test for employment
- Exceptions
  - Pharmaceutical companies and security firms may give test to certain classes of employees
  - Employers who have suffered a theft may administer tests to reasonable suspects
  - Federal, state, and local governments exempt



#### Children's Online Privacy Protection Act

- Reduces amount of public information gathered from children
- Online services must gain parental consent before collecting information from children 12 and under



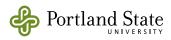
## Genetic Information Nondiscrimination Act

#### Health insurance companies

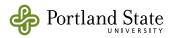
- Can't request genetic information
- Can't use genetic information when making decisions about coverage, rates, etc.
- Doesn't apply to life insurance, disability insurance, long-term care insurance

#### Employers

- Can't take genetic information into account when hiring, firing, promoting, etc.
- Small companies (< 15 employees) are exempt</li>

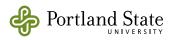


# 6.3 Information Collection by the Government



### Census Records

- Census required to ensure every state has fair representation
- Number of questions steadily rising
- Sometimes Census Bureau has broken confidentiality requirement
  - World War I: draft resistors
  - World War II: Japanese-Americans





Persons of Japanese ancestry arrive at the Santa Anita Assembly Center from San Pedro. Evacuees lived at this center at the former Santa Anita race track before being moved inland to relocation centers." Clem Albers, Arcadia, CA, April 5, 1942.

National Archives, ww2\_29.jpg

#### Internal Revenue Service Records

- The 16<sup>th</sup> Amendment to the U.S.
   Constitution gives the federal government the power to collect an income tax
- IRS collects more than \$2 trillion a year in income taxes
- Income tax forms contain a tremendous amount of personal information: income, assets, to whom you make charitable contributions, medical expenses, and more



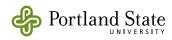
# FBI National Crime Information Center 2000

#### NCIC

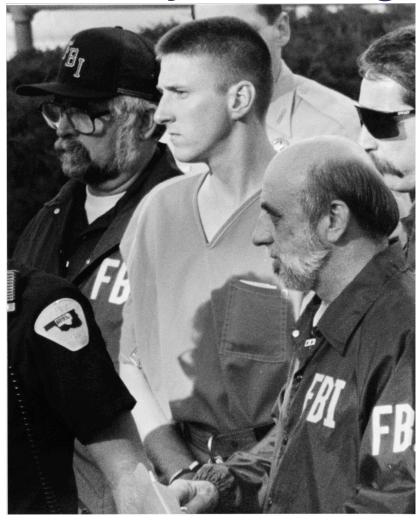
- Collection of databases related to various crimes
- Contains > 39 million records

#### Successes

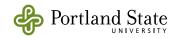
- Helps police solve hundreds of thousands of cases every year
- Helped FBI tie James Earl Ray to assassination of Dr. Martin Luther King, Jr.
- Helped FBI apprehend Timothy McVeigh for bombing of federal building in Oklahoma City



# Timothy McVeigh



© Bob E.Daemmrich/Sygma/Corbis

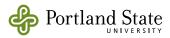


### OneDOJ Database

- Database being constructed by U.S. Department of Justice
- Gives state and local police officers access to information provided by five federal law enforcement agencies
  - Incident reports
  - Interrogation summaries
  - Other information not available through NCIC

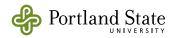
#### Criticisms

- OneDOJ gives local police access to information about people who have not been charged with a crime
- There is no way to correct misinformation in raw police reports



#### Closed-circuit Television Cameras

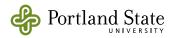
- First use in Olean, New York, in 1968
- Now more than 30 million cameras in U.S.
- New York City's effort in lower Manhattan
  - \$201 million for 3,000 new cameras
  - License plate readers
  - Radiation detectors
- Effectiveness of cameras debated



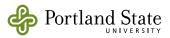
# Number of Surveillance Cameras Keeps Increasing

Insert Figure 6.3 here

© xiao-ming/iStockphoto.com



# 6.4 Covert Government Surveillance



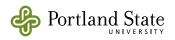
#### 4th Amendment to U.S.

"The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized."

