NAICS:

North American Classification System

Federal Depository Library Program (FDLP)
 Academy Webinar
October 13, 2022
Jennifer C. Boettcher

Jennifer C. Boettcher

Changes to NAICS Affects Researchers

Online Searcher 46, no. 4 (Jul, 2022): 16-21

Using NAICS Codes Effectively to Research Industries

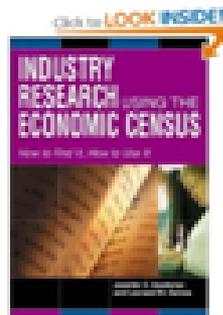*Online Searcher* 46, no. 5 (Sep, 2022): 10-15.

Hello!

What do you want to learn? really

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Submit all questions and comments via Chat (lower right)
Slides will be distributed to participants
https://tinyurl.com/FDLP22NAICS

Jennifer C. Boettcher

Jennifer C. Boettcher and Leonard M. Gains. Industry Research Using the Economic Census. Greenwood Press: Phoenix, AZ. 2004

M.B.A., Georgetown University, Washington, D.C., 2005

M.L.S., State University of New York, Albany, N.Y., 1992

Georgetown University 1997-present

ALA GODORT and RUSA BRASS Member since 1991

Founder of Business Information Finders (BIF) and Capital Area Business Academic Librarians (CABAL) in DC

2013 Emerald Research Grant: Zombie List (reanimated business sources)

2010 Gale Cengage Learning Award for Excellence in Business Librarianship

Librarian & Information Scientist

As a Librarian, I do

- Understand the source
- Know how to find the source
- Know the subjects covered
- Know how it's connected to other sources
- Know how to read the data
- Interpret the data (up/down, percentage)
- Make connections between publisher/agencies and researcher

As a Librarian, I do not

~ Publish the primary source

~ Have your context or expertise

~ Do statistical analysis

~ Tell you why

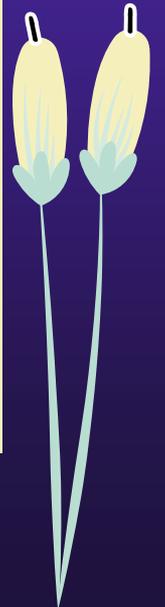~ Do data entry

~ Have legal expertise

All opinions are my own

Table of *contents*

01

What *is it?*

What is NAICS and Who creates North American Industry Classification System

Quiz: What is

SAFEWAY

Safeway in your area?

A. Food Store

B. Grocery Store

C. Supermarket

D. Delivery Service

E. Gasoline Stations with Convenience Stores

F. Delicatessens primarily retailing a range of grocery items and meats

G. It depends

North American Industry Classification System: NAICS

pronounced nākes, like snakes 🐍

- Standard used by Federal statistical agencies
- Classifying **business establishments**
- For the purpose of collecting, analyzing, and publishing **statistical data**
- Related to the U.S. business economy.

Food Store Supply Chain

PRODUCTION

Agriculture - 11
Orange groves- 11131
Fishing- 11411

PROCESSING

Manufacturing- 31
Frozen food - 31141
Seafood- 31171

AGGREGATION/ DISTRIBUTION

Transportation- 48
Trucking, local - 48411
Warehousing - 493

MARKETS/ CONSUMERS

Retail- 44
Grocery - 44511
Grocery delivery - 49221

Four principles of NAICS

1. NAICS is erected on a production-oriented conceptual framework. This means that producing units that use the same or similar production processes are grouped together in NAICS.

2. NAICS gives special attention to developing production-oriented classifications for (a) new and emerging industries, (b) service industries in general, and (c) industries engaged in the production of advanced technologies.

3. Time series continuity is maintained to the extent possible.

4. The system strives for compatibility with the two-digit level of the International Standard Industrial Classification of All Economic Activities (ISIC Rev. 4) of the United Nations.

Why Industry *Classification?*

History

- Economic Concept of Industry
- 1939 Standard Industry Classification (SIC) created
- 1959 first use of SIC in Economic Census
- 1997 first version of NAICS

Usage

Trends and Comparisons
- Census- Economic Census
- BEA- Gross Domestic Product (in/out tables)
- BLS- Producer Price Index (inflation)
- Census- County Business Patterns

NEWS: Death notice for SIC

February 26, 2020 OMB ask for permission to kill the Standard Industrial Classification (**SIC**). With 86 FR No. 242 72277, December 21, 2021 SIC will be eliminated effective immediately. Long live the North American Industry Classification System (**NAICS**). Thank you Economic Classification Policy Committee (ECPC)

V. OMB Statistical Policy Directive No. 8, Standard Industrial Classification of Establishments The ECPC is soliciting public comments at the request of OMB on the advisability of formally updating Statistical Policy Directive No. 8, Standard Industrial Classification of Establishments, and seeking comments on the proposed text of the update.

VI. OMB Statistical Policy Directive No. 9, Standard Industrial Classification of Enterprises The ECPC proposes elimination of Statistical Policy Directive No. 9, Standard Industrial Classification of Enterprises.

Who oversees NAICS?

Office of Management and Budget (OMB)'s Office of Information and Regulatory Affairs (OIRA) gives responsibility to Economic Classification Policy Committee (ECPC)

- Representatives from Census, BEA, BLS, and others as needed
- With Mexico's INEGI and Statistics Canada to negotiated levels
- Revision every 5 years

North American Industry Classification System (NAICS) Structure

Level	Code	Description
Sector *	31	Manufacturing
Subsector *	315	Apparel Manufacturing
Industry Group *	3152	Cut and Sew Apparel Manufacturing
Industry	31525	Cut and Sew Apparel Manufacturing (except contractors)
U.S. Industry	<u>315250</u>	Cut and Sew Apparel Manufacturing (except contractors)

* Mexico & Canada Compatible

315250 Cut and Sew Apparel Manufacturing (except Contractors)

Cross-References. Establishments primarily engaged in--

- Cutting and/or sewing materials owned by others for apparel--are classified in Industry 315210, Cut and Sew Apparel Contractors;
- Knitting apparel or knitting fabric and manufacturing apparel--are classified in Industry 315120, Apparel Knitting Mills;
- Manufacturing fur and leather mittens and gloves--are classified in Industry 315990, Apparel Accessories and Other Apparel Manufacturing;
- Dyeing and dressing furs--are classified in Industry 316110, Leather and Hide Tanning and Finishing; and
- Manufacturing cloth diapers--are classified in U.S. Industry 314999, All Other Miscellaneous Textile Product Mills.

2012 NAICS	2017 NAICS	2022 NAICS	Corresponding Index Entries
315280	315280	315250	Apparel, fur (except apparel contractors), manufacturing
315220	315220	315250	Aprons, work (except leather, waterproof), men's and boys', cut and sewn from purchased fabric (except apparel contractors)
315240	315240	315250	Aprons, work (except waterproof, leather), women's and girls', cut and sewn from purchased fabric (except apparel contractors)
315220	315220	315250	Athletic clothing, men's, boys' and unisex (i.e., sized without regard to gender), cut and sewn from purchased fabric (except apparel contractors)
315240	315240	315250	Athletic clothing, women's and girls', cut and sewn from purchased fabric (except apparel contractors)
315280	315280	315250	Athletic uniforms, team, cut and sewn from purchased fabric (except apparel contractors)
315220	315220	315250	Bakers' service apparel, washable, men's and boys', cut and sewn from purchased fabric (except apparel contractors)

24 NAICS Sectors

11 Agriculture, Forestry, Fishing and Hunting

21 Mining

22 Utilities

23 Construction

31-33 Manufacturing

42 Wholesale Trade

44-45 Retail Trade

48-49 Transportation and Warehousing

51 Information

52 Finance and Insurance

53 Real Estate and Rental and Leasing

54 Professional, Scientific, and Technical Services

55 Management of Companies and Enterprises

56 Administrative and Support and Waste Management and Remediation Services

61 Education Services

62 Health Care and Social Assistance

71 Arts, Entertainment, and Recreation

72 Accommodation and Food Services

81 Other Services (except Public Administration)

92 Public Administration

Food Store Supply Chain

PRODUCTION

Agriculture - 11
Orange groves- 11131
Fishing- 11411

PROCESSING

Manufacturing- 31
Frozen food - 31141
Seafood- 31171

AGGREGATION/ DISTRIBUTION

Transportation- 48
Trucking, local - 48411
Warehousing - 493

MARKETS/ CONSUMERS

Retail- 44
Grocery - 44511
Grocery delivery - 49221

Advice

➔ When looking up an Industry
  ◆ <u>Find the right NAICS Code</u>
  ◆ Confirm there will not be a better code
    ● Look at US Industry for details
➔ When looking for industry statistics
  ◆ NAICS is the standard code NOT the data
  ◆ Who collects it?
  ◆ Read Methodology of how NAICS is collected and aggregated.
  ◆ What level of aggregation?
  ◆ What level of geography is available?
    ● Small geographies will not have data
  ◆ Try <u>FRED</u> before Data.gov
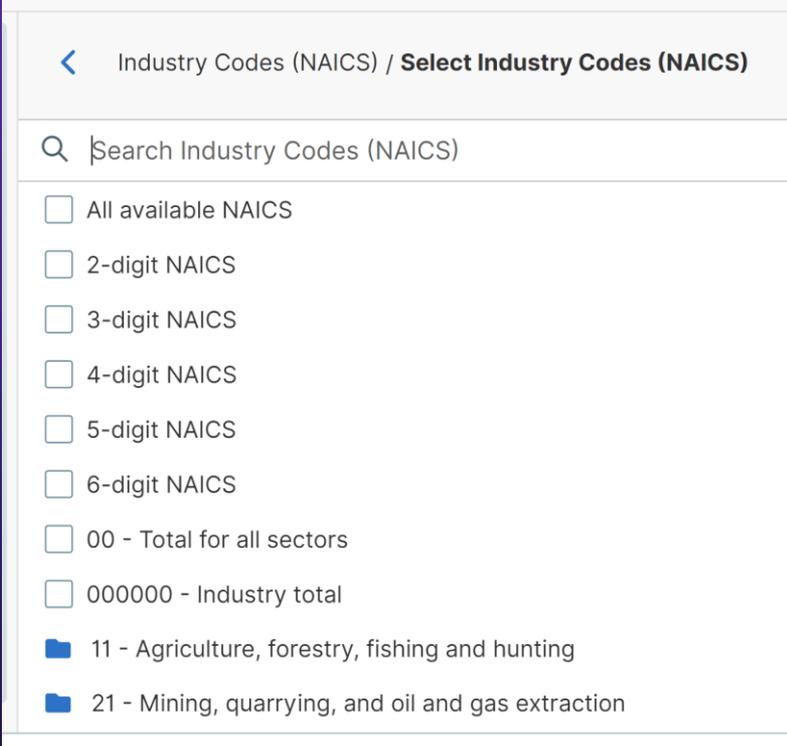
← Industry Codes (NAICS) / **Select Industry Codes (NAICS)**

🔍 Search Industry Codes (NAICS)

☐ All available NAICS
☐ 2-digit NAICS
☐ 3-digit NAICS
☐ 4-digit NAICS
☐ 5-digit NAICS
☐ 6-digit NAICS
☐ 00 - Total for all sectors
☐ 000000 - Industry total
📁 11 - Agriculture, forestry, fishing and hunting
📁 21 - Mining, quarrying, and oil and gas extraction

Census only data on data.census.gov

Which Industry?
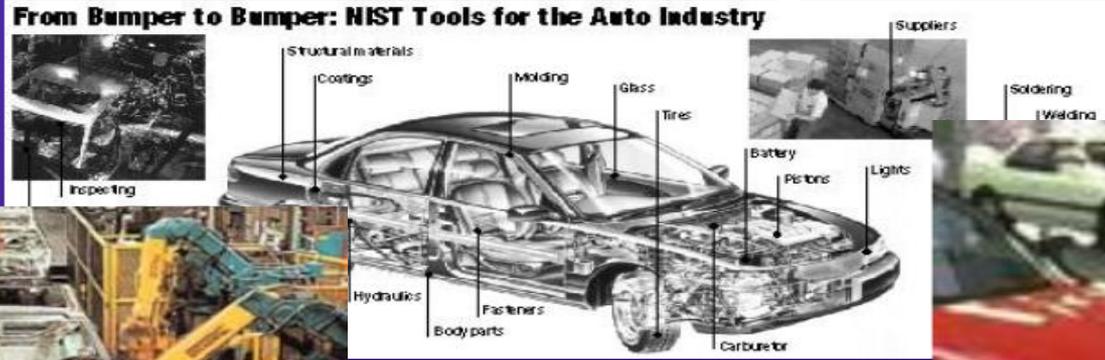
Do you want a new NAICS Code?