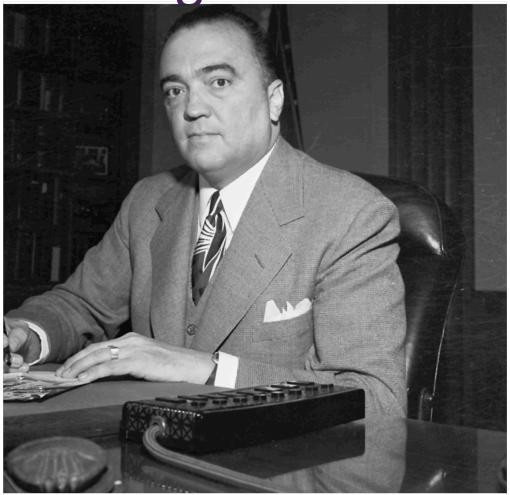


# Wiretaps and Bugs

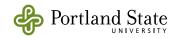
- Omstead v. United States wiretapping OK
- Federal Communications Act wiretapping made illegal
- Nardone v. United States wiretapping not OK
- FBI continues secret wiretapping
- Katz v. United States bugs not OK



J. Edgar Hoover



© Bettmann/CORBIS



The extent of the FBI's wiretapping under J. Edgar Hoover has never been clear.<sup>3</sup> Although Congress received annual testimony from Hoover, it was unable to discover how much wiretapping was actually occurring, since the figures Hoover gave did not include the taps installed by field agents on their own or the taps installed by local police at the FBI's request.

Hoover kept the transcripts of wiretaps—many of them hidden in obscure files—even when they revealed no evidence of criminal activity. Since wiretaps on suspected spies and organized crime figures sometimes picked up conversations with politicians or other influential people, Hoover developed a mass of material with great political value. This is how he ended up with transcripts of intimate conversations between John Kennedy and Inga Arvad, a Danish reporter and former Miss Europe who had visited Germany for social functions with high Third Reich officials, including Hitler. The FBI was investigating allegations that Arvad was a German spy (Anderson 1996a, pp. 48-52). The investigation itself may have been legitimate. The recordings were made during the World War II, while Kennedy was a Naval officer. Nonetheless, although the investigation produced no evidence of espionage, recordings of his pillow talk with Arvad were still in the FBI files when Kennedy became president nearly 20 years later.

Diffie & Landau: Privacy on the Line

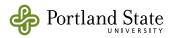
It is believed that, without any pretense of investigating criminal activities, Hoover wiretapped senators and congressmen.<sup>4</sup> It is known that he wiretapped various Supreme Court justices.<sup>5</sup> The existence of extensive records on political figures was well known, and these files ensured that Hoover got much of what he wanted. Congress exercised little oversight of the FBI's affairs, wiretapping included.

One example is particularly illustrative of the way in which Hoover was able to use the FBI's investigative powers to protect its interests. In 1965, a Senate subcommittee undertook an investigation of electronic surveillance and mail covers. The FBI, a major focus of this review, was concerned. One FBI memo noted: "Senator Long... has been taking testimony in connection with mail covers, wiretapping, and various snooping devices on the part of federal agencies. He cannot be trusted." (Jones 1965) Two high-ranking Bureau officials met with Edward Long (the

1965) Two high-ranking Bureau officials met with Edward Long (the chairman of the subcommittee) and a committee counsel. There is no indication that there were any briefings of other subcommittee members, nor is there any reason to believe that during the 90-minute meeting Long was told any details of FBI electronic surveillance, such as the bugging of a congressman's hotel room during the sugar lobby investigations (see below), the bugging and wiretapping of Martin Luther King, or the wiretapping of a congressional staffer, two newspaper reporters, and an editor of an anti-Communist newsletter (USS 94e, p. 309). The FBI men suggested that the senator issue a statement saying that he had held lengthy conferences with FBI officials and was now completely satisfied "that the FBI had never participated in uncontrolled usage of wiretaps or microphones and that FBI usage of such devices has been completely justified in all cases" (DeLoach 1966a). When Long said that he did not know how to write such a press release, the FBI officials said they would be happy to do so—and they did (ibid.).