Process

Federal Register (FR) notice soliciting proposals
ECPC review of proposals and trilateral negotiation
FR notice containing OMB final decisions
NAICS United States available on NAICS Website
2022 revision started in 2019

Considerations

Be of appropriate size - for privacy
Ability of government agencies to classify, collect, and publish data
Applied by agencies within their normal processing operations for cost saving
Take into account the cost of making the changes
Activities of similar producing units cannot be separated (see NAPCS)

Talk to someone in the ECPC with your ideas.

Proposals for changes to NAICS

a) Specific detail about the economic activities to be covered by the proposed industry, especially its production processes, specialized labor skills, and any unique materials used.

b) Specific indication of the relationship of the proposed industry to existing NAICS United States six-digit industries.

c) Documentation of the size and importance of the proposed industry in the United States.

d) Information about the proposed industry in Canada and Mexico, if available.

OMB's Statistical Policy Directive No. 8

The North American Industry Classification System (NAICS) is to be used to classify reporting establishments by types of industrial activity in which they are engaged....

Use for Federal Nonstatistical Program Purposes NAICS shall not be used in the administration of any regulatory, administrative, or tax program unless the Secretary (Administrator) has first determined that the use of such industry definition is appropriate to the implementation of the program's objectives...

The use, interpretation, and application of NAICS for nonstatistical purposes is controlled by and defined by the agencies or regulations that use the statistical standard for those nonstatistical purposes.

CC0, https://pixabay.com/en/hedgehog-child-young-hedgehog-1759027

02

NAICS
functions

Who uses NAICS:
Statistical and Nonstatistical

Statistical Indicators

County Business Patterns (ZIP, Congress, MA, Islands, State, United States)

Advance Monthly Sales for Retail and Food Services (MARTS)

Longitudinal Employer-Household Dynamics (LEHD)

New Small Business Pulse (SBP)

New Business Formation Statistics (BFS)

New Annual Business Survey (ABS)

Annual Survey of Manufactures (ASM)

Quarterly Financial Report (QFR)

Business Dynamics Statistics (BDS)

Quarterly Services Survey (QSS)

Nonemployer Statistics (NES)

Economic Census

Producer Price Index (PPI)

Employment (BLS)

Industry at a Glance (BLS)

Tax Stats (IRS)

GDP by Industry (BEA)

Job Patterns for Minorities and Woman (EEOC)

All Census Programs

Economic Census

New NAICS introduced - Every five years with years ending in 2 and 7

○ Legal Basis Title 13, United States Code (U.S.C.), Section 9, 131, 224, and 225.

■ Copies retained in respondents' files are immune from legal process.

Census, not a survey- All Business

○ Administrative records- Social Security & IRS, NOT Nonemployer Establishments

Core data (Geographic) National, state, metro, county, place, and ZIP Code levels

○ Number of establishments
○ Value of sales, receipts, revenue, shipments, or business done
○ Annual payroll
○ Number of employees

○ Economic Census NOT Census of Population and Housing

Selected Industries That Contributed to the U.S. Gig Economy: 2019

2017 NAICS Industry	Receipts ($1,000)
Taxi and Limousine Service	$31,177,778
Couriers and Messengers	$7,281,790
Real Estate Property Managers	$15,133,204
Janitorial Services	$16,568,347
Landscaping Services	$13,439,333
Child Day Care Services	$9,448,847
Traveler Accommodation	$3,474,333
Special Food Services	$6,567,380
Other Personal and Household Goods Repair and Maintenance	$4,462,389
Pet Care (except Veterinary) Services	$2,493,274
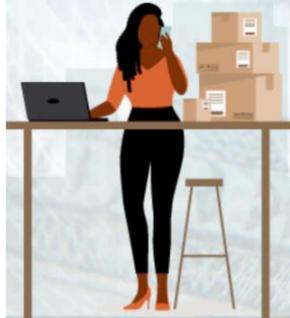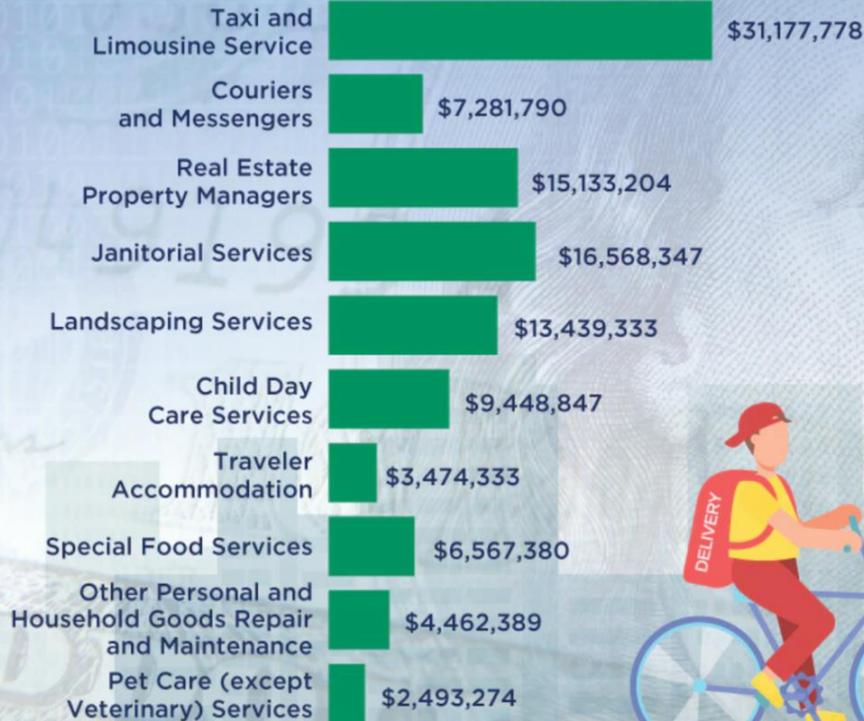
Geographic Area Name	2017 NAICS code	Meaning of NAICS code	Year	↓ Number of nonempl...	Nonemployer sales, val...
United States	812112	Beauty salons	2019	757,926	19,639,956
United States	812113	Nail salons	2019	265,922	9,604,326
United States	541219	Other accounting services	2019	246,146	6,277,585
United States	621399	Offices of all other miscella...	2019	217,614	8,625,417
United States	621111	Offices of physicians (exce...	2019	179,293	16,180,318
United States	812111	Barber shops	2019	116,128	3,022,886
United States	541213	Tax preparation services	2019	97,197	2,669,503

Geographic Area Name	2017 NAICS code	Meaning of NAICS code	Year	Number of nonemployer establishments	Nonemployer sales, value of shipments, or revenue ($1,000)	Rev/est
United States	52312	Securities brokerage	2019	15,508	3,286,001	211.8907
United States	52311	Investment banking and securities dealing	2019	7,913	1,660,530	209.8484
United States	23721	Land subdivision	2019	8,977	1,541,711	171.7401
United States	42494	Tobacco and tobacco product merchant wholesalers	2019	1,851	291,552	157.5105
United States	52314	Commodity contracts brokerage	2019	1,932	292,803	151.5543
United States	44531	Beer, wine, and liquor stores	2019	9,483	1,404,222	148.0778
United States	52313	Commodity contracts dealing	2019	1,497	197,633	132.0194
United States	44112	Used car dealers	2019	108,250	13,971,384	129.0659
United States	45431	Fuel dealers	2019	2,878	369,268	128.3072
United States	42491	Farm supplies merchant wholesalers	2019	2,912	335,865	115.3383

GDP by Industry

From BEA

Line		2020				2021				2022	
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
1	**Gross domestic product**	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
2	**Private industries**	87.4	86.5	87.3	87.4	87.7	87.9	87.9	88.2	88.3	88.4
3	**Agriculture, forestry, fishing, and hunting**	0.8	0.7	0.7	0.8	0.8	0.9	0.9	0.9	1.1	1.2
4	Farms	0.6	0.5	0.5	0.6	0.6	0.7	0.8	0.7	0.9	1.0
5	Forestry, fishing, and related activities	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
6	**Mining**	1.1	0.7	0.9	1.0	1.3	1.3	1.5	1.6	1.7	2.1
7	Oil and gas extraction	0.7	0.3	0.5	0.6	0.9	0.9	1.0	1.2	1.3	1.7
8	Mining, except oil and gas	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
9	Support activities for mining	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
10	**Utilities**	1.5	1.7	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.8
11	**Construction**	4.3	4.3	4.2	4.2	4.2	4.1	4.0	4.0	4.0	3.9
12	**Manufacturing**	10.8	10.5	10.7	10.6	10.7	10.7	10.6	10.9	10.9	11.0
13	Durable goods	6.1	5.8	6.2	6.1	6.1	6.0	5.9	6.0	6.0	6.0

NAICS is the linchpin in *Industry Analysis*

Financials

Ratio Analysis/comps
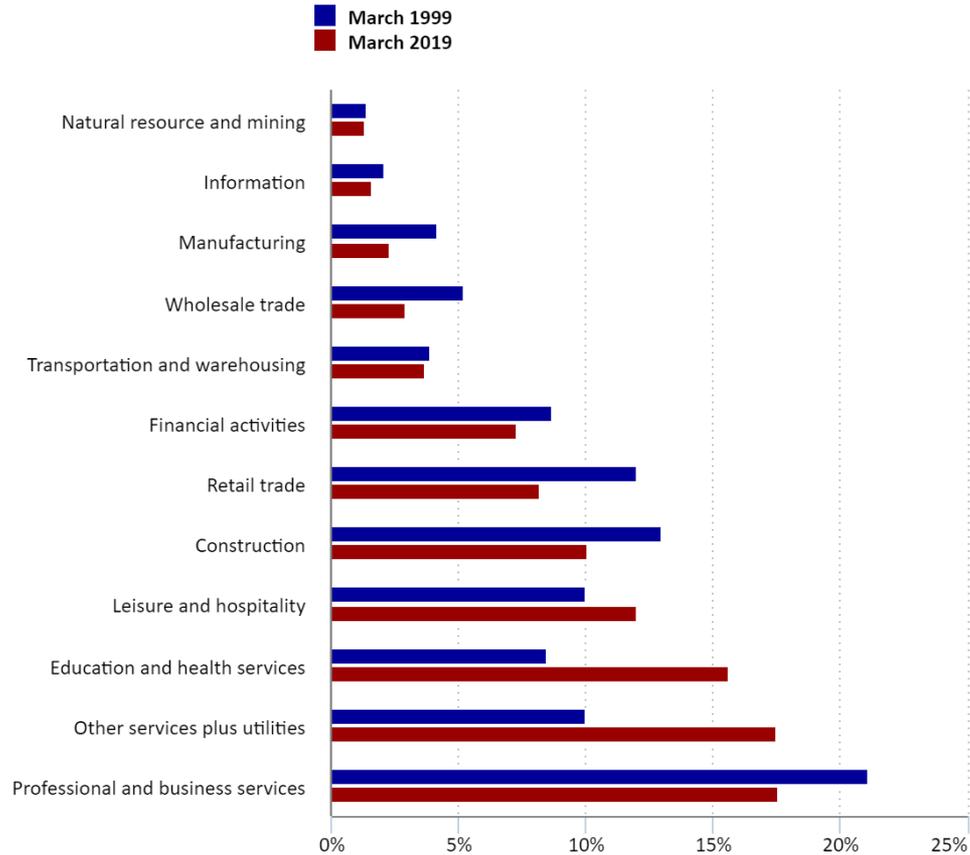Pro Forma Statements

Directories

Business Competitors
Market size (how many)
Market share (dominate company)

Field Searching

NAICS Field in most article indexing services

Share of startups in March 1999 and March 2019, by industry

■ March 1999
■ March 2019

Click legend items to change data display. Hover over chart to view data.
Source: U.S. Bureau of Labor Statistics.