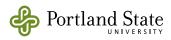
## Operation Shamrock

- Continuation of World War II interception of international telegrams
- National Security Agency (1952)
- Expanded to telephone calls
- Kennedy
  - Organized crime figures
  - Cuba-related individuals and businesses
- Johnson and Nixon
  - Vietnam war protesters
- Nixon
  - War on drugs



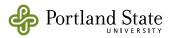
# Carnivore Surveillance System

- Created by FBI in late 1990s
- Monitored Internet traffic, including email exchanges
- Carnivore = Windows PC + "packet-sniffing" software
- Captured packets going to/from a particular IP address
- Used about 25 times between 1998 and 2000
- Replaced with commercial software



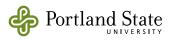
### Covert Activities after 9/11

- September 11, 2001 attacks on World Trade Center and Pentagon
- President Bush authorized new, secret, intelligence-gathering operations inside United States



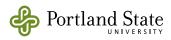
# National Security Administration Wiretapping

- President Bush signed presidential order
  - OK for NSA to intercept international phone calls & emails initiated by people inside U.S.
  - No search warrant required
- Number of people monitored
  - About 500 people inside U.S.
  - Another 5,000-7,000 people outside U.S.
- Two al-Qaeda plots foiled
  - Plot to take down Brooklyn bridge
  - Plot to bomb British pubs and train stations

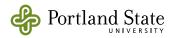


### **TALON Database**

- Created by U.S. Department of Defense in 2003
- Supposed to contain reports of suspicious activities or terrorist threats near military bases
- Reports submitted by military personnel or civilians
- Reports assessed as "credible" or "not credible" by military experts
- Reports about anti-war protests added to database
- Many of these reports later deleted from database
- In 2007 new Under Secretary of Defense for Intelligence recommended that TALON be terminated

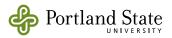


# 6.5 U.S. Legislation Authorizing Wiretapping



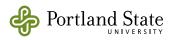
### Title III

- Part of Omnibus Crime Control and Safe Streets Act of 1968
- Allows a police agency with a court order to tap a phone for up to 30 days
- In 1972 U.S. Supreme Court again rejected warrantless wiretapping, even for national security



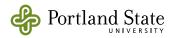
#### Electronic Communications Privacy Act

- Passed by Congress in 1986
- Allows police to attach two kinds of surveillance devices to a suspect's phone line
  - Pen register: displays number being dialed
  - Trap-and-trace device: displays caller's phone number
- Court order needed, but prosecutors do not need to show probable cause
- Allows police to do roving wiretaps (following suspect from phone to phone)



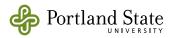
#### Stored Communications Act

- Part of Electronic Communications Privacy Act
- Government does not need a search warrant to obtain from an Internet service provider email messages more than 180 days old
- Advent of cloud computing raises new privacy concerns
- Digital Due Process organization (nearly 50 companies and privacy rights organizations) lobbying Congress to change law

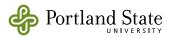


## Communications Assistance for Law Enforcement Act

- Passed in 1994
- Designed to ensure police can still do wiretapping as digital networks are introduced
- FBI asked for new abilities, such as ability to intercept digits typed by caller after phone call placed
- Federal Communications Commission included these capabilities in its guidelines to phone companies
- Privacy-rights advocates argued that new capabilities went beyond Congress's intent



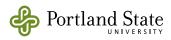
### 6.6 USA PATRIOT Act



### **USA PATRIOT Act**

#### Provisions

- Greater authority to monitor communications
- Greater powers to regulate banks
- Greater border controls
- New crimes and penalties for terrorist activity
- Critics say Act undermines 4th Amendment rights
  - Pen registers on Web browsers
  - Roving surveillance
  - Searches and seizures without warrants
  - Warrants issued without need for showing probable cause



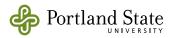
## National Security Letters

- FBI can collect Internet, business, medical, educational, library, and church/mosque/ synagogue records without showing probable cause
- Issues a National Security Letter stating the records are related to an ongoing investigation; no approval from judge needed
- Gag orders prevent recipients (e.g., libraries) from disclosing receipt
- FBI issued 50,000 National Security Letters a year between 2003 and 2006



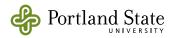
#### Patriot Act Successes

- Charges against 361 individuals
  - Guilty pleas or convictions for 191 people
  - Shoe-bomber Richard Reid
  - John Walker Lindh
- More than 500 people removed from United States
- Terrorist cells broken up in Buffalo, Seattle, Tampa, and Portland ("the Portland Seven")



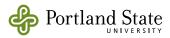
#### Patriot Act Failure

- March 11, 2004 bombings in Madrid Spain
- FBI makes Brandon Mayfield a suspect
  - Claims partial fingerprint match
  - Conducts electronic surveillance
  - Enters home without revealing search warrant
  - Copies documents and computer hard drives
- Spanish authorities match fingerprint with an Algerian
  - Judge orders Mayfield released
  - FBI apologizes