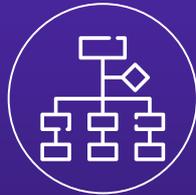# *Government/***Nonstatistical**

OPM

Federal Wage System

OSHA

Injury and Illness

SBA

What is a small business: 13 CFR 121

*F*oreign Trade

Military Exports

Who assigns NAICS to a company/firm?

self-assigned

NAICS *interpretation*

30% of IRS returns wrong

From person files a 1040 Schedule C (for business)

21% are errors, and 13.6% do not even include sector (2 digit)

Oehlert, C., Schulz, E., & Parker, A. (2022). NAICS Code Prediction Using Supervised Methods. *Statistics and Public Policy, 9*(1), 58–66.

29% of CO's wrong

contracting officers helping to fill procurement form

Miller, M. A., & Ellis, J. M. (2016). *The NAICS Code Selection Process And Small Business Participation.* NAVAL POSTGRADUATE SCHOOL MONTEREY CA MONTEREY United States.

AI solution and better training

Read the Methodology being used to assign NAICS

If statistical agencies are different, compare the methodology

If historical, check for changes and use Bridge Tables

Do you need Nonemployer Statistics (NES)?

Words of Advice

Know what NAICS Version is being used

Reflection

What questions do you have?

What industry is Safeway in?

03

2022
NAICS

Will not appear until 2024, as part of the Economic Census

Changing NAICS

hierarchy	defination	1997	2002	2007	2012	2017	2022
2 digit	Sectors	24	24	24	24	24	24
3 digit	Subsectors	96	100	99	99	99	96
4 digit	Industry Groups	313	318	313	312	311	308
5 digit	Industries	721	725	721	713	709	689
6 digit	US Industries	1170	1179	1175	1065	1057	1012

Note Consolidation in 2022

Changes in 2022

Sector	Description	US Industry	2022 Changes
21	Mining, Quarrying, and Oil and Gas	21	6
31	Food & Textile Manufacturing	69	5
32	Materials Manufacturing	96	4
33	Finished Product Manufacturing	181	11
42	Wholesale Trade	69	3
44	Retailers	28	38
45	Retailers	29	74
51	Information	29	41
52	Finance and Insurance	35	9
81	Other Services (except Public Admir	44	2

30	title change, no content change
185	new code for 2022 NAICS
7	re-used code, content change
3	re-used code, content change at lower level with insignificant inpact

New 2022 NAICS Codes

Mining

2022

21214 surface coal
212115 underground
212220 gold & silver
212290 other metal ore
21232 Kaolin, clay...
212339 Other
Nonmetallic Mineral
Quarrying

2017

212111 bituminous & 212113 anthracite
212112 bituminous & 212113 anthracite
212221 gold & 212221 silver
212222 uranium & 212299 all other
metals
212324 Kaolin & 212325 Clay, ceramic,...
Potash, Phosphate, other chem, all other
nonmetallic mineral mining

Manufacturing

2022

315120 (Apparel Knitting Mills)

315250(Cut & Sew Apparel)

31699 (Other Leather & Allied)

321215 (Engineered Wood)

32212(Paper Mills)
R 325314(Fertilizer)
~~325315(Compost)~~

2017

31511 (Hosiery & Socks) & 31519 (Other Apparel Knitting)

31522 (Men's & Boy's Cut & Sew Apparel) & 31524(Woman's, Girl's, & Infant's Cut) & 31526 (Other Cut & Sew Apparel)

316992 (Women's Handbag & Purse) & 316998 (All other Leather Good & Allied Product)

321213 (Engineered Wood Member) & 321214 (Truss)

322121(Paper [except Newsprint]) & 322121 (Newsprint)

325314 (Fertilizer)

325314 (Compost)

Manufacturing

2022

333248 All Other Industrial
333310Commercial & Services Industry Mach
333996 All Other Misc
334610 Reproduction Magnetic & Optical Media

2017

333244 Printing Machinery & 333249 Other Industrial
333314 Optical & 333316 Photographic & 333318 Other Commercial & Services Industry Machinery
333997 Scale & Balance & 333999 All Other Misc General
334613 Blank Magnetic Recording Media & 334614 Software & Other PreRecorded CD, Tape, & Record

Manufacturing

2022

335131 Electric Lighting
335132 Commercial Industrial & Institutional
335139 Electric Lamp Bulbs & Other
33591 Battery
33611 Auto & Light Duty Motor Vehicles
337126 Household Furniture (except Wood & Upholstered)

2017

335121 Residential Electric Lighting Fixtures
335122 Commercial Industrial & Institutional Electric Lighting Fixtures
33511 Electric Lamp Bulbs and Parts & 335129 Other Lighting Equipment
335911 Storage Battery & 335912 Primary Battery
336111 Automobile & 336112 Light Trucks & Utility Vehicles

337125 Metal Household Furniture & 337125 Household furniture (except wood & Metal)

Wholesale

2022

42435 Clothing &
Clothing Accessories
R 42512 Wholesale
Trade Agents & Brokers

2017

424320 Men's and Boy's Clothing and Furnishing &
424330 Woman's and Childers, and Infants clothing and
Assoc
425111 Business to Business Electronic Markets

2022 NAICS: Retailers not stores or website

2022 NAICS Code	2022 NAICS Title	2017 NAICS Code	2017 NAICS Title
459210	Book Retailers and News Dealers	451211	Book Stores
459210	Book Retailers and News Dealers	Pt 451212	News Dealers and Newsstands
459210	Book Retailers and News Dealers	Pt 454110	Electronic Shopping and Mail-Order Houses
513130	Book Publishers	511130	Book Publishers
513130	Book Publishers	Pt 519130	Internet Publishing and Broadcasting and Web Search Portals - Internet book publishers

Other Retail

2022

445132 Vending Machines

45811 Clothing & Clothing Accessories

45993 Manufactured (Mobile) Home Dealers

459991 Tobacco, Electric Cigarette, & Other Smoking

2017

45421 Vending Machines Operators

Men's, Women's, Children's, Family Clothing Stores & Clothing accessories & Other Clothing Stores & Electronic Shopping & Mail-Order Houses & Other Direct Selling Establishments

45393 Manufactured (Mobile) Home Dealers

453991 Tobacco Stores

Publishing

2022

51311 Newspaper
51312 Periodical
51313 Book
51314 Directory & Mailing Lists
513191 Greeting Cards
513199 All Other Publishing
51321 Software

2017

51111 Newspaper Publishers & Pt 51913 Internet Newspaper
51112 Periodical & Pt 51913 Internet Periodicals
51113 Books & Pt 51913 Internet Books
51114 Directory & Mailing Lists & Pt 51913 Internet Directory and Mailing Lists
511191 Greeting Cards & Pt 51913 Internet Greeting Cards
513199 All Other Publishing & Pt 51913 Internet All Other Publishing
51121 Software Publishing

Broadcasting & Content Providers

2022

51611 Radio
51612 Television
51621 Media Streaming
Distribution Services,
Social Networks, and
Other Media Networks
& Content providers

2017

515112 Radio Stations
Pt 515120 Television Broadcasting
515111 Radio Networks & 51521 Cable & Other
Subscription Programming & 51911 News Syndicates &
Pt 51512 Television Networks & Pt Internet Broadcasting

Telecommunications

2022

517111 Wired Carriers
517112 Wireless Carriers
717121 Telecom Resellers
517122 Agents For Wireless
51781 All Other

2017

517311 Wired Telecommunications Carriers
Pt. 517312 Wireless Carriers except Agents
Pt 517911 Telecommunications Resellers except Agents
Pt 517312 Wireless Agents & Pt 517911 Resellers except Agents
517919 All Other Telecommunications

Web Search Portals, Libraries, Archives, Others Information Services

2022

519

51921 Libraries & Archives
51929 Web Search Portals and All Other Information Services

2017

Pt 519 News syndicates and Internet publishing & Broadcasting
51912 Libraries & Archives
Pt 519130 Web Search Portals & 51919 All Other Information Services

Banking

2022

522180 Savings Institutions & Other Depository Credit Intermediation
533399 International, Secondary Market, & All Other Nondepository Credit
52315 Investment Banking & Securities Intermediation
52316 Commodity Contracts
523940 Portfolio Management & Investment Advice

2017

52212 Savings Institutions & 52219 Other Depository Credit Intermediation

522293 International Trade Financing & 522294 Secondary Market Financing & 522298 All Other Nondepository Credit Intermediation
52311 Investment Banking and Securities Dealing & 523120 Securities Brokerage
52313 Commodity Contracts Dealing & 523140 Commodity Contracts Brokerage
52392 Portfolio Management & 52393 Investment Advice

Repair Services

2022

811114 Specialized Automotive Repair
81121 Electronic & Precision equipment Repair & Maintenance

2017

811112 Auto Exhaust System & 811113 Auto Transmission &
811118 Other Automotive Mechanical & Electrical Maint
811211 Consumer Electronics & 811212 Computer and Office Machine & 811213 Communications Equipment & 811219 Other Electronic and Precision Equipment Repair and Maintenance

North American Product Classification System 2017 (NAPCS 2017)

Hierarchical Structure

Level	Digits	Agreggation level	Categories
1	2	Section	24
2	3	Subsection	61
3	5	Division	172
4	7	Group	276
5	9	Subgroup	497
6	11	Trilateral product	1167

Example (library services)

North American Product Classification System 2017 (NAPCS 2017) version Beta 1.0	
Code	Product title
24	Home entertainment, recreation and culture products, including household pets and related products
241	Home entertainment, recreation and culture products
24110	Other home entertainment, recreation and culture products
2411001	Other home entertainment, recreation and culture products
241100101	Gambling products
241100102	Leisure, recreational, and athletic instructional programs
241100103	Library and archive services
24110010301	Library and archive services