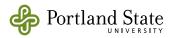


#### Patriot Act Renewal

- Patriot Act renewed in 2006
- Nearly all provisions made permanent
- Four-year sunset clause on two provisions
  - Roving wiretaps
  - FBI ability to seize records from financial institutions, libraries, doctors, and businesses with approval from secret Foreign Intelligence Surveillance Court

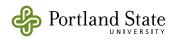


## 6.7 Regulation of Public and Private Databases



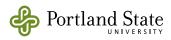
## Genesis of Code of Fair Information Practices

- 1965: Director of Budget asked committee of economists to look at problems caused by decentralization of statistical data across federal agencies
- Committee recommended creation of a National Data Center
- Citizens and legislators expressed concerns about possible abuses of such a system
- Another group formed to draft guidelines for government databases



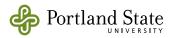
#### Code of Fair Information

- No secret databases
- People should have access to personal information in databases
- Organizations cannot change how information is used without consent
- People should be able to correct or amend records
- Database owners, users responsible for reliability of data and preventing misuse



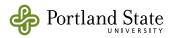
## Privacy Act of 1974 Falls Short

- Applies only to government databases
- Only covers records indexed by a personal ID
- No federal employee responsible to enforcing Privacy Act provisions
- Allows agencies to share records with other agencies



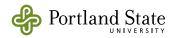
## Legislation for Private

- Fair Credit Reporting Act
- Fair and Accurate Credit Transactions Act
- Financial Services Modernization Act



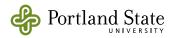
## Fair Credit Reporting Act

- Promotes accuracy and privacy of information used by credit bureaus
- Major credit bureaus: Equifax, Experian, Trans Union
- Negative information kept only 7 years
- Exceptions
  - Bankruptcies: 10 years
  - Criminal convictions: indefinitely



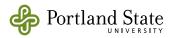
## Fair and Accurate Credit Transactions Act

- Passed in 2004
- Requires three major credit bureaus to provide consumers a free copy of their credit report every 12 months
- Not automatic: consumers must request credit reports
- Provisions to reduce identity theft

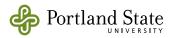


#### Financial Services Modernization

- Also called Gramm-Leach-Bliley Act of 1999
- Creates "financial supermarkets" offering banking, insurance, and brokerage services
- Privacy-related provisions
  - Privacy policies must be disclosed to customers
  - Notices must provide an opt-out clause
  - Companies must develop procedures to protect customers' confidential information

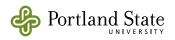


## 6.8 Data Mining by the Government



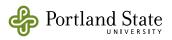
## Definition of Data Mining

 Data mining: Process of searching through one or more databases looking for patterns or relationships among the data



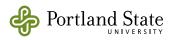
#### **IRS** Audits

- IRS uses computer matching and data mining to look for possible income tax fraud
- Computer matching: matching tax form information with information provided by employers, banks, etc.
- Data mining: searching through forms to detect those that appear most likely to have errors resulting in underpayment of taxes



## Syndromic Surveillance

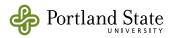
- Syndromic surveillance system: A data mining system that searches for patterns indicating the outbreak of an epidemic or bioterrorism
  - 911 calls
  - emergency room visits
  - school absenteeism
  - Internet searches
- Example: A system in New York City detected an outbreak of a virus in 2002



### Telecommunications Records Database

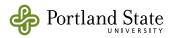
- Created by National Security Agency after 9/11
- Contains phone call records of tens of millions of Americans
- NSA analyzing calling patterns to detect terrorist networks
- Phone records voluntarily provided by several major telecommunications companies
- USA Today revealed existence of database in May 2006
- Several dozen class-action lawsuits filed
- August 2006: Federal judge in Detroit ruled program illegal and unconstitutional
- July 2007: U.S. Court of Appeals overturned ruling, saying Porplaintiffs did not have standing to bring suit forward

### 6.9 National Identification Card



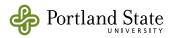
#### History, Role of Social Security Number

- Social Security cards first issued 1936
- Originally used only for SS purposes
- Use of SSN has gradually increased
- SSN is a poor identification number
  - Not unique
  - Rarely checked
  - No error-detecting capability



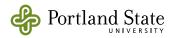
## Arguments for a National ID

- Current ID cards are second-rate
- Would reduce illegal entry to U.S.
- Would prevent illegal aliens from working
- Would reduce crime
- Other democratic countries have national ID cards