New Product-, Merchandise-, and Services- Lines

Questions will come

Who is doing the counting and assigning?
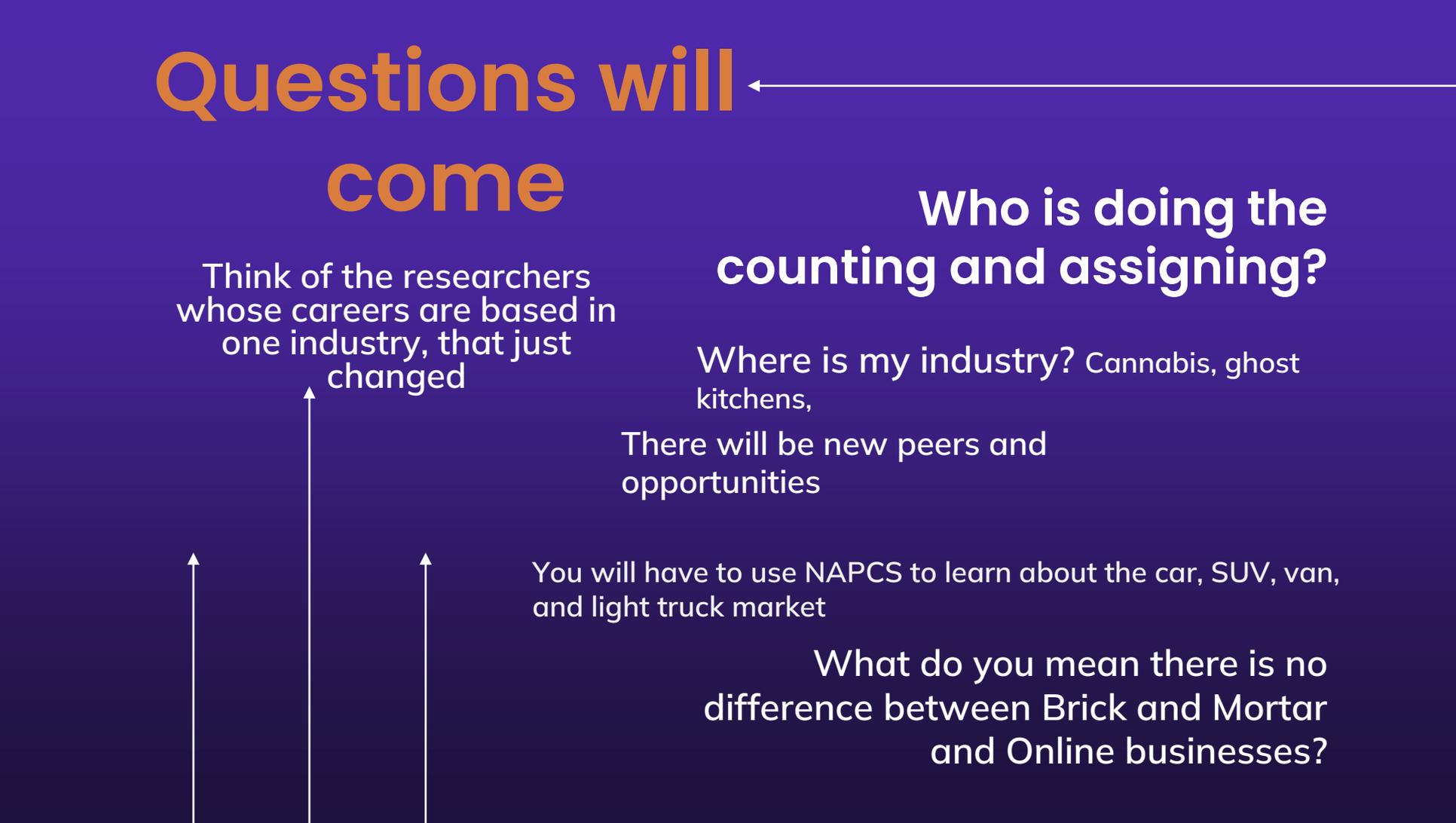
Think of the researchers whose careers are based in one industry, that just changed

Where is my industry? Cannabis, ghost kitchens,

There will be new peers and opportunities

You will have to use NAPCS to learn about the car, SUV, van, and light truck market

What do you mean there is no difference between Brick and Mortar and Online businesses?

What we can *DO*

- There will be new peers and opportunities for your company?
- Ask vendors how they will treat the changes
- Empathy for those data users having to deal with disruptions
  - Cost & time series
- Learn more about the NAPCS
- Learn more about changes in the 2022 Economic Census
- Provide insights, comments, and suggestions to the ECPC

Be ready when the questions start coming

04 **Learn** *more*

About Government Data and business

"It is a capital mistake to theorize before one has data."

Sir Arthur Conan Doyle

Federal Government Information is Business

Executive Branch

- Regulations
- Data, API
- Data, Statistics or Indicators
- Press releases or Trade press or Bulletin
- Handbooks or Fact Books
- Department's Reports
- Industry Reports or Surveys or Review
- State of the Industry and Outlooks
- Geographic specific
- New Technology and direction

Congressional Branch

- Forthcoming laws
- Committee reports/prints
- Congressional Research Section
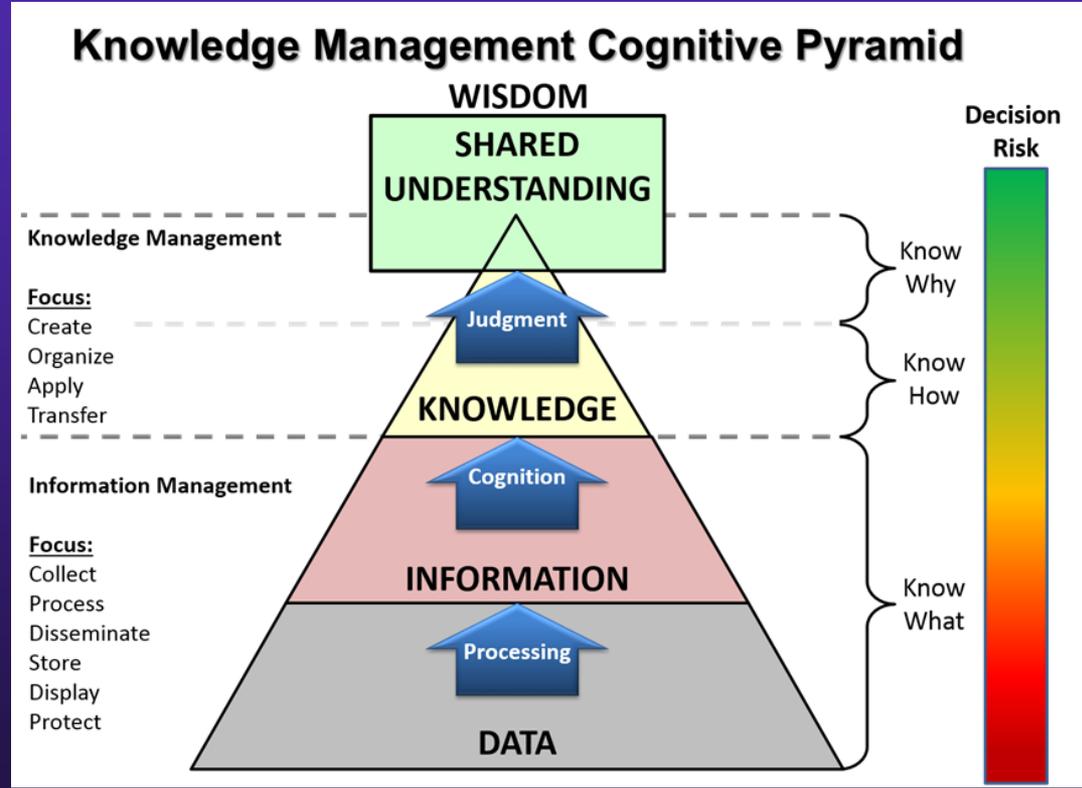- Library of Congress, Reading Rooms
- Government Publishing Office

Judicial Branch

- Interpreting laws
- Courts, transcribes
- Courts, defendants

Words about Data

Data are not:
Information Technology
Digital Analytics
Evidence
Research
Visualizations
Ideas

Data are collected facts
"raw material"

Knowledge Management Cognitive Pyramid

WISDOM

SHARED UNDERSTANDING

Knowledge Management

Focus:
Create
Organize
Apply
Transfer

Judgment

KNOWLEDGE

Information Management

Focus:
Collect
Process
Disseminate
Store
Display
Protect

Cognition

INFORMATION

Processing

DATA

Decision Risk

Know Why

Know How

Know What

Adaptations of DIKW pyramid by US Army Knowledge Managers, from https://en.wikipedia.org/wiki/DIKW_pyramid

How do you present data

Line		2014			
		I	II	III	IV
1	Gross d		100	100	100
2	Private in			87.1	87.1
3	Agricul	1.1		1.1	1.1
4	Farm			0.9	0.9
5	Fore		0.	0.2	0.2
6	Minin	2.	2.	2.4	2.1
7	Oil a	1.6		1.6	1.4
8	Mining	0.3		0.3	0.3
9	Support			0.5	0.4
10	Utilities		1.7	1.7	1.7
11	Constru	3.6	3.6	3.6	3.7
12	Manufac	11.6	11.7	11.8	11.7

Graphs for time series

Pie chart for comparison to the whole

Bar charts showing the differences

Common-size to per capita for story

TYPES OF DATA ANALYSIS

DESCRIPTIVE

Increase/decrease

PREDICTIVE

Estimates

DIAGNOSTIC

Relationships

PRESCRIPTIVE

Policy & Decision Making

What most people do

Google

"Employee Benefits"
data site:.gov

Data.Gov

Inventory, has promise

Commercial

ICPSR- Great
Data Planet- Good
Wolfram Alpha- Science

Kinds of Federal Sources: Social Science

Census
Demographics, Manufacturing, Retail, Wholesale, Construction, most other industries

Labor
Labor and price data

Companies
Publicly Traded Companies

Banking
Banking & economic conditions

Transportation
Ideal for tourism and comparisons

Telecommunications
Complaints, cable, mobile, broadcasting, broadband

Mortgage

Education
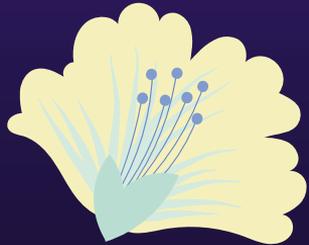
Kinds of Federal Sources: Natural Science

Agriculture

Including Fisheries and Forestry

Health
State sources will be better

Environment

Including Minerals and Energy

Weather
Regional center better
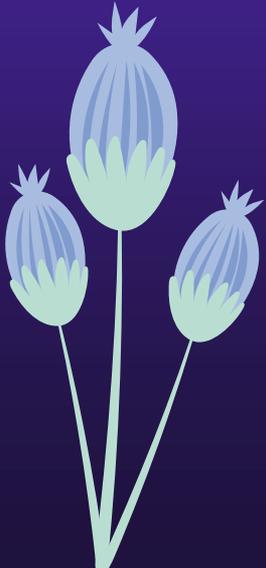
Business of Government

Procurement

Sam.com

Assistance

Federal Grants and other Benefits

Public Finance

Spending

Taxes

Federal Budget Projections

We can get there together

FDLP Academy

Accidental Government Librarian

Census Academy for Business

BLS Training Videos

API University from OMB

Inter-university Consortium for Political and Social Research (ICPSR) repository

Boettcher webinars to watch

2022

[Data Sources for Librarian](#)

2022

[Free Business Sources for New England](#)

2020

[Public Domain vs. Open Access Data](#)

2020

[Business Sources from the Federal Government: Classic and New](#)

2019

[Industry Research Using the Economic Census](#)

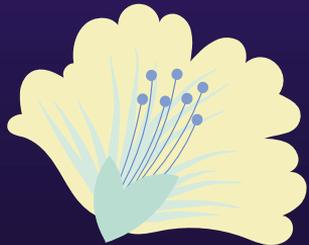2019

[Federal Data Strategies Webinar](#)

2018

[ZombieList](#)
Slides only

2017

[Census Of Governments](#)

[Government Data as Intellectual Property: Is Public Domain the Same as Open Access?](#) Online Searcher, July 2018 with Matthew Dames

Let's discuss

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One Statistical Office in US: Why Not?

1. **Privacy:** The Privacy Act of 1974, Confidential Information Protection and Statistical Efficiency Act of 2002 (CIPSEA), and Statistical Policy Directive No. 1 (2014) require agencies to ensure that the collection and maintenance of citizens' data is accurate, confidential, and within legal restrictions. With different offices having access to those records, there would be less possibility of everything being leaked.

2. **Security**: Along the lines of fewer offices having access to data records. The more servers that hold the data, the safer it is. The times when an exchange of information is necessary laws and regulations among departments allow to protect access to data.

3. **Integrity**: The income you report to IRS might be different from what you report to the Census Bureau.

4. **Methodology**: Sometimes data must have a higher number of people questioned so the accuracy will be better; different methods of collection or sampling may be required.

5. **Popularity**: Anything being done by the government has a political dimension, especially funding for employees and for modernizing and updating technology, attractiveness of the research, and repetition of statistical programs by agencies.

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