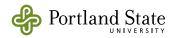
#### Arguments against a National ID Card

- No card positively guarantees identification
- No biometric-based system is 100% accurate
- No evidence it will reduce crime
- Makes government data mining simpler
- Make law-abiding people more vulnerable to fraud and indiscretions



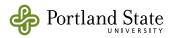
### The REAL ID Act

- Signed in May 2005
- Significantly changes driver's licenses in the United States
- New licenses
  - Issued by end of 2013
  - Required to open bank account, fly on commercial airplane, or receive government service
  - Requires applicants to supply 4 different IDs
  - Will probably contain a biometric identifier
  - Must contain data in machine-readable form

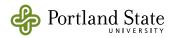


#### Possible Consequences of New Licenses

- Better identification means better law enforcement
- People won't be able to change identities
  - Parents ducking child support
  - Criminals on the run
- New, centralized databases could lead to more identity theft

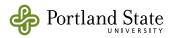


## 6.10 Information Dissemination



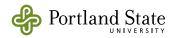
#### Legislation to restrict information dissemination

- Family Education Rights and Privacy Act
- Video Privacy Protection Act
- Health Insurance Portability and Accountability Act
- Examples of information dissemination
  - Freedom of Information Act
  - Toll booth records used in court



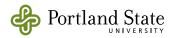
# Family Education Rights and Privacy Act (FERPA)

- Rights given to
  - Students 18 years and older
  - Parents of younger students
- Rights include
  - Reviewing educational records
  - Requesting changes to erroneous records
  - Preventing release of records without permission



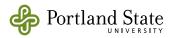
### Video Privacy Protection Act

- Videotape service providers cannot disclose rental records without consumer's written consent
- Rental stores must destroy personal information related to rentals within a year of when it is no longer needed



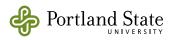
## Judge Robert Bork





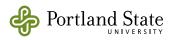
# Health Insurance Portability and Accountability Act

- Limits how doctors, hospitals, pharmacies, and insurance companies can use medical information
- Health care providers need signed authorization to release information
- Health care providers must provide patients with notice describing how they use medical information



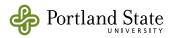
#### Freedom of Information Act

- Federal law designed to ensure public has access to U.S. government records
- Signed by President Johnson (1966)
- Applies only to executive branch
- Nine exemptions
  - Classified documents
  - Trade secrets or financial information
  - Documents related to law enforcement

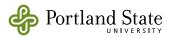


#### Toll Booth Records

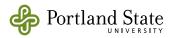
- E-ZPass: an automatic toll-collection system used on most toll roads, bridges, and tunnels between Illinois and Maine
- Drivers with E-ZPass tags pass through without stopping to pay attendant
- Records have been provided in response to court orders in criminal and civil cases



### 6.11 Invasion

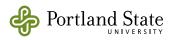


- Government actions to prevent invasion
  - Do Not Call Registry
  - CALM Act
- Invasive government actions
  - Requiring identification for pseudoephedrine purchases
  - Advanced Imaging Technology scanners at airports



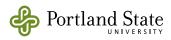
## National Do Not Call Registry

- FTC responded to public opinion
  - Created Do Not Call Registry in 2003
  - More than 50 million phone numbers registered before it even took affect
- Example of how privacy is treated as a prudential right
  - Benefit of shielding people from telemarketers judged to be greater than harm caused by limiting telephone advertising



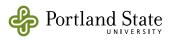
#### **CALM Act**

- Television watchers have complained to FCC about loud commercials since 1960s
- CALM Act signed by President Obama in 2010
- Requires FCC to ensure television commercials are played at same volume as programs they are interrupting



### Pseudoephedrine Purchases

- Pseudoephedrine an ingredient of Sudafed and other cold medications
- It is also an ingredient of methamphetamine ("meth")
- Federal and state governments have passed laws limiting access to pseudoephedrine
  - Limits quantity that can be purchased in a month
  - Identification and signature required for purchase in most states



#### Advanced Imaging Technology Scanners

- Transportation Security Administration began installing AIT scanners in 2007
- AIT scanners reveal anatomical features
- Electronic Privacy Information Center sued government in 2010, saying systems violate 4<sup>th</sup> Amendment and various laws
- February 201: TSA announced it was developing new software that would replace detailed image with generic outline of a



#### Advanced Imaging Technology Scanner

#### Insert Figure 6.6 here

